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## Herrin Coal Chlorine **DEWITT** County

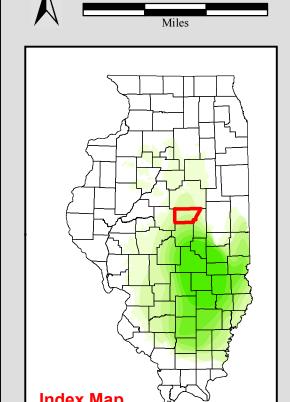
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

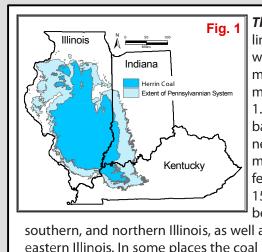
Map construction: October 29, 2009

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 \_FORD 23N 4E 23N 6E 23N 3E 23N 5E 23N 1E 23N 1W 22N 3E 22N 4E 22N 6E 22N-2E-22N 5E 22N 1W McLean 0.1 to 0.2 percent 21N 4E 21N 6E 21N 3E 21N 2E 21N 1E\_ Waynesville Wapella LOGAN 20N 5E 20N 1E 20N-2E 20N 1W \_DEWITT De Land 19N 6E 19N 4E 19N 5E 19N 3E 19N 1W 0.2 to 0.3 percent 18N 6E 18N 5E 18N 3E 18N 2E 18N 1E -18N-1W 0.3 to 0.4 percent Forsyth 17N 6E 17N 5E 17N<sup>1</sup>2E 17N 1E 17N 1W SANGAMON Illiopolis Harristown 0.4 to 0.5 percent 16N 6E 16N 3E 0.5 to 0.6 percent 16N 1W lated to mining of the Fig. 4 The Herrin Coal underlies about two thirds of Il-**Map Explanation** Pennsylvanian Stratigraphic Column linois as well as portions of western Indiana and deposit (e.g. thick-Central and Southern Northern and Western Eastern and Southern Members and Beds Members and Beds Members and Beds ness, depth, in-place





orth-south cross section of the Pennsylvanian System in Illinois

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 Sandstone Member. In parts is of Illinois, silty gray shale as fe much as 100 feet thick overlies the Herrin Coal. Associated with this shale is a channel sandstone commonly as B much as a mile wide and 60-80 feet thick mapped as Anvil **T**h

Danville	Original 19.6	Mined 0.2	R emaining 19.4	Available
-	19.6	0.2	10.4	
			19.4	4.5
Jamestown	3.6	0	3.6	0.9
Herrin	88.5	9.4	79.0	51.0
Springfield	65.1	2.2	63.0	27.0
Colchester	19.0	0.5	18.5	1.0
Dekoven	6.0	0.1	5.9	0.3
Davis Available Avail. w/ potential restr.	9.6	0.1	9.5	4.7
Seelyville Restricted or mined	9.7	0	9.7	6.7
0 20 40 60 80 100	0	(All number	s in Billions of	Tons)
Fig. 3 billions of tons	221.1	12.5	208.6	96.1

Fig. 3	billions of tons	221.1	12.5	208.6	96.1		
s overlain by relatively thick bodies of the gray shale of up to a few tens of feet it has a much lower sulfur content than elsewhere. The gray shale overies the coal principally in parts of Williamson, Franklin, Jefferson, Madison, St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Herrin							
	n by either the Anna Shal tone Member. (Hopkins,				) or the		

ated with this shale is a chan- nel sandstone commonly as much as a mile wide and 60-	Coal is overlain by either the Anna Shale Member (black fissile shale) or the Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.)		
80 feet thick mapped as Anvil Rock Sandstone and may be contemporaneous with the coal. In areas where the coal	The original resource of Herrin Coal in the State of Illinois totals 88.5 billion tons, of which 9.4 billion have been mined. Approximately 58% of the original Herrin Coal resources, 51 billion tons, are considered available for mining. (See Fig 3.) Available means that the surface land-use and geologic conditions re-	References: - 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.	

	S	1		Conant Limestone ——		Conant Limestone
rently being mined	Desr	1		Jamestown Coal	D . I'	Jamestown Coal
in the state. Of these	ll—	+		Brereton Limestone  Anna Shale	Brereton Limestone Anna Shale	Brereton Limestone Anna Shale
	II	1		Energy Shale	Aillia Shaic	Aillia Silaic
resources, 21 billion	II	1	**************************************	Herrin Coal	Herrin Coal	Herrin Coal
tone occur in coal	eries	1			Spring Lake Coal Bed Big Creek Sandstone	
tons occur in coal	Seri	1		D: WILL I	Vermillionville Sandstone	D: WILC I
42 to 66 inches thick	11	۱ مه	XXXXXXX	Briar Hill Coal Canton Shale	Canton Shale	Briar Hill Coal Canton Shale
and 30 billion tons	Sia	lal Jal	7	St. David Limestone	St. David Limestone	St. David Limestone
	ine	Ιĕ		Turner Mine Shale	Turner Mine Shale	Turner Mine Shale
occur in thicknesses	Desmoinesian	Carbondal		Dykersburg Shale	Consider Could Could	Garia e Gald Gard
greater than 66 inch-	est	ಬ	RXXXXX	Springfield Coal	Springfield Coal Covel Conglomerate	Springfield Coal
greater than 60 mcn-		1		— Hanover Limestone	Hanover Limestone	
es. (Modified from	II	1		Excello Shale	Excello Shale	Excello Shale
ISGS Pub. IM 120,	II	1	XXXXXXXXXX	Houchin Creek Coal Roodhouse Coal	Houchin Creek Coal Breezy Hill Limestone	Houchin Creek Coal
,	II	1		Pleasantview Sandstone	Kerton Creek Coal Pleasantview Sandstore	Pleasantview Sandstone
Treworgy, et al)				1 reasantview Sandstone	1 icasantview Sandstole	1 icasantview bandstone
37, ,	-	-				
5.6						
References:						
- Handbook of Illinois S	trat	iar	aphv. 1975.	Illinois State Geolog	gical Survey Bulle	tin 95, 261p.
		J.				

Bankston Fork Limestone

Anvil Rock Sandstone

tonnage, stability

of bedrock overbur-

den) are comparable

to other coals cur-

## **Coal Chlorine** Anvil Rock Sandstone Less than 0.1 % 0.1 to 0.2 % 0.2 to 0.3 % 0.3 to 0.4 % 0.4 to 0.5 % 0.5 to 0.6 % Greater than 0.6 %

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

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. Data included in this map are suitable for use at a scale of 1:100,000.

in these files is subject to the limitations of the data and varies from place to place.

## **Disclaimer**

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