

Coal Mines in Illinois Mount Olive Quadrangle

Macoupin & Montgomery Counties, Illinois

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

Mining Method

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

Other Areas Depicted

- Non-Coal Mines

Source of Mine Outline

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

Tipple, Shaft, Slope, Drift Locations

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

Other Points Depicted

- Non-Coal Mines

Mine Annotation (space permitting)

Company
Mine Name
ISGS Index No., Years of Operation

Disclaimer

Please check the Coal Section at the Illinois State Geological Survey's web site at <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 off 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.

ILLINOIS
Illinois State Geological Survey
PRAIRIE RESEARCH INSTITUTE

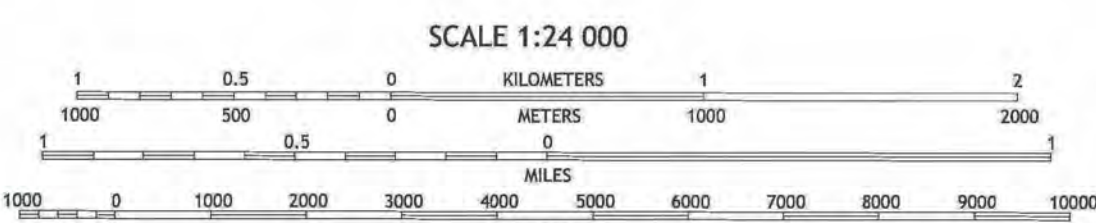
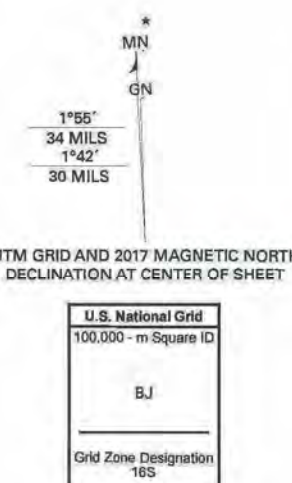
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February 8, 2002
Revised June 14, 2004 & December 2023

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
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Base Map: NAD83, July 2015 - October 2015
Roads: U.S. Census Bureau, 2017
Names: U.S. Census Bureau, 2017
Hydrography: National Hydrography Dataset, 2002 - 2016
Contours: National Elevation Dataset, 2008 - 2011
Boundaries: Multiple sources; see metadata file 2014 - 2016
Public Land Survey System: BLM, 2017
Wetlands: FWS National Wetlands Inventory 1981 - 1986



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



MOUNT OLIVE, IL
2018

DIRECTORY OF COAL MINES IN ILLINOIS 7.5-MINUTE QUADRANGLE SERIES MOUNT OLIVE QUADRANGLE MACOUPIN & MONTGOMERY COUNTIES

Melisa L. Borino & Cheri Chenoweth



Department of Natural Resources
ILLINOIS STATE GEOLOGICAL SURVEY
2002
REVISED 2004, 2023

**DIRECTORY OF COAL MINES IN ILLINOIS
7.5-MINUTE QUADRANGLE SERIES
MOUNT OLIVE QUADRANGLE
MACOUPIN & MONTGOMERY COUNTIES**

2002
REVISED 2004, 2023

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

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

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

Printed by authority of the State of Illinois/2004

CONTENTS

INTRODUCTION	1
MINING IN THE MOUNT OLIVE QUADRANGLE	1
PART I EXPLANATION OF MAP AND MINE SUMMARY SHEET	2
INTERPRETING THE MAP	2
Mine Type and Mining Method	2
SOURCE MAPS	3
POINTS AND LABELS	3
INTERPRETING A MINE SUMMARY SHEET	6
REFERENCES	8
PART II DIRECTORY OF MINES IN THE MOUNT OLIVE QUADRANGLE	9
MINE SUMMARY SHEETS	9
Mine Index 68	
Bell & Zoller Coal & Mining Company, Bell & Zoller No. 15 Mine	9
Mine Index 73	
Mt. Olive & Staunton Coal Company, Mt. Olive & Staunton No. 2 Mine	10
Mine Index 189	
Staunton Mine Seven, Inc., Staunton No. 7 Mine	11
Mine Index 282	
Mt. Olive Coal Company, Hoosier Mine	12
Mine Index 413	
Superior Coal Company, Superior No. 1 Mine	13
Mine Index 761	
Consolidated Coal Company of St. Louis, Consolidated No. 8 Mine	14
Mine Index 2894	
Consolidated Coal Company of St. Louis, Consolidated No. 10 Mine	15
Mine Index 2895	
Consolidated Coal Company of St. Louis, Consolidated No. 9 Mine	16
Mine Index 2896	
Consolidated Coal Company of St. Louis, Anchor Mine	17
INDEX OF MINES IN THE MOUNT OLIVE QUADRANGLE	18

INTRODUCTION

Coal has been mined in 73 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.

The directory serves as a key to the accompanying mine map and provides basic information on the coal mines. 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.

MINING IN THE MOUNT OLIVE QUADRANGLE

The mines in the Gillespie South Quadrangle operated for long periods, with only two of the ten operating for less than 20 years. The longest-running mine was the Staunton No. 7 Mine (mine index 189), which operated for over 70 years. The four Superior Coal Company mines operated between 36 and 48 years each, and were among the most productive mines in the state during World War I. Employment at these mines was fairly stable during the Great Depression in spite of frequent idling of the mines, the result of an agreement between the Superior Coal Company and the unions to share out the work among the men instead of layoffs.

The coal thickness in the Mount Olive Quadrangle ranged from below 5 feet thick to over 9 feet thick. Depths ranged from 290 to about 350 feet.

The roof conditions described in several mines were similar. Below the persistent, competent limestone was a crumbly gray shale, then a green and brown shale. Below that was a lenticular limestone that ranged from 0 to 12 inches thick, with a light gray shale (usually referred to as "clod") and below that a massive black shale. The clod and dark gray shale did not hold very well. Some mines left 14 to 22 inches of top coal to help keep the roof up, but some roof falls went to the upper limestone. Leaving the top coal protected the shale from the changes in humidity and other effects of weathering, and slowed the deterioration. Most of these mines operated prior to roof bolting (the earliest roof bolting was in this area in 1947, in Staunton No. 7 Mine, mine index 189), and timbering was used to keep the roof up. In another area, limestone protrusions (sometimes referred to as bosses) extended down into the coal seam. They were inferred to be derived by pressure, as the black shale and coal below was usually shattered with pinwheel slips around the protrusions.

PART I EXPLANATION OF MAP AND MINE SUMMARY SHEET

INTERPRETING THE MAP

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

Mine Type and Mining Method

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

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

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

Room and Pillar - mining is divided into six categories:

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

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

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

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

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

SOURCE MAPS

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

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

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

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

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

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

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

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

POINTS AND LABELS

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

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

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



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

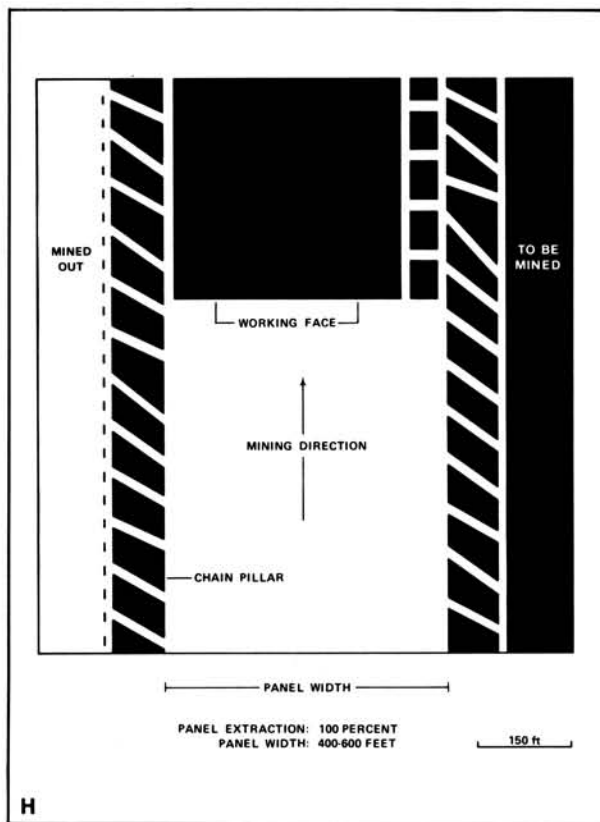
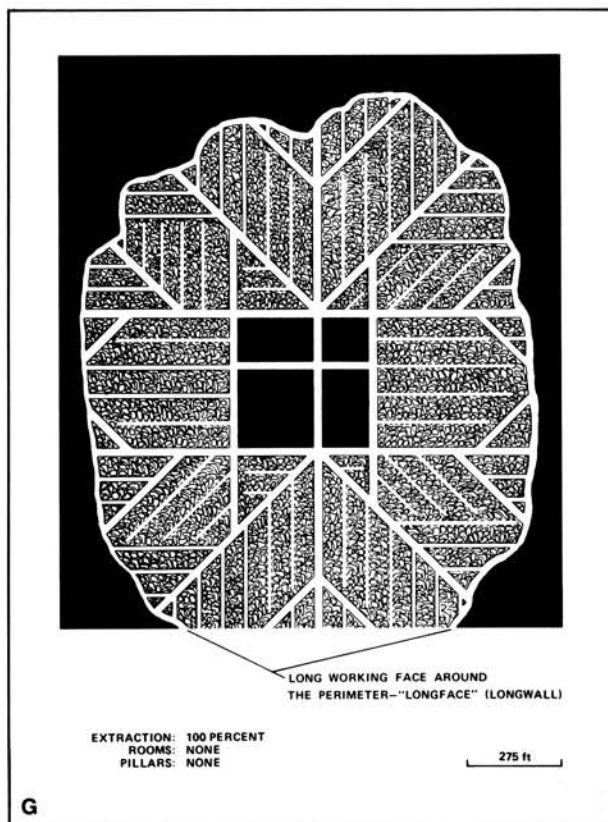


Figure 1 (cont.) Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall



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

INTERPRETING A MINE SUMMARY SHEET

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

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

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

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

SHAFT, SLOPE, DRIFT OR TIPPLE LOCATIONS

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

GEOLOGY

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

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

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

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

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

PRODUCTION HISTORY

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

SOURCE OF DATA

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

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

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

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

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

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

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

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

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

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

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

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

REFERENCES

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

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

PART II DIRECTORY OF MINES IN THE MOUNT OLIVE QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Mount Olive 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 68

Bell & Zoller Coal & Mining Company, Bell & Zoller No. 15 Mine

Type: Underground Total mined-out acreage shown: 4,014

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft (8.83' x 15.5')	Macoupin	7N 6W	9	NE NW NE
Air shaft (8.83' x 15.5')	Macoupin	7N 6W	9	SE NW NE

This mine is connected underground to Staunton No. 7 Mine (mine index 189).

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	387	7.0	8.75	7.5-7.67	MRP *

* RPP around the outer portions of the mine, the interior is MRP.

Geologic Problems Reported: Portions of the black shale roof (a minimum of 2 to 4 inches) were rotten, and were overlain by 2 inches of clod. The clod was dark gray and hard when fresh, but after exposure and oxidation, it became lighter and crumbled in the hand. The roof conditions in the north part of the mine were very good; in the south part, there was some soapstone. Limestone protrusions into the seam caused some difficulty with mining. Some slips were present in the black shale, especially around the protrusions. The shale was very hard to keep up and sooner or later was taken down up to the limestone cap rock. Coal balls were present, but few in number. Squeezes were noted in the NE 1/4 of section 9 (1911 and 1924), and NW 1/4 of section 4 (1938).

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Consolidated Coal Company of St. Louis	Consolidated No. 15	1905-1951	27,476,356
Bell & Zoller Coal & Mining Company	Bell & Zoller No. 15	1951-1951	45,835
			27,522,191

Last reported production: May 1951

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_1123	5-11-1951	1:4800	1:4800	Final
Company, 4103.M34 i5.1-13	5-1-1942	1:4800	1:4800	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, shaft sizes.

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

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

State archive, IL_1123 - Shaft locations, mine outline, mining method.

Company map, ISGS map library 4103.M34 i5.1-13 - Shaft locations.

Company map, ISGS map library, Old Ben Coal Co. archive collection - Geologic problems.

Mine Index 73**Mt. Olive & Staunton Coal Company, Mt. Olive & Staunton No. 2 Mine**

Type: Underground Total mined-out acreage shown: 5,504

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Twp-Rge	Section	Quarters-Footage
Main shaft	Madison	6N 6W	10	150 FNL, 100 FWL
Air shaft	Madison	6N 6W	10	NW NW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	293-325	5.0	8.0	6.5-7.0	RPP

Geologic Problems Reported: Some small faults were present, with displacement of 3 feet. Roof rolls sometimes cut the coal thickness down to 4 feet. Some gas was present near the roof. The floor clay heaved slightly.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Mt. Olive & Staunton Coal Company	Mt. Olive & Staunton No. 2	1904-1957	<u>32,519,272</u> 32,519,272

Last reported production: June 1957

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_47	3-1-1965	1:4800	1:4800	Final
State archive, IL_2620	4-1935	1:2400	1:2400	Not final
State archive, IL_2646	Undated	Unknown	1:24000	Undated

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, seam, depth, thickness.
 Directory of Illinois Coal Mines (Madison County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Madison County) - Mine type, shaft location, seam, depth, thickness, geologic problems.
 State archive, IL_47 - Shaft locations, mine outline (east side of mine), mining method.
 State archive, IL_2620 - Mine outline (southwest side of mine).
 State archive, IL_2646 - Mine outline (west side of mine).

Mine Index 189**Staunton Mine Seven, Inc., Staunton No. 7 Mine**

Type: Underground Total mined-out acreage shown: 3,521

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	21	SW SW SE
Air shaft	Macoupin	7N 6W	21	SE SW SE

This mine is connected underground to Bell and Zoller No. 15 (mine index 68) and Consolidated No. 14 Mine (mine index 190).

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	350-355	5.0	7.5-8.0	6.67-7.5	RPP

Geologic Problems Reported: Occasional rolls were present. The roof was dark gray or black shale with 6 to 24 inches of clod above it. A 3-inch band of limestone occurred above the clod, separated from the main limestone caprock by a 1-inch clay seam. Some of the shale was severely fractured and contained many slips, making a treacherous roof. Some rooms had to be abandoned due to inability to keep the roof up. The 1935 source map showed bad top and squeezed areas in the NE of section 28 and NW of section 27, bad top in NW and SW of section 22, and caved areas in SW section 22 and NE of section 21 (all T7N-R6W). This mine was the site of one of the earliest experiments in roof bolting in 1947, which proved very effective. The coal contained pyrite lenses (up to 1 inch wide) and calcite and gypsum stringers above the blue band.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Williamson, Townsend & Company	Williamson & Townsend	1881-1882	18,000
Ellsworth Coal Company	Ellsworth No. 7	1882-1886	131,249
Consolidated Coal Company of St. Louis	Consolidated No. 7	1886-1896	1,246,276
B. Hebenstreit	Consolidated No. 7	1896-1897	101,035
Consolidated Coal Company of St. Louis	Consolidated No. 7	1897-1951 *	17,302,596
Bell & Zoller Coal & Mining Company	Bell & Zoller No. 7	1951-1951	140,025
Staunton Mine Seven, Inc.	Staunton No. 7	1951-1952	33,572
			18,972,753

* Idle 1911-1913, 1931-1934

Last reported production: February 1952

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_727_03	2-19-1952	1:4800	1:4800	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

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

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

State archive, IL_727_03 - Shaft locations, mine outline, mining method.

State archive, IL_805_03 (6-15-1935) - Geologic problems.

Mine Index 282**Mt. Olive Coal Company, Hoosier Mine**

Type: Underground Total mined-out acreage shown: 1,608 Production indicates an additional 9 acres were mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	1	NW NE NW
Air shaft	Macoupin	7N 6W	1	NW NE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	420-435			7.5-8.4	RPP

Geologic Problems Reported: The roof conditions were generally considered excellent. Some areas of the mine had a limestone roof, and bosses protruded 6 to 8 inches down into the coal. Radiating slips surrounded these protrusions, giving a pinwheel effect. In other areas, the roof was 18 inches of black shale and it was difficult to keep up. The lower half was typically sheety and tough, but the upper half was not tough or sheety and disintegrated on short exposure, frequently allowing all the black shale to come down. The floor was about 6 feet of fire clay, which was soft and heaved. This made it difficult to close off entries. A gob and pillar fire was reported in 1950 that had been burning since about 1900. The firewall was shifted out from the fire, but adjacent entries were full of smoke, heat and sulfur. The mine was eventually closed due to this fire.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Consolidated Coal & Coke Co. of Mt. Olive	Mt. Olive	1887-1889	19,210
Mt. Olive Coal Company	Mt. Olive	1889-1894	788,413
Madison Coal Corporation	Madison No. 5	1894-1915	4,753,959
Mt. Olive Coal Company	Mt. Olive No. 5	1915-1920	1,259,782
Madison Coal Corporation	Madison No. 5	1920-1934 *	3,047,920
Mt. Olive Coal Company	Hoosier	1934-1940	636,746
Mt. Olive Coal Company	Hoosier	1940-1940	60,118 **
			10,566,148

* Idle 1932 & 1933

** Production after map date

Last reported production: December 1940

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_1135_01	5-1-1940	1:2400	1:2400	Not final (incomplete)
Company map, 4103.M34 i5.1-10	4-21-1931	1:2400	1:2400	Not final

Annotated Bibliography (data source, brief description of information)

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

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

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

State archive, IL_1135_01 - Mine outline (east side of mine).

Company map, ISGS map library, 4103.M34 i5.1-10 - Shaft locations, mine outline, mining method.

Mine Index 413

Superior Coal Company, Superior No. 1 Mine

Type: Underground Total mined-out acreage shown: 19,186 The boundaries between this mine, Superior No. 2 (mine index 503), Superior No. 3, (mine index 66), and Superior No. 4 (mine index 188) could not be distinguished. The acreage reported is the total for all four mines.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft (9'x17')	Macoupin	8N 6W	29	1100 FSL, 1200 FEL, NW
Air shaft	Macoupin	8N 6W	29	NW SE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	320-348	6.5	9.0	7.0-7.5	RPP

Geologic Problems Reported: The clay lamina in the upper bench were a detriment as it was next to impossible to pick out much of this material. These upper clay band horizons changed gradually to stony pyrite lenses. There were some facings of pyrite and calcite, of minor importance as an ash constituent. Some gas was present in pockets in the roof shale. Roof rolls were present over the entire mine. A great thickness of soapstone was immediately above the coal. The soapstone was fractured, slipped and very difficult to hold. The coal underneath much of this soapstone was very thinly laminated. Thus, although sometimes left as roof, it served very poorly. The coal was thickest under the thickest areas of soapstone. For instance, where the soapstone was 28 feet thick, the coal was 9 feet thick. A squeeze occurred in the southeast part of the mine. Coal balls were common in some parts of the mine.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Superior Coal Company	Superior No. 1	1904-1951	<u>30,220,349</u> 30,220,349

Last reported production: May 1951

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_1126_03	5-9-1951	1:4800	1:4800	Final
State archive, IL_1130	5-25-1954	1:4800	1:4800	Final
State archive, IL_1124	10-29-1953	1:4800	1:4800	Final
State archive, IL_1102	8-7-1953	1:4800	1:4800	Final

Annotated Bibliography (data source, brief description of information)

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

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

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

State archive, IL_1126_03 - Shaft locations, mine outline (east, northeast, north central), mining method.

State archive, IL_1130, map of Superior No. 4 (mine index 188) - Mine outline (west, southwest).

State archive, IL_1124, map of Superior No. 3 (mine index 66) - Mine outline (west, north).

State archive, IL_1102, map of Superior No. 2 (mine index 503) - Mine outline (southeast, south central).

Mine Index 761**Consolidated Coal Company of St. Louis, Consolidated No. 8 Mine**

Type: Underground Total mined-out acreage shown: 807

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	11	NW NE SW
Air shaft *	Macoupin	7N 6W	2	SW SE SE

* The air shaft for Consolidated No. 8 was the main shaft for Consolidated No. 9 (mine index 2895, closed in 1891), and was also used as an air shaft for Consolidated No. 10 (mine index 2894). This point is shown as a main shaft on the accompanying map.

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	400-440		9.0	7.5-8.0	MRP

Geologic Problems Reported: A large squeeze occurred north of the main shaft in the W ½ NE 11-T7N-R6W, and another occurred in the S ½ SE 10-T7N-R6W. Two areas caved, both in the SW 12-T7N-R6W. A fire was also indicated on one of the source maps, in the SW NE SE 10-T7N-R6W.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
South Mt. Olive Coal Company	South Mt. Olive	1881-1883	51,252
Ellsworth Coal & Mining Company	Ellsworth No. 8	1883-1886	165,810
Consolidated Coal Company of St. Louis	Consolidated No. 8	1886-1914	<u>5,643,086</u>
			5,860,148

Last reported production: March 31, 1914

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_884_01	3-31-1914	1:2400	1:2400	Final
State archive, IL_859_01	3-31-1914	1:2400	1:2400	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Macoupin County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Macoupin County) - Mine type, shaft location, seam, depth, thickness.
 State archive, IL_884_01 - Shaft location, mine outline, mining method, geologic problems.
 State archive, IL_859_01 - Mine outline (west extensions), geologic problems.
 Old Ben Archive Collection map - Geologic problems.

Mine Index 2894**Consolidated Coal Company of St. Louis, Consolidated No. 10 Mine**

Type: Underground Total mined-out acreage shown: 755 The boundary between this mine and Consolidated No. 9 (mine index 2895) could not be distinguished. The acreage reported is for both mines.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	2	NE SE SE
Air shaft *	Macoupin	7N 6W	2	SW SE SE

* The air shaft for Consolidated No. 10 was the main shaft for Consolidated No. 9 (mine index 2895, closed in 1891), and was also used as an air shaft for Consolidated No. 8 (mine index 761). This point is shown as a main shaft on the accompanying map.

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	420-431			8.0	MRP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Keiser	Keiser	1877-1879	45,000 *
Mt. Olive Coal Company	Mt. Olive	1881-1883	225,000
Ellsworth Coal & Mining Company	Ellsworth No. 10	1883-1886	444,443
Consolidated Coal Company of St. Louis	Consolidated No. 10	1886-1909	<u>4,114,761</u>
			4,829,204

* Production and ownership prior to 1878 are unknown. The Coal Report of 1882 indicates 20 acres were mined. According to the *History of Macoupin County*, A. J. and C. J. Keiser, the owners of Mt. Olive Coal Company, sunk a shaft in 1877 that appears to correspond best to this mine.

Last reported production: 1909 (The source map states the mine was abandoned September 1, 1909.)

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_1103_03	9-1-1909	1:2400	1:2400	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Macoupin County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Macoupin County) - Mine type, shaft location, seam, depth, thickness.
 State archive, IL_1103_03 - Shaft locations, mine outline, mining method.
 History of Macoupin County, 1911, S. J. Clarke Publishing Company, Chicago, Illinois, 727 p. - Ownership, years of operation.

Mine Index 2895**Consolidated Coal Company of St. Louis, Consolidated No. 9 Mine**

Type: Underground Total mined-out acreage shown: 755 The boundary between this mine and Consolidated No. 10 (mine index 2894) could not be distinguished. The acreage reported is for both mines.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	2	500 FSL, 4100 FWL

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	416			8.0	MRP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Mt. Olive Coal & Mining Company	Mt. Olive	1874-1883	180,000 *
Ellsworth Coal & Mining Company	Ellsworth No. 9	1883-1886	51,000 **
Consolidated Coal Company of St. Louis	Consolidated No. 9	1886-1891	**
			<u>231,800</u>

* Years of operation, production, and ownership prior to 1881 unknown; the *Atlas of Macoupin County* (1875) shows a shaft at this location. According to the *History of Macoupin County*, A. J. and C. J. Keiser, the owners of Mt. Olive Coal Company, sunk a shaft in 1874 that appears to correspond best to this mine.

** Production after 1884 included in production from No. 10 Mine (mine index 2894)

Last reported production: 1891

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
State archive, IL_1103_03	9-1-1909	1:2400	1:2400	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, depth, thickness.
 Directory of Illinois Coal Mines (Macoupin County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Macoupin County) - Shaft location, seam, thickness.
 State archive, IL_1103_03 - Shaft locations, mine outline, mining method.
 Atlas of Macoupin County and the State of Illinois, 1875, Chicago: Warner & Beers, 89p. - Years of operation.
 History of Macoupin County, 1911, Chicago, Illinois: S. J. Clarke Publishing Company, 727 p. - Ownership, years of operation.

Mine Index 2896
Consolidated Coal Company of St. Louis, Anchor Mine

Type: Underground Total mined-out acreage shown: 24

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Macoupin	7N 6W	15	NW SW SE
Air shaft	Macoupin	7N 6W	15	SW NW SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Ave	
Herrin	380-382			6.5-7.5	RPB

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Anchor Coal Company	Anchor	1882-1886	117,241
Consolidated Coal Company of St. Louis	Anchor	1886-1888	<u>27,333</u>
			144,574

Last reported production: March 1888

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Old Ben Archive Collection	1886	1:2400	1:2400	Not final
State archive, IL_727_03	2-19-1952 *	1:4800	1:4800	Secondary source

* The mine outline matches the outline on the Old Ben Archive Collection source map, which suggests that the outline may be final. In addition, the mined area shown on the accompanying map is the approximate size expected for the production reported. This suggests that the mine outline is complete.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Macoupin County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Macoupin County) - Mine type, shaft location, seam.
 Old Ben Archive Collection - Shaft locations, mine outline, mining method.
 State archive, IL_727_03, map of Staunton No. 7 Mine (mine index 189) - Shaft locations.

INDEX OF MINES IN THE MOUNT OLIVE QUADRANGLE

Anchor Coal Company	17
Bell & Zoller Coal & Mining Company, No. 15 Mine	9
Bell & Zoller Coal & Mining Company, No. 7 Mine	11
Consolidated Coal & Coke Co. of Mt. Olive	12
Consolidated Coal Company of St. Louis	
Anchor	17
Consolidated No. 07 Mine	11
Consolidated No. 10.	15
Consolidated No. 15 Mine	9
Consolidated No. 8.	14
Consolidated No. 9.	16
Ellsworth Coal & Mining Company, No. 10 Mine	15
Ellsworth Coal & Mining Company, No. 8 Mine	14
Ellsworth Coal & Mining Company, No. 9 Mine	16
Ellsworth Coal Company, No. 7 Mine	11
Hebenstreit (B.)	11
Keiser	15
Keiser (A. J. & C. J.)	15, 16
Madison Coal Corporation, No. 5 Mine	12
Mt. Olive & Staunton Coal Company, No. 2 Mine	10
Mt. Olive Coal & Mining Company	16
Mt. Olive Coal Company	15
Hoosier.	12
Mt. Olive No. 5	12
South Mt. Olive Coal Company	14
Staunton Mine Seven, Inc.	11
Superior Coal Company	
No. 1 Mine	13
Townsend (Williamson, Townsend & Company)	11
Williamson, Townsend & Company	11

Funding for this project was supplied by the Illinois Department of Transportation.