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Herrin Coal Chlorine LOGAN County

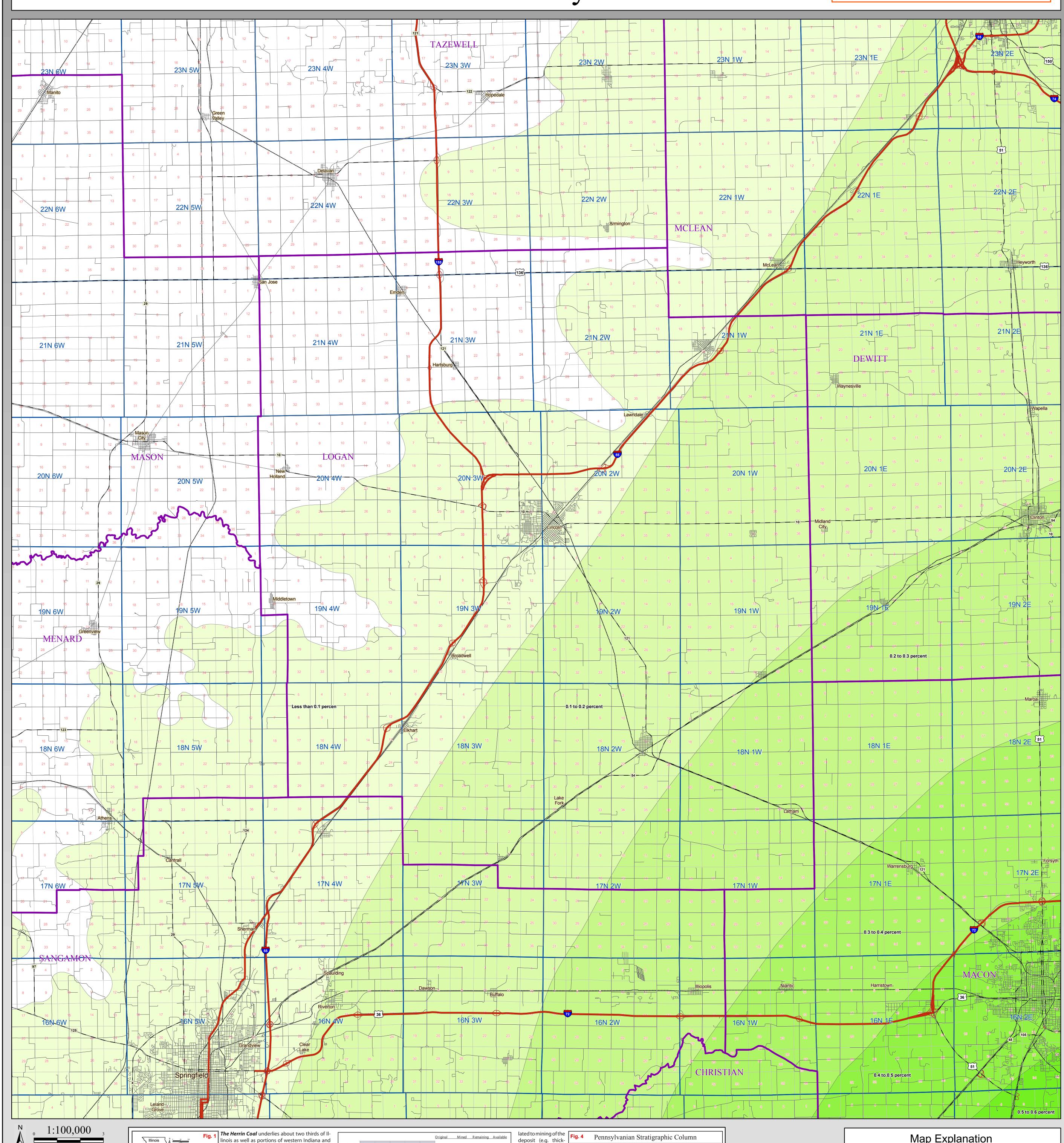
County Coal Map Series Andrew Louchios, Scott Elrick,

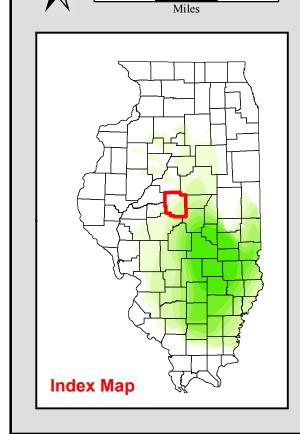
Map construction: October 29, 2009

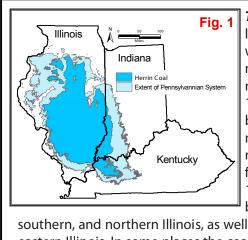
Chris Korose, David Morse

This product is under review and may not meet the standards of the Illinois State Geological Survey.

County coal maps and select quadrangle maps available as downloadable PDF files at: http://www.isgs.illinois.edu/maps-data-pub/coal-maps/county-index.shtml



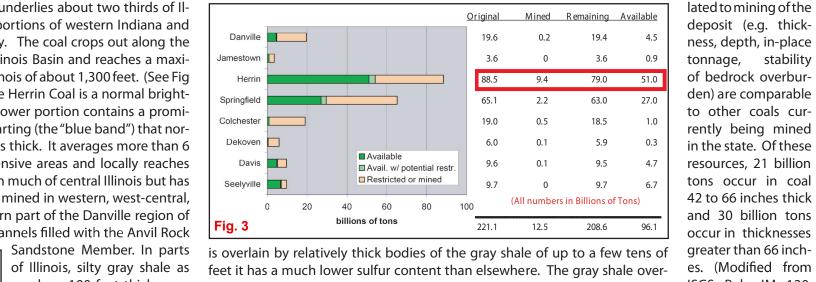




orth-south cross section of the Pennsylvanian System in Illinois

linois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig . and Fig 2.) The Herrin Coal is a normal brightbanded coal. Its lower portion contains a prominent claystone parting (the "blue band") that normally is 1-3 inches thick. It averages more than 6 feet thick in extensive areas and locally reaches 15 feet. It is thin in much of central Illinois but has been extensively mined in western, west-central,

southern, and northern Illinois, as well as in the southern part of the Danville region of eastern Illinois. In some places the coal is cut out by channels filled with the Anvil Rock much as a mile wide and 60-



much as 100 feet thick over- lies the coal principally in parts of Williamson, Franklin, Jefferson, Madison, ISGS Pub. IM 120, lies the Herrin Coal. Associ- St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Herrin Treworgy, et al) ated with this shale is a chan- Coal is overlain by either the Anna Shale Member (black fissile shale) or the

nel sandstone commonly as Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.) 80 feet thick mapped as Anvil The original resource of Herrin Coal in the State of Illinois totals 88.5 billion References: Rock Sandstone and may be tons, of which 9.4 billion have been mined. Approximately 58% of the original contemporaneous with the Herrin Coal resources, 51 billion tons, are considered available for mining. (See

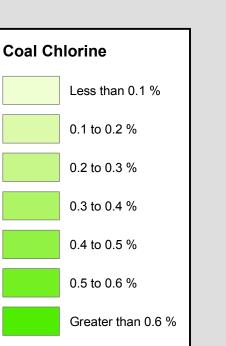
coal. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re-

tons occur in coal 42 to 66 inches thick and 30 billion tons occur in thicknesses

| deposit (e.g. triick- | | | | - | 0 1 | |
|------------------------|--------------|------------|---|--|--|--|
| ness, depth, in-place | eries | Fm. | Graphic | Central and Southern | Northern and Western | Eastern and Southern |
| | S | F | Column | Members and Beds | Members and Beds | Members and Beds |
| <i>3</i> , | Ser | | | Danville Coal Galum Limestone | Danville Coal | Danville Coal |
| of bedrock overbur- | | u. | ××××××××××××××××××××××××××××××××××××××× | —— Galum Limestone —— Allenby Coal | | |
| den) are comparable | Desmoinesian | Shelburn | XXXX | Bankston Fork Limestone | | Bankston Fork Limestone |
| to other coals cur- | oir | She | XXXX | Anvil Rock Sandstone | Copperas Creek Sandstone Lawson Shale | Anvil Rock Sandstone |
| | sn | 91 | | Conant Limestone —— | Lawson Shale | Conant Limestone |
| rently being mined | De | | | Jamestown Coal Brereton Limestone | Brereton Limestone | — Jamestown Coal Brereton Limestone |
| in the state. Of these | | | | Anna Shale | Anna Shale | Anna Shale |
| | | | 1100 | Energy Shale | Tima Siare | Tima Siare |
| resources, 21 billion | ١ | | ************************************** | Herrin Coal | Herrin Coal | Herrin Coal |
| tons occur in coal | eries | | · · · · · · · · · · · · · · · · · · · | | Spring Lake Coal Bed Big Creek Sandstone | |
| | Ser | | | Briar Hill Coal | Vermillionville Sandstone | Briar Hill Coal |
| 42 to 66 inches thick | | e | XXXXXXX | Canton Shale | Canton Shale | Canton Shale |
| and 30 billion tons | Sis | Carbondale | | St. David Limestone | St. David Limestone | St. David Limestone |
| | ine | ono | 7 | Turner Mine Shale | Turner Mine Shale | Turner Mine Shale |
| occur in thicknesses | no | ırb | | Dykersburg Shale | Caria - Cald Carl | GiG-14 G1 |
| greater than 66 inch- | Desmoinesian | Ca | RXXXXX | Springfield Coal | Springfield Coal Covel Conglomerate | Springfield Coal |
| 3 | D | | | — Hanover Limestone | Hanover Limestone | |
| es. (Modified from | | | | Excello Shale | Excello Shale | Excello Shale |
| • | | | XXXXXXXXXX | Houchin Creek Coal | Houchin Creek Coal | Houchin Creek Coal |
| ISGS Pub. IM 120, | | | | Roodhouse Coal Pleasantview Sandstone | Breezy Hill Limestone Kerton Creek Coal Pleasantview Sandstore | Pleasantview Sandstone |
| Treworgy, et al) | | | | rieasantview sandstone | r reasantview Sandstone | rieasantview Sandstone |
| , | | | | | | |

- Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p. - Treworgy, C.G., C.P. Korose, C.A. Chenoweth, and D.L. North, 1999a, Availability of the Herrin

Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 120, 54 p.



Map Explanation

The maps and digital files of this study were compiled from data from a variety of public and private sources and have varying degrees of completeness and accuracy. They present interpretations of the geology of the area and are based on available data. However, these interpretations are based on data that may vary with respect to accuracy of geographic location, type, quantity, and reliability, as they were supplied to the Illinois State Geological Survey. Consequently, the accuracy of the interpreted features shown in these files is subject to the limitations of the data and varies from place to place.

Contoured features less than 7 million square feet (about 1/2 mile square) in area may not be accurately portrayed or resolved. This data set provides a large-scale conceptual model of the geology of the area on which to base further work. These data are not intended for use in site-specific screening or decision-making.

Disclaimer

The Illinois State Geological Survey and 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. $\hbox{@}$ 2009 Board of Trustees of the University of Illinois. All rights reserved.