Institute of Natural Resource Sustainablity

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Herrin Coal Sulfur CLINTON County

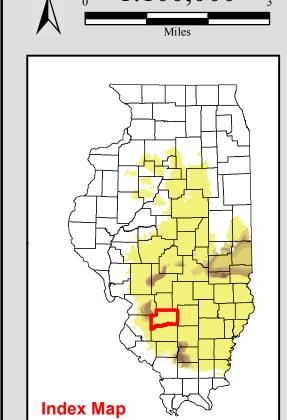
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

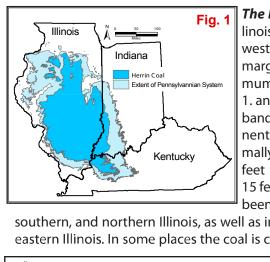
Map construction: October 29, 2009

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

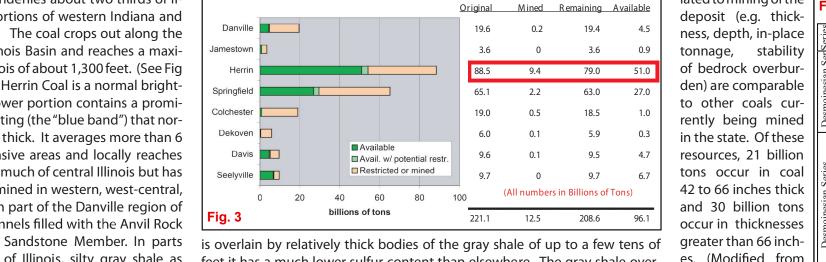
BOND 1.68 to 2.50 (lb S per MM Btu) 15N 1W1 5N 2W 5N 3W Pleasant FAYETTE 4N 2W MARION 160 Highland 3N-5W 3N 4W 3N 3W 3N 1E Boulder 3N 1W 0.61 to 0.83 (lb S per MM Btu) 2N 4W Breese 2N 6W 2N 1E 0.84 to 1.24 (lb S per MM Btu) Greater than 2.50 (lb S per MM Btu) 1.68 to 2.50 (lb S per MM Btu)_ Höffman 1N 4W 1N 3W 1N 2W CLINTON 1S 2W **51 JEFFERSON** 2S 6W 2\$ 4W 2S | 2W 2S 3W 2S 1W 2S 1E Woodlawn WASHINGTON 3S 5W 3S 4W **Map Explanation**



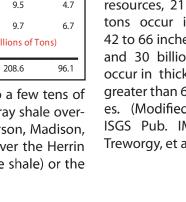


The Herrin Coal underlies about two thirds of Illinois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig 1. and Fig 2.) The Herrin Coal is a normal brightbanded 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-



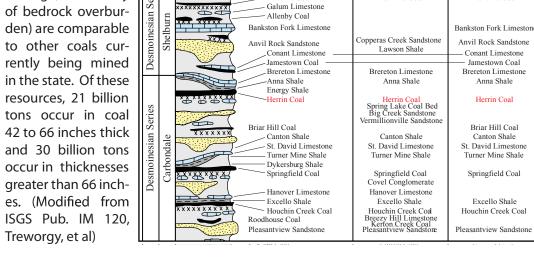
of Illinois, silty gray shale as feet it has a much lower sulfur content than elsewhere. The gray shale over- es. (Modified from much as 100 feet thick over- lies the coal principally in parts of Williamson, Franklin, Jefferson, Madison, ISGS Pub. IM 120, lies the Herrin Coal. Associ- St. Clair, eastern 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:



deposit (e.g. thick-

ness, depth, in-place

tonnage, stability



Pennsylvanian Stratigraphic Column

Central and Southern Northern and Western Eastern and Southern

- Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p. 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 - Treworgy, C.G., C.P. Korose, C.A. Chenoweth, and D.L. North, 1999a, Availability of the Herrin coal. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re- Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 120, 54 p.

Coal Sulfur Less than or equal to 0.40 (lb S per MM Btu)

0.41 to 0.60 (lb S per MM Btu)

0.61 to 0.83 (lb S per MM Btu)

0.84 to 1.24 (lb S per MM Btu)

1.25 to 1.67 (lb S per MM Btu)

1.68 to 2.50 (lb S per MM Btu)

Greater than 2.50 (lb S per MM Btu)

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

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