

Coal Mines in Illinois Astoria Quadrangle

Fulton, Schuyler & Mason Counties, Illinois

Springfield Coal

This map accompanies the Coal Mines Directory for the Astoria Quadrangle and the maps of mines in the Colchester & Other Coals, Astoria Quadrangle.

Consult the directory for a complete explanation of the information shown on this map.

Mining Method	Other Areas Depicted
Room & Pillar (RP)	Non-Coal Mines
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	
Source of Mine Outline	
——— Final Mine Map	
Not Final Mine Map	
Undated Mine Map	
Incomplete Mine Map	
Secondary Source Map	

Other Points Depicted

Location

Non-Coal Mines

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

IVIINE INAME

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.

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.

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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.

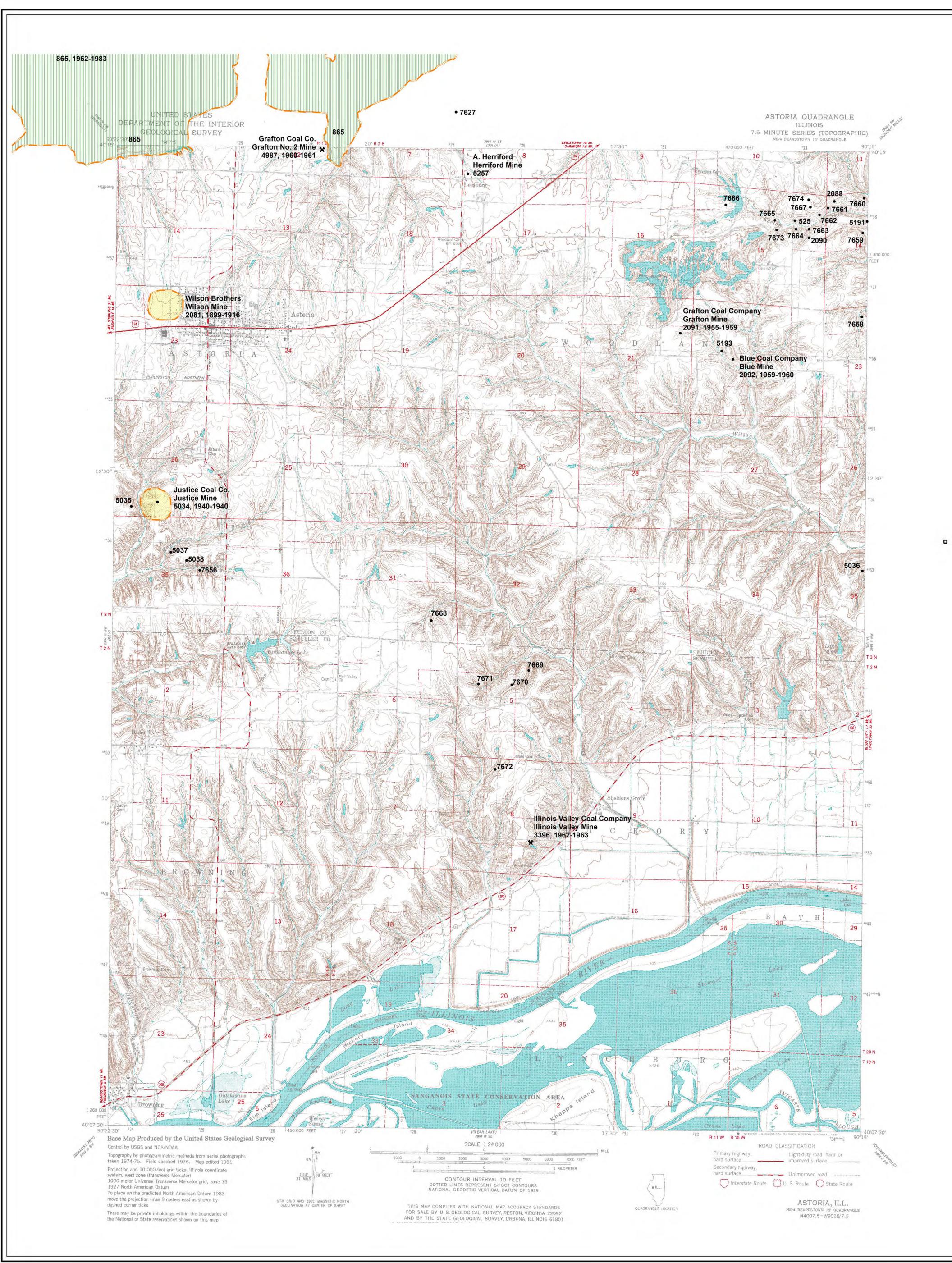




Prairie Research Institute Illinois State Geological Survey 615 E. Peabody Dr. Champaign, IL 61820

Mine Outlines Compiled by C. Chenoweth

June 2016



Coal Mines in Illinois Astoria Quadrangle

Fulton, Schuyler & Mason Counties, Illinois

Colchester & Other Coals

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

Mining Method

Other Areas Depicted **Mining Method** Non-Coal Mines 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 **Source of Mine Outline** Final Mine Map

Tipple, Shaft, Slope, Drift Locations

Secondary Source Map

Not Final Mine Map

Undated Mine Map

----- Incomplete Mine Map

- * 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

Mine Name

ISGS Index No., Years of Operation

Disclaimer

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Other Points Depicted

Location

Non-Coal Mines

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June 2016

DIRECTORY OF COAL MINES IN ILLINOIS 7.5-MINUTE QUADRANGLE SERIES ASTORIA QUADRANGLE FULTON, SCHUYLER, AND MASON COUNTIES

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2016

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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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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 ASTORIA QUADRANGLE

The earliest known mining in the Astoria Quadrangle was northwest of the town of Astoria, circa 1859 (mine index 7675). Mining was also shown on the 1871 atlas, near the northeastern part of the quadrangle.

The Springfield Coal is present in the Astoria Quadrangle as isolated pods near Astoria and in the northeastern part of the quadrangle, where the coal was surface-mined by Key No. 1 Mine (mine index 2089). The Springfield Coal was noted for having frequent large clay dikes, up to 4 feet wide, that would run from the floor to the ceiling. In the top third of the seam, a sooty, crumbly cannel coal was common, and that portion of the seam was 2 to 4 inches thick. The black shale roof had large pyritic concretions.

The Colchester Coal was mined in other portions of the Astoria Quadrangle, often via drift entries in ravines where the coal cropped out. Other minor coals were locally thick enough to mine, such as the Kerton Creek Coal, Summum (later known as Houchin Creek), and Cardiff Coal. In most cases, not enough evidence is available to say for certain which coal was mined, and these were included in the "other coals" layer.

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.

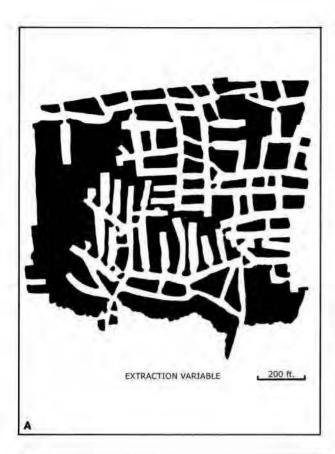
Secondary source map The original mine map was not found so the outline shown was determined from secondary sources (e.g., outlines from small-scale regional maps published in other reports). The summary sheet describes the secondary sources.

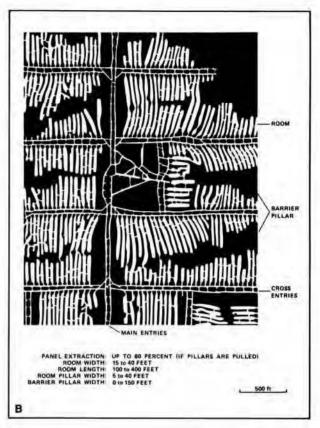
POINTS AND LABELS

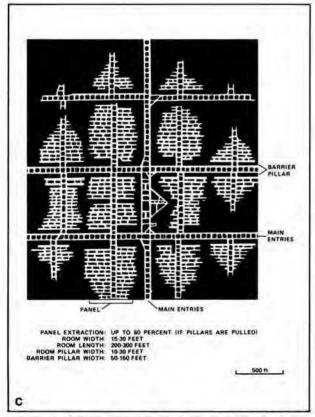
The locations of all known mine openings (shafts, slopes, and drifts) and surface mine tipples are plotted on the map. Tipples are areas where coal was cleaned, stockpiled, and loaded for shipping.

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.







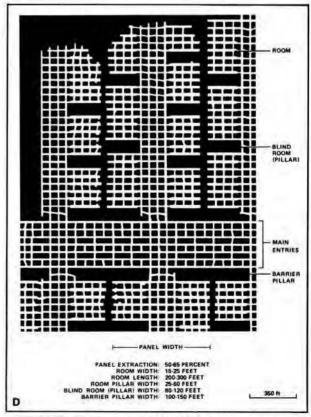
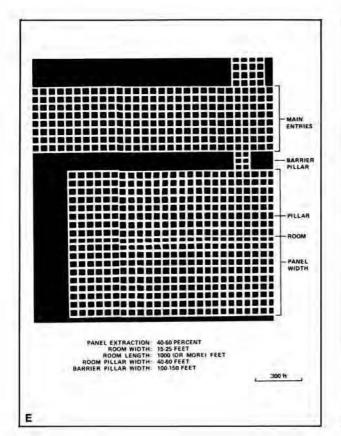
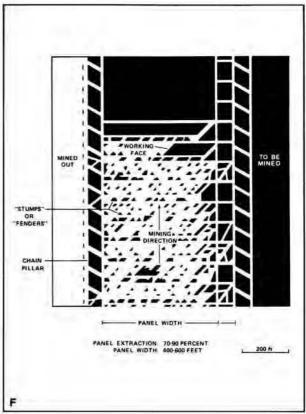
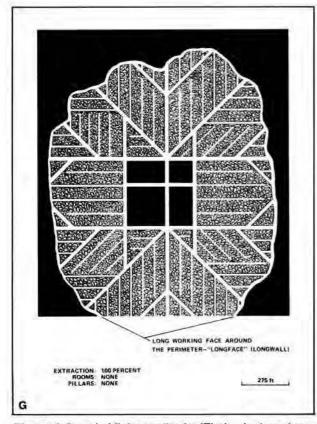


Figure 1 Mining methods: (A) room-and-pillar basic (RPB), (B) modified room and pillar (MRP), (C) room-and-pillar panel (RPP), (D) blind room and pillar (BRP).







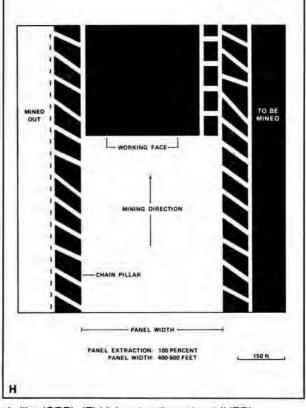


Figure 1 (cont.) Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall

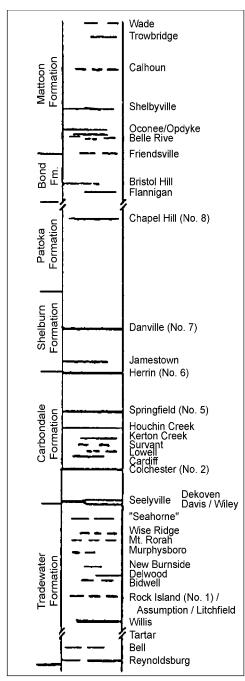


Figure 2 Generalized stratigraphic section, showing approximate vertical relations of coals in Illinois.

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.

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- 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 ASTORIA QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Astoria 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 118 Glen Coal Company, Eclipse Mine

Type: Underground Total mined-out acreage shown: 88 Production indicates approximately 20 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	14	SE SW SE
Air shaft	Fulton	3N 1E	14	SE *
Shaft	Fulton	3N 1E	14	NE SE SE

^{*} A sketch in the mine notes shows an air shaft 450 feet east of the main shaft. The air shaft location was not accurate enough to include on the accompanying map.

GEOLOGY

		Thic	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	65	5.42	6.0	5.67	RP	

Geologic Problems Reported: The roof was composed of black shale over the entire mine. Prominent subsidence at the surface indicated that the shale roof was very thin in many places. Clay slips and faults were noted in the seam. Caved areas prevented examination of the faults. The coal was cut out by post-Pennsylvanian valleys with vertical walls. The usual clay slips of the Springfield Coal were prominent, with the usual uneven contact with the coal along the sides of the slip, and with the usual clay partings in the coal adjacent to the slip being prominent as well. The coal was fairly flat-lying, with the exception of the western workings. One roll was present, limiting a mule to two cars in a haulage circuit, partly due to poor equipment.

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
F. G. Bader	Bader	1908-1909	40	_
Bader & Bader	Bader	1909-1910	1,875	
E. G. Bader	Eclipse	1910-1912	5,832	
Eclipse Coal Company	Eclipse	1912-1923 **	90,700	
Glen Coal Company	Eclipse	1923-1924	1,200	
• •	·		99.647	

^{**} Idle 1916

Last reported production: 1924

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Mine notes (H. E. Culver)	Undated	1:62500	1:62500	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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 (western), seam, depth, thickness.

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

Mine Index 141

Astoria Coal & Mining Company, Astoria Mine

Type: Underground Total mined-out acreage shown: 65

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	23	NW SE SW
Air shaft (new, 1896)	Fulton	3N 1E	23 *	

^{*} The location of the air shaft is not known and is not shown on the accompanying map. The 1896 Coal Report noted the completion of the new air shaft and stated that the Astoria Mine was the best ventilated in the county.

GEOLOGY

		Thic	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	70-72			5.5-6.0	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Astoria Coal & Mining Company	Astoria	1889-1902	403,882 **	
			403,882	

Dunalization

Last reported production: 1902

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Sanborn Fire Insurance Maps	1893, 1900	Unknown	1:24000 ***	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	Secondary source

^{***} The described location was plotted on a 1:24000 USGS topographic map base.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, seam, depth, thickness, mining method. Directory of Illinois Coal Mines (Fulton County) - Mine names, mine index, ownership, years of operation. Sanborn-Perris Map Company (Astoria) - Mine location.

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

^{**} The production for 1896 is unknown.

Mine Index 525 George Spring, Spring Mine

Type: Underground Total mined-out acreage shown: None

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 2E	15	center NE

GEOLOGY

		Thi	ckness (ft	:)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Unknown				4.0-5.0	RP	

Geologic Problems Reported: The top 4 inches of coal was sooty and soft and was left up to reinforce the roof.

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
George Spring	Spring	1932-1932	Unknown *

^{*} Mines producing less than 1,000 tons were not listed in the 1932 Coal Report.

Last reported production:

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Mine notes (L. C. McCabe)	9-17-1932	1:62500	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 (Fulton County) - Mine names, mine index, ownership, years of operation.

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

Mine Index 740 Astoria Woodland Coal Company, A Mine

Type: Underground Total mined-out acreage shown: 102 Production indicates approximately 60 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft (12 x 6 ft) *	Fulton	3N 2E	19	SE NE NW

^{*} The shaft consisted of two compartments.

GEOLOGY

		Thi	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Sprinafield	53	4.0	6.5	5.5	RP	

Geologic Problems Reported: The roof consisted of over 3 feet of black shale with large balls of iron pyrite. The top coal was dark, soft, and often broken. No faults were seen, but clay dikes were common, some displacing the coal up to 18 inches. Gypsum was common in the mine, generally seen as a 1/4 to ½ inch lens that was 6 to 7 inches long. In the upper third of the coal seam, a 2 to 3 inch thick cannel coal was noted. The clay dikes were exceptionally large, quite frequent in occurrence, and often ran through the entire seam thickness. One was observed to be 12 feet long and 4 feet wide.

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Scripps Coal Company	Scripps	1900-1905 **	135,523
Astoria Woodland Coal Company	A, or Merril Farm	1905-1910	107,733
• •			243.256

^{**} Idle 1905

Last reported production: 1910

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Mine notes (Jon A. Udden)	9-22-1909	1:62500	1:62500	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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, seam, depth, thickness, mining method, geologic problems. Microfilm map, document 351418, reel 03136, frame 53 - Shaft locations, mine outline, mining method.

Mine Index 865 Amax Coal Company, Sun Spot Mine

Type: Surface Total mined-out acreage shown: 8,883 The area shown on the accompanying map is larger than expected for the reported production. Production indicates approximately 4,700 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Tipple	Fulton	3N 1E	4	SW NE NE

GEOLOGY

		Thickness	(ft)	Mining	
Seam(s) Mined	Depth (ft)	Min Max	Avg	Method	
Springfield	22		4.65	Surface	
Colchester	40-70		2.0-2.43	Surface	

<u>Geologic Problems Reported</u>: The Colchester Coal had occasional pyrite lenses and numerous nodules. The nodules were flattened ovals, up to 3 inches across. Pyrite and calcite were present on vertical facings. Clay dikes were present, some as small as 0.1 inch wide, while others were several inches to a foot wide.

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Delta Coal Corporation	Sun Spot	1962-1962	40,979	
Thunderbird Collieries Corporation	Sun Spot	1963-1966	2,875,877	
Ayrshire Collieries Corporation	Sun Spot	1967-1971	4,191,689	
Amax Coal Company	Sun Spot	1972-1983	10,478,068	
			17,586,613	

Droduction

Last reported production: December 1983

SOURCES OF DATA

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

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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, thickness, geologic problems.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Ipava Quadrangle, 2015 - Mine outlines.

Mine Index 2077

C. & W. Coal Company, C. & W. Mine

Type: Underground Total mined-out acreage shown: 82 Production indicates approximately 6 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	22	SE SE NE

GEOLOGY

		Thi	Thickness (ft)		Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	23-35			6.0	Underground	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Ezra C. Bucher Coal Company	Bucher	1920-1924 *	13,547	
A. W. Hickle	Hickle	1924-1925	4,800	
Standard Fuel Company	Standard	1926-1926	2,150	
C. & W. Coal Company	C. & W.	1927-1927	1,400	
Standard Fuel Company	Standard	1928-1928	4,116	
E. & W. Coal Company	E. & W.	1929-1930	4,398	
C. & W. Coal Company	C. & W.	1931-1931	<u>1,658</u>	
			32,069	

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

Last reported production: 1931

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Mine notes	Undated	1:62500	1:62500	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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 location, depth, thickness.

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

Mine Index 2079

H., G. & L. Coal Company, H., G. & L. Mine

Type: Underground Total mined-out acreage shown: 1

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	23	SW SW SW
Air shaft	Fulton	3N 1E	23	SW SW SW

GEOLOGY

		Thickness (ft)			Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	12			6.33	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
H., G. & L. Coal Company *	H., G. & L.	1940-1942	<u>770</u>	
			770	

^{*} Owned by Harry Grove, William Harre, H. Harre, George Thompson, and A. Lawery.

Last reported production: 1942

SOURCES OF DATA

		Original	Digitized		
Source Map	Date	Scale	Scale	Map Type	
MSHA 1235	4-8-1942	1:1680	1:1680	Final **	

^{**} Although the map is final and the base georegisters well with the land surface, the entry distances are not accurate, and the mine plan appears to be a sketch of the actual surveyed distances. The mine is shown as a general area of mining on the accompanying map.

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 Inspector's reports, courtesy of Joe Pelc, IDNR - Mine type, seam, depth, thickness, mining method. State Archive, MSHA_1235, courtesy of Robert Gibson, IDNR - Mine outline, shaft locations.

Mine Index 2081 Wilson Brothers, Wilson Mine

Type: Underground Total mined-out acreage shown: 45 (general area of mining) Production indicates approximately 1 acre was mined in the Springfield Coal and 3 acres in the Colchester Coal.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main drift	Fulton	3N 1E	23	SE NE NW

GEOLOGY

		Thickness (ft)			Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	22-40			4.0-6.0	RP	
Colchester	60-80			2.5-2.67	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Joseph Wilson	Wilson	1899-1913 *	9,602	_
Wilson Brothers	Wilson	1913-1916 **	<u>325</u>	
			9,927 ***	

^{*} Idle 1906

Last reported production: 1916

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Mine notes	Undated	1:62500	1:62500	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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 (Fulton County) - Mine names, mine index, ownership, years of operation. Mine notes (Fulton County) - Mine type, drift location. Federal Land Bank Report (Fulton County) - Mine outline.

^{**} Idle 1915

^{***} The production is composed of 4,251 tons from the Springfield Coal and 5,676 tons from Colchester Coal.

Mine Index 2082 David Thomas, Thomas Mine

Type: Underground Total mined-out acreage shown: 5 Production indicates approximately 3 acres were mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	24	NE NW SW
Air shaft	Fulton	3N 1E	24	NW NW SW
Old shaft	Fulton	3N 1E	24	NW NW SW

GEOLOGY

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

Geologic Problems Reported:

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Thomas & Moss	Thomas & Moss	1920-1922	56 *
David A. Thomas	Thomas	1922-1927 **	15,003
Glen Coal Company	Glen	1928-1928	2,704
David Thomas	Thomas	1929-1929	1,135
David Thomas	Thomas	1929-1930	2,591 ***
Glen Coal Company †	Glen	1931-1932	5,474 ***
David Thomas	Thomas	1933-1933	4,850 ***
			31,813

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

Last reported production: 1933

SOURCES OF DATA

		Original	Digitized		
Source Map	Date	Scale	Scale	Map Type	
Microfilm, document 351580	9-16-1929	1:480	1:530	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, seam.

Microfilm map, document 351580, reel 03136, frame 366 - Shaft locations, mine outline, mining method.

^{**} Idle 1924

^{***} Production after map date

[†] The Coal Report indicated the operator of Glen Coal Company was David Thomas.

Mine Index 2083 Bob Coal Company, Bob Mine

Type: Underground Total mined-out acreage shown: 2 Production indicates approximately 3 acres were mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Fulton	3N 1E	24	NE NE NW
Air shaft	Fulton	3N 1E	24	NE NE NW

GEOLOGY

0202001		Thic	kness (ft)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max Avg	Method	
Springfield				RPB	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Lutz & Grissom	Bob	1925-1927	7,151
Bob Coal Company	Bob	1928-1929	3,683
Bob Coal Company	Bob	1929-1929	1,240 *
Lutz & Grissom	Bob	1930-1932	6,081 *
Bob Coal Company	Bob	1933-1934	6,978 *
			25,133

^{*} Production after map date

Last reported production: 1934

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
State Archive, MSHA_1222	9-13-1929	1:240	1:240	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) - Seam.

State Archive, MSHA_1222, courtesy of Robert Gibson, IDNR - Shaft locations, mine outline, mining method.

Mine Index 2088 Ratcliff Coal Company, Ratcliff Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Pit or tipple	Fulton	3N 2E	14	NW NW NW	

GEOLOGY

		Thi	ckness (f	ft)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Kerton Creek *	6-15			2.5-3.0	Surface	

^{*} The mine will be included with the mines in the Colchester Coal. Other mines in this vicinity (14-T3N-R2E & 15-T3N-R2E) that are currently correlated to Colchester Coal may actually be in the Kerton Creek Coal.

Geologic Problems Reported:

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Ratcliff Coal Company	Ratcliff	1963-1963	<u>55</u> 55

Last reported production: 1963

SOURCES OF DATA

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

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

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

Mine Inspector's reports, courtesy of Joe Pelc, IDNR - Mine type, depth, thickness, mining method.

ISGS field notes (Fulton County) - Seam, mining method.

Mine Index 2089 Peabody Coal Company, Key No. 1 Mine

Type: Surface Total mined-out acreage shown: 378

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Tipple	Fulton	3N 2E	15	SW SE NW

GEOLOGY

		Inic	kness (ft)		Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	45-50		•	5.43	Surface	

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Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Key Coal Company	Key	1948-1955	2,933,228
Peabody Coal Company	Key No. 1 *	1956-1957	452,566 **
			3.385.794

^{*} Peabody Coal Company, Key No. 2 Mine is mine index 860 in Schuyler County, and mine index 2108 in Fulton County.

Last reported production: July 1957

SOURCES OF DATA

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

Annotated Bibliography (data source, brief description of information)

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

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

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

National Agriculture Imagery Program map, digital ortho-photo quadrangle map, Astoria Quadrangle, 2015 - Mine outlines.

^{**} The value shown is the 1956 tonnage only. The 1957 production was listed in the Coal Reports for Key No. 1 and Key No. 2 Mine (mine index 2108) combined, and that tonnage is recorded with Key No. 2 Mine. The 1957 tonnage is reported with Key No. 2 Mine.

Mine Index 2090 Carl Shaffer, Shaffer Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Main drift	Fulton	3N 2E	15	SE NE

GEOLOGY

		Thi	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Uncertain	40			3.5-5.0	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Carl Shaffer	Shaffer	1937-1943	<u>1,140</u>	
			1 1/10	

Last reported production: 1943

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
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 (Fulton County) - Mine names, mine index, ownership, years of operation.

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

Mine Inspector's reports, courtesy of Joe Pelc, IDNR - Mine type, depth, thickness, mining method.

Mine Index 2091 Grafton Coal Company, Grafton Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage	
Pit or tipple	Fulton	3N 2E	21	NE	

GEOLOGY

		Thi	Thickness (ft)		Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Colchester	15			1.5	Surface	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Grafton Coal Company	Grafton	1955-1959	3,018	
			3 018	

Last reported production: December 1959

SOURCES OF DATA

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

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

Mine notes (Fulton County) - Mine type, mine location.

Mine Inspector's reports, courtesy of Joe Pelc, IDNR - Mine type, seam, depth, thickness, mining method.

Mine Index 2092 Blue Coal Company, Blue Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Pit or tipple	Fulton	3N 2E	22	W ½

GEOLOGY

0202001		Thickne	ess (ft)	Mining	
Seam(s) Mined	Depth (ft)	Min M	ax Avg	Method	
Colchester	10		2.33	Surface	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Blue Coal Company	Blue	1959-1960	<u>26</u> 26

Last reported production: February 26, 1960

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Mine Inspector's reports	Undated	1:48000	1:48000	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, seam, depth, thickness.

Mine Inspector's reports, courtesy of Joe Pelc, IDNR - Mine location.

Mine Index 3396 Illinois Valley Coal Company, Illinois Valley Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Pit or tipple	Schuyler	2N 2E	8	SE NW SE

GEOLOGY

		Thi	ckness (f	ft)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Colchester	20			2.5	Surface	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Illinois Valley Coal Company	Illinois Valley	1962-1963	<u>370</u>	
			370	

Last reported production: June 1963

SOURCES OF DATA

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

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

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

Mine notes (Schuyler County) - Seam, depth, thickness.

Mine Index 4987 Grafton Coal Company, Grafton No. 2 Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage
Pit or tipple	Fulton	3N 1E	12	SE

GEOLOGY

		Thi	ckness (f	ft)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Colchester	10			2.0-2.5	Surface	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Grafton Coal Company	Grafton No. 2	1960-1961	<u>432</u>	
			132	

Last reported production: March 1961

SOURCES OF DATA

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

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

Mine Inspector's reports, courtesy of Joe Pelc, IDNR - Seam, depth, thickness, mining method.

Mine Index 5034 Justice Coal Company, Justice Mine

Type: Underground Total mined-out acreage shown: 40 Production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Shaft	Fulton	3N 1E	26	SE SW	

GEOLOGY

	I hickness (f		it)	Mining		
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Colchester					Underground	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Justice Coal Company	Justice	1940-1940	<u>300</u>	
			300	

Last reported production: 1940

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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.

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

Mine Index 5258

T. H. Jarvis Coal Company, Jarvis Mine

Type: Underground Total mined-out acreage shown: None; production indicates approximately 10 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Туре	County	Township-Range	Section	Quarters-Footage	
Main shaft	Fulton	3N 1E	23	NW SE SE	

GEOLOGY

		Thi	ckness (f	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Springfield	46			5.0-5.5	RP	

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
T. H. Jarvis Coal & Mining Company	Jarvis	1897-1900	<u>46,640</u>	
			46 640	

Last reported production: 1900

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Мар Туре
Sanborn Fire Insurance Maps	1900	Unknown	1:24000 *	Secondary source

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

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, thickness, mining method. Directory of Illinois Coal Mines (Fulton County) - Mine names, mine index, ownership, years of operation. Sanborn-Perris Map Company (Astoria) - Shaft location, depth.

Mine Index 7655 Charles Butler, Butler Mine

Type: Underground Total mined-out acreage shown: 61 Production indicates approximately 1 acre was mined. It is likely that other mines operated nearby; 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	Fulton	3N 1E	23	SW SE NW

GEOLOGY

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

Geologic Problems Reported:

PRODUCTION HISTORY

			Production
Company	Mine Name	Years	(tons)
Charles Butler	Butler	1925-1926	3,733
			3,733

Last reported production: 1926

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
ISGS field notes (W. V. Searight)	Undated	1:62500	1:62500	Secondary source
Federal Land Bank Report	4-20-1933	1:124800	1:124800	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 (Fulton County) - Mine names, mine index, ownership, years of operation. ISGS field notes (Fulton County) - Mine type, shaft location, seam. Federal Land Bank Report (Fulton County) - Mine outline.

Mine Index 7667 Schafer Brothers Coal Company, Schafer Mine

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

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage	
Main slope	Fulton	3N 2E	15	NE NE	

GEOLOGY

		l hi	ckness (†	t)	Mining	
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method	
Uncertain				6.0	Underground	_

Geologic Problems Reported:

PRODUCTION HISTORY

			Production	
Company	Mine Name	Years	(tons)	
Schafer Brothers Coal Company	Schafer	1947-1947	<u>216</u>	
			216	

Last reported production: 1947

SOURCES OF DATA

		Original	Digitized	
Source Map	Date	Scale	Scale	Map Type
Mine Inspector's reports	Undated	1:48000	1:48000	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 Inspector's reports, courtesy of Joe Pelc, IDNR - Mine location, thickness.

OTHER MINES SHOWN ON ASTORIA QUADRANGLE

Mine Index 5035 SE SW SW 26-T3N-R1E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 5036 SE NE NW 35-T3N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 5037 NW SW NE 35-T3N-R1E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 5038 NE SW NE 35-T3N-R1E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 5190 NW NW SE 23-T3N-R1E, slope, Springfield Coal source: ISGS field notes (W. V. Searight, 7-1926) & Federal Land Bank Report (4-1933)

Mine Index 5191 SW NE NW 14-T3N-R2E source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 5193 SE SW NW 22-T3N-R2E, surface, Colchester Coal source: ISGS field notes (W. V. Searight,

Mine Index 5257, Herriford (A.) Mine SW SW SW 8-T3N-R2E source: Coal Section files, Area 14, Mined-Out Area Maps (1950)

Mine Index 7656 SW SE NE 35-T3N-R1E, Colchester Coal, 2.5 ft thick source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7658 NW NE NW 23-T3N-R2E, drift, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base & ISGS field notes (W. V. Searight, 1926)

Mine Index 7659 NW SE NW 14-T3N-R2E source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7660 NW NE NW 14-T3N-R2E source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base & ISGS field notes (W. V. Searight, 8-19-1926)

Mine Index 7661 NW NW NW 14-T3N-R2E source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7662 SE NE NE 15-T3N-R2E source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base & ISGS field notes (H. R. Wanless, 8-19-1929)

Mine Index 7663 NW SE NE 15-T3N-R2E, drift source: ISGS field notes (W. V. Searight, 8-21-1926)

Mine Index 7664 NE SW NE 15-T3N-R2E, drift source: ISGS field notes (W. V. Searight, 8-21-1926)

Mine Index 7665 SW NW NE 15-T3N-R2E, drift source: ISGS field notes (G. H. Cady, 9-16-1926)

Mine Index 7666 NW 15-T3N-R2E, drift source: ISGS field notes (W. V. Searight, 8-19-1926)

Mine Index 7668 NW SE SE 31-T3N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7669 SW NW NE 5-T2N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7670 NE SE NW 5-T2N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7671 NE SW NW 5-T2N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7672 NW NE NW 8-T2N-R2E, Colchester Coal source: Coal Section files, undated work map on USGS Beardstown (15-minute) Quadrangle base

Mine Index 7673 NW SW NE 15-T3N-R2E source: Atlas Map of Fulton County, Illinois (1871) Mine Index 7674 NW NE NE 15-T3N-R2E source: Atlas Map of Fulton County, Illinois (1871)

Mine Index 7675 SW 14-T3N-R1E, Springfield Coal, 4.5-5.0 thick, circa 1859 source: Geology and Paleontology of Illinois, Volume IV (1870, page 98)

MINES WHOSE LOCATIONS ARE NOT KNOWN, ASTORIA 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 Astoria 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 192,728 (137,732 underground; 5,897 surface mined; 49,099 mined by uncertain method), which would represent approximately 30 to 160 acres, depending on the seam, recovery factor, mining method, and numerous other factors. (Note: 1 square mile = 640 acres)

ASTORIA (Fulton County)

Danner (Clarence), 1934-1941, drift, underground	622 tons	mine index 4970
A. & M. Coal Company, 1953-1954, surface	706 tons	mine index 4984
Donna (Jacob), 1883-1885, slope or drift, Springfield, 35-60, 5.75-6.0, RP	192 tons	
Bottenberg & Engle, 1883-1884, –, Springfield, 35-50, 5.0-6.0, RP Bectell & Choclate, 1884-1885 Choikly & Baghtol, 1885-1888 Wilson (Charles), 1888-1889 Battenburg (Joseph), 1889-1892 Diamond (James), 1892-1896 McClelland (Emery), 1896-1897	2,034 tons 512 tons 1,640 tons 600 tons 2,386 tons 2,750 tons 460 tons 10,382 tons	
Green Brothers, 1886-1890, shaft, Springfield, 35-40, 5.0-6.0, RP Greene (Henry), 1890-1891 Millock (Wilson), 1891-1892 Miller (A. J.), 1892-1894 Willick (Wilson), 1894-1899 Rumble (K. A.), Eclipse Mine, 1899-1903	4,633 tons 1,128 tons 7,895 tons 840 tons 6,379 tons <u>6,553</u> tons 27,428 tons	
Markham (Thomas A.), 1886-1887, shaft, Springfield, 20, 6.0, RP Markham (A.), 1887-1888	400 tons <u>850</u> tons 1,250 tons	
McClelland (Edward), 1888-1891, shaft, Springfield, 20, 6.0, RP	2,080 tons	
Stephenson (Stephen), 1888-1889	750 tons	
Hoppings (S. C.), 1889-1890	160 tons	
Hoops (Leonard), 1895-1899, drift, Cochester, 30-45, 2.0-2.5, RP	906 tons	
Mavall (D. S.), 1896-1897, drift, -, -, 2.5, RP	800 tons	
Perry (John), 1897-1899, drift, -, 30,	520 tons	
Swing (Thomas), 1897-1898, shaft or pit, Springfield, 0, 5.0	250 tons	
Stevenson (Steve), 1898-1899, shaft, Springfield, 30, 5.0	100 tons	
Lannery (E. R.), 1900-1902, drift, Colchester, 40, 2.5, RP	360 tons	

Peters (William), 1900-1902, drift, Colchester, 60, 2.5, RP	560 tons
Rockwell (A. J.), 1900-1902, drift, Colchester, 60, 2.5, RP	440 tons
Geiselman (Temple), 1902-1905, slope, -, 20, 2.5-5.17, RP	3,447 tons
Surprise Coal Company, 1902-1905, drift, Springfield, 21-25, 4.5-5.0, RP	1,500 tons
Ewing (D. T.), 1906-1907, shaft, Springfield, 30, 6.0, RP	1,040 tons
Bushnell (M.), 1909-1911, shaft & drift, Springfield, 28-48, 5.0-6.0, RP Falkensteen (Charles J.), 1911-1916 Falkenstein (W. O.), 1916-1917	2,500 tons 11,025 tons 3,600 tons 17,125 tons
Furnace & Diamond, 1909-1910, drift, -, 60-100, 2.5-6.0, RP Richardson & Parr, 1910-1911 Furnace & Diamond, 1911-1914	350 tons 880 tons <u>1,073</u> tons 2,303 tons
Reed (A.), 1909-1910, drift, Rock Island, -, 3.0, RP	272 tons
Bussie (Ray), 1909-1910, drift, Springfield, -, 4.5, RP	110 tons
Parr (Ross), 1911-1917, shaft, Springfield, 30-80, 5.0-6.0, RP Parr Coal Company, 1917-1918	11,015 tons 4,100 tons 15,115 tons
Foutch (Frank), 1911-1914, drift, Colchester, 60-70, 2.5-2.67, RP	925 tons
Ratcliff (John), 1911-1913, drift, Springfield, 15-45, 4.83-5.0, RP	275 tons
Hall (Charles), 1912-1913, drift, Springfield, 50, 4.83, RP	1,000 tons
Grove (L. J.), 1912-1913, drift, Colchester, 35, 3.33, RP	300 tons
James (Richard), 1912-1913, drift, Colchester, 40, 2.5, RP	125 tons
Rockwell (R. W.), 1913-1914, slope, Springfield, 70, 6.0, RP	465 tons
Diamond & Brook, 1914-1915, shaft, Springfield, 15-45, 6.0, RP Diamond & Brooker, 1915-1916	277 tons 375 tons 652 tons
Wilson (T. E.), 1914-1915, slope, Springfield, 6, 2.69, RP	128 tons
Garrett (George E.), 1914-1919, drift, Springfield, 45, 3.33-5.0, RP	1,700 tons
McBride (J. R.), 1915-1916, drift, Colchester, 60, 2.67, RP	665 tons
Raster (Nelson W.), 1915-1916, drift, Colchester, 65, 2.67, RP	480 tons
Hendee (Isaac), 1915-1933, drift, -, 50-65, 2.5-2.67, RP Hendee Brothers, 1934-1935 Hendee (L.), 1936-1936	5,295 tons 480 tons 160 tons 5,935 tons
Astoria Fuel Company, 1917-1920 Keller (Charles N.), No. 1 Mine, 1920-1921	11,438 tons 6,000 tons 17,438 tons
McPherson Coal Company, 1918-1920 Keller (Charles), No. 2 Mine, 1920-1921	4,475 tons <u>2,873</u> tons 7,348 tons

Valentine (Don), 1919-1921	1,067 tons
Batterton (John), 1919-1922 Seagum & Batterton, 1922-1923 Scrogum (Ben), 1923-1925 Gilsom (John) & Scrogum, 1925-1925 Scrogum (Ben), 1926-1927	430 tons 313 tons 851 tons 895 tons 461 tons 2,950 tons
Carles (Clarence), 1919-1921	559 tons
Diamond (J. W.), 1920-1922 Diamond (William) & Brother, 1922-1923	240 tons 595 tons 835 tons
Ashcroft (John), 1920-1921	85 tons
Hoole & Son, 1922-1923 Hoopes (H. H.), 1923-1924	2,594 tons <u>200</u> tons 2,794 tons
Walick & Rasler, 1922-1923	340 tons
Worley & Morse, 1922-1923 Worley & Cawless, 1925-1926 Whaley (Henry), 1927-1927	520 tons 100 tons 160 tons 780 tons
Batterton (C. E.), 1924-1925	120 tons
Caswell (J. W.), 1928-1928, underground	3,500 tons
Thompson (Russell), 1928-1929, underground Thompson (Deloss), 1930-1934 Thompson & Shaffer, 1934-1935	280 tons 16,000 tons <u>642</u> tons 16,922 tons
Cook (Sam), 1934-1936, underground	522 tons
Stremmel Coal Company, 1934-1935, surface	484 tons
Petefish (Lester), 1935-1935, underground	1,147 tons
Danner Brothers, 1936-1937, shaft, Springfield, 30, 6.0, RP Leonard (Carl & Clair), 1938-1938	822 tons 553 tons 1,375 tons
Gorey (Dean L.), 1937-1939, drift, Springfield, 30, -, RP also known as Litchfield Coal Company	860 tons
Diamond (John), 1939-1939, shaft, Springfield, 18, 6.0, RP Smith & Garrett, 1939-1939	60 tons 79 tons 139 tons
ASTORIA (Schuyler County)	
Butler (Charles), 1934-1934, surface	360 tons
Sugar Grove Coal Company, 1934-1935, underground	710 tons

BLUFF CITY (Fulton County)

Floren (Henry), 1898-1899, drift, Colchester, 40, 2.5	80 tons
Curlen (Hartford), 1898-1900, drift, Colchester, 40, 2.5, RP	590 tons
Parks (M. R.), 1915-1919, drift, -, 65-75, 2.83-3.0, RP	3,935 tons
Norman (G. T.), 1924-1925 Park (Manford), 1926-1926	1,080 tons 495 tons 1,575 tons
Parks (W.), 1929-1929	288 tons
Staples (William) Coal Company, 1924-1925	120 tons

BRIGHTON (Fulton County)

Baxter (Harry), 1920-1921	200 tons
Baxter (Harry), 1920-1921	200 to

BROWNING (Schuyler County)

Towns & Foutch, 1914-1915, drift, Colchester, 60, 2.5, RP	570 tons
McCullough, Cheney & Company, 1923-1924	600 tons
Poole (Joseph T.), 1929-1929, underground	70 tons
Stroop (Harry), 1934-1934, surface	100 tons
McComes (Granville), 1935-1935, surface	15 tons
Winner (William), 1937-1937, underground	90 tons
Mathis (L. W.) Coal Company, 1949-1952, surface	3,031 tons

SHELDON GROVE (Fulton County)

Lauery (E. R.), 1909-1910, drift, Colchester, –, 3.0, RP	64 tons
Weese (Walter), 1919-1921	447 tons

SHELDON GROVE (Schuyler County)

Lauery (E. R.), 1911-1912, drift, Colchester, 80, 2.5, RP	300 tons
Braunan (John), 1911-1914, drift, Springfield, 44-80, 2.67-3.0, RP	1,060 tons
Reed (A. L.), 1911-1912, drift, Colchester, 80, 2.67, RP	110 tons

SUMMUM (Fulton County)

Smithfield Coal Company, 1959-1960, surface	1,201 tons	mine index 4985
Shaffer (Solomon), 1889-1895, drift, Springfield, 40-43, 4.5-5.0, RP	1.760 tons	

Shaffer (Solomon), 1898-1900, drift, Springfield, 40, 6.0, RP	710 tons
Bankert (John D.), 1889-1895, drift, Springfield, 40, 4.5, RP	735 tons
Valentine (Don), 1911-1915, drift or slope, Springfield, 15-60, 3.0-6.0, RP Valentine (Dan), 1915-1916	1,570 tons <u>450</u> tons 2,020 tons
Gilson (John), 1913-1916, drift, -, 40-50, 2.67-4.0, RP	1,283 tons
King (J. R.), 1919-1921	693 tons
Scrogum (Ben) & Shaffer, 1919-1921	991 tons
Raseler & Wallis, 1922-1923 Rasler (Nelson), 1923-1924	980 tons 380 tons 1,360 tons
Barnsyndro & Rand, 1926-1926	740 tons
Gilson & Beckman, 1922-1923 Gibson (John), 1923-1924 Gilson & Beckham, 1924-1926	800 tons 759 tons 3,340 tons 4,899 tons
Hubbs (R. R.), 1934-1935, underground	210 tons

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