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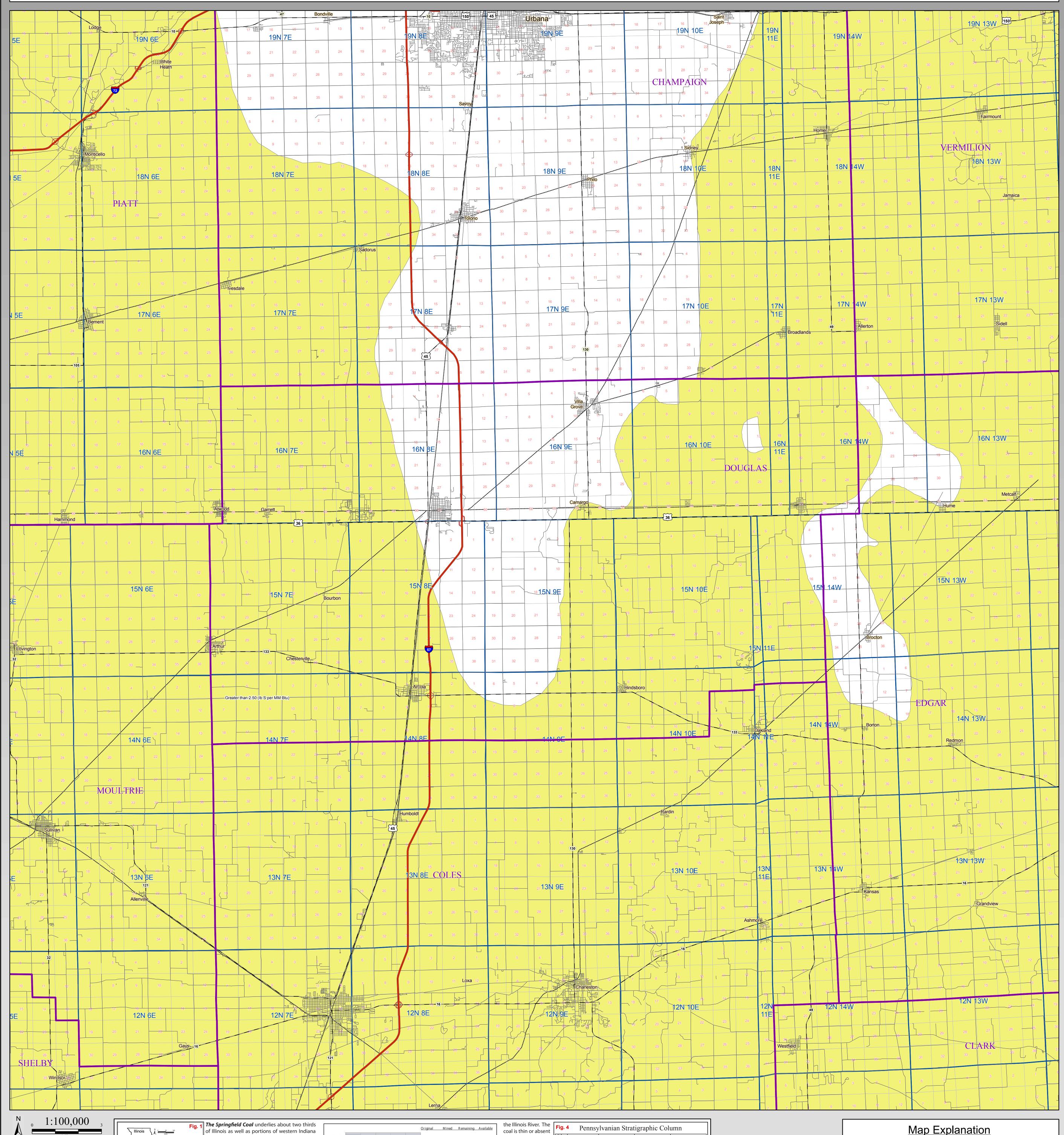
## Springfield Coal Sulfur DOUGLAS County

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



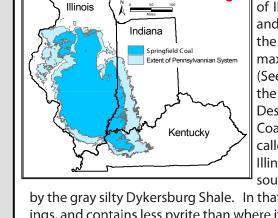
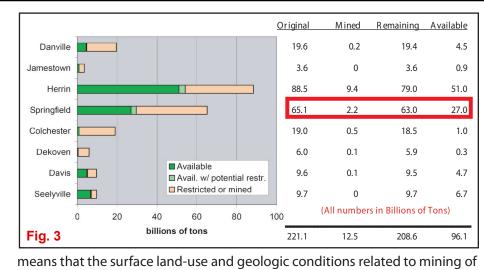


Fig. 1 The Springfield Coal underlies about two thirds of Illinois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig 1. and Fig 2.) The Springfield Coal is in the 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 by the gray silty Dykersburg Shale. In that belt the coal is commonly split by shale part-

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 41% of the original Springfield thickest resources of Springfield Coal in Illinois are found in the central part 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. been mined. Approximately **T**he Springfield Coal has been mined in Illinois for well over 100 years. The

## Central and Southern Northern and Western Eastern and Southern in the southwestern Members and Beds | Members and Beds | Members and Beds and extreme northern portions of the coal field. (Modified from ISGS Pub. IM Canton Shale St. David Limestone Turner Mine Shale 118, Treworgy, et al) St. David Limestone Turner Mine Shale Dykersburg Shale Excello Shale Houchin Creek Coal Excello Shale Houchin Creek Coal Breezy Hill Limestone Kerfon Creek Coal Pleasantview Sandstone

coal is thin or absent

Pennsylvanian Stratigraphic Column

- 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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