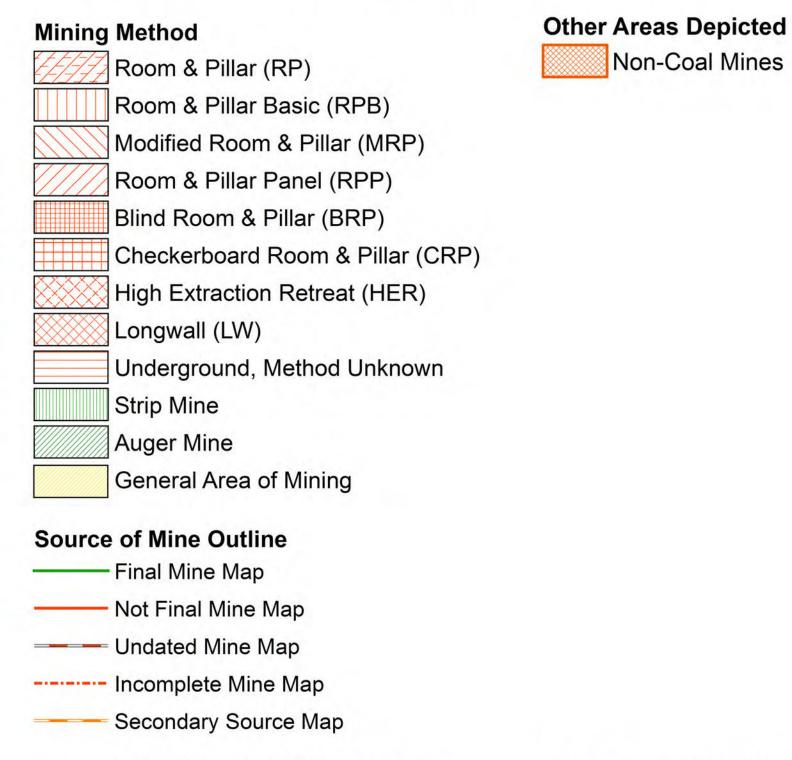


Coal Mines in Illinois Farmington East Quadrangle

Peoria, Fulton & Knox Counties, Illinois

Herrin Coal

This map accompanies the Coal Mines Directory for the Farmington East Quadrangle and the map of mines in the Springfield Coal, Farmington East Quadrangle. Consult the directory for a complete explanation of the information shown on this 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

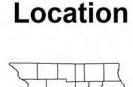
Mine Annotation (space permiting)

Company Mine Name

ISGS Index No., Years of Operation

Non-Coal Mines

Other Points Depicted





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.





Prairie Research Institute Illinois State Geological Survey 615 E. Peabody Dr. Champaign, IL 61820

Mine Outlines Compiled by C. Chenoweth & Alan R. Myers

June 2015

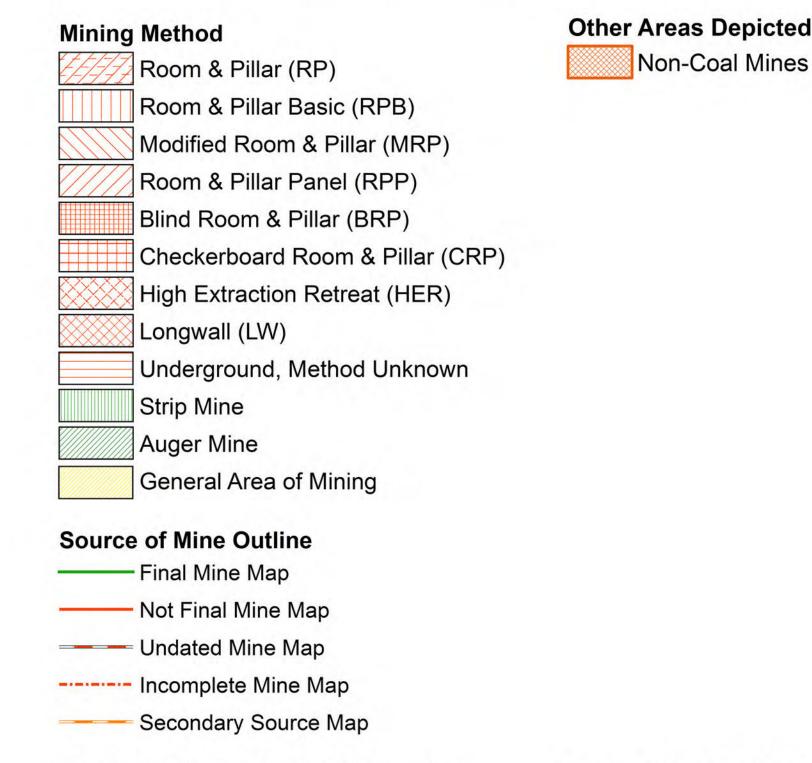
UNITED STATES FARMINGTON EAST QUADRANGLE DEPARTMENT OF THE INTERIOR ILLINOIS GEOLOGICAL SURVEY 7.5 MINUTE SERIES (TOPOGRAPHIC Illinois Colliery Co. Alden No. 5 Mine 110, 1888-1952 D. & D. Coal Co. D. & D. No. 3 Mine Old Chapman Mine 2246, 1924-1952 5015, 1873-1891 Newsam Brothers Maplewood Mine 2250, 1900-1911 Tony Kanzlarich • 922 Kanzlarich Mine **2255**, 1919-1943 John Bruketta **Bruketta Mine** 922, 1934-1960 57' 30" 250 Base Map Produced by the United States Geological Survey SCALE 1:24 000 COMPUED FROM AERIAL PHOTOGRAPHS TAKEN USGS AND NOS/NOAA FIELD CHECKED NTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1982 ROAD LEGEND FIELD CHECKEDTRANSVERSE MERCATOR UTM GRID DECLINATION... QUADRANGLE LOCATION 1982 MAGNETIC NORTH DECLINATION ... CONTOUR INTERVAL 10 FEET HORIZONTAL DATUM ... Interstate Route U. S. Route State Route 1 2 3 1 Yates City 2 Elmwood 3 Oak Hill To place on the predicted North American Datum of 1983, SUPPLEMENTARY CONTOUR INTERVAL 5 FEET PROVISIONAL MAP move the projection lines as shown by dashed corner ticks To convert feet to meters multiply by .3048 (1 meter north and 9 meters east) Produced from original To convert meters to feet multiply by 3.2808 5 4 Farmington West FARMINGTON EAST, ILLINOIS manuscript drawings. Infor-5 Hanna City THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS mation shown as of date of FOR SALE BY U. S. GEOLOGICAL SURVEY DECIMEIONAL EDITION 1009

Coal Mines in Illinois Farmington East Quadrangle

Peoria, Fulton & Knox Counties, Illinois

Springfield Coal

This map accompanies the Coal Mines Directory for the Farmington East Quadrangle and the map of mines in the Herrin Coal, Farmington East Quadrangle. Consult the directory for a complete explanation of the information shown on this 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**

Mine Annotation (space permiting)

Company

Mine Name

ISGS Index No., Years of Operation

Non-Coal Mines

Other Points Depicted





Disclaimer

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Prairie Research Institute Illinois State Geological Survey 615 E. Peabody Dr. Champaign, IL 61820

Mine Outlines Compiled by C. Chenoweth & Alan R. Myers

June 2015

DIRECTORY OF COAL MINES IN ILLINOIS 7.5-MINUTE QUADRANGLE SERIES FARMINGTON EAST QUADRANGLE PEORIA, FULTON & KNOX COUNTIES

C. Chenoweth & Alan R. Myers



2015

Prairie Research Institute Brian Anderson, Interim Executive Director ILLINOIS STATE GEOLOGICAL SURVEY Richard C. Berg, Interim Director

Natural Resources Building 615 East Peabody Drive Champaign, Illinois 61820



Phone 217-244-4610

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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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 FARMINGTON EAST QUADRANGLE

The Burton Mine operated 2.5 miles north of Farmington in 1859. The exact location of the Burton Mine is not known and may be stripped out by the Middle Grove Mine (mine index 621), but this does indicate that coal was mined for a long time, although generally on a small scale for local homeowners and blacksmiths. Mining also took place east of Norris in 36-T8N-R4E (near mine index 5016) before 1870.

In the northern part of the Farmington East Quadrangle, the Herrin Coal was worked in shallow local mines for the first half of the 20th century, and later surface-mined when the Elm Mine (mine index 887) extended westward. The Springfield Coal was worked along the western side of the Farmington East Quadrangle from 1888 until both the Arden No. 5 Mine (mine index 110) and D. & D. No. 3 Mine (mine index 2246) closed in 1952.

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 ISGS 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 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.

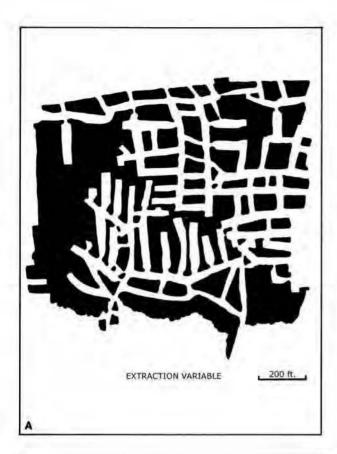
Secondary source map The original mine map was not found so the outline shown was determined from secondary sources (e.g., outlines from small-scale regional maps published in other reports). The summary sheet describes the secondary sources.

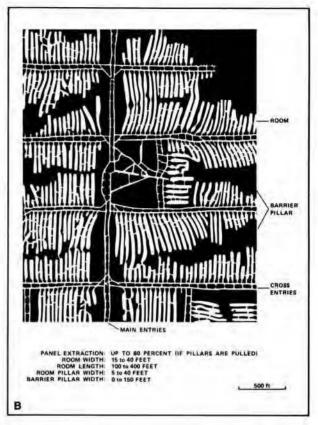
POINTS AND LABELS

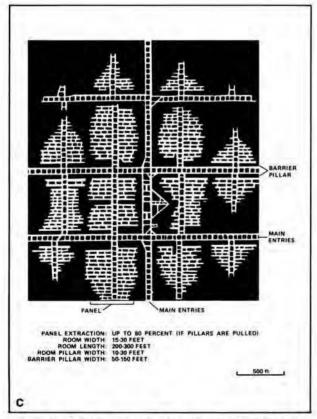
The locations of all known mine openings (shafts, slopes, and drifts) and surface mine tipples are plotted on the map. Tipples are areas where coal was cleaned, stockpiled, and loaded for shipping.

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.







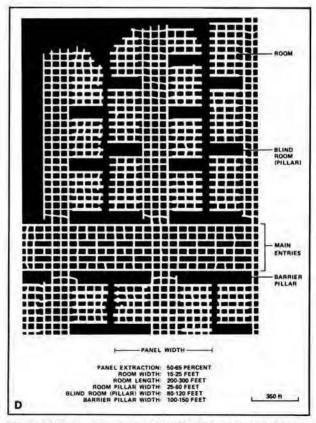
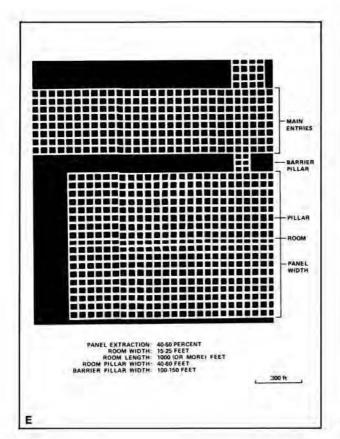
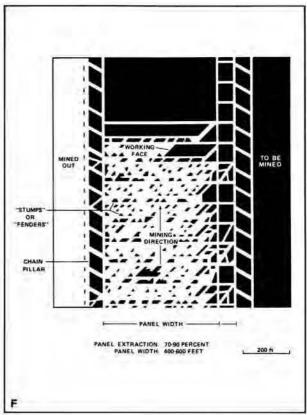
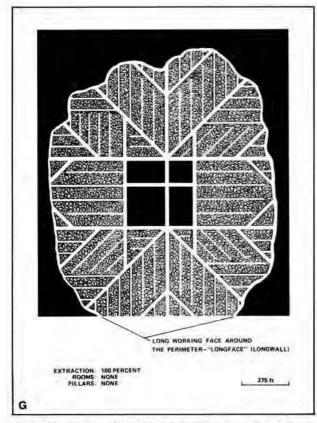


Figure 1 Mining methods: (A) room-and-pillar basic (RPB), (B) modified room and pillar (MRP), (C) room-and-pillar panel (RPP), (D) blind room and pillar (BRP).







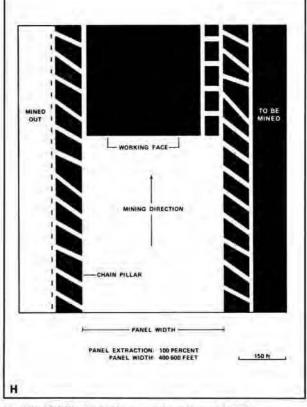


Figure 1 (cont.) Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall

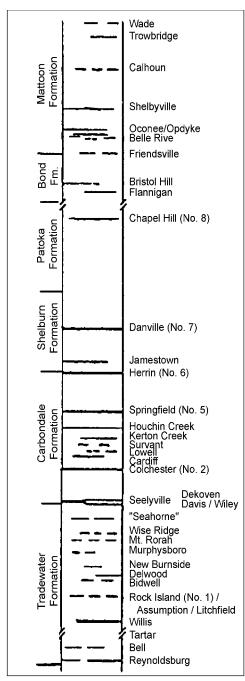


Figure 2 Generalized stratigraphic section, showing approximate vertical relations of coals in Illinois.

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 tipple locations Locations of all known former entry points to underground mines or the location of coal cleaning. tipple, 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 tipple. 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 tipple for underground mines was generally located near the main shaft or slope. At surface mines, coal was sometimes hauled to a central tipple 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.
- Worthen, A. H., H. M. Bannister, F. H. Bradley and H. A. Green, 1870, Geology and Paleontology, Volume IV, Geological Survey of Illinois, State Journal Steam Press, Springfield, Illinois, 508p.

PART II DIRECTORY OF MINES IN THE FARMINGTON EAST QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Farmington East 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 110

Illinois Colliery Company, Alden No. 5 Mine

Type: Underground Total mined-out acreage shown: 598

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Main shaft	Fulton	8N 4E	2	SW NW NE	
Air shaft	Fulton	8N 4E	1	SW NE NW	
GEOLOGY					
		Thickne	ess (ft)	Mining	
Seam(s) Mined	Depth (ft)	Min N	lax Avg	Method	
Springfield	185		4.06	MRP	

Geologic Problems Reported: The immediate roof was 2 feet of black shale, with 6 to 8 inches of clod above that, and 4 to 8 inches of limestone above the clod. This roof shale was cut out in haulage routes to make head room for the mules. Many pyrite nodules and coal balls up to 18 inches in diameter were common in the roof. The coal balls protruded down into the coal and some would drop out of the roof once the coal was removed while some would stay up in the roof indefinitely. The bottom 2 to 6 inches of the black shale roof was a draw slate that would sometimes stay up and sometimes adhere to the coal. Pyrite distribution within the coal seam was irregular but often present in nodules and lenticular layers 2 feet below the roof. Horsebacks were numerous, and cut the coal out completely, but were generally thin. One horseback was 6 feet wide and extended upwards into the roof. The mine was dry and no heaving was noted. Pressurized water was encountered in one room (a horizontal drill hole released the pressure so that the water shot out 30 feet from the hole), but that room was kept sealed and the water pumped out.

PRODUCTION HISTORY

			i ioddclion
Company	Mine Name	Years	(tons)
Farmington Coal Company	Farmington	1888-1891	49,771
Claire Coal Company	Claire No. 2	1891-1895	149,647
Farmington Coal Company	Nickel Plate	1895-1908	377,362 *
Alden Coal Company	Alden No. 5	1908-1927	1,162,784 **
Illinois Colliery Company	Alden No. 5	1928-1952	<u>761,112</u>
			2,500,676

Droduction

Last reported production: April 1952

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Microfilm, document 351652	1952	1:2400	1:4966	Final
Federal Land Bank Report	4-1934	1:42560	1:42560	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

Mine notes (Fulton County) - Mine type, shaft location, seam, depth, thickness, geologic problems.

Microfilm map, document 351652, reel 03137, frame 15 - Shaft locations, mine outline, mining method.

Federal Land Bank Report map (Fulton County) - Mine outline (western side).

Microfilm map, document 351646, reel 03137, frame 7, map of Westerby No. 2 Mine (mine index 2246) - Air shaft.

^{*} Production was incorrectly reported for all mines in 1896, and was not used in the production total.

^{**} Idle 1922

Mine Index 621 Peabody Coal Company, Middle Grove Mine

Type: Surface Total mined-out acreage shown: 13,706

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Tipple	Fulton	8N 3E	2	SE SE NE	

GEOLOGY

010100.		Thi	ckness (f	it)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Herrin	15-48			3.07-4.07	Surface	
Springfield	56-75			3.0-3.83	Surface	

<u>Geologic Problems Reported</u>: The Herrin Coal sometimes had up to 4 inches of bone coal at the bottom of the seam. The Springfield Coal included horsebacks that reduced production.

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Midland Electric Coal Corporation	Middle Grove No. 2	1933-1963 *	20,970,266
Midland Electric Coal Corporation	Middle Grove No. 085	1963-1967	6,162,061
Peabody Coal Company	Middle Grove	1968-1968	<u>561,763</u>
			27,694,090

Last reported production: May 1968

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Company, 10-9-7	3-1978	1:12000	1:12000	Not final
NAIP digital ortho-photo quadrangles	2004	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 (Fulton County) - Mine names, mine index, ownership, years of operation.

Mine notes (Fulton County) - Mine type, mine location, seam, depth, geologic problems.

Company map, Coal Section files, 10-9-7 - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Farmington East Quadrangle, 2004 - Mine outline.

Mine Index 887 Midland Coal Company, Elm Mine

Type: Surface Total mined-out acreage shown: 3,519 The area shown on the accompanying map is larger than expected from the reported production and likely includes some areas that were unmined, but were impossible to identify as unmined on the photographic maps.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Depth (ft)

55-78

Type	County	Township-Range	Section	Quarters-Footage	
Tipple	Peoria	9N 5E	24	NW SE SW	
GEOLOGY		Thicknes	s (ft)	Mining	

Max

2.67-4.25

Method

Surface

Min

<u>Geologic Problems Reported</u>: The roof for the Herrin Coal was sometimes the Brereton Limestone, which was generally 1 to 2 feet thick but locally up to 4 feet thick. In 36-T9N-R5E, the Herrin Coal was heavily affected by "white top", a light gray clay material, and the thickness was highly variable. The white top material infiltrated the upper portion of the seam. This problem decreased downward in the coal, but made a very dirty product. Slip planes and cracks in the coal were observed, as well as clay dikes. The top of the seam was irregular. The blue band was about 2 inches thick in this area. Pyrite lenses up to 1.5 inches were noted, as were pyrite nodules.

PRODUCTION HISTORY

Seam(s) Mined

Herrin

			Production	
Company	Mine Name	Years	(tons)	
Peabody Coal Company	Elm No. 1 & Bright Star No. 2	1968-1970	2,943,493	
Midland Coal Company	Elm	1970-1984	10,339,741	
			13 283 234	

Last reported production: July 1984

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Company, 6-393	1-1-1987	1:12000	1:12000	Final
Company, 10-9-7	3-1978	1:12000	1:12000	Not final
Company, 10-6-11	1-1-1979	1:12000	1:12000	Not final
NAIP digital ortho-photo quadrangles	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, mining method.

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

Mine notes (Peoria County) - Mine type, seam, mining method, geologic problems.

Company map, Coal Section files, 6-393 - Mine outline, mining method.

Company map, Coal Section files, 10-9-7 - Mine outline, tipple location.

Company map, Coal Section files, 10-6-11 - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Hanna City Quadrangle, 2004 - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Farmington East Quadrangle, 2004 - Mine outline.

USGS topographic map, Hanna City Quadrangle, 1971, Photorevised 1979 - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Hanna City Quadrangle, 2004 - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Farmington East Quadrangle, 2004 - Mine outline.

Mine Index 922 John Bruketta, Bruketta Mine

Type: Underground Total mined-out acreage shown: 24 Production indicates that approximately 46 acres were mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage	
Main shaft	Fulton	8N 4E	36	SE SE SE	
Hoist shaft	Fulton	8N 4E	36	SE SW SE	
Air shaft	Fulton	8N 4E	36	cen SW SE	
Hoist shaft	Fulton	8N 4E	35	NE	

GEOLOGY

		l hickness (ft)		Mining		
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	80			4.0	MRP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
John Bruketta	Bruketta	1934-1949	74,773	
John Bruketta	Bruketta	1949-1960	130,083 *	
			204,856	

^{*} Production after map date

Last reported production: April 1960

SOURCES OF DATA

		Original	Digitized		
Source Map	Date	Scale	Scale	Map Type	
ISGS map library, 4103.F8 i5.1-2	12-1-1949	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 (Fulton County) - Mine names, mine index, ownership, years of operation. Mine notes (Fulton County) - Mine type, shaft location (SE SE 36-T8N-R4E), seam, depth, thickness. ISGS map library, tracing of company map, 4103.F8 i5.1-2 - Shaft locations, mine outline. Microfilm map, document 351688, reel 03137, frame 53 - Mining method. Microfilm map, document 355105, reel 03148, frame 74 - Hoist shaft (NE 35-T8N-R4E). **

^{**} The map showed east-west trending entries about ½ mile north of the workings that can be related to features on the land surface, but the map showed no land surface features, and the location is known only from the map legend. The shaft is shown in the center of NE 35-T8N-R4E, but an accurate location is not known.

Mine Index 2246

D. & D. Coal Company, D. & D. No. 3 Mine

Type: Underground Total mined-out acreage shown: 29 Production indicates approximately 100 acres were mined. The general area of mining shown on the accompanying map is 27 acres, which would indicate that the area shown is 44 acres smaller than production would indicate (probably north and east of the area shown).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	8N 4E	1	SW SW NE
Air shaft	Fulton	8N 4E	1	SW SW NE

GEOLOGY

		Thi	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	156			4.0	MRP	

<u>Geologic Problems Reported</u>: Two roof falls were noted on the source map (microfilm document 351620) in the southern part of the mine.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Westerby Brothers	Westerby	1924-1939	181,538
Farmington Coal Company	Farmington	1940-1946	82,751
D. & D. Coal Company	D. & D. No. 3	1946-1952 *	92,346
			356.635

^{*} Idle 1951

Last reported production: 1952

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Microfilm, document 351620	4-1952	1:1200	1:1738	Final
Microfilm, document 351646	7-1-1925	1:1200	1:1655	Not final
Federal Land Bank Report	4-1934	1:42560	1:42560	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

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

Microfilm map, document 351620, reel 03136, frame 430 - Shaft locations, mine outline (western, southern), mining method, geologic problems.

Microfilm map, document 351646, reel 03137, frame 7 - Shaft location, mine outline (northern).

Federal Land Bank Report (Fulton County) - Mine outline (northern general area of mining).

Mine Index 2250 Newsam Brothers, Maplewood Mine

Type: Underground Total mined-out acreage shown: 413 Production indicates approximately 150 acres were mined. The area shown on the accompanying map is similar to a general area of mining and probably contains not mined areas within the mine, or may contain workings of unknown previous operators.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Main shaft	Fulton	8N 4E	11	SE NE NE	

GEOLOGY

OLOLOG1		Thickness (ft)		Mining	
Seam(s) Mined	Depth (ft)	Min Max	Avg	Method	
Springfield	112		3.75-4.33	RP	

Geologic Problems Reported: The roof was black shale that was overlain by 2 feet of soft sandstone.

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Newsam Brothers	Maplewood	1900-1911	479,985	
			479.985	

Last reported production: 1911

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Federal Land Bank Report	4-1934	1:42560	1:42560	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 (Fulton County) - Mine names, mine index, ownership, years of operation. Mine notes (Fulton County) - Shaft location, depth, thickness, geologic problems. Federal Land Bank Report map (Fulton County) - Shaft location, mine outline.

Mine Index 2255 Tony Kanzlarich, Kanzlarich Mine

Type: Underground Total mined-out acreage shown: None; production indicates approximately 8 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Main shaft	Fulton	8N 4E	36	NE SE NE	

GEOLOGY

		Thi	ckness (f	ft)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	80			4.0	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Tony Kanzlarich	Kanzlarich	1919-1920	12
Peter Karlovich	Karlovich	1920-1922	145 *
Tony Kanzlarich	Kanzlarich	1922-1943	<u>28,637</u> **
			28,794

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

Last reported production: 1943

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Mine notes	Undated	1:62500	1:62500 ***	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 (Fulton County) - Mine names, mine index, ownership, years of operation.

Mine notes (Fulton County) - Mine type, shaft location, seam, depth, thickness, mining method.

^{**} Production was not reported from 1931 to 1933 for mines producing less than 1,000 tons per year.

OTHER MINES SHOWN ON FARMINGTON EAST QUADRANGLE

Mine Index 3644 NW NE 19-T8N-R5E, shaft, Springfield Coal source: Federal Land Bank Report (4-1934)
Mine Index 5016 SE NE SE 16-T8N-R4E, shaft, Springfield Coal source: Federal Land Bank Report (4-1934)
Mine Index 5857 * SE NW SW 21-T9N-R5E, Herrin Coal source: ISGS mined-out area, Area 11 (1959 revision)
Mine Index 5858 NW SW NE 26-T9N-R5E, Herrin Coal source: ISGS mined-out area, Area 11 (1959 revision)
Mine Index 5860 NE NE SW 34-T9N-R5E, Herrin Coal source: ISGS mined-out area, Area 11 (1959 revision)

MINES WHOSE LOCATIONS ARE NOT KNOWN, FARMINGTON EAST 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 Farmington East 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 290,426 (264,235 underground; 13,472 surface mined; 12,719 mined by uncertain method), which would represent approximately 67 to 102 acres, depending on the recovery factor, mining method, and numerous other factors. (Note: 1 square mile = 640 acres)

780 tons

CRAMER (Peoria County)

Tyler (William), 1889-1892, drift, Herrin, 50, 4.0, RP

FARMINGTON (Fulton County)	
Baker (John), 1885-1886, drift, Herrin, 65, 4.17, RP	656 tons
Webster (L.), 1885-1886, drift, Herrin, 40-55, 4.17, RP Ross (William), 1886-1887	200 tons 245 tons 445 tons
Berry (M.), 1885-1889, drift, Herrin, 20-40, 4.0-5.0, RP Webster (Elisha), 1889-1894 Breseler (John), 1894-1896 Webster (Elija), 1896-1898	1,590 tons 1,420 tons 190 tons 565 tons 3,765 tons
Raffle (William), 1885-1897, -, Herrin, 30-40, 4.0-4.17, RP	9,583 tons
Emmons (John A.), 1888-1892, shaft, Springfield, 44-67, 3.75-4.0, RP Graham & Murdock, 1892-1893 Emmons (John) Coal Company, 1893-1895 Pecton & Emmons, 1895-1897	41,780 tons 9,400 tons 29,684 tons <u>8,625</u> tons 89,489 tons
Davis (John), 1894-1895, drift, Herrin, 30, 4.67, RP	150 tons
Tryon (George), 1896-1897, slope, -, 50, 4.0, RP	180 tons
Nappin (David), 1897-1899, shaft, Herrin, 50-60, 4.0-4.5, RP Deemy & Raffle, 1899-1902	3,200 tons <u>4,320</u> tons 7,520 tons

^{*} Not shown on accompanying map due to later surface mining

Endres (George), 1897-1898, shaft, Herrin, 50, 4.0	750 tons
Little Black Diamond Coal Company, 1903-1905, shaft, -, 35-50, 4.5-5.0, RP	310 tons
Frazell (C. A.), 1905-1907, shaft, Herrin, 56, 4.0-6.0, RP	1,684 tons
Nace (A. B.), 1906-1909, drift, Herrin, 38-50, 4.0-4.5, RP	1,940 tons
Bruketta (John), 1910-1911, slope, Springfield, -, 5.0, RP	1,000 tons
Walck (C. L.), 1919-1929, underground	1,329 tons
Bruketa (John), 1922-1925	387 tons
Taylor & Munsen, 1928-1928	240 tons
Dubois (Ira), 1923-1924	200 tons
Picton (Eldred), 1923-1924	150 tons
Connell (Nick), 1931-1931, underground	2,746 tons
Dubois (J. B.), 1934-1934, underground	28 tons
Beggi (John), 1934-1934, underground	514 tons
Norton (William), 1936-1936, surface	50 tons
Harrington (Frank), 1941-1941, underground	107 tons
FARMINGTON (Peoria County)	
Thrush & Oak, 1919-1920	650 tons
TRIVOLI (Peoria County)	
Ramshaw (Joseph), 1883-1884, shaft, Springfield, 40, 4.5, RP	400 tons
Tyler (Ebenezer), 1889-1893, drift, Herrin, 20, 4.0-4.33, RP Goss (Robert H.), 1893-1895	1,245 tons 340 tons 1,585 tons
Jordan (John), 1897-1900, shaft, Herrin, 40, 4.25-4.5, RP	1,940 tons
Pautz & Spinney, 1914-1916, shaft, -, 26-36, 4.5-4.67, RP	1,548 tons
Ferris & Petty, 1920-1922 Travis & Petty, 1922-1923 Petty (F.) & Clark (J. E.), 1923-1925	8,000 tons 1,112 tons 1,838 tons 10,950 tons
Traynor (W.), 1925-1925 Traynor Brothers, 1926-1926 Traynor (W.), 1927-1927	368 tons 251 tons 500 tons 1,119 tons
Boyle & Wiegand, 1949-1949, surface Wiegand (Edward Ralph), 1950-1950	959 tons 12,440 tons 13,399 tons

YATES CITY (the town is in Fulton County, but the address was used for a mine in Peoria County)

Broadfield Brothers Coal Company, 1949-1950, surface

73 tons

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