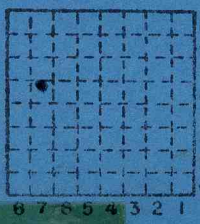
Big Ridge Coal Co. Big Ridge Mine

915

BIG RIDGE COAL CO.
BIG RIDGE MINE (Strip)

Mine Index No. 915
Coal Report No. L-128



SALINE COUNTY

(Sheets) COAL PRODUCTION (Sheet)

Period Mo. Day Year	Period Mo. Day Year	Tons		
	1970	28	477	
	1971	67	871	
	1972	80	265	
	1973	76	055	
	1974	54	868	
	1975	17	811	
Mine Idle much of this year.	1976			NO DATA
	1977	22	563	

Not reporting April 78
P.J.O.

Back in production May 1978
C.J.N.

SUMMARIES

No.		No.		
1970 to 1971 (INC)		96	348	

Railroad, Wagon, Strip, Idle, Abandoned

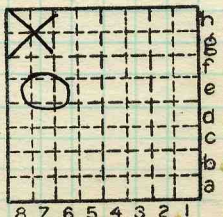
IDENTIFICATION

County No. _____ Coal No. #6

Coal Report No. L-128

Quad.

County SALINE



COAL MINE—PRODUCTION
ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)

Dear Hop:

I am sending you, under separate cover, twelve copies of the 1969 Annual Coal Reports, and am happy to do so.

Your request for the legal descriptions of the two coal companies are as follows:

Big Ridge Coal Co.
P. O. Box #C
Carterville, Ill. 62918

Located: 5 miles east of Harrisburg
Legal Description: NW¼, Sec.19, T9S, R7E, 3PM, Saline County, Illinois

E & L Coal Company
1513 North State St.
Marion, Ill. 62959

Located: 2½ miles south of Stonefort.
Legal Description: ~~SW¼~~ SW NE NE, Sec.6, T11S, R5E, Pope County, Illinois

Enclosed are two letters, one from the Army Corps of Engineers, and the other from the Pennsylvania State University that were sent to this office. Will you please, if you have any of this information, correspond with these people. I would appreciate it very much.

I will certainly be looking forward to seeing you in Springfield at the Mining Institute.

Warmest personal regards,

Yours truly,

Joseph C. Tabor,
Chief Clerk

Sept. 17, 1970
Department of Mines & Minera

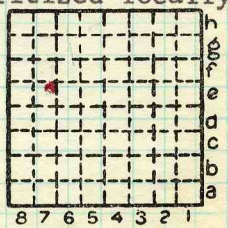
Illinois State Geological Survey

Big Ridge Mine (Big Ridge Coal Company)
Face-Channel Sample #1 C170700

Roof:	Shale - medium gray.	approx. 10'+
	Limestone - medium gray, fairly massive (Brereton).	up to 5'
	Shale - black, "slaty," well laminated, thin phosphatic bands and pyritic lenses, much pyritized shell debris.	2'4"
	Shale - medium gray, poorly laminated.	0'4"
	Coal - canneloid, bony (not mined).	0'10"

Coal - Herrin (No. 6), detail description below.

25.5	0"-25 1/2"	Coal - normally bright banded, hard, a few thin fusain partings, prominent calcite and pyrite fillings on cleat faces.
.04' .5 excl	25 1/2"-26"	Pyrite - hard, shaly, discontinuous (excluded).
3.75	26"-29 3/4"	Coal - normally bright banded.
.08' 1.0	29 3/4"-30 3/4"	Shale - medium gray, hard (excluded) - blue band.
2.0	30 3/4"-32 3/4"	Coal - normally bright banded.
13' 1.5	32 3/4"-34 1/9"	Shale - medium gray to medium dark gray, carbonaceous plant impressions, pyritized locally in lenses up to 1" thick (excluded).



By WHS & RBN Date 1-12-71

Quadrangle Equality

County Saline Sec. 19 T 9 S. R 7 E.
170'W of NE cor. SE SW NW

Face Channel Sample #1

8.0	34 1/4"-42 1/4"	Coal - normally bright banded, softer than near top of seam.
1.5	42 1/4"-43 3/4"	Shale - medium gray, soft, coaly with pyrite lenses (excluded).
3.5	43 3/4"-47 1/4"	Coal - normally bright banded.
		Claystone (seatrock) - medium gray, carbonaceous plant debri

47.25"
3.94' (.25' excluded)

Illinois State Geological Survey

Big Ridge Mine (Big Ridge Coal Co.)

Face Channel Sample #2 C170 71

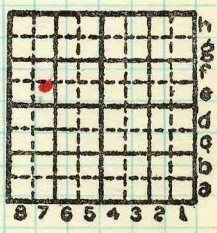
Roof: same as at Sample No. 1, except the top 6" of the black shale grades into medium dark gray shale.

Coal - Herrin (No. 6), detail description below.

0"-19 3/4"	Coal - normally bright banded, several discontinuous fusain bands, 3/4" fusain band 3" from top.
19 3/4"-20"	Fusain - hard, mineralized with calcite.
20"-26 1/2"	Coal - normally bright banded.
26 1/2"-26 5/8"	Pyrite - hard, discontinuous.
26 5/8"-29 5/8"	Coal - normally bright banded.
29 5/8"-30 1/8"	Shale - medium gray, (excluded), blue band.
30 1/8"-32 1/8"	Coal - normally bright banded.
32 1/8"-33 1/8"	Shale - medium gray, hard, plant impressions (excluded).
33 1/8"-42 5/8"	Coal - normally bright banded.
42 5/8"-43"	Shale - medium gray, persistant, pyritized locally (excluded).
43"-46 1/2"	Coal - normally bright banded.

Claystone - (seatrock), medium gray, carbonaceous plant debri

Coal = 3.875'
1.88" excluded = .15'



By WHS & RBN Date 1-12-71

Quadrangle Equality

County Saline Sec. 19 T 9S R 7E

270'W of NE cor., SE SW NW

Illinois State Geological Survey

Big Ridge Mine (Big Ridge Coal Co.)

Face Channel Sample #3 C17072

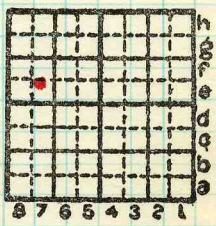
Roof: same as at Sample No. 1, except the black shale is less well laminated and contains some slip fractures.

Coal: Herrin (No. 6), detail description below.

0"-22"	Coal - normally bright banded.
22"-22 1/4"	Shale - medium gray, pyritic, discontinuous.
22 1/4"-23 3/4"	Coal - normally bright banded, pyrite on cleat fractures.
23 3/4"-32 3/4"	Coal - normally bright banded, 1/8" pyrite lense near middle.
1.5 32 3/4"-34 1/4"	Shale - medium gray (excluded), blue band.
34 1/4"-45 1/2"	Coal - normally bright banded, softer than coal above blue band.
45 1/2"-45 3/4"	Fusain - mineralized.
45 3/4"-48 3/4"	Coal - normally bright banded.
	Claystone - (seatrock), medium gray, carbonaceous plant debris.

4.06 .13 ex

Composite = C17073



By WHS & RBN Date 1-12-71

Quadrangle Equality

County Saline Sec. 19 T 9S R 7E

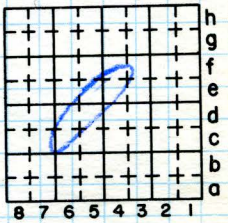
94'W of NE cor. SE SW NW.

ILLINOIS GEOLOGICAL SURVEY, URBANA

Big Ridge Coal Company
Highwall Description

thickness

8-10'	Drift
3-4'	0-3.5' - Sandstone - Bedded (≈4" beds). Anvil Rock Sandstone.
≈13'	3.5-16.5' - Sandstone - Light gray (weathers red-brown); medium grained, massive, irregularly jointed; micaceous, contains carbonaceous fragments. Current bedding present; friable. Anvil Rock Sandstone - Cuts into limestone below in some places and may be into the coal at east end of pit.
5.3'	16.5-21.8' - Brereton Limestone - Medium gray; fine grained; hard, dense, massive. Some calcite filling on vertical fractures, contains many fine calcite veins.
2.0'	21.8-23.8' - Anna Shale - Dark gray to black, well laminated ("slaty" in part); hard when fresh; clayey (medium dark gray) in top 0.1'.
4.3'	23.8-28.1' - Herrin Coal - Relatively clean coal; cleat fillings thin with mainly kaolinite and pyrite, some calcite.
	0.0-0.6' Normally bright banded.



et al.

By H.H.D. & W.J.N. Date 5/30/74

Quadrangle Equality

County Saline Sec. 19 T. 9S R. 7E

0.6-0.65'	Shale - Carbonaceous with pyrite impregnations
0.65-1.05'	Normally bright banded
1.05-1.1'	Fusain
1.1-3.1'	Normally bright banded
3.1-3.18'	Shale - Blue Band
3.18-3.35'	Normally bright banded
3.35-3.4'	Shale - Dark gray; highly carbonaceous (almost bone)
3.4-3.85'	Normally bright banded
3.85-3.93'	Pyrite lense
3.93-4.3'	Normally bright banded

Claystone (Seatrock) - Typical; medium gray, stigmarian.

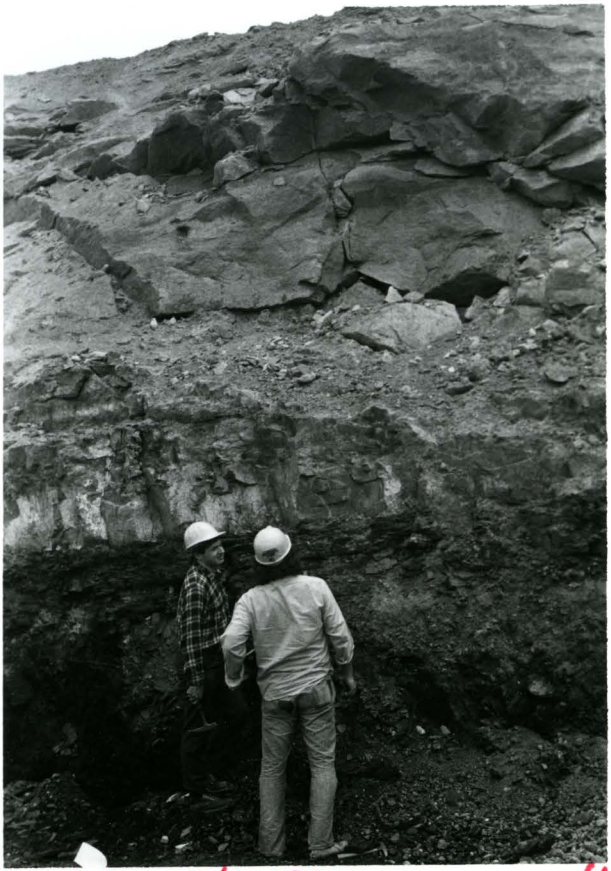
Coal face about 600-750' in E.-W. direction, mining from N. to S., have about 600-1000' mined so far at this location.

Main Cleats and Joints, azimuths:
N 90° E main set
N 170° E important set
N 20-30° E less prominent set

Small fault exposed:
N 90/60-70 N.
in SSE corner of pit (photo taken)

Big Ridge CC 5/30/74
p. 2

General view of the operations at Big Ridge Coal Co. strip pit. The dragline in the background is removing the overburden while the shovel loads coal into dump trucks. Photo by Heinz Damberger, 5/30/74.



Big Ridge CC - 5/30/74 4

John Nelson (left) and George Allgaier of the I.S.G.S. examine the highwall at Big Ridge Coal Co. The Herrin (No. 6) Coal in this pit is overlain by black Anna Shale, Brereton Limestone (just above John and George's heads) and massive Anvil Rock Sandstone. Photo by Heinz Damberger, 5/30/74.

BIG RIDGE COAL CO. (Strip Mine) SALINE COUNTY

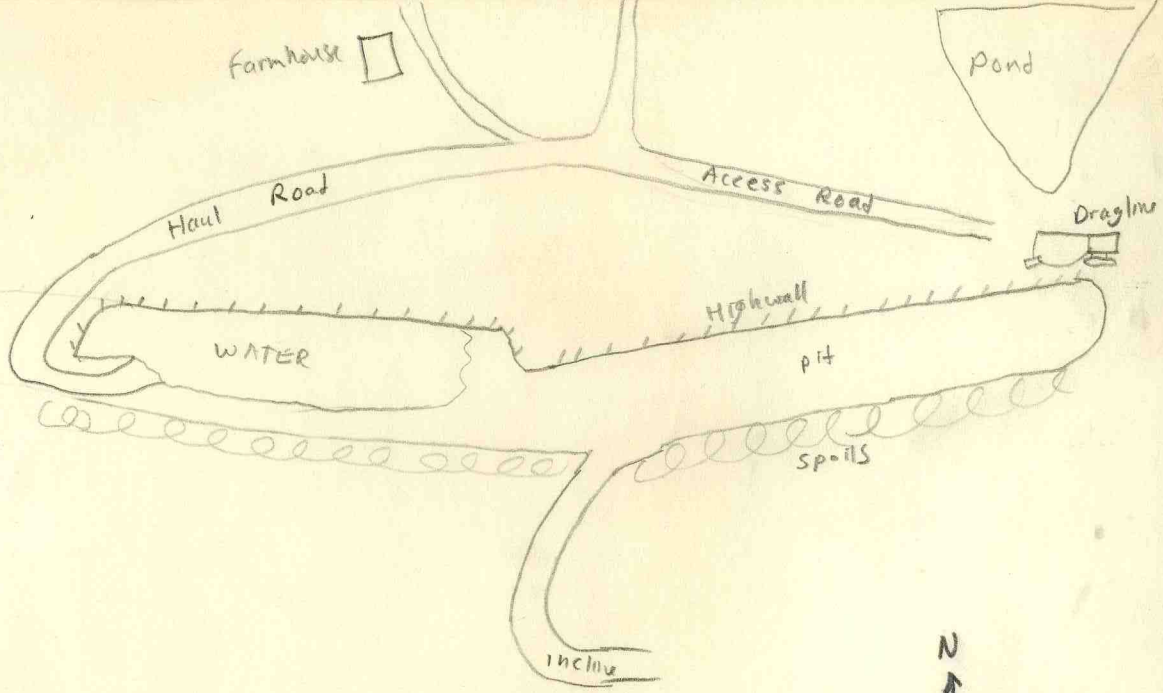
Notes by John Nelson on visit with John Popp, 9/30/77

New pit opened approx. SW¼ NE¼ Sect. 19 9S-7E. Mining Herrin (No. 6) Coal.

The active pit is about 3/8 mile long and runs east-west with a south-facing highwall. See sketch map (over) The coal has been removed up to the highwall in the east half of the pit, and the west half of the pit is filled with water above coal level. The dragline was not running and no coal was being loaded.

No place anywhere for a good measured section; the highwall is steep and inaccessible. The following is a generalized section, measured where possible:

10-15'	Soil and glacial drift, not studied in detail. also includes weathered bedrock.
5-10'	Sandstone and sandy shale, interbedded, the sandstone light gray, weathering brownish, fine-grained, thin-bedded; the shale thinly laminated. Grades into:
15-20'	Sandstone (Anvil Rock), weathers brownish, coarse grained, porous, massive to thick-bedded but with fine internal lamination, locally cross-bedded. Very sharp contact; cuts down toward west:
10'	Shale (Lawson) , medium-dark gray, moderately hard, well-bedded, silty to sandy, contains sandy interlams in upper part, well-jointed. Sharp contact:
0.5'	Limestone (Conant), dark gray, hard, poorly bedded, fine-medium grained, very argillaceous, finely carbonaceous. Lenticular. Fairly sharp contact:
1.5'	Shale (Jamestown Coal Horizon), dark gray to almost black at base, hard, poorly bedded, calcareous, upper part with fine fossil debris, lower part smooth and carbonaceous. No actual coal noted. Grades into:
4.0'	Limestone (Brereton), dark gray, fine-grained,



Sketch map
Big Ridge Coal Co.
pit about 3/8 mile long.

very hard, massive, contains calcite-filled fractures.

1.4' Shale (Anna), black, hard, smooth, fissile, pyritic.

4.4' Coal (Herrin-No. 6), N.B.B. with abundant pyrite on cleat and as lenses. Blue Band 0.1' thick 1.2' above base and another clay band 0.05-0.10' thick 0.7' from top.

At extreme west end of pit about 8' of Lawson Shale exposed above water line. This contains closely-spaced 150° joints. At east edge of water-filled pit the shale has widely-spaced (1-3') joints trending 145°/85NE. These are very continuous forming large smooth vertical surfaces on the highwall.

The rock layers dip gently westward. Anvil Rock Sandstone cuts downward to west and apparently is a channel deposit. No faults or other unusual structures noted in pit.

BIG RIDGE COAL COMPANY Surface Mine
Saline County, SW, NE, 19, 9S-7E
September 30, 1977
John Nelson and John Popp, notes by Popp

Chuck Malone is Superintendent of this operation. We stopped by to see what the geologic conditions are.

They have had a lot of moisture here so the pit was wet. Presently the larger of two draglines is down while the motor is being overhauled. A front end loader was clearing out the pit, and very little coal is uncovered.

This mine is a small operation - one earthmover, two dozers, one overburden drill, one front end loader, and two small draglines. I didn't see any coal haulage trucks.

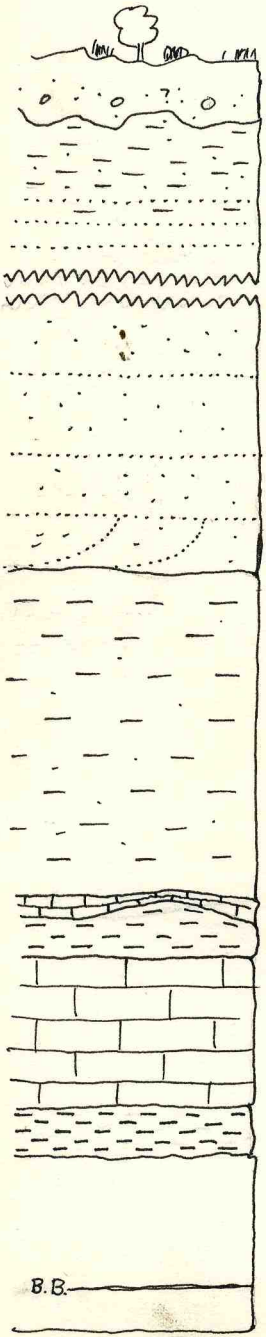
At this pit the Herrin (No. 6) Coal Member is being mined, and a generalized statigraphic section is made on the next page. Coal thickness is about 4.4 feet, with well-developed cleat directions. Face cleat is 74° and butt cleat is 148°. Pyrite occurs both as cleat filling and in lenses in the coal. The blue band is thin but very continuous.

The Brereton Limestone is well jointed with directions trending about 114°. Above the Brereton, the Conant and Jamestown Members are present but their thickness is non-persistent with the thicknesses given representing maximums.

The upper portion of the Anvil Rock is not accurately distinguishable. There appears to be a thin bedded shale above the Anvil Rock, which may just represent fining upwards

Above the Anvil Rock sequence is what appears to be a weathered zone that is being stockpiled for reclamation.

The pit has a flattened U-shape, and is 1500-200' long, oriented east-west. Maximum cover is about 50'.



Soil and weathered Anvil Rock ?

Anvil Rock Sandstone, 20-30', thick bedded and channel-like at base, thin bedded and shaley toward top.

Lawson Shale, 8-10', thin bedded, silty, well jointed.

Conant Limestone, 0.5', dk gray with dk gray inclusions

Jamestown Coal Horizon, 1.5', black shale, fossiliferous with shell fragments.

Brereton Limestone, hard, massive, calcite veinlets. 4.0'

Anna Shale, 1.4'

Herrin (No. 6) Coal Member, n.b.b., good cleat development. 4.4'