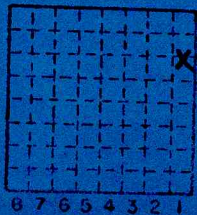


V-Day Coal Co.

V-DAY COAL CO.

Mine Index No. ⁶⁹⁴ 1730
County No. 600
Coal Report No. L-220



Sec. 30
T. 19 N.
R. 11 E.
Index No. W

VERMILLION COUNTY



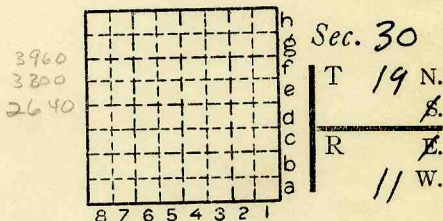
Location and Elevation Data

Location: Exact Approximate
 (Approximate only if no trace of record of original exists)
 Location by J.A. Simon
 Date 1945 Notebook No. 667 Page 41-2460
 Looseleaf ref. _____
 Map files No. _____

Description of Location

Position in sec., 1/4 sec., 40 acres

_____ feet from North line
275 feet from East line
3990 feet from South line
 _____ feet from West line



6-220
 Other description: New 1945 (12-2-45) Farm _____
 No. _____
#7 82 (573) 6'0" Company _____
#6 120 (575) 6'0" Ve-Day Coal Co.
 No. _____
 County No. 600
in tabulations

Elevation 654.5 ft.
 By J.A.S.

Method: Level, transit, alidade, hand level

Elevation of Gurb at top of slope
 Height of point above ground _____
 Date _____ Notebook _____ P. _____
 Looseleaf ref. _____

Map files No. _____
 Description of item: (drill hole, mine, etc.) Slope mine Active 1948

County Vanmilion Quadrangle Danville Index No. 173061
 (50167-5M-2-38) 2 149



(Sheets) COAL PRODUCTION (Sheet)

Period				Tons		
Mo.	Day	Year	Mo.	Day	Year	
		44				
<i>opened</i>		45				136
		1946				17 603
		47				73 934
		48				71 845
		49				60 714
		50				63 582
		1951				60 759
		'52				49 988
<i>Shipping</i>		'53				39 027
"		1954				42 849
"		1955				38 572
"		1956				47 760
"		1957				42 437
"		1958				41 567
		1959				46 134
		1960				26 817
<i>Shipping</i>		1961				29 716

SUMMARIES

No. to No.

Railroad, Wagon, Strip, Idle, Abandoned

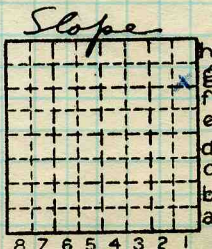
IDENTIFICATION

County No. _____ Coal No. _____

Coal Report No. L-220

Quad.

County Vermilion



Sec. 30

T. 19 N.

S.

E.

R. 11 W.

Index No.

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA

173061





(Sheets) **COAL PRODUCTION** (Sheet)

Period				Tons	
Mo.	Day	Year	Mo.	Day	Year
		1962			
		1963			
		1964			
		1965			
		1966			
		1967			
		1968			
		1969			
		1970			
		1971			
		1972			
		1973			
		1974			

30	341
32	407
39	440
40	059
40	250
47	870
46	326
54	146
62	277
32	272
16	203
	422
5	470

Mine closed December 1974.

SUMMARIES

No.	1950 to 1971(INC)	No.		
			954	593

Railroad, Wagon, Strip, Idle, Abandoned *Slope*

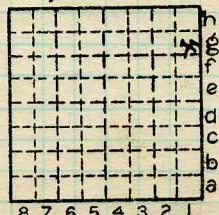
IDENTIFICATION

County No. _____ Coal No.

Coal Report No. L-220

Quad. _____

County VERMILION



Sec. 30

T. 19 N.

R. 11 W.

Index No. _____



ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
<u>V-Day Mine, bottom of slope where Main East starts</u>		From	To
<u>Sequence above No. 6 Coal</u>			
Limestone - Medium gray to dark gray, mottled with light greenish gray, very argillaceous especially near base, irregularly bedded (Bankston Fork Limestone). Sharp contact.	+4	14.6'	18.6'
Shale - Medium gray, brownish, rather poorly bedded, full of irregular vertical "synaeresis cracks" filled with light gray (greenish) clay (discolored material, not different), about 1/2"-1" wide on average but 0-3-4" range. (Lawson Shale?)	2.6'	12.0'	14.6'
Shale - Brownish gray, much better bedded, with only few synaeresis cracks and only knife's edge with.	0.7'	11.3'	12.0'
Shale - Medium to dark gray, slightly silty, firm, poorly bedded but better than above, many small light yellowish gray nodules of siderite (?). Grading into:	0.3'	11.0'	11.3'
Shale - Medium gray, slightly mottled with medium dark gray and light greenish gray, fine irregular synaeresis cracks with discoloring, rather firm, mostly poorly bedded, one limestone concretion near base, about 1' wide.	6'	5.0'	11.0'
Shale - Dark gray, mottled with greenish gray in upper part, grades downward			

COMPANY

FARM

DATE DRILLED

AUTHORITY

ELEVATION

LOCATION

COUNTY

6/24/74

R. B. Nance and H. H.

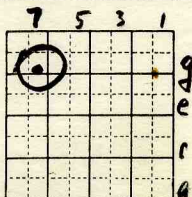
Damberger

NE NE

VERMILION

NO.

COUNTY NO.



30-19N-11W

	Thickness	Top	Bottom
<p>into fairly uniform dark gray to black shale, poorly bedded, only few fine synaersis cracks, firm, slightly silty, better bedded in lower 1-2'. (Anna Shale?).</p>	5'	0'	5.0'
<p>Coal - (Not fully exposed).</p>	←	5 1/2'	6'
<p>Interpretation: Brereton Limestone is probably missing; few feet of shale above coal probably Anna Shale; grading into shale above Brereton Limestone higher up is Bankston Fork Limestone.</p>			



ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
<p>V-Day Coal Co; V-Day Mine Sample #1 - Gluskoter & Eyman No. 6 Coal Location: Room 9 off 3rd W., 2400'S of N Line Section 30-19N-12W</p>			
<p>Gray Shale roof, very fossiliferous, Underclay bottom, total thickness of Coal 7'; 2" left at bottom.</p>		From	To
<p>Coal - normally bright banded - abundant pyrite in cleats thin (less than 1/8") fusain stringers at 6", 7", 11 1/2"</p>		1"	13"
<p>Fusain lens varies in thickness</p>		13"	13 1/2"
<p>Coal - normally bright banded, pyrite on vertical fractures and in some small nodules (1" x 3") 1/2" fusain vein at base.</p>		13 1/2"	17 1/2"
<p>Coal - normally bright banded, less pyrite than above; calcite on vertical fractures, thin fusain bands every few inches.</p>		17 1/2"	30"
<p>Brown Shale Band (1/8" thick)</p>		30"	30 1/8"
<p>Coal - normally bright banded, some pyrite in cleats zone of tan shale, bony coal and thin vitrain bands, predominantly bony coal - coal shale. (Blue Band) omitted from sample.</p>		59"	61"
<p>Coal - normally bright banded, calcite on vertical fractures, coal much brighter, harder, vitrain bands up to 1/2" thick, very few impurities</p>		65"	bottom

Sample 12/20/63 Jan 1964

Date?

plamf

Strata	Thickness	Top	Bottom
V-Day Coal Co., V- Day Mine, Sample #3 Location: Room 14, 2400'S, 1000'E of NEc of Sec. 30-13N-11W 7' of No. 6 Coal <i>Sampled 12/20/63</i>		Jan	1964
Coal - normally bright banded - thin pyrite stringer (less than 1/16") another at		3½" 9½"	
Pyrite & minor calcite on vertical fracture at 12"; nothing apparent where channel, but zone widens into thick pyrite band (1" - 3" thick) in each direction.		12"	12½"
Coal - normally bright banded (as above) fusain band (soft) (banded)		18½" 19½"	19½" 22"
Coal - normally bright, calcite and pyrite on vertical fractures (1/8" - ½" thick) bony band at 24", 26", 27½"		22"	28"
Coal - normally bright banded, calcite and pyrite on vertical fractures, but not as abundant as above.		28"	46"
Coal with much fusain and bony bands.		46"	51"
Dirty band, bone coal, coaly shale, vitrain, (Blue Band) omitted from sample		51"	53"
Calcite on vertical fractures		53"	72"
Coal normally bright banded, coal much harder than above.		72"	84"



Strata	Thickness	Top	Bottom
V-Day Coal Co; V-Day Mine Sample No. 2 - Gluskoter & Eyman No. 6 Coal Location: Room 29, 3rd W. 2400' S, 300' E Section 30-19N-11W		<i>Sample</i>	
Gray shale roof, very fossiliferous underclay bottom - 6'11" of coal <i>Sample 12/20/63 plants</i>			
Coal - normally bright banded, pyrite and calcite on vertical fracture, thin pyrite bands (less than 1/8" at very top. 1/2" fusain band.		1 1/2" 12 1/2"	12 1/2" 13"
Coal normally bright banded - calcite (thick) on vertical fracture, calcite up to 1/16" thick, Coal 1/2" at 25" 1/4" Bone coal at 28" Bony coal, thin vitrain bands.		13" 25" 28" 41"	25" 25 1/2" 28 1/2" 42"
Coal - Normally bright banded - calcite and vitrain on vertical fractures. bony coal - coal shale? (Blue band) omitted from sample.		42" 51 1/2"	51 1/2" 53 1/2"
Coal - normally bright banded- abundant calcite on vertical fractures; harder than above.		53 1/2"	bottom
Very little impure bands in bottom 2 feet			

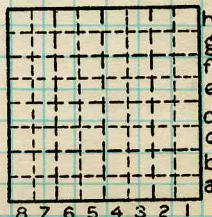


V-Day Mine, Danville, Room 1 off 1st S., about 200' to Sample #2, SE $\frac{1}{4}$, Sec. 30-19N-11W, taken by HHD and LS, 8/22/69, Face channel Sample #1

Roof - soft brownish gray shale, with many plant fragments	2.20'	0-2.20'
Coal - normally bright banded		
Cleats with thin calcite and some pyrite filling. Cleats: N. 10-30°E main set; N. 120-130°E main set	0.14'	2.20-2.34'
Coal - bony		
Coal - normally bright banded, as above	1.05'	2.34-3.39'
Coal - bony	0.05'	3.39-3.44'
Coal - normally bright banded, as above	0.90'	3.44-4.34'
Shale - soft, brown, with bony coal	0.07'	4.34-4.41'
Coal - normally bright banded, as above	2.05'	4.41-6.46'
Underclay - soft, gray, claystone with <u>Stigmaria</u>		

Total thickness of coal: $6.46' = 77.5" = 1.97^m$

By HHD & LS Date 8/22/68
 Quad. _____ Part SE $\frac{1}{4}$
 County VERMILION



Sec. 30
 T. 19 N.
 R. 11 W.
 Index No.





V-Day Mine, Danville, Room 5 off 1st S., about 200'
 from Sample #1, 900' from Sample #3, SE $\frac{1}{4}$, Sec. 30-19N-11W,
 taken by HHD and LS, 8/22/68, Face channel Sample #2

Roof- soft, brownish gray shale,
 well-bedded with thin streaks of
 coal and many plant remains
 Roof bolts 4' deep to get up into
 the gray, harder shale

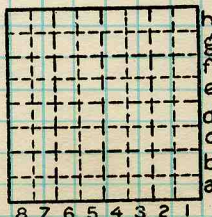
Coal - normally bright banded	2.20'	0-2.20'
Cleats with calcite and some pyrite		
Fusain - soft with thin laminae of shale	0.08'	2.20-2.28'
Coal - normally bright banded	0.20'	2.28-2.48'
Shale - dark brownish gray	0.02'	2.48-2.50'
Coal - normally bright banded	0.05'	2.50-2.55'
Shale - dark brownish gray	0.02'	2.55-2.57'
Coal - normally bright banded, as above	1.90'	2.57-4.47'
Shale - soft, brownish ("mud band"), variable thickness of mud band up to 1"	0.02'	4.47-4.49'
Coal - normally bright banded, as above	2.10'	4.49-6.69'
Underclay - soft, gray claystone with <u>Stigmaria</u>		

Total thickness of coal: 6.69' = 80.3" = 2.04 m

By HHD + LS Date 8/22/68

Quad. _____ Part _____

County VERMILION



Sec. 30
 N. _____
 T. 19
 R. _____
11 W.
 Index No.





V-Day Mine, Danville, 4th South entry, about 900' from Sample #2*, Sec. 30-19N11W, Vermilion County, taken by HHD and LS, 8/22/68, Face channel Sample #3

* see sketch

Roof - soft, brownish gray shale, easily disintegrating in moist air, in summer difficult to hold up full of plant remains (samples taken)

→ passed to H. P. Johnson in 1970

Coal - normally bright banded with cleats containing calcite and some pyrite

1.30' 0-1.30'

Fusain - soft, variable thickness

0.03' 1.30-1.33'

Coal - normally bright banded, as above

1.20' 1.33-2.53'

Shale - brownish gray, soft, varying thickness

0.01' 2.53-2.54'

Coal - normally bright banded, as above

0.06' 2.54-2.60'

Shale - brownish gray with bony coal and ~~durain~~ coal (durain?)

0.02' 2.60-2.62'

Coal - ~~n~~ bright banded, as above

1.97' 2.62-4.59'

Shale - brownish gray with fine streaks of coal

0.03' 4.59-4.62'

Coal - bony

0.06' 4.62-4.68'

Shale - dark brownish gray with many streaks of coal ("mud bed")

0.08' 4.68-4.76'

Coal - normally bright banded, as above

1.20' 4.76-6.56'

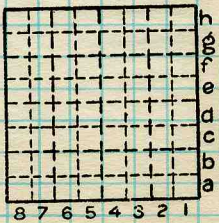
Underclay - soft gray claystone with Stigmaria

Total thickness of coal: $6.56' = 78.8" = 2.00 \text{ m}$

By HHD + LG Date 8/22/68

Quad. _____ Part _____

County VERMILION



Sec. 30
T. 19 N.
R. 11 W.
Index No.





V-Day Mine - Sample 2 - ^{6th North} ~~Main~~ Entry
 Grape Creek No. 6 coal 20' cut by Rm. 18

Total 5' 6" coal

Top

- Immed. Roof - Sh. dk. gy. med. to fine grained, pyritic
- Top to 6" Coal, NBB, much calcite on vert. fract.
- 6 - 6 1/4 Pyritized fusain band
- 6 1/4 - 10 1/4 Coal, NBB
- 10 1/4 - 10 1/2 Bony coal
- 10 1/2 - 31 1/2 Coal, NBB
- 31 1/2 - 31 3/4 Fusain band
- 31 3/4 - 36 Coal, NBB
- 36 - 37 1/2 Sh. gy., carb. w/ coaly strks. - Excluded from sample
- 37 1/2 - 38 1/2 Bony coal
- 38 1/2 - 42 Coal, NBB
- 42 - 42 1/8 Pyrite parting
- 42 1/8 - 43 5/8 Coal NBB
- 43 5/8 - 44 Two 1/16" pyrite partings separated by coal
- 44 - 48 1/2 Coal NBB
- 48 1/2 - 48 3/4 Pyritized fusain w/ coaly strks.
- 48 3/4 - 56" Coal NBB harder than above
- 56 - 57 Pyrite band - Excluded from sample
- 57 - 61 Coal, BB, w/ occas. thin pyritic partings, ~~BB~~
- 61 - 61 1/2 Fusain band, pyritic w/ pyrite strks
- 61 1/2 - 66 Coal - BB, hard, w/ occas thin pyritic streaks

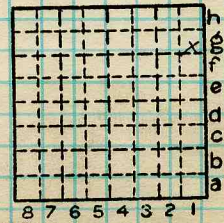
Vel. gy. *

Location of Tipple

By JAS & MEH Date 9-8-13

Quad. DANVILLE SW Part

County Vermilion



Sec. 30
 T. 19 N.
 R. 11 W.
 Index No.

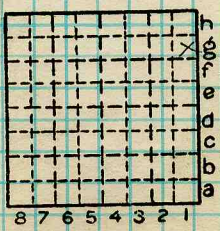


Roof Sample X
2' above top of coal
Bottom V-Day Mine

Sample X
2" above top of coal
Bottom - V-Day Mine

Tipple

By JAS & MEH Date 9-18-53
Quad Denville Part SW
County Vermilion



Sec. 80
T. 19 N.
R. 11 W.
Index No.





V-Day Mine - Sample #1 - Rm. 13
off of 6th North

Total thk. of coal 5.9'

Feet

Top - DK. gy. sh.

0-0.9

Coal, NB/B

0.9-0.92

fusain

0.92-

at 0.9' - 0.02 pyrite band

at 1.4 - 1/8" pyr. band

" 1.6' - 0.03' fusain band

" 2.15 - 0.02 pyrite band

" 2.85 - 0.05 Gy. sh. ~~band~~ band - Excluded from sample

at 2.90 - Coal, Bony coal & Sh. ~~1.15'~~
0.15' thick

3.05 to base - Coal NB/B w/ occas. pyrite parting - harder in bottom 18"

ud. - gy.

@ 11" 1/4" pyrite band

1' 5" 1/8" pyrite band

1' 7" 1/4" fusain band

2' 2" 1/4" pyrite band

2' 10" 1/2" ~~band~~ band excl from samp.

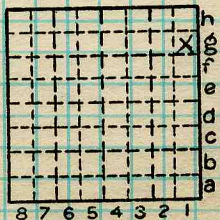
2' 10 1/2" 1 3/4" Coal bony & shale

from 3' 0 1/2" to 5' 11" Coal n.b.b. w/ occas. pyrite ptgs.
harder in bott. 18" Location of tipple

By JAS & MEH Date Sep. 18, 1953

Quad. DANVILLE SW Part

County VERMILION



Sec. 30
N.
T. 19
R. 11
W.
Index No.

V-DAY COAL CO. MINE, NEAR DANVILLE, VERMILLION COUNTY
VISIT BY HEINZ DAMBERGER, JUNE 20-24, 1974.

General Information: V-Day Mine started operating again under new ownership and management, Mr. V.S. Reddy. In 1972, mine had produced only 16,203 tons of coal and suspended operations in October of that year. Then it was under K.L. Zaberletti's ownership and management, with B. Cravens as underground mine manager. Apparently the mine was ordered closed by MESA because of non-compliance with rules and regulations. The company also apparently went through bankruptcy.

V.S. Reddy told us that he intends to buy a drilling rig to explore the coal field he has under lease. He showed us some cores that recently were drilled under contract and under his management. Driller's log did not look like good description of rock sequence encountered. Reddy seems to recognize this problem and is looking for a geology student who would be willing to supervise and direct his drilling program. However, Reddy did not give any indication of money he wants to spend on such a person; apparently he wants him actually to go out with the drilling crew and help them manually as well as describe cores drilled. On Monday, June 24, we logged the cores that he has in storage. There were some problems with labelling, but they turned out to be pretty good cores. Unfortunately, Reddy does not seem to have good locations on the three bore holes, but they still remember locations at surface relative to mine entrances. (The holes were later located by Chris Ledvina and John Nelson, using a chain and compass).

Almost all of the old mine works have been sealed off by Reddy. He wants to drive new main entries around the old works toward the west, where he expects to find good seven-foot Herrin (No. 6) Coal. Not clear where he got that info (that good coal exists to west); apparently based mainly on what they had in the old works of V-Day in that area. Does not have any borehole data.

Has tremendous roof problems on the Herrin (No. 6) Coal in his new main entries and is now considering to get over into the western field through the Danville (No. 7) seam. The No. 7 Coal generally seems to be better developed than the No. 6; also the roof seems to be in good shape. The main question is whether there is enough solid roof left below the glacial drift. We told him that he will need to get more information and that the idea of acquiring a drilling rig and hiring a geologist to look at the cores sounds good. We asked him if he considered contract drilling with a drilling company since finding the right people to operate his rig and training them properly might turn out to be a problem. He does not seem to recognize this as a problem and wants to go ahead with buying his rig which supposedly is to be delivered soon.

Roof Conditions In The Mine: At the bottom of the slope where the Main East starts, the following sequence of rocks is exposed above the Herrin (No. 6) Coal:

Top

- 4.0' Limestone, medium-dark gray, mottled with light greenish-gray, very argillaceous, especially near base, irregularly bedded, in contrast to shale below.
- 2.6' Shale, medium gray-brownish, rather poorly bedded, full of irregular roughly vertical "synaresis cracks" filled with light gray (greenish) clay (discolored) material, not different from other stuff), about $\frac{1}{2}$ -1" wide average, but range of width is from 0 to 4".
- 0.7' Shale, brownish-gray, much better bedded, with only a few synaresis cracks of only a knife-edge width.
- 0.3' Shale, medium-dark gray, slightly silty, firm, poorly bedded but better than above, many small yellowish-gray nodules of siderite (?). Grades into shale below.
- 6.0' Shale, medium gray, slightly mottled with medium-

- dark gray and light greenish-gray, fine irregular synaeresis cracks with discoloring, rather firm, mostly poorly bedded, one limestone concretion near base about 1 ft. wide.
- 5.0' Shale, dark gray, mottled with greenish-gray in upper part, grades downward into fairly uniform dark gray to black shale, poorly bedded, only a few fine synaeresis cracks, firm, slightly silty, better bedded in lower 1-2'.
- 6.0' Coal, not fully exposed at this location.

Stratigraphic Interpretation of this Lithologic Sequence

Brereton Limestone is probably missing; few feet of rather dark shale immediately above coal probably represents the Anna Shale. This grades into shale above which probably represents shale that normally occurs above the Brereton Limestone. At top of exposure probably is the Bankston Fork Limestone.

Roof condition in this area is much better than in the rest of the mine. However, much slaking has occurred causing exposure of sequence often up to the limestone. The shale below the Bankston Fork Limestone with much mottling and synaeresis cracking probably is the weakest unit in the roof sequence.

At the end of old Main East close to the air shaft they are now turning around to the north and then to the west to drive their new Main West entries. Almost immediately after turning north and west they ran into very treacherous roof conditions. An abundance of slips throughout the roof, some of them with definite trend across one or several rooms, others seemingly only of local importance. Some of the more important slips cut into the top of the seam where they tend to peter out, often by dipping more and more shallow and finally paralleling the bedding in the coal. Small displacements of up to a few inches have been observed. Where the slips hit the coal, coming from the roof shales, there often is a "white top" type of material in small pockets. In the more severely disturbed places, coal thickness is reduced from the normal

dark gray, and light greenish-gray, fine irregular syn-

lar symplectic cracks with discoloring, rather fine, mostly poorly bedded, one limestone con-
cretion near base about 1 ft. wide.
Shale, dark gray, mottled with greenish-gray in
upper part, grades downward into fairly uniform
dark gray to black shale, poorly bedded, only a
few fine symplectic cracks, thin, slightly silty,
better bedded in lower 1-2'.
Coal, not fully exposed at this location.

Geologic Interpretation of this Lithologic Column
The limestone is probably missing; few feet of
rather dark shale immediately above coal probably rep-
resents the Anna shale. This grades into shale above
which probably represents shale that normally occurs
above the Princeton limestone. At top of exposure pre-
sents as the Princeton York limestone.
The condition in this area is much better than in
the rest of the mine. However, such striking has occurred
causing exposure of sequence often up to the limestone.
The shale below the Princeton York limestone with much
mottling and symplectic cracking probably is the western
unit in the roof sequence.
At the end of old Main East close to the air shaft
they are now turning around to the north and then to
the west to drive their new Main West entries. Almost
immediately after turning north and west they ran into
very treacherous roof conditions. An abundance of slips
throughout the roof, some of them with definite trends
across one or several rooms. Others seemingly only of
local importance. Some of the more important slips out
into the top of the seam where they tend to peter out,
often by dipping more and more shallow and finally
paralleling the bedding in the coal. Small displacements
of up to a few inches have been observed. Where the
slips hit the coal, coming from the roof shales, there
often is a "white top" type of material in small pockets
in the more severely disturbed places, coal thickness is
reduced from the normal

reduced from the normal 5-6 feet to 2-3 feet, and quite often reductions of 1-2 feet have been observed near slips that severely affect the roof and the upper portion of the seam. It seems that the shale sequence above the seam and below the Bankston Fork Limestone, as described at the bottom of the slope, is quite variable in thickness throughout the new Main West entries. Particularly where the clodlike shale below the Bankston Fork Limestone is close to the coal with all its synaresis cracks and burrows, roof conditions seem to deteriorate badly. Where the dark shale and gray shale below the mottled and cracked shale thickens, roof conditions improve, at least in those areas where slips are absent or minor. Unfortunately, such areas appear to be of limited extent only; may be one or two rooms in size.

They mine coal by shooting with Airdox. This method only seems to aggravate bad roof conditions.

Interpretation: A look at the mine map of the old workings suggests that the area of bad roof conditions trends from about the center of SW $\frac{1}{4}$ of Sect. 20, 19N-11W through the NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 29, toward the slope in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 30, and further toward the center of the east line of Section 30 and thence further to the southwest. What this may represent is the trend line of thickening gray Energy Shale toward the southeast of this line. Coal from the V-Day Mine has been known to be relatively low in sulfur, and occasionally very low, indicating the presence of some 20 feet or more of gray Energy Shale on top of the Herrin (No. 6) Coal. Data from the area is scant, however, and the extent and even the presence of gray shale is not well known. Only a well-planned drilling program would permit delineation of low-sulfur coal/ thick gray shale areas.

Previous visits to the V-Day Mine and entries in our Mine Notes indicate the absence of roof problems encountered in new Main West. This is rather intriguing; should thick gray shale have protected the seam from disturbance in the same way it protected the seam from infiltration of sulfur?

V-DAY COAL CO. MINE, DANVILLE, VERMILLION COUNTY,
ILL.

Notes by H.-F. Krausse, June 20, 1974, in connection
with Herrin (No. 6) Coal Roof Study.

Strike of joints (compass heading)
(Presumably in the immediate roof)

<u>Very Frequent</u>	<u>Locally but then narrow spaced (sic)</u>	<u>Few and wide- spaced</u>
043		
047	008	129
053	007	134
046	012	138
049	015	136
043	006	131
050	008	141
057	010	128
053	011	135
051	013	133
048	005	140
042		135
		137

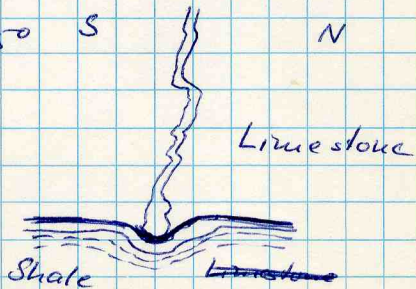
Main direction (strike) of synaeresis cracks 085.
(Sketch appears to indicate that these are in the
"caprock" Bankston Fork Limestone that lies about
ten feet above the top of the coal in most of this
mine, and forms the top of the larger falls. C.J.N.)

These notes typed by C.J. Nelson on 5/13/76
after Krausse had left the Survey.

V-DAY Mine June 20, 1974

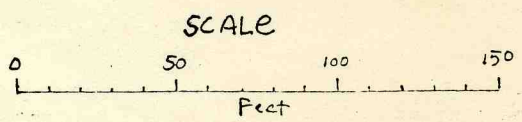
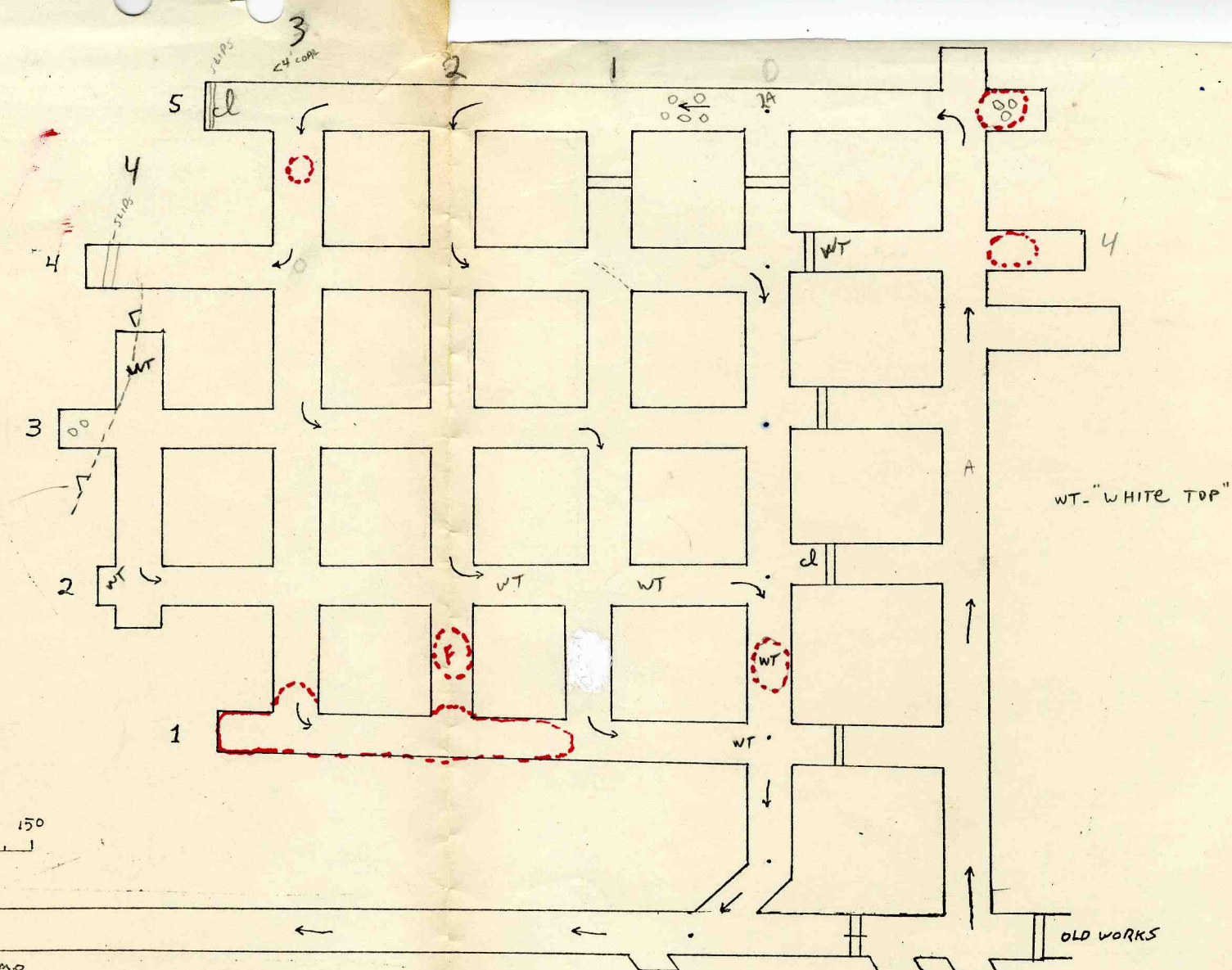
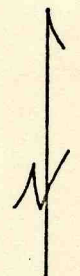
Strike
Joints very frequent $43^\circ, 47^\circ, 53^\circ, 46^\circ, 49^\circ, 43^\circ, 50^\circ, 57^\circ, 53^\circ, 51^\circ, 48^\circ, 42^\circ$
locally but then narrow spaced $8^\circ, 7^\circ, 12^\circ, 15^\circ, 6^\circ, 8^\circ, 10^\circ, 11^\circ, 13^\circ, 5^\circ$
few and wide spaced. $129^\circ, 134^\circ, 138^\circ, 136^\circ, 131^\circ, 141^\circ, 128^\circ, 135^\circ, 133^\circ$
 $140^\circ, 135^\circ, 137^\circ$

Main direction (strike) of synchronous cracks 85° S N



Nelson STOPS

Nov 17, 1974



10 p e 24 1/2 °
Sump

CHAIN AND COMPASS MAP OF THE
V-DAY COAL MINE, Near DANVILLE, ILL.

BY C.T. LEDVINA AND JOHN NELSON, Nov 18, 1974

TWP 19N R11W SEC. 30 SLOPE MOUTH AT: 275 EL, 3970 WL SEC 30
ELEVATION 654.5'

- ↑ AIR FLOW
- SPAD SURVEY POINTS
- ≡ CONCRETE STOPPING
- ≡ CONCRETE STOPPING WITH MAN-DOOR

6x22x20 BTG

Face of Entry 4 to about 4 1/2' of coal with very prominent Blue Band having elongate lenses of pyrite at the base—sometimes total 4" thick, about 18" from bottom. Coal here has sharp abrupt contact to roof, black shale, very smooth and uniform and non-laminated in lower 6", becoming finely laminated with gray above. Relatively good roof. But long slips are abundant in roof, some cutting into top of coal.

Slip angles— 135° , 100° , 125° , 155° . Dips variable. One set appears to have surrounded a 4' pod which fell.

About 12' back from the face another set of large slips heading 025° + running clear across the entry.

Large imprint of tree bark, like alligator hide, found nearby. Plant imprints and coal riders are very rare in the new part of the mine.

20' back from face roof has fallen away showing gradation from black into mottled shale, with light to medium gray-green patches and blotches, and abundant criss-crossing fractures common throughout the mine. Mottling starts 2-3 feet above coal. This shale is actually uniform, very dark gray to black when fresh; the mottling appears with exposure to air.

At intersection of 3rd crosscut and 4th entry a large concretion taller than it is wide—about 18" high. This different from most mines, where they are usually flattened horizontally.

Face of Entry 5 (intake air) coal height and appearance like in Entry 4. Top contact again sharp, somewhat irregular, occasional pyrite lenses in first inch of roof. There the roof shale has considerable fresh mottling along widely spaced fractures. Right at the face in NW corner roof is badly shattered and mottled, along several large slips roughly N-S. Shattering may also be due to

the shooting (this mine is conventional throughout).

In some places the roof breaks away in a ripple-pattern. Across from crosscut 3 the coal thins to less than 4 ft. under several slips.

Large clumps of roof have fallen between crosscuts 2 and 3. A large nest of septarian concretions occurs here, about 4 ft. above coal. Internally they are black, with sparkling microcrystals, occasional siderite-filled septarian cracks. These are round or oval and appear to be flattened horizontally.

Bad roof conditions continue eastward past crosscut 1 (sealed) and occasional concretions as before.

Still in Entry 5, opposite track entry, coal is overlain by a foot of smooth uniform black shale, then a foot of black shale finely interlaminated with brownish. Above this is black shale grading quickly to mottled. The laminated layer shows several small faults of a few inches offset, showing no slickensides. They reach top of coal but don't penetrate.

More concretions here split horizontally with sparkies all along the splits, may be preservation of original shale bedding.

At the corner a stub started east about 10' toward the old works. About 3' of the roof fell in here. The top of the dome is concretion layer with the fracture, mottled appearance, but hard and solid. May be base of the lower bench of Bankston Fork Limestone. Just above the coal the even black shale and the brownish laminated layer are visible—both thinner than before, coal slightly over 5 ft. thick. In stub entry 4 a similar roof fall, this time maybe 5 ft. above the coal.

Roof farther south along intake air course is better—black pyrite shale, some fossils. Some slabbing to about

one foot. Less roof was taken during mining.

Back to Entry 4 at crosscut 3, SE corner, two large slips above, both heading $\sim 110^\circ$.

In Entry 3, stub of crosscut 4 heading north. Large slip (fault) at the face, north several smaller slips under unsupported roof. Trend about 045° , NW dip. Offset 12-16". Immediately above coal here is about 6" of weak clayey, slipped gray to brown shale, "white-top" mixed with thin coal stringers.

Thin laminated, smooth black shale grading upward into fractured black mottled shale as usual.

The same slip and/or parallel slips, cut diagonally through the west face of the north stub, on through the north stub. Slips have in places 2-foot offsets. Angles of 000° , 045° , 075° noted, and both east and west dips. The "white-top" continues as immediate roof. Slips are very abundant in bottom roof and coal.

Moving away from face in Entry 3 the "white-top" layer disappears. Black shale thicker, more stable, some areas of mottled shale and concretions.

At intersection of Entry 4 and crosscut 2 about 4' of roof has fallen leaving fairly solid top of mottled shale—concretions as in air intake course. Rest of entry 4 rather weak mottled concretionary shale with numerous falls. In crosscut, 1 by the seal, on east side, the "white-top" layer reappears above relatively low coal. Bottom of "white-top" layer is mostly chunks of coal in clayey matrix, top is gray clayey shale with few coal stringers. Apparently a place where original peat was flooded and partly eroded. The shaly band has much pyrite especially near top.

Entry 2 at the face. Edge of a "white-top" wedge. The

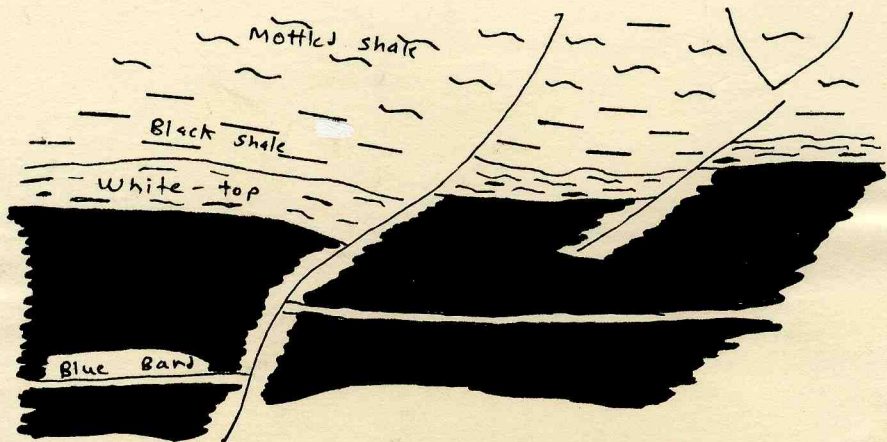
coal is clearly thinned from the top and contact changes from straight, level to irregular, numerous vertical fractures filled by pyrite occur below the "white-top"—these probably were fractures in the peat. Layers in the coal are slightly disturbed below the "white top."

The roof above the normal coal is firm, black shale. Mottled shale occurs above the channeled coal.

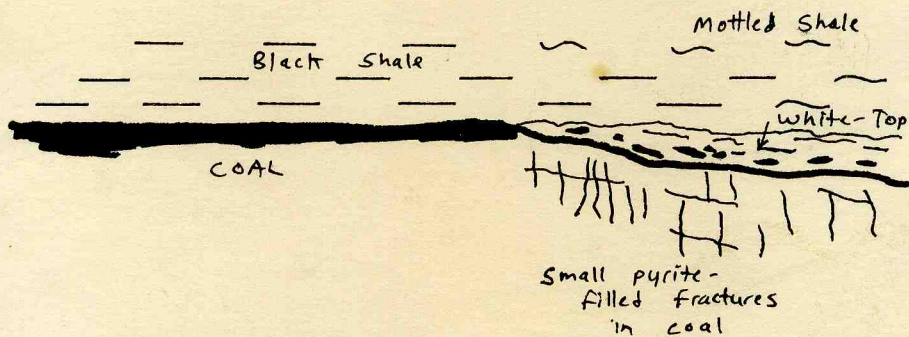
Crosscut 3 to Entry 1—see roof fall in Entry 1, but roof unsupported, couldn't get in. Most bolts still hanging roof fell around the bolts pulling some of them part way out. Edges of crosscut show the low, eroded coal. Appears to be little or no good shale in 1—all mottled with many concretions.

Crosscut 2 in between Entries 1 and 2 has a big, domed fall not rebolted. Dome about 6' above coal top perhaps on base of limestone—the hard mottled concretionary layer. Coal top straight north of fall and appears channeled to south. Could not cross fall to Entry 1.

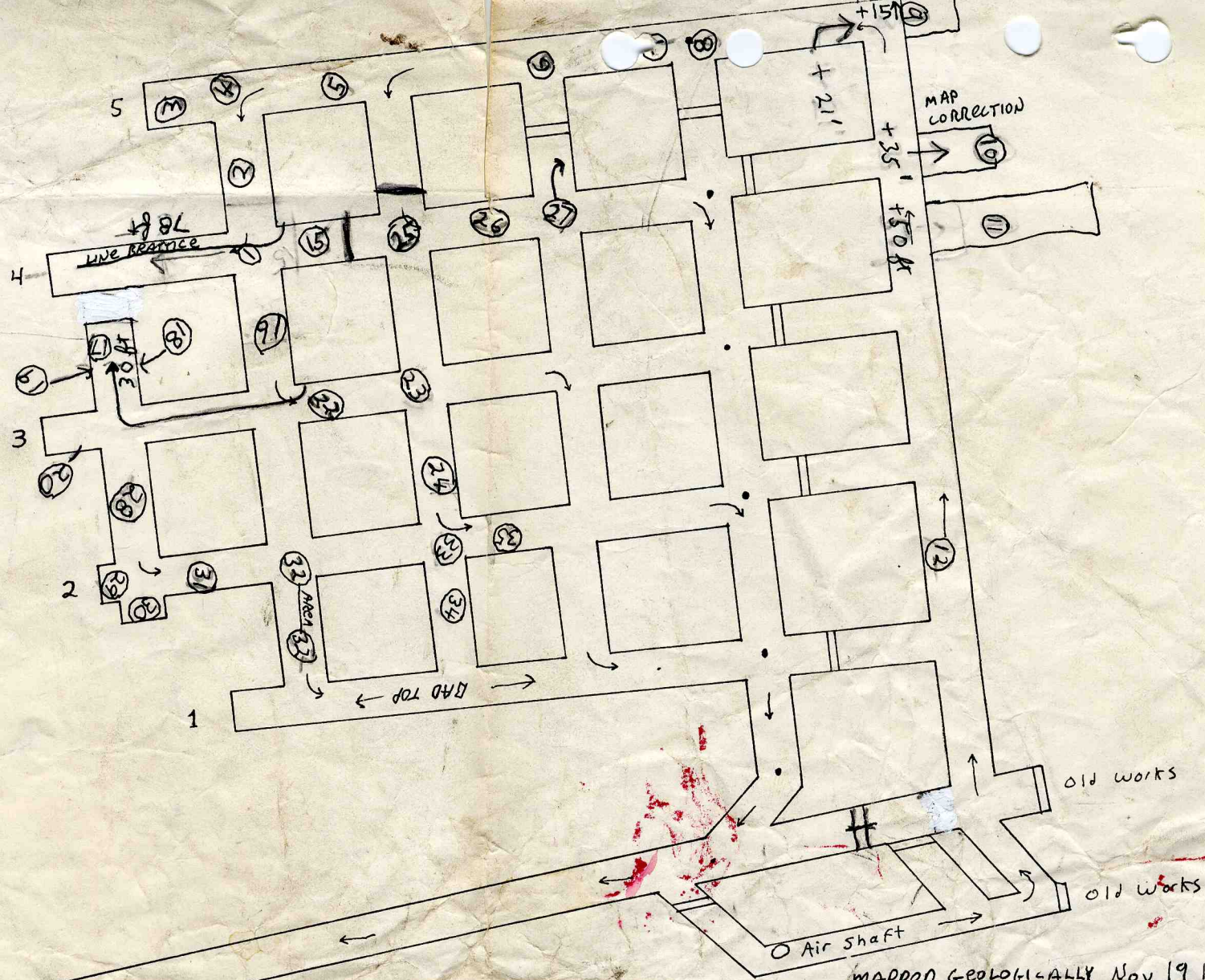
All of Entry 2 features small cut-out areas, with "white-top."



Prominent slips on North face of stub-crosscut 4, heading north off Entry 3.



White-top in working face of Entry 2, showing how the normal straight, level upper contact of coal was eroded before White-top deposition, and showing pyrite-filled vertical fractures in coal below White-top.



SLOPE $24 \frac{1}{2}^\circ$ sump

Note, SLOPE & MINE NOT ORIENTED CORRECTLY ON THIS MAP

MAPPED GEOLOGICALLY Nov 19, 1974
see Notes

V-Day Coal Mine
Nov. 18, 1974

→ Air Flow || Sealed Brattice
• Spads # Brattice with Door

0 50 100 150
Feet

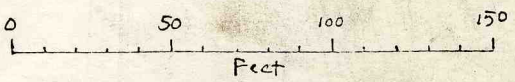
Handwritten note: ~~Handwritten text, possibly describing a specific area or feature on the map.~~

Note, orientation of mine is incorrect here, see newer map.

APPROXIMATE CHAIN AND COMPASS MAP

V-Day Coal Mine
Nov. 18, 1974

- Air Flow
- || Scaled Brattice
- Spads
- ⊥ Brattice with Door



BY C.T. LEUVINA AND JOHN NELSON

SLOPE LOCATION:
275 EL, 3990 WL

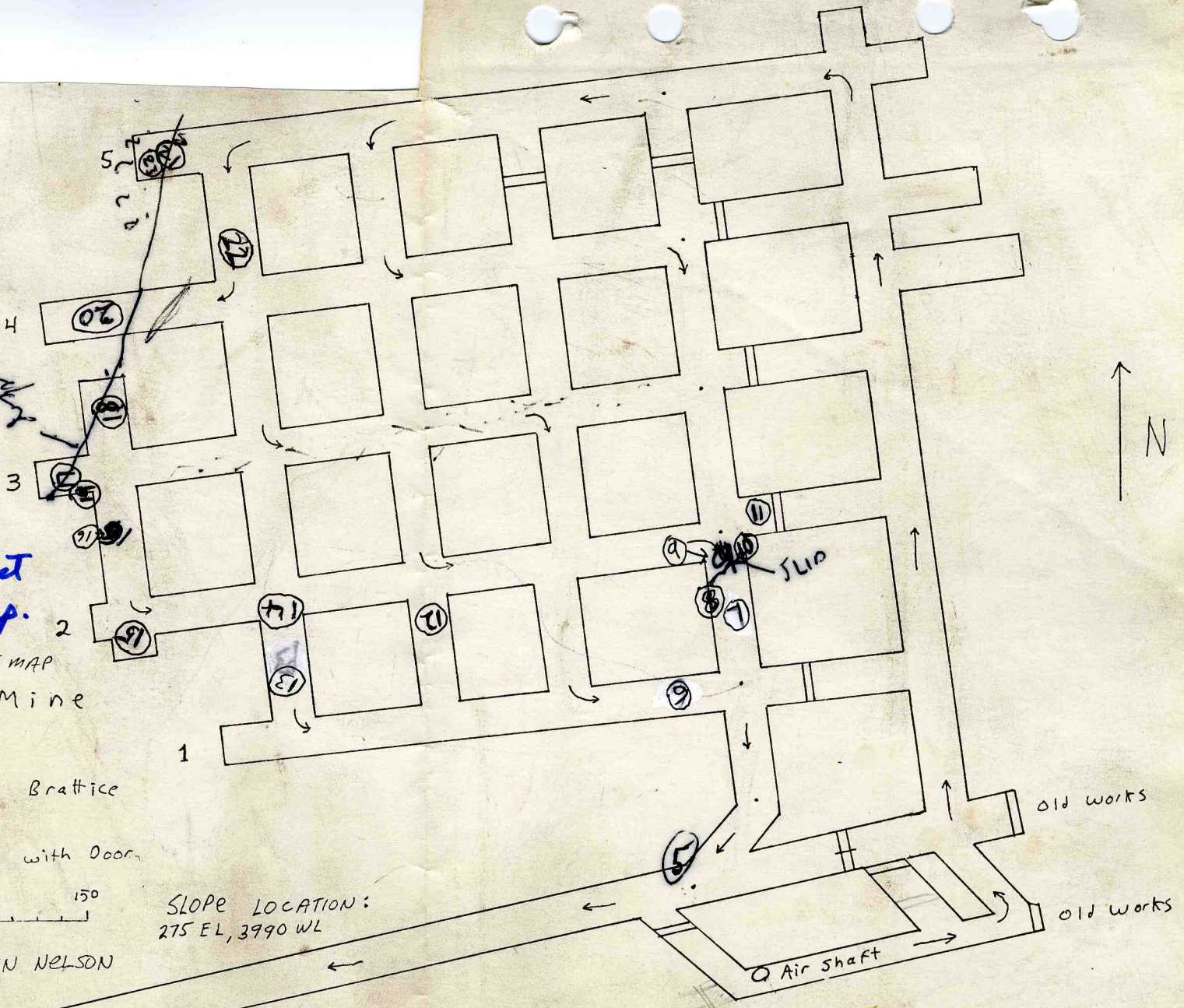
19N 11W Sec 30
Elev. 654.5

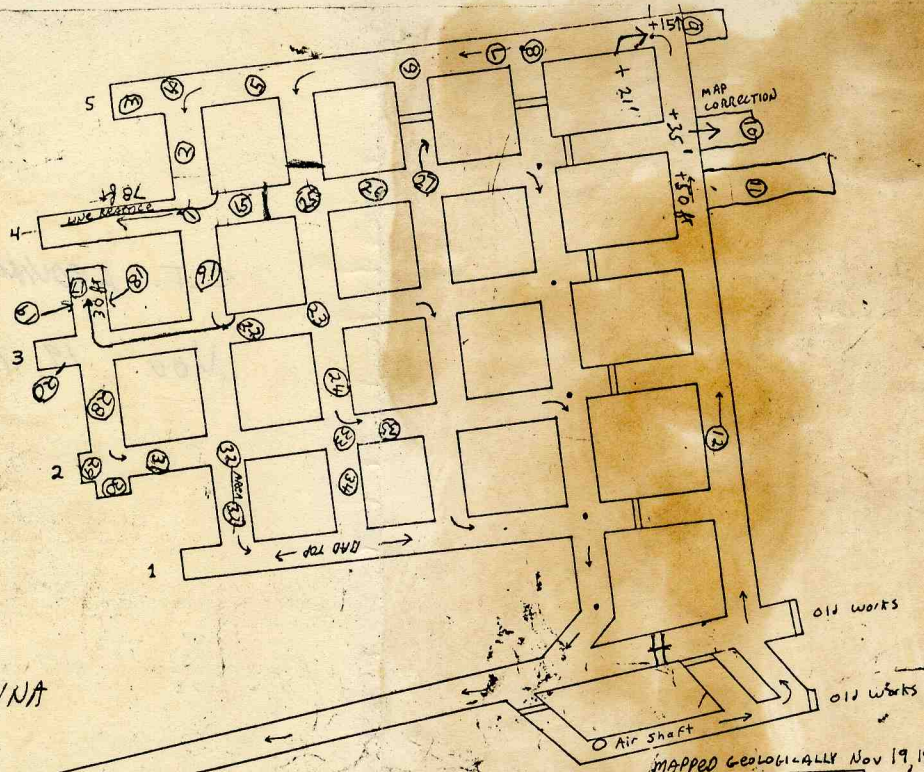
Slope 24 1/2°



257

This map shows stop numbers for trip of November 29, 1974





C. T. LEVINA

Note, SLOPE & MINE NOT ORIENTED CORRECTLY ON THIS MAP

MAPPED GEOLOGICALLY Nov 19, 1974 see Notes

V - Day Coal Mine
 Nov. 18, 1974

— Air Flow || Scaled Brattice
 . Spads + Brattice with Door

0 50 100 150
 Feet

ILLINOIS GEOLOGICAL SURVEY, URBANA

C. T. Ledvina
November 19, 1974
V-Day Coal Mine

At beginning of coal miner's strike. We are taken into the mine by Clyde Heggesy, mine manager.

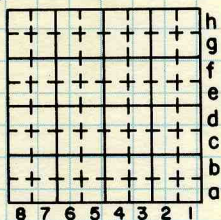
Note: These notes are very general because they are first impressions of this mine. See map for locations of Stop Nos.

1. Coal thickness low, as mine manager says, where coal comes up, roof comes down. 4.5' thick here. He means that coal thickness is erratic.

Blue Band is 18" from bottom and has a fusain band 2" above it that is semi-continuous. Blue Band is 2" thick with large pyritic lenses at bottom (sampled) of variable thickness, approximately 2". Black shale roof (Anna?), hard, fairly slaty and micaceous with numerous slickensides, grades into dark gray shale with lighter greenish gray mottles and synaeresis cracks.

Immediate roof is often gray instead of black and when that happens, it is laminated with lighter silty material and some siderite laminations.

Slips (slickensides) are highly variable in dip, but generally trend SE 115° . Large kettle bottoms occur everywhere and are divided by slips all around



By _____ Date _____

Quadrangle _____

County _____ Sec. _____ T. _____ R. _____

circumference. Some look big enough to be pods of Brereton Limestone. ?

Coal in places has several bands, but mine manager says blue band is the only continuous one.

Some tree impressions noted in medium gray shale roof. These are very rare according to mine manager. See Fig. 1.

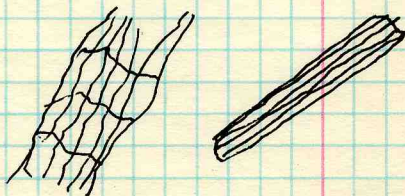


FIG 1, TREE IMPRESSIONS

Surface of trunks are "alligator" checked. Some pyrite riders noted into shale. Mottling becomes more intense outby this entry. Fall occurred 20 feet outby this entry. Exposed shale is not quite as mottled. Also a kettle bottom found outby at cross cut standing on end.

2. Roof not too bad in cross cut. Medium dark gray shale. Hard and dense, mottling beginning upward after a few inches. Roof good because coal was mined well. Coal thin here. 3.9-4.0 feet.

3. Contact with coal very "hashy" in spots here, or it can be very smooth and marked by long siderite lenses and shale breaks with cone-like structures in places and is surprisingly unfossiliferous.

4. Gray mottled shale roof and low coal. <4.0 feet. Blue Band 15-18" from bottom.

5. Very dark gray and/or black mottled shale roof. Similar to what was seen before. Dark gray shale shows

some fine horizontal laminations. Mottled shale shows no structure except syneresis and the mottles. Joints seem to parallel synaeresis. (130°).

6. Usual slabbing roof noted. Dark gray shale grades into light and dark laminations (light laminations are same color as mottles), then to usual mottled shale.

7. Mineralization along on joints, dark gray shale roof.

8. Nice section here.

From the top:

Mottled shale with syneresis.

.75' laminated brownish gray shale.

1-0' Dark gray to black shale.

4.3' Coal

Fault noted, laminations in shale 1.0' above coal show it. Fault is normal.

9. 5.0'+ Coal.

10. 6 foot roof fall. Roof fell because of no bolts. Here mine manager says we are dangerously close to old works.

11. Flat black shale roof.

12. Smooth, black shale roof. 13 and 14 ommitted.

15. Coal dips down to 3 feet here. Then ~1.3' black shale, then ~1 feet light and dark interlaminated shale, then mottled shale.

16. "Good roof" area, 1' Anna Shale[?] holding well in most areas.

17. Area has usual stratigraphy above coal, except coal is

very thin 3.0'. Fault noted right on face. 1.5' displacement. See Fig. 2.

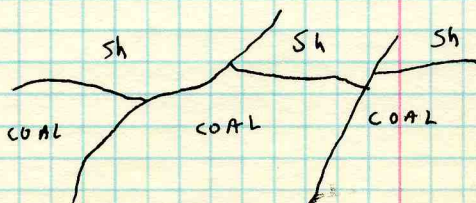


FIG 2

Described in more detail by C. J. Nelson (see notes)

18. Slip in mottled shale—laminated shale transition zone.

110°S/62° dip.

19. We find soft carbonaceous shale with carbonaceous fragments and small coal stringers 6" thick above coal, then normal sequence. Coal is <3.0' thick.

In general, entry is structurally disturbed.

20. Here in the end of No. 3 entry, we have mottled shale roof as usual with numerous kettle bottoms. Coal as in 19 is overlain by weak carbonaceous shale then black shale and usual sequence. Fault noted: Maybe some fault is over in cross cut to 4. See Fig. 3.

ENTRY

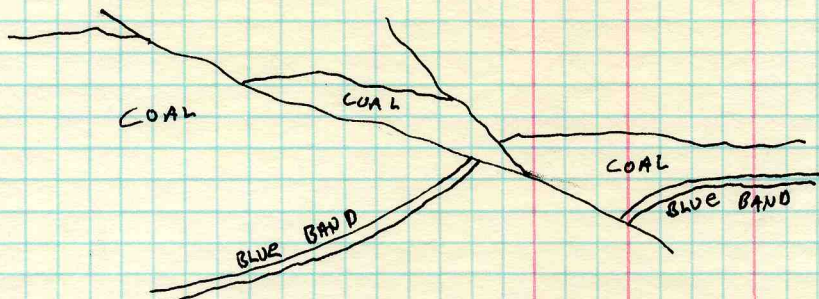


FIG 3

No STOP 21

22. Relatively thick Anna Shale here, or ~~could be that~~ it is lower Lawson, which ^{IS NOT} through to the mottled zone yet. Surface is smooth and undulating.
23. Broken ^{up} to mottled shale again. Mottles are in darker matrix.
24. Anna Shale seems to be 2-3 feet thick before hitting mottled shale, but it eventually comes down in falls to expose mottled shale.
25. Centre of cross cut shows a large pending roof fall. Mottled shale with numerous kettle bottoms and slips.
26. Anna Shale in some places, others have broken through to Lawson. Normal sequence.
27. Thin coal, ~3.5', then band of sulfur stained carbonaceous shale .5' thick with numerous riders, then normal sequence. Mine manager says he only gets this "smut" when coal is low; I agree. Probably a channel. Band is gone on other side of entry. This is white top and occurs in this mine often.
28. Nice Anna Shale, roof in good shape.
29. Coal lowers and carbonaceous shale comes in again. Similar to other places. See Fig. 4.



FIG 4 , white top

Seems to have white top here in a channel. Black shale seems to be less competent in low coal. Laminations of coal are irregular here with numerous pyritic vertical

stringers. Coal is messy.

31. Roof quite irregular with bolted complete sections low and high (3' above coal) fall sections w/ heads of bolts resting on mottled shale.

Ribs show low coal and clay shale again. I am looking into entry. No one and see a fallen mess. This is an older entry and is caused by falling of water reactive usual shale.

32. Black shale roof here, but mine manager says he tries to take it down.

No 33

34. Big fall in cross cut, as usual it goes about 6' up to a hard rock cap. At this time, I think the rock cap is the Bankston Fork Limestone. Looking down into entry 1, I see the grade going down hill and coal gets thicker; 6'+. Also near here on the cross cut, I see the carbonaceous shale layer (white top) on top of the coal and that shows that the coal should be thinner here, it is; 3.5-4.0'.

35. Very small kettle bottoms with much mineralization; calcite crystals (green and bluish with some amber coloring indicating iron or copper traces?), or it may just be oxidized pyrite. Roof is generally mottled shale with kettle bottoms, some black shale noted, however.

General observations:

In this mine, I get the impression that the normal sequence above the No. 6 is altered. It seems that the Lawson is the immediate roof, even though several notes were made mentioning Anna Shale roof.

This mine, at least in this area, will never have high roof falls because the Bankston Fork Limestone is close to the coal. In other words, the Lawson will fall, but the Bankston Fork is so close that one should expect

continual minor roof problems.

It is also true that to the South of the mine (near and in old works), the roof was gray shale and represented good roof and low sulfur coal. The owner (V. S. Reddy) is trying to mine through the bad roof area to reach new gray shale roof to the south-west. It seems that (according to boreholes) he may succeed if he mines far enough. Also in the gray shale areas, the coal is thicker and more uniform and there are no white top disturbances.

It is a shame in this case that, because of ventilation requirements, the owner could not use the old works and thereby had to seal them.

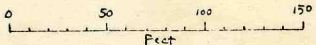
See map of slope

Note, orientation of mine is incorrect here, see newer map.

APPROXIMATE CHAIN AND COMPASS MAP

V - Day Coal Mine
Nov. 18, 1974

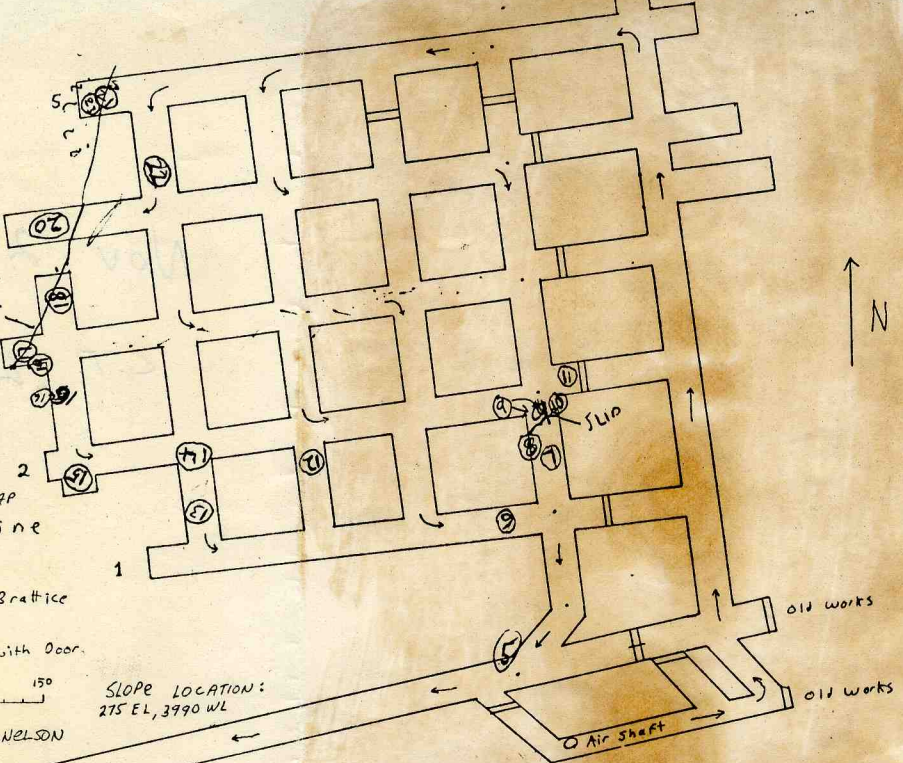
- Air Flow || Sealed Brattice
- Spads + Brattice with Door



BY C.T. LEVINA AND JOHN NELSON

SLOPE LOCATION:
275 EL, 3990 WL

19N 11W Sec 30
Elev. 654.5



257

This map shows stop numbers for trip of November 29, 1974

ILLINOIS GEOLOGICAL SURVEY, URBANA

V-Day Coal Company Mine

C. T. Ledvina

November 29, 1974

Third trip to V-Day Coal Company Mine near Danville Illinois. Accompanying were Fred Krausse. We entered the mine without a company man. Miner's strike still in progress. *ALSO ACCOMPANYING WERE*

John Nelson & Steve Hunt

Note: End of the day's notes contains measurements used to locate test drill holes. These measurements were made at the request of the company, but will serve the Survey also.

Slope description of V-Day Coal Mine.

2.0' Shale - Medium gray with numerous siderite lenses as sampled by R. B. Nance. Base of unit heavily iron stained.

2.5' Claystone - Medium gray with light yellow staining (sulfur). Very soft and sticky.

4.0' No. 7 Coal - Pyrite with much fusain noted. Bottom not exposed. Estimated coal bottom down to top of 1st limestone bench seems to be 8'. Possibly closer to 10'. This interval is presumably shale.

1. First rock exposed going down slope below No. 7 Coal. Is top of Bankston Fork, though cannot actually see upper contact. It is medium light buff gray, becomes mottled downward. Some crystalline calcite inclusions noted along with some slips and

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

By _____ Date _____

Quadrangle _____

County _____ Sec. _____ T _____ R _____

6.0' iron stained joints. After mottled zone in middle, becomes denser and purer downward.

Shale - Medium greenish gray but very dark in top .9'. See Fig. 1. Grades into.

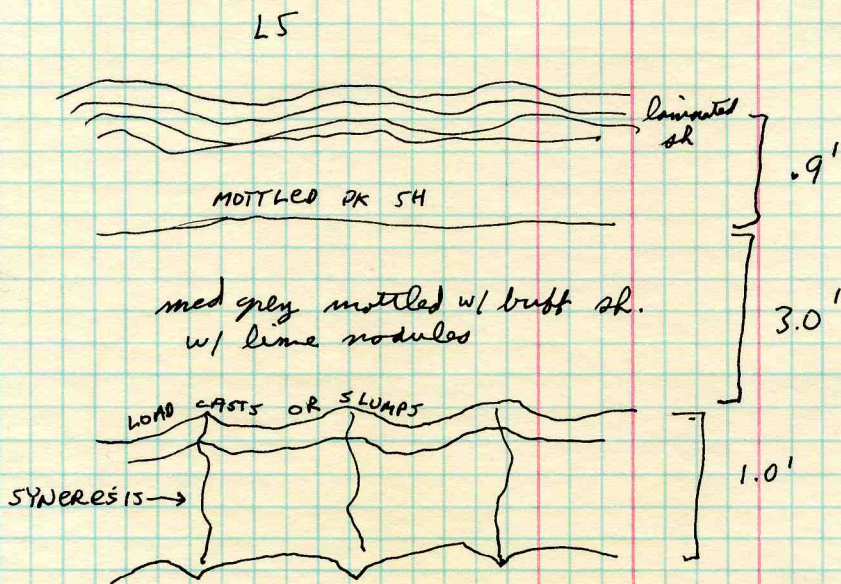


FIG 1 (FRED TOOK 2 PICTURES HERE)

Shale - Medium brown, mottled with syneresis cracks which are continuous to shale above. Some parts dark gray. Gets denser at bottom to form a good cap. Falls seem to fall up to this unit. From here down is mottled shale ~5-10' to top of coal.

Top of this unit has black calcareous kettle bottoms, suggesting base of unit is undulatory with kettle bottoms. Contact with buff limestone sharp to gradational with kettle bottoms.

This is the lower bench of the Bankston Fork. Roof of main haulage road is all this stuff. Suggesting that the mottled shale was cleaned away. At sump, 6' of immediate roof, mottled greenish grayish sh.

We see kettle bottoms in mottled shale that cleave parallel to bedding. These do not behave like usual kettle bottoms. They might be pods in the Lawson? Some septarian concretions noted lower down. I am not convinced of presence of Anna Shale in immediate roof.

3.0'

5. See Fig. 2. Roof

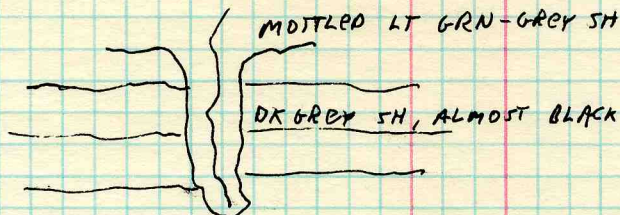


FIG 2.

Fred has taken 4 pictures at base of slope in all.

6. Black shale roof grading into mottled, some white top noted.
7. Big slip, trends north. Slip surface is 4 feet long and 1 foot high. Dip 50° west.
8. White top over coal. Has a wavy, almost channel-like ^{CONTACT} with top of coal.
9. N 30 E- 38° SE. Slip.
10. See FIG. 3

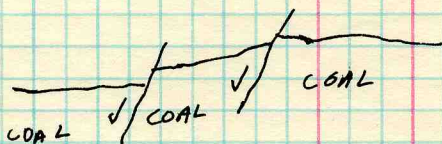
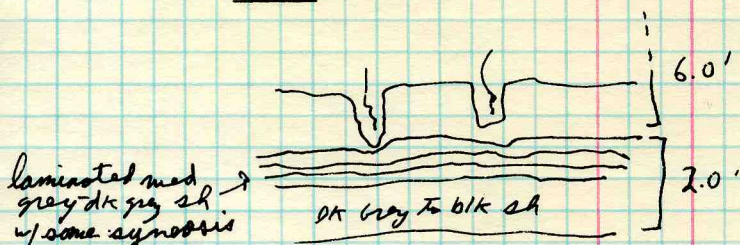


FIG. 3

11. Large faced slip in black shale. Shale is well laminated with lighter laminations. Picture of white top and clay dikes here on S wall.
12. Roof fall up to limestone ≈ 10 feet high. Photo. 7.



COAL (5.0')

Fred's
PHOTO
8

FIG 4

Upper 6 feet of shale looks like "patchwork" with much synaeresis. White top noted not on this section but on other rib.

13. Falls leading into No. 1 entry. Falls extend up to limestone.
14. Fallen, cleaned and rebolted up to limestone. Some water leaking from bolt.
15. Black shale roof, once was solid, now has narrow cracks and bedding plane slabbing. Other visit (last Tuesday) showed roof solid. Area has low black shale roof now, but is sure to become raised by falling up to limestone through mottled shale.
16. Good top area, black shale.
17. Face with unsupported roof and much falling. Miners did not bolt here because of strike.
18. Photo of slip area in face. Make picture (Fig. 5A). Displacement 1.5'.



FIG 5 A

022 / 53 NW	115 / 53 SW
035 / 55-28 E	110 / 66 NW
180 / 28 E	100 / 20 S
000 / 45° E	107 / 39 SW
120 / 27-22 E	054 / 45 SE
325 / 19 NE	025 / 31 SE
315 / 28 SW	151 / 24, 29, 42 E
055 / 25 SE	
153 / 41 SW	
044 / 51 S	
165 / 33 NE	

LIST OF SLIP ORIENTATIONS

FIG 5B

Big slip running from point 18 out into crosscut.

FIG 6 OMITTED

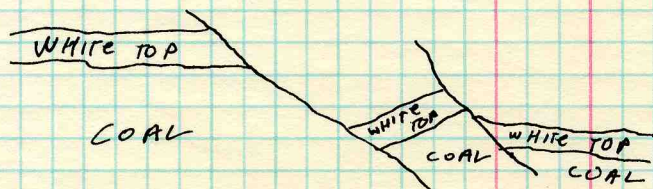


FIG 7 WHITE TOP W/SLIP

Short List of Things to Do FOR AND AT
THIS MINE

1. Do. Interval Map (Bankston to top of coal).
2. Locate Johnson Company Hobs.
3. Measure distances of S pods.
4. Write up field notes.
5. Process photos.

19. Fault. Traces across from 18 to this point.
See Figure 7.

20. Fault as above, photo 10. This fault traces from one above. Several readings taken:

025-35 NW

045-32 NW

037-38 NW

Additional slips noted above this main one. These often cross over one another.

Some readings taken:

027-48 SE

160-51 SW

21. Much white top on face noted, black shale roof here.
22. Roof fall, top of fall only a foot or so high. Roof bolt failure is apparent. Bolts just pulled out of mottled shale.
23. Cleats in face, see list of orientations. Fig. 8.

110 / 86 NE

128 / 90

159 /

110

124

150

60	} LOCAL MINOR CLEATS
68	
36	
32	

115
110
80 } ON CURVING PLANE, ALL CALCITE
COATED CLEATS HERE.

JOINTS & SLIPS

077 / 77 NW

116 / 80 NE

56 / 87 SE

006 / 73 NW

006 / 86 NW

JOINTS

63 / 45 SE

125 / 20 NE

107 / 32 SE } LARGE SLIPS

145 / 20 SE

25 / 20 SE

55 / 48 SE

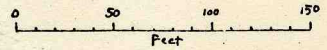
NOV.
27
Locations visited

Note: This map is INCORRECT
see UPDATED MAP.

APPROXIMATE CHAIN AND COMPASS MAP

V - Day Coal Mine
Nov. 18, 1974

- Air Flow
- || Scaled Brattice
- Spads
- ⊕ Brattice with Door

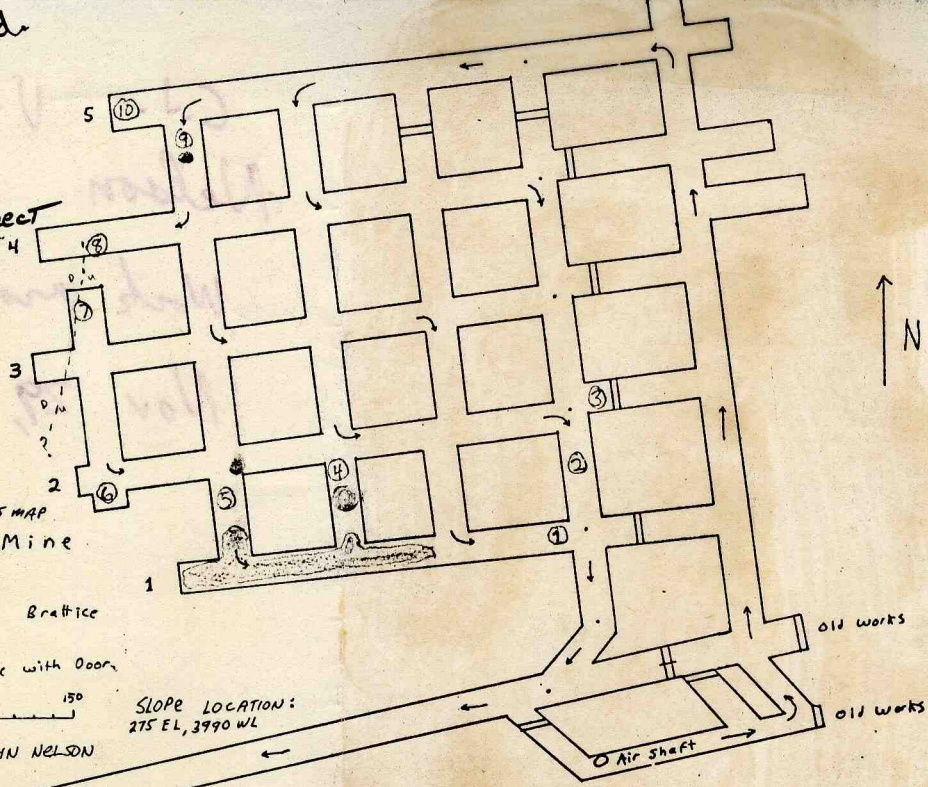


BY C.T. LEVINA AND JOHN NELSON

SLOPE LOCATION:
275' EL, 3990' WL

slope 24 1/2°
sump

19N 11W Sec 30
Elev. 654.5



V-Day Coal Mine
Section 30, 19N-11W
Vermilion County

John Nelson

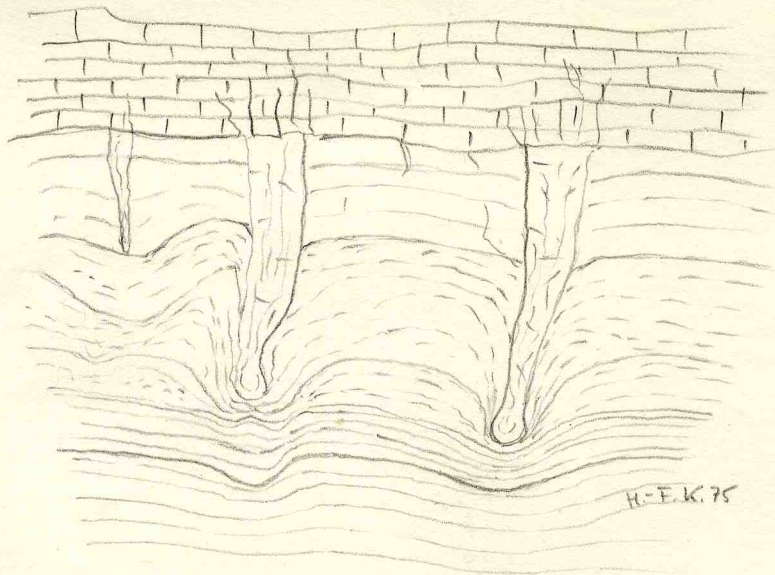
November 27, 1974

Numbers refer to locations on map.

1. White-top with large coal chunks.
2. White-top and many associated small slips; both sides of track entry.
3. Picture (5 and 6) taken of white-top with numerous clay dikes into coal. Also, a fine network of clay dikes into immediate black roof shale.
4. Pictures taken of roof fall (7 and 8), about 6 feet of roof came down exposing bottom of limestone caprock. Mottled shale shows "patchwork pattern." Undisturbed shale is nearly black. Many intersecting cracks have wide border of light gray-green. The cracks themselves are lightest.

White-top in scattered lenses around this fall.

5. Roof fall in cross cut extending into Entry 1. No photos.
6. Cracking in immediate roof of uniform black shale has worked since our last visit, 8 days ago.
7. Photo 9 - Of the large offsetting slips (sketched 11/20). The offset continues diagonally, white-top samples.
8. Same slip continues through to Entry 4, south rib. Not traced to north rib and not found in Entry 5. Several small faults of opposite dip on north rib of Entry 4. Photo 10 shows the slip on the south rib.
9. Small roof fall about 2 ft. high, bounded by slips. Roof bolt pulled out.
10. White-top on face—but normal black shale roof on both sides. Clay dikes upward into roof from white-top. Mottled shale occurs above white-top with the intervening black shale broken by clay dikes and slips.
Small low-angle slips are common in white-top.
Floor sample (dark claystone) taken at face.



Limestone

Calcareous shale

Shale light gray

shale dark gray, laminate

shale light gray

synclinal cracks or "dikes" with limestone and calcite filling
in shale beds (type V-Day time)

Sketch by H.F. Krausse, 1974

PHOTOGRAPHS

Made late 1974 by ~~unknown photographer, possibly~~ H.-F. Krausse. Original captions lost. New captions made ✓
✓ from memory by John Nelson, 12-15-75.

- 1) Fault displacing top of coal and "white-top" by about 2 feet. Near face of Entry 3.
- 2) Fault displacing top of coal and "white-top." Pocket transit for scale. Probably the same fault as above, in X-cut 4 between Entries 3 and 4.
- 3) Fall, showing patchwork mottling of shale and synaeresis cracks. Probably in Entry 1.
- 4) Fall, showing synaeresis cracks in side view, and calcareous concretions (at level of hammer.) Probably located on slope entry just off the bottom.
- 5) "White-top" above coal, and clay-filled fractures in black shale. Location unknown.
- 6) "White-top" in close-up. Somewhat out of focus.
- 7) Normal succession of roof strata. From coal upwards; black smooth shale, then gray or greenish shale, then weak, mottled shale with synaeresis cracks and calcareous concretions and inclusions.
- 8) "White-top" and small faults displacing the coal. Clay intruded along bedding planes. Location not known.
- 9) Close-up of above photo.

rs-03-025.tif



Photo 1 ↑

rs-03-026.tif
Photo 2 ↓



rs-03-027.tif



Photo 3 ↑

Photo 4 ↓ rs-03-028.tif



rs-03-029.tif

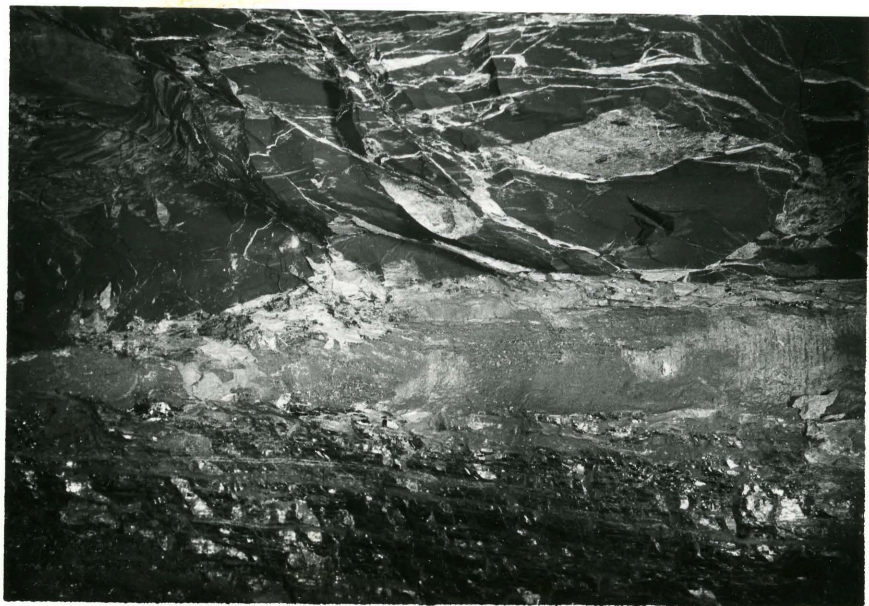


Photo 5

5



rs-03-30.tif

Photo 6 ↓



rs-03-031.tif



Photo 7

rs-03-032.tif



Photo 8

↑

Photo 9

↓

rs-03-033.tif

