

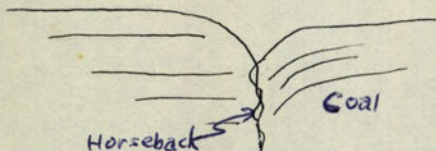
**FIELD NOTES**  
**Illinois State Geological Survey**

1906      See map 4107 d5-52 (Mine II)  
 lfg      Springfield Area

In the mine of the Athens Mining Company as in the Wabash Mine at Athens - horsebacks are numerous. The roof is usually a black slate with small lentils and horizontal streaks of light gray material. In places this shale or slate is overlaid with a drab colored, soft shale or soapstone called clod. In other places it is overlaid by the cap rock of limestone which varies from  $\frac{1}{2}$  foot to 4 or 5 feet in thickness. At a few points the cap rock is wanting entirely and occasionally the cap rock immediately overlies the coal seam with no intervening black slate or clod. The coal seam varies from 5 feet 10 inches to 6 feet 8 inches in thickness.

The horsebacks seem to pass through the coal and associated strata in every direction, with no single direction predominating. The clay portions are usually light gray in color, often very hard so that sparks fly when struck with a hammer, but the material slakes[?] down and softens in a short time when exposed to the air. This gray clay or soapstone seems to have been pressed downward into the coal and overlying roof slate and cap rock from the gray soapstone bed that overlies the cap rock.

When the horseback enters the top of the coal one side is usually dropped from one inch to one or two feet, and the coal on this side is bent downward for one or two feet back from the fracture line showing that the slipping  
 (continued next page)



								h
								g
								f
								e
								d
								c
								b
								a
8	7	6	5	4	3	2	1	

By T. E. Savage      Date 1906

Quadrangle Springfield

County Menard      Sec. 1      T. 17N      R. 6W

FIELD NOTES

Illinois State Geological Survey

lfg (continued from preceding page)

was downward and that the downward squeezing also made itself felt on the coal at the downthrown side at the time the clay was squeezed downward through the fissures into the coal seams. The coal seam seems to have offered accommodation to the strains in many cases, for often the horseback subdivides in the lower part of coal seam and sp. ? gles out into a number of swollen[?] branches which die out in the coal seam. Strong horsebacks are accompanied by rolls in the cap rock of from a few inches to one foot or more in vertical height.

Often the downward pressure that squeezes the shale of the horsebacks downward has been so great as to cause a buckling of the coal at various points in one of the sides of the slip.

Occasional small sulphur balls occur in the coal but the sulphur of the coal seam is mostly in the form of scales or thin bands. Nigger heads from a few inches to two or more feet in diameter are abundant in the roof slate. These are most numerous along the line of contact of the coal and the black slate above it.

Athens Mining Co.

Shaft 206 feet to the coal. Coal 6 feet.

212 feet ot bottom of coal.

Altitude of base of No.5 coal - 394 feet.

No log of shaft preserved.

By T.E. Savage Date 1906

Quadrangle Springfield

County Menard Sec. 1 T 17N R 6W

