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Springfield Coal Sulfur HAMILTON County

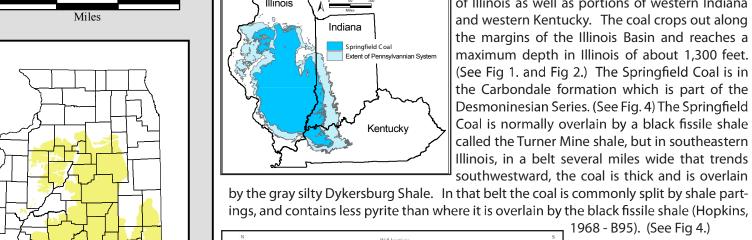
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

Map construction: October 29, 2009

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

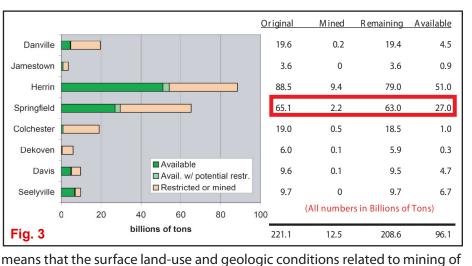
County coal maps and select quadrangle maps available as downloadable PDF files at: http://www.isgs.illinois.edu/maps-data-pub/coal-maps/county-index.shtml

45 2S 9E 2S 8E 2S 5E 2S 6E Keenes Barnhill 3S 7E 3S 4E 3S 5F JEFFERSON Greater than 2.50 (lb S per MM Btu) HAMILTON 4S 9E 4S 7E 4S 3E 4S 6E 4S 4E 4S 5E 5S 3E Macedonia_ 0.84 to 1.24 (lb S per MM Btu) 6S.9E Broughton-1.25 to 1.67 (lb S per MM Btu) FRANKLIN 7S 4E 0.61 to 0.83 (lb S per MM Btu) 84 to 1.24 (lb S per MM Btu) GALLATIN Johnston 0.84 to 1.24 (lb S per MM Btu 0.61 to 0.83 (lb S per MM Btu) WILLIAMSON 0.61 to 0.83 (lb S per MM Btu) Equality 9S 8E Fig. 1 The Springfield Coal underlies about two thirds the Illinois River. The **Map Explanation** Pennsylvanian Stratigraphic Column Original Mined Remaining Available of Illinois as well as portions of western Indiana coal is thin or absent

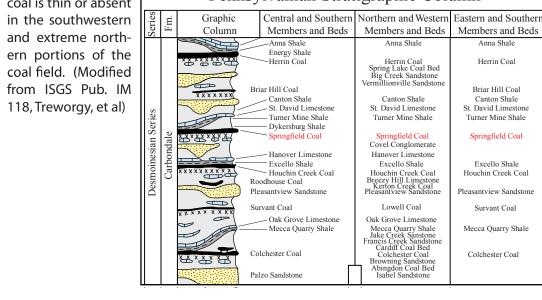


and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig 1. and Fig 2.) The Springfield Coal is in the Carbondale formation which is part of the Desmoninesian Series. (See Fig. 4) The Springfield Coal is normally overlain by a black fissile shale called the Turner Mine shale, but in southeastern Illinois, in a belt several miles wide that trends southwestward, the coal is thick and is overlain

ings, and contains less pyrite than where it is overlain by the black fissile shale (Hopkins, 968 - B95). (See Fig 4.) **T**he original resource of Springfield Coal in the State of Illinois totals 65.1 billion tons, of which 2.2 billion have been mined. Approximately **T**he Springfield Coal has been mined in Illinois for well over 100 years. The 41% of the original Springfield thickest resources of Springfield Coal in Illinois are found in the central part of



means that the surface land-use and geologic conditions related to mining of the deposit (e.g. thickness, depth, in-place tonnage, stability of bedrock overburden) are comparable to other coals currently being mined in the state. Of these resources, 23 billion tons occur in coal 42 to 66 inches thick and 4 billion tons occur in thicknesses greater than 66 inches thick.



- Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p. the state around the city of Springfield and in the southeastern part of the state - Treworgy, C.G., C.P. Korose, C.A. Chenoweth, and D.L. North, 1999a, Availability of the Springfield along the Galatia Channel. Recent and historical mining of the coal has been concentrated in these areas and in shallow surface minable deposits west of Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 118, 43 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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