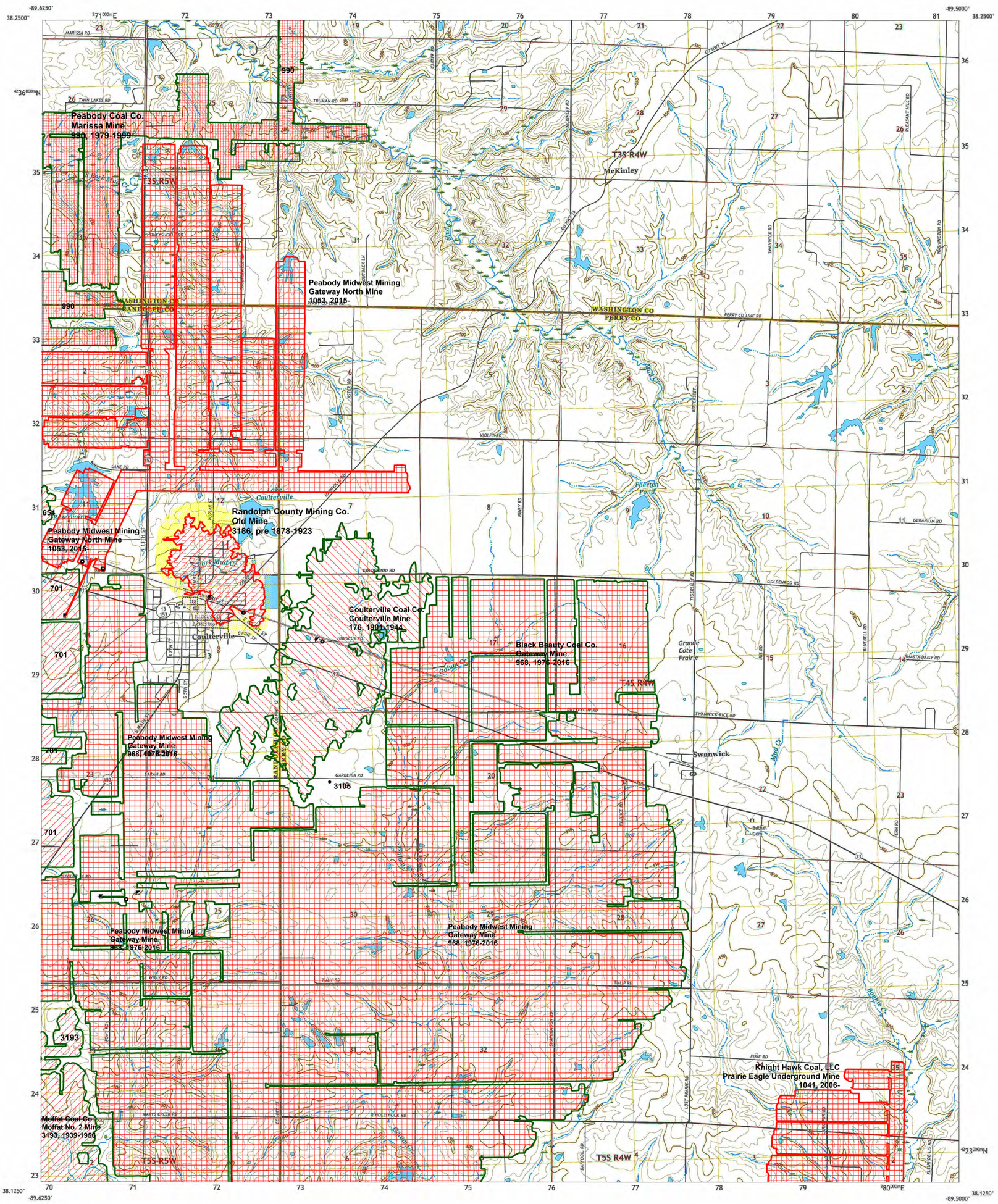
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

COULTERVILLE QUADRANGLE
ILLINOIS
7.5-MINUTE SERIES



Coal Mines in Illinois
Coulterville Quadrangle
Perry, Washington & Randolph Counties, Illinois

This map accompanies the Coal Mines Directory for the Coulterville Quadrangle. Consult the directory for a complete explanation of the information shown on this map.

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

Other Areas Depicted
- Non-Coal Mines

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

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

Other Points Depicted
- Non-Coal Mines

Location

Mine Annotation
(space permitting)
Company
Mine Name
ISGS Index No., Years of Operation

Disclaimer

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

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

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

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

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 16S

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, July 2015 - October 2015
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2017
Hydrography.....National Hydrography Dataset, 2002 - 2015
Contours.....National Elevation Dataset, 2008
Boundaries.....Multiple sources; see metadata file 2014 - 2016
Public Land Survey System.....BLM, 2017
Wetlands.....FWS National Wetlands Inventory 1981

UTM GRID AND 2017 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000
1 KILOMETERS 0 0.5 1 2
1000 METERS 500 0 1000 2000
1 MILES 0 0.5 1
1000 FEET 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011. A metadata file associated with this product is draft version 0.6.18

ROAD CLASSIFICATION
Expressway, Secondary Hwy, Ramp, Local Connector, Local Road, 4WD
Interstate Route, US Route, State Route

ADJOINING QUADRANGLES
1 Saint Libory
2 Oakdale
3 Nashville
4 Tilden
5 Winkler
6 Steeleville
7 Percy
8 Pinckneyville

COULTERVILLE, IL
2018

ILLINOIS
Illinois State Geological Survey
PRAIRIE RESEARCH INSTITUTE

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Mine Outlines Compiled by
Alan R. Myers

2010; revised 2012; updated 2016, 2021 & 2023

DIRECTORY OF COAL MINES IN ILLINOIS
7.5-MINUTE QUADRANGLE SERIES
COULTERVILLE QUADRANGLE
PERRY, WASHINGTON & RANDOLPH COUNTIES

Alan R. Myers & C. Chenoweth

2010, Updated 2021, 2023, 2024

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This material is based upon work supported by the Illinois Mine Subsidence Insurance Fund. 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 Mine Subsidence Insurance Fund.

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.

CONTENTS

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 COULTERVILLE QUADRANGLE

Mining has taken place almost continuously from before 1878 until present in the vicinity of the Coulterville Quadrangle. The oldest mines are directly contiguous to the town of Coulterville near the western edge of the quadrangle, and the more recent mines have advanced eastward from Randolph County. The Herrin Coal was mined, usually having a thickness over 6 feet. The roof material was often problematical, with pods or lenses of white top that came down readily, associated with slips and rolls that further contributed to poor roof conditions. Energy Shale was also present in some areas, a sandy gray shale that is also known as a roof that falls readily. In most areas, a competent limestone was present above the shale, and in some cases, was the immediate roof over the coal.

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.

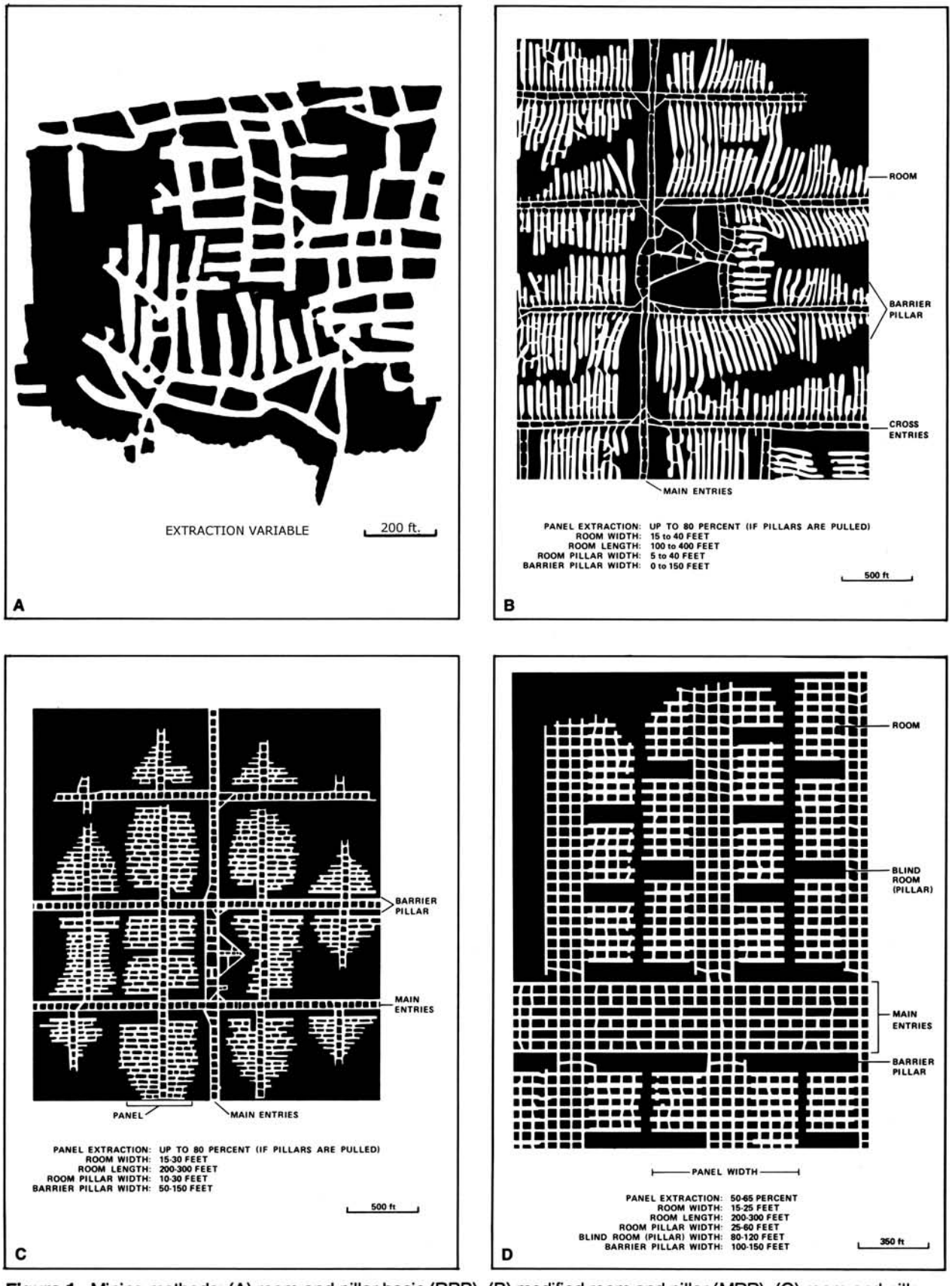
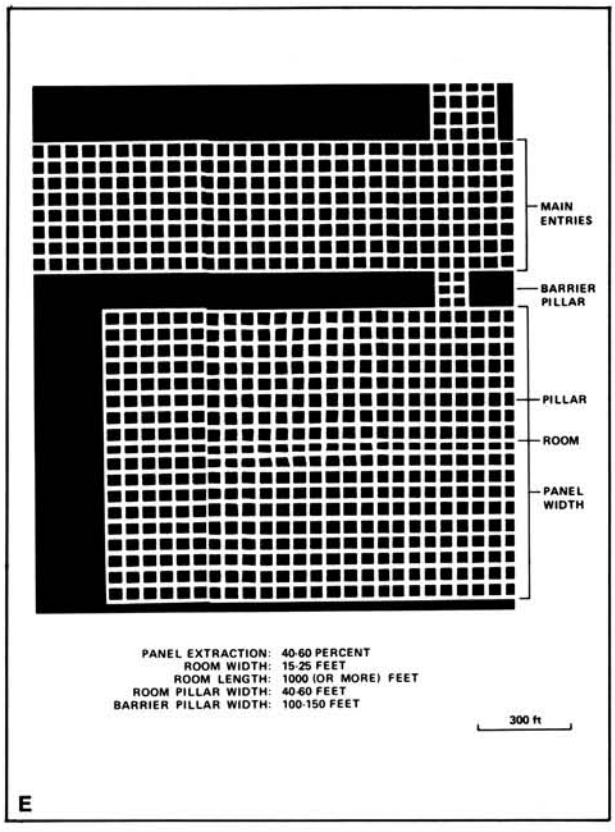
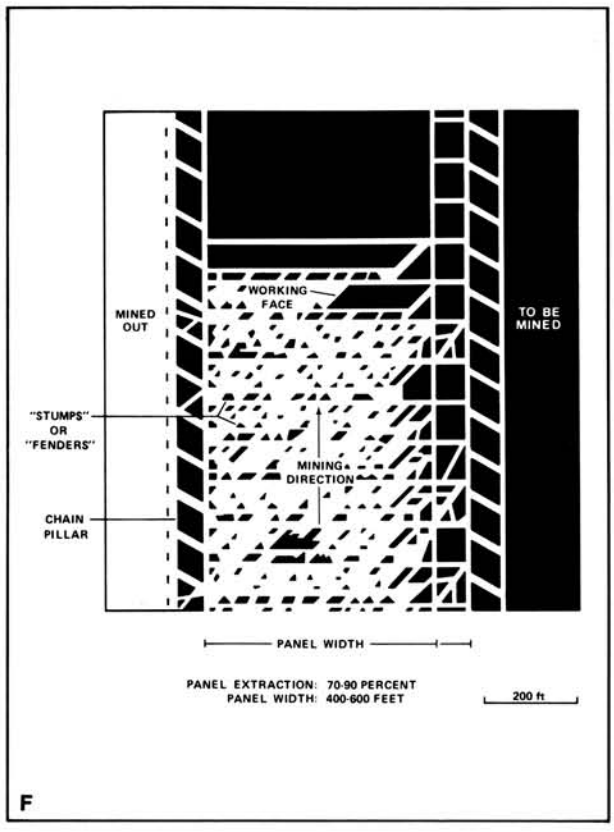
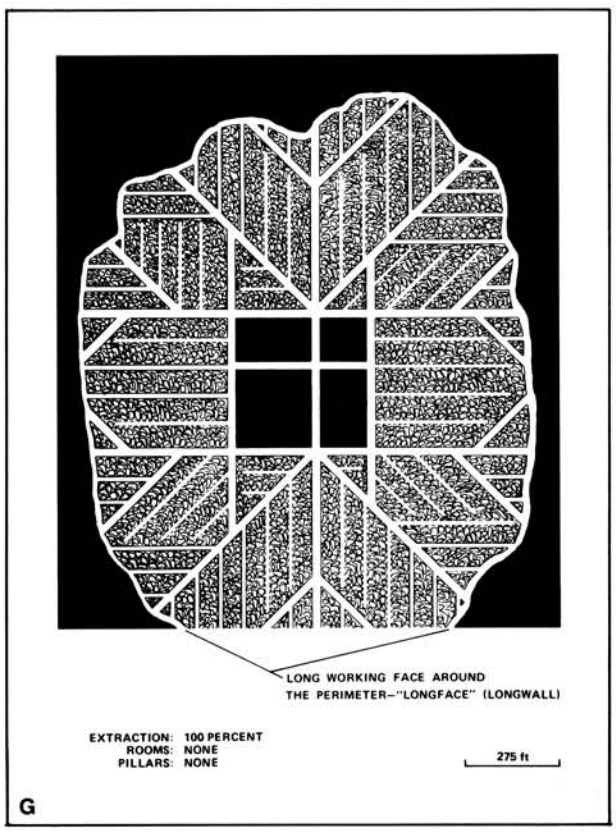


Figure 1 Mining methods: (A) room-and-pillar basic (RPB), (B) modified room and pillar (MRP), (C) room-and-pillar panel (RPP), (D) blind room and pillar (BRP).







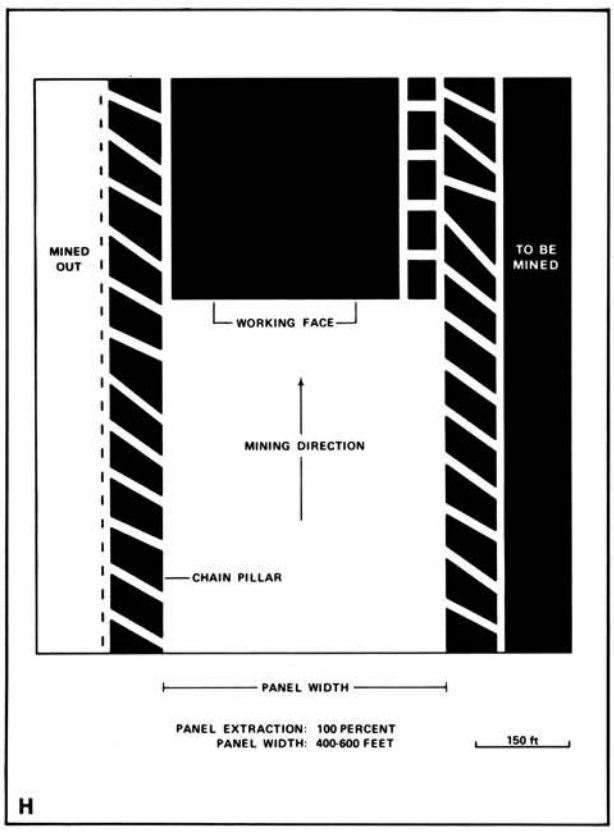


Figure 1 *(cont.)* Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall

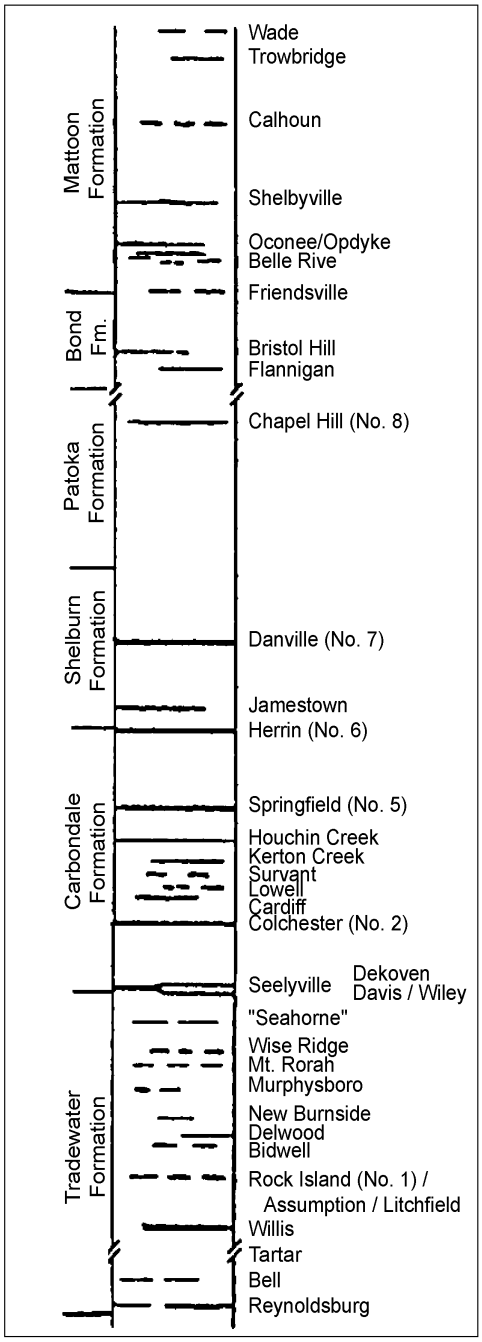


Figure 2 Generalized stratigraphic section, showing approximate vertical relations of coals in Illinois.

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.

PART II DIRECTORY OF MINES IN THE COULTERVILLE QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Whatever 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 176
Coulterville Coal Company, Coulterville Mine

Type: Underground Total mined-out acreage shown: 813

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Perry	4S 4W	18	SW SE NW
Air shaft	Perry	4S 4W	18	SW SE NW

GEOLOGY

		Thickness (ft)			Mining
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method
Herrin	280-282	6.33	7.75	6.66	MRP

Geologic Problems Reported: Some small faults were observed in the mine. The roof was draw slate and white top ranging from 4 inches to 6 feet thick. Some roof falls extended upward over 18 feet, showing only the white top. In limited areas, a bastard rock made another poor roof, sometimes 7 to 8 feet thick. The mine was very dry, but the fire clay floor heaved after the coal was removed.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Chicago & Coulterville Coal Company	Chicago & Coulterville	1901-1904	45,403
West Muddy Coal Company	West Muddy	1904-1905	41,476
Hippard Coal Company	Vulcan	1905-1906	51,040
Vulcan Coal & Mining Company	Vulcan	1906-1907	64,389
St. Louis - Coulterville Coal Company	Vulcan	1907-1917	634,593
Perry County Coal Company	Vulcan	1917-1923	901,788 *
Perry Coal Company	Perco	1923-1931	2,244,295 *
Coulterville Coal Company	Coulterville	1932-1944 **	666,926 *
			4,649,910

* Production was reported in Randolph County from 1920 to 1923 and 1943 to 1944
** Idle 1936 & 1941

Last reported production: April 1944

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 353359	6-16-1944	1:2400	1:4800	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.
Mine notes (Perry County) - Mine type, shaft location, seam, depth, thickness, geologic problems.
Microfilm map, document 353359, reel 03142, frames 360 & 361 - Shaft locations, mine outline, mining method.

Mine Index 654
Sparta Coal Company, Florida Mine

Type: Underground Total mined-out acreage shown: 1,206

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Randolph	4S 5W	10	SW SE NW
Air shaft	Randolph	4S 5W	10	NW NE SW

GEOLOGY

		Thickness (ft)			Mining
Seam(s) Mined	Depth (ft)	Min	Max	Avg	Method
Herrin	186	5.5	6.5	6.0	RPP, some MRP

Geologic Problems Reported: The immediate roof was up to 3 feet of black shale that stuck to the coal or limestone where the black shale wedged out. In some places, up to 2 feet of white top was seen above the coal. The limestone cap rock was a nodular argillaceous rock that required heavy timbering and fell without warning even then. It appeared to consist of limestone nodules 4 to 8 inches across embedded in calcareous shale, and more closely resembles a bastard limestone than the typical Brereton Limestone. Coal balls were present in the eastern part of the mine in the uppermost bench of coal, which thickened up to 2 feet thick when the coal balls were present. Thin plates of pyrite were present, as well as 1/16 inch thick band of plates that was about 18 inches below the roof. Another band of pyrite plates and / or clay was present about 18 inches above the floor. This band in the lower part of the seam averaged 1/8 to 1/4 inch thick, and ranged up to 2 inches thick. The blue band was about 12 inches above the floor and contained some streaks of pyrite. Bands of mother coal were fairly persistent in the mine.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
A. E. Powell	Consol	1902-1904	35,220
J. A. Greim	Consol	1904-1905	39,617
Coulterville Coal Company	Consol	1905-1907	67,631
West Mine Coal Company	Consol	1907-1912	136,841
Underwood Coal & Mining Company	Consol, West	1912-1914	60,438
West Side Coal Company	Consol, West	1914-1919	281,559
St. Louis Coal Company	Florida	1919-1940 *	2,896,031
Florida Coal Company	Florida	1940-1945	1,895,198
Sparta Coal Company	Florida	1946-1950	1,657,781
			7,070,316

* Idle 1932

Last reported production: September 1950 **

** According to the source map, the production reported after June 1 must have been from an on-site stockpile. The map legend states that the mine was last operated March 15, 1950, was abandoned September 1, 1950, and the final survey was June 1, 1950.

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 353357	6-1-1950	1:2400	1:4800	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Mine notes (Randolph County) - Mine type, shaft location, seam, depth, thickness, geologic problems.
Microfilm map, document 353357, reel 03142, frames 354-357 - Shaft locations, mine outline, mining method.

Mine Index 701
Old Ben Coal Company, Spartan Mine

Type: Underground Total mined-out acreage shown: 7,197

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Hoist slope	Randolph	4S 5W	21	NE SE SE
Materials slope	Randolph	4S 5W	21	SE SE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	200-203			6.0-6.75	RPP

Geologic Problems Reported: The roof was generally up to 4 feet of black Anna Shale topped by clod and limestone. Joints were common in the Anna Shale, and the shale broke along the joint surfaces and fell. In some places, the roof was nodular limestone that slabbed off in thicknesses of a foot or more along shaley partings and did not make a competent roof. Generally, the limestone was more solid in the eastern portion of the mine than in the western part. In some areas, the roof was gray shale, which sometimes contained coal balls in the upper part of the seam. Pyrite was present in the coal along fracture faces, in thin bands, and mixed in the durain bands. Squeezing took place before 1974. In some areas, 2 feet of upheaval was noted, but a mine examiner reported that in some areas, the squeezing was all the way to the roof. This caused the pillars to crack.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Midwest Utilities Coal Corporation	Bradbury	1952-1957	2,165,914
Zeigler Coal & Coke Company	Spartan	1957-1970	11,310,966
Zeigler Coal Company	Spartan No. 2	1971-1991 *	15,399,408
Old Ben Coal Company	Spartan	1992-1997	9,079,821
			37,956,109

* Idle 1983 & 1984

Last reported production: November 21, 1997

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, Coal Section files	4-24-1998	1:4800	1:4800	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Mine notes (Randolph County) - Mine type, slope location, geologic problems.
Company map, Coal Section files - Slope locations, mine outline, mining method.

Mine Index 968
Peabody Midwest Mining, Gateway Mine

Type: Underground Total mined-out acreage shown: 13,062

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Randolph	4S 5W	26	NE SW NE
Man & materials shaft	Randolph	4S 5W	26	NE SE NE
Air shaft	Randolph	4S 5W	26	SW SE NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	200-265			6.2-7.0	CRP

Geologic Problems Reported: Mining was stopped on the east and southeast sides by the Anvil Rock Channel.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Zeigler Coal Company	Zeigler No. 11	1976-1991	14,895,818
Old Ben Coal Company	Zeigler No. 11	1992-2003 *	22,158,865
Coulterville Coal Company	Gateway	2004-2006	4,721,378
Black Beauty Coal Company	Gateway	2007-2010	12,439,105
Peabody Midwest Mining	Gateway	2011-2015	12,537,603
			66,752,769

* Idle 1996

Last reported production: 2015

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 6-461N	3-29-2016	1:6000	1:6000	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Company map, Coal Section files, 6-461N - Slope & shaft locations, mine outline, mining method, geologic problems.

Mine Index 990
Peabody Coal Company, Marissa Mine

Type: Underground Total mined-out acreage shown: 7,273

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Washington	3S 5W	29	NW NW SE
Air shaft	Washington	3S 5W	29	SW NW SE
Air shaft	Washington	3S 5W	29	SW NW SE
Air shaft	Washington	3S 5W	29	SW NE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	150-200			6.6-7.3	BRP

Geologic Problems Reported: A thrust fault with displacement up to 1.5 feet was noted, as well as some localized thrust faults with less than 1 foot of displacement. The thrust faults were laterally discontinuous. The roof was limestone near the slope bottom. Limestone roof materials were sometimes thin or discontinuous. The limestone was likely Brereton Limestone in some areas, but the Conant Limestone was also seen in the Marissa Mine. Anna Shale made the roof in some areas, and joints and slips were usually widely spaced in this black shale. Some areas of black shale roof contained concretions. Slips were common where the roof was Energy Shale, and the coal under the gray shale sometimes contained coal balls in the upper part of the seam. A set of slips, oriented northwest-southeast, southwest of the air intake shaft marked a boundary between good and bad roof. The bad roof had many slips, and appeared to have thin or no limestone in the sequence above the coal. The coal was generally 5.5 feet thick under limestone roof and up to 7.5 feet thick under black shale. Pyrite was present in the coal as stringers, thin bands and goat beards. The blue band was about 1 foot from the bottom of the coal.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Peabody Coal Company	Marissa	1979-1999	40,680,259
			40,680,259

Last reported production: 1999

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, MS_25_01	1-11-2000	1:3200	1:3200	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth.
Directory of Illinois Coal Mines (Washington County) - Mine names, mine index, ownership, years of operation.
Mine notes (Washington County) - Mine type, seam, thickness, geologic problems.
State archive, MS_25_01 - Slope & shaft locations, mine outline, mining method.

Mine Index 1041
Knight Hawk Coal, LLC, Prairie Eagle Underground Mine

Type: Underground Total mined-out acreage shown: 7,002

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main drift, north mine	Perry	5S 4W	30	NE NE NW
Air drifts (3)	Perry	5S 4W	30	NE NE NW
Belt drift	Perry	5S 4W	30	NE NE NW

GEOLOGY

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

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

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Knight Hawk Coal, LLC	Prairie Eagle Underground	2006- *	44,982,479 *
			44,982,479

* Production includes tonnage through 2022, the latest available Coal Report.

Last reported production:

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 6-426N	3-15-2022	1:4800	1:4800	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness, mining method.
Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.
Mine notes (Perry County) - Drift location.
Company map, Coal Section files, 6-426N - Drift locations, mine outline, mining method.

Mine Index 1053
Peabody Midwest Mining, Gateway North Mine

Type: Underground Total mined-out acreage shown: 2,185

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Slope	Randolph	4S 5W	14	NE SW NW
Air shaft (intake)	Randolph	4S 5W	11	SW SW SE
Air shaft (exhaust)	Randolph	4S 5W	11	SW SW SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	305			6.2	CRP

Geologic Problems Reported: (Geologic problems npt reported for active mines).

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Peabody Midwest Mining	Gateway North	2015- *	17,229,644 *

* Production shown is through 2022, the most recent Coal Report

Last reported production:

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 6-473F	3-27-2020	1:4800	1:4800	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Company map, Coal Section files, 6-473F - Slope and shaft locations, mine outline, mining method.

Mine Index 3186
Randolph County Mining Company, Old Mine (also known as Granny Mine)

Type: Underground Total mined-out acreage shown: 201 Production indicates approximately 5 acres were mined after the map date. The outline shown on the accompanying map is smaller than expected for the reported production. Production indicates approximately 270 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Randolph	4S 5W	13	SE NE NW
Air shaft	Randolph	4S 5W	13	NE SW NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	313			6.5	RPB

Geologic Problems Reported: A gas explosion in the winter of 1882-1883 killed 10 men. No problems were noted after an air shaft was constructed.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Jones & Nesbit	Coulterville	pre1878-1879 *	5,339
Coulterville Coal Company	Coulterville	1881-1883	150,710
Jones & Nesbit	Coulterville	1883-1885	23,100
William Miller	Coulterville	1885-1886	13,410
Consolidated Coal Company	Coulterville	1886-1889	24,035
J. M. Jones	Coulterville	1889-1891	31,500
Coulterville Mining Company	Coulterville	1891-1909	565,782
Randolph County Mining Company	Old Mine, Granny Mine, No. 2	1909-1922	715,136
Randolph County Mining Company	Old Mine	1922-1923	24,936 **
			1,553,948

* Production and years of operation before 1878 are not known. The 1879 Coal Report indicates 8 acres were mined.
** Production after map date

Last reported production: April 1923

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 353397	12-1-1922	1:2400	1:4800	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, geologic problems.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Mine notes (Randolph County) - Mine type, shaft location, seam, depth, thickness.
Microfilm map, document 353397, reel 03142, frame 409 - Shaft locations, mine outline, mining method.

Mine Index 3193
Moffat Coal Company, Moffat No. 2 Mine

Type: Underground Total mined-out acreage shown: 2,002

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Randolph	5S 5W	4	NE SW SE
Man & material slope	Randolph	5S 5W	4	NE SW SE
Air shaft	Randolph	5S 5W	4	NW SE SE
Air shaft	Randolph	5S 5W	4	NW SE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft) Min	Max	Avg	Mining Method
Herrin	88-100			6.0-6.5	RPP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Moffat Coal Company	Moffat No. 2	1939-1956	9,224,668
			9,224,668

Last reported production: February 28, 1956

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 353366	2-28-1956	1:2400	1:4800	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
Mine notes (Randolph County) - Mine type, slope location, seam.
Microfilm map, document 353366, reel 03142, frames 368-371 - Slope & shaft locations, mine outline, mining method.

OTHER MINES SHOWN ON COULTERVILLE QUADRANGLE

Mine Index 3105, Holiday Mine NW NE SW 19-T4S-R4W, shaft source: Microfilm map, document 353359, reel 03142, frame 361, map of Perco Mine (mine index 176) and Coal Section files, digital map of Gateway Mine (mine index 968)

INDEX OF MINES IN THE COULTERVILLE QUADRANGLE