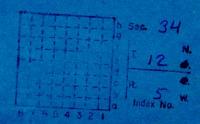
Abandoned in November, 1971

FREEMAN COAL MNG. CORP

CROWN MINE #1

5-4

Mine Index # 707



	101	II C. MOOF	e Corpor	ration, Ro	chester, I	v. v. Bin	der and	holes in	leaves	Patent	ted. FO	KM 4	01500	
		V-				MOORES	MODERN METHODS					4		
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COAL MINE—PRODUCTION
ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)





Face Channel Sample #1
Freeman Coal Mine Corp. -- Crown Mine 17 outpourcy (...
14 October. 1969

Heinz H. Damberger & Henry Scoggin & G. J. Allgaier

8th West off 4th Main South, 50' back from face 1550'N & 1180'W of center of Sec. 10-11N-5W Elev. +267'

From To Thickness
0 - 0.30 0.3 Coal NBB

- .30 .32 .02 Shale, Carbonaceous, Fairly soft.
- .66 .34 Coal, Fine Banded in upper third carbonaceous silt. Coal streaks.
  - .70 .04 Boney Coal with some Pyrite streaks.
  - 1.3 .60 Coal, NBB, Fusain lenses and some highly carbonaceous shaley lamin te.
  - 1.36 .06 Coal, dull time ash and fusain lense like pyrite.
    - 2.46 1.10 Coal MBB. Few thin pyrite lenses and fusain bands.
    - 2.48 .02 Shale, carbonaceous with many thin pyrite lenses.
    - 3.66 1.18 Coal NBB. Cleats fairly irreg. with calcite & Pyrite filling.
    - 3.68 .02 Pyrite lenticular fairly hard and fine grained.
    - 4.30 .62 Coal NBB with several thin lenticular pyrite laminate & lense shaped pyrite zones up to .05 thick



From To Thickness
4.34 .04 Shale, soft gray Excluded from sample

Page -2-

"Blue band"

5.22 .88 Coal, NBB few lenticular carbonaceous
Shale bands and pyrite lamin@

5.24 .02 Fusain, fairly soft

5.90 .66 Coal, fairly dull, finely laminated /

few fusain bands

7.57 1.67 Coal NBB

7.57 1.67 Coal NBB Underclay, soft about 3" seen



Face Channel Sample #2

Freeman Coal Mine Corp. -- Crown Mine

14 October, 1969

Heinz H. Damberger, Henry Scoggin & G. J. Allgaier

B Entry in 2nd N. in 11th West off 4th Main South 1200'W & 1300'N of center of Sec. 10-11N-5W Elev. +267'

Roof -- Shale, dark gray, with many irregular slips approx. 2" visible. No plant impressions.

From	To	Thickness	
0 -	.60	.60	Coal-NBB fusain layer especially
			in the middle part.   prominant
			parting-coal above this parting
			frequently bolted to roof.
	1.50	.90	Coal-NBB. Finely laminated. Few
			highly carbonaceous, lenticular
			shaley partings and thin fusain
	a la		lenses.
	1.65	.15	Coal fairly dull, canneloid
			appearance.
	1167	.02	Boney Coal with coal streaks.
	1.85	.18	Coal-pretty bright.
	1.92	.07	Shale-carbonaceous, many fine grain
			pyrite lenses - Excluded from sample
2	2.1	.18	Coal-NBB
2	2.4	.03	Coal-somewhat shaley
3	3.32	.92	Coal NBB several thin pyrite +

pyritized fusain lenses.

MOORE'S	HODERN METHODS

				Page -2-
From		To	Thickness	
1101		31	.01	Shale, highly carbonaceous, dark
				brown with pyrite concretions.
	3.	46	.15	Bright Banded Coal.
	3.	74	.28	Coal, dull finely, laminated.
	4.	19	.45	Coal, NBB.
	4.	27	.08	Coal somewhat shaley.
	-			
	4.	62	.35	Coal NBB, pyrite and fusain lenses,
				rather soft. Thin shaley partings in lower part of layer with probably
				some movement along partings.
	T			Some movement along partings.
	4.	64	.02	Pyrite fine grained lenticular.
	5.	17	•53	Coal, NBB
	5.	25	.08	Shale brown carbonaceous, soft with
				many, up to .04 thick, pyrite
	1			lenses "Blueband" Excluded.
	L			
Ħ	5.	90	.65	Coal NBB few fusain lenses pretty
				hard.
	5.	95	.05	Fusain, pyritized with shale, hard.
	L			
	6.	91	.96	Coal-bright banded; in upper 1/3
				thick vitrain lenses.
	6.	94	.03	Boney Coal.
	7.	20	.26	Coal bright banded, some fairly
				thick vitrain lense,

Underclay soft, gray, stigmaria\*; sharp contact to coal above. Aprox. .5' visable.

MOORE'S	MODERN
-	THE THOUSE

-	-		
FC	C.	mnla	11-3

1.00-1.62 0.62

Freeman Coal Mine Corporation - Crown Mine

14 Oct., 1969
Heinz H. Damberger, Henry Scoggin, & G. J. Allgaier

Room 15 on C. Entry 1st North in 11th West off 4th Main South. 540 W and 2250 N of center of Section 10-11N-5W Elev. +267

Roof	Dark Gray shale fairly soft

Coal	NBB	fairly	hard,	bolted to	L
roof	(Not	inclu	ded in	samples)	Ļ
					Coal NBB fairly hard, bolted to roof (Not included in samples)

						S	ha	le	aı	nd	f	us	ai	n	lei	ase	28			

1.	64 0	.02	Shale, carbonaceous soft parting.
1.	97	.33	Coal, NBB, hard.

Coal, NBB, several carbonaceous

2.00	.03	Popour Cool
2.00	.03	Boney Coal.

2.51 .51 Coal, NBB, hard cleats with	2.51	.51	Coal, NE	B, hard	cleats	with	calcite.
--------------------------------------	------	-----	----------	---------	--------	------	----------

2.53	.02	Coaly Sha	ile.

2.90	.02	Hite 21 n	cott.	lanticular
2.00	.02	Lusarit	SOTE	lenticular.
			1	

3.51	.61	Coal, NBB, 3 to 4 thin shaly part-
		ings with occasional pyrite
		lenses less than .01 thick.

3.53	.02	Fusain, soft,	lense	shaped.

3.87	.34	Coal, NBB.

3.88	.01	Shale,	highly	carbonaceous,	some
		nyrite	lenses	soft parting.	
		Pyrrec	LCIIOCO	Dorr barrens.	

			LIONNES NETHODS
			Page -2-
From	То	Thickness	
	4.36	.48	Coal dull with vitrain laminic
	4.45	.09	Coal, bright vitrain lenses approx
			.01 thick.
	F 00		
	5.00	•55	Coal, dull, relatively few vitrain
			lense and some soft fusain lenses
	5.06	.06	Vitrain, lenticular.
	,		VICE COLORS
	5.18	.12	Coal dull, few vitrain lenses.
	5.20	.02	Pyrite fine grained & thin shaley
			parting.
	E 70	FO	
	5.78	.58	Coal NBB.
	5.85	.07	Shale carbonaceous, soft "Blue
			Band" (Excluded from sample.)
	7.52	1.67	Coal NBB, few dull layers, some
			fine grained pyrite lenses.
	7.55	.03	Coal, Dull Bony.
	7.67	.12	Coal NPP
	,.0,		Coal, NBB.
	7.75	.08	Coal, Somewhat bony, dull.
	7.85	10	Coal, NBB.
	7.87	.02	Fusain hard somewhat pyritized.
	8.02		Good way
	0.02	.15	Coal NBB
			underclay, soft rooflets.

1) 2)

3)

4)

5)

6)

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9) 10)

11)

12)

15)

Crown Mine
Smith, Gluskoter, Major - 10/27/66
Sample #1, 2500'W, 4400'S, NE/c Sec. 3, T.11N, R.5W.
Sample taken in benches
40-50' from face in 1st main South
Top Bottom

Approximately 1' coal left in roof at point of sampleing.

Coal, Normally bright banded, calcite 0 6"
and minor pyrite on vertical fractures.

Pyrite and fusain, lenticular stringers 6" 6½"

Coal, normally bright banded, calcite on vertical fractures, 3/8" dull band at 1'3". 6½" 1'5"

Shale, gray, with pyrite nodules up to

支" thick in top (omitted from sample) 1'5" 1'6" End of Bench #1

Coal, normally bright banded, calcite and pyrite on vertical fractures thin (less than 1/8") fusain band at 1'8". 1'6\\2" 2'6" End of Bench #2

Coal, normally bright banded, but duller than that above, calcite and pyrite on vertical fractures, calcite more abundant than in above. Pyrite at 3' and 3'3", bony band 2" than associated with pyrite locally at base.

Coal, normally bright banded, calcite on vertical fractures and extremely thin pyrite stringers throughout bottom of Bonch 2.

End of Bench #3

Smith, Gluskoter,
By and Major
Date 10/27/66

Quad. Part

County. Sec. 3

T. 11 S. R. 5 W.

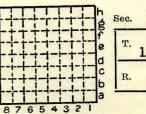
3'10"

3'103" 4'53"

Page 2

	Top	Bottom
Shale with minor amounts of pyrite interlaminated, Blue Band.	4 ' 5½"	4'7"
(omitted from sample)		
Coal, Normally bright banded pyrite and calcite on vertical fractures, ½" fus		
at 4'10". Bottom 1' is duller than		
the rest of coal bed.	4'7"	6'10"

Smith, Gluskoter, By and Major ...... Date 10/27/66 Quad. Part.... County.....



Crown Mine Smith, Gluskoter, Major - 10/27/66

Sample #2

Room 23, 10th North A entry, 210 in.

900'E, 300'S, NW/c, Section 4, T. 11 N., R. 5 W.

Sampled in benches (6)

Approximately 6' Coal sampled. An estimated 16" of coal left in roof at sampling point.

Coal, Normally bright banded, abundant

calcite on vertical fractures, relatively

bright."

End of Bench #1

Shale, dark gray, carbonaceous with thin

vitrain stringers (excluded from sample)

Coal, normally bright banded calcite on vertical fractures, duller than above noticeable lack of pyrite. 1/8" fusain 33"

band 1" from bottom. End of Bench #2.

Bony coal, varies laterally from 1/8" to 12" includes pyrite lenses laterally but not here.

Coal, normally bright banded, minor calcite on vertical fractures, mineral-

ized fusain less than 1/8" thick at 1'9" and at 2'7", although unit is duller than top coal, very little calcite and pyrite observed.

End of Bench #3.

Smith, Gluskoter, Byand Major Date 10/27/66

Quad. Part.

County

311

33"

1'7"

1'73"

2'11"

Sec.

3

1'7"

1'73"

Page 2

Food of Bench 6

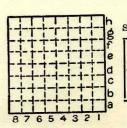
Top Bottom variable Pyrite extremely noticeable in thickness laterally, includes some highly mineralized bony coal. (Omitted from sample). 2'11" 2'11\\\" Coal, normally bright banded, calcite and pyrite on vertical fractures. 2'11\\" 3'6\\" End of Bench #4 Coal, bright, relatively thick vitrain, bands, interbedded with dull bony bands, calcite and pyrite on vertical fractures, thin pyrite stringers less than 3" and 4'2" and 4'6". Duller than above. 3'63" 4'10" End of Bench #5 Coal, dull, banded as above, calcite and pyrite more abundant on vertical fractures. 4'10" 6'0"

Underclay, light gray, contains Stigmaria.

Smith, Gluskoter,

By and Major Date 10/27/66

Quad. Part.



T. 11 R. 5

Freeman Crown Mine

Smith, Gluskoter, Major - 10/27/66

Sample #3, Room 16 10th North D entry, first main west.

Sample taken 250'W. of the D entry.

400'E, 640'S, NW/c, Sec. 4, T. 11 N., R. 5 W.

Coal 7'11" thick at sample point.

Coal, normally bright banded, calcite and pyrite on vertical fracture, thin pyrit stringers less than 1/16" in top 1" and	e	
one 3" below top. End of Bench #1	0	5½"
Pyrite lense varies 0-½" omitted. Coal, normally bright banded, calcite	0'5麦"	6"
and pyrite on vertical fractures.  End of Bench #2	6"	1'7½"
Fusain, soft, only slightly mineralized. Coal, wide banded, calcite and pyrite on	1'7눌"	1'8"
vertical cleat.	1'8"	1'10"
Fusain, soft Coal, normally bright banded, abundant calcite and pyrtile on cleat faces. A	1'10"	1'10½"
支' bony band at base. End of Bench #3	1'10½"	2'2"

Coal, normally bright banded, thin, (less than 1/8" fusain stringers at 2'4" and 2'5", thin patchy pyrite at 2'6". Bone coal and pyrite 之" thick at base (mmitted from sample).

Smith, Gluskoter

By......Date 10/27/66

Quad. Part.

County.....

Top

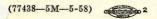
Bottom

Sec. 4

T. N.
11 s.

R. 5 w.

31311



Page 2

common throughout.

End of Bench #6

Top Bottom Coal, normally bright banded, minor calcite on vertical fractures, thin (1/8") pyrite and bony band at 4'8". 313" 51411 End of Bench #5 Shale, very carbonaceous, coaly, includes vitrain stringers and pyrite band (omitted from sample) ("Blue band"). 5'4" 515" Coal, dull, banded, calcite and pyrite abundant on cleat thin pyrite stringers

> Smith, Gluskoter 10/27/66 Byand Major Date. Quad. Part.

5 15"

Sec. 4 т. 11 E. R. 5

W.

7'11"

Freeman Crown Mine Smith, Gluskoter, Major - 10/27/66 Sample Locality #4 9th S. 1st Main E. "B" entry at Room 8. 2200'S, 560'W, NE/c, Sec. 2, T. 11 N., R. 5W.

Thickness at point sampled 5'5" about 1' of coal above separated from coal described by 3" shale.

Top Bottom Coal, normally bright banded with fusain (½") 1" and 3½" below top, pyrite (<1/8") at 6". Several other very thin fusain bands including one at base. 0" 1'3" End of Bench #1

and minor amounts of calcite on vertical fractures pyrite band less than 1/16" thick at 1'8". Mineralized fusain less than 1/8" at 2'62". 1'3"2 3'03"

End of Bench #2

Pyrite and carbonaceous shale (Blue band?) omitted from sample. 3'03" 3'13" Coal, normally bright banded calcite on

vertical fracture. Not as bright as above. Approximately six ((1/16") pyrite stringers in bottom 3' End of Bench #3

Coal, normally bright banded, pyrite

Coal, normally bright banded, calcite and pyrite on vertical fractures, relatively4'5"

dull as is unit above.

Bushotemate 10/27/66 and Major.

County

Quad. Part.

Sec.

3'13"

N. T. 11 s. E.

51511

415"

Smith, Glusketer, Major - 10/27/66

Sample Locality 64 9th S. ist Main E. "B" entry at Room 8. 2200'S, 360'W, NE/c, Sec. 2, T. II N., R. 5W.

Thickness at point sampled 5'5" about 1' of coal above separated from coal described by 3" shale,

s Bottom Coal, normaily bright banded with fusain (kg) in and 3k" below top Pyrite ((1/8") at 6". Several other very thin fusain 1130 bands including one at base.

> End of Bench #1 Coal, normally bright banded, pyrtce and minor amounts of egicles on vertical

fractures pyrite band lass than 1/16" thick at 1'8". Mineralized guer: tusain less than 1/8" at 1'6 [".

Pyrice and carbonaceous shale (Blue

Coal, normally bright banded calcife on Desconered + Giled manifest estates End of Bench #3

1/95 PM Potrographie Analyses

A-983 to A-1002 were used from these 4 sample sets.

Freeman Coal Co., Crown Mine

No. 6 Coal - sampled July 5, 1962, Harrison, Gluskoter, & Eadie.

Mine idle, miners' vacation. Panel belts to main line track. Conventional trackless equipment. Roof bolting and conventional (rail bars) support.

Samplers accompanied by Bill Burke. East side of mine sealed. Development to south and in Main West. Auxillary ventilation shaft in West.

Sample # 1: 800'S, 900'W, NE corner sec. 27, 12N - 5W

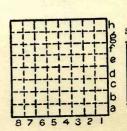
Sample # 2: 400'N, 550'W, SE corner sec. 21, 12N - 5W

Sample # 3: 1400'S, 500'E, NW corner sec. 28, 12N - 5W

Sample # 4: 300'S, 2400'W, NE corner sec. 3, 11N - 5W

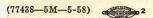
By JAH	-GRE-HG	Date.	7-5-62
Quad		Part	

County Montgomery



Sec. 24

T. S. E. Sw. 5w.



Freeman Coal Co

## Crown Mine

Coal # 6
Sample # 1

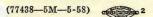
Room 10	off 3rd S. off 17th E. of 7th Main N.		
800'S a	and 900'W of NE. cor., Sec. 27, T. 12 N.	. R.	5 W
3rd F			
Total h	eight of coal observed = 7½ feet. One	foot	of
	coal reported.		
Thickne	rop t	o bot	ttom
In.		Ft.	In.
6½	Clarian, medium banded with number of		
	vertical cleats containing pyrite and		
	gypsum		61/2
1/4	Fusain band-mineralized		6 3/4
3社	Clarain, medium to broad banding with		
	one vitrain band up to \tau" thick		10
4	Fusain - fairly soft ½"		10岁
3章	Clarain - medium to well banded	1	1支"
1½	Fusain - fairly clean, partly mineral		
	with ½" vitrain band in the middle	1	3
3½	Clarain - medium banded	1	61/2
1/2	Zone of Fusain - finely interlaminated		
	with vitrain	1	7
6½	Clarain, thin to medium banded,		
1/0	bright	2	1½
1/8	Pyrite	2	1 5/8
57/8	Clarain - normally bright banded		
	with bands up to 1/8"	2	7 ½
1/2	Shale band - dark	2	8
	Clarain - narrow to medium banded		
	bright, with vitrain band to at		
15½	3'1½" and an 1/8" pyrite band	3	11월
	3' 3 3/4"	h gaa	27
		, Dec.	//

By JAH-GE-HG Date 7/5/62

Quad. Part. County MONTGOMERY 87654321

т. 12

w.



Crown Mine - Coal # 6 - Sample # 1

Inches	Ft.	In.
k Shale band - light to medium gray	3	113/4
7 3/4 Clarain - bright banded, fine to		
medium top increasing to bands 1/8"		
at bottom	4	73
1 Shale - medium to dark gray -		
blue band	4	83
3 ½ Clarain - medium banded	5	
表 Fusain - mineralized 7 表 Clarain - medium to wide banded with	5	Ł
7 2 Clarain - medium to wide banded with		
some vitrain bands up to 4"	5	75
t Fusain - mineralized	5	7 3/4
6 3/4 Clarain - fine to medium banded,		
hard, compact.	6	21/2
k Shale band	6	2 3/4
3½ Clarain, fine to medium banded,		
hard, compact	6	6 ½
1/8 Shale band, medium to dark gray	6	6 5/8
11 3/8 Clarain	7	6
Floor - fire clay - hard gray		
NOME OI C I		

NOTE: Cleating of calcite or gypsum extends through bed.

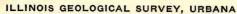
NOTE: All mineral matter band ½" or larger were not included in sample.

By JAH-GE-HG Date 7/5/62

Quad. Part

T. 12 s/R. 5 w.

County MONTGOMERY



Crown Mine

Coal #6
Sample # 2

之

Room 11, off 21st N., 21st W., 1st Main N.

400'N and 550'W of SE cor., Sec. 21, T. 12 N., R. 5 W., 3rd P.M.

Reported that 1 foot of coal is left for roof.

Total height of coal observed = 7'8"

Thickness

Inickness
In.
6½ Clarain - medium to wide banded,
vertical cleavage with pyrite and

vertical cleavage with pyrite and calcite or gypsum
Shale band
Clarain, wide banded

1 ½ Clarain, wide banded ½ Fusain - non-mineralized, soft 2 ½ Clarain - medium to wide banded,

occasional ½" vitrain bands
½ Pyrite

8 ½ Clarain, wide banded, with occasional 1/16" fusain band and vitrain bands up to 3/8"
1 ½ Fusain zone with occasional pyrite

nodules up to ½" thick, with thin laminae of vitrain.
9½ Clarain, vertical cleavages, medium

banded with occasional ½" vitrain bands

1 ½ Fusain band with ½" vitrain band in

middle 1½ Clarain - as above

By JAH-GE-HG Date 7/5/62

Quad. Part.

8 7 6 5 4 3 2 1

21	
	N.
12	\$.
5	エセ.

Top

Ft. In.

0-6항

1

1

2

2

63-6 3/4

6 3/4 - 8

8111

10 3/4

10岁

7

81

2 5 3/4

83

County MONTGOMERY

Crown	Mine - Sample # 2 - Coal # 6		
Thickr	less	TO.	
Inche	28		ор
21/2	Fusain - mineralized with small	Ft.	In.
	pyrite nodules, also laminated		
	pyrite band.		
7월	Clarain as above with occasional	2	11
	1/16" non-mineralized fusain band		
1	Fuscing soft and	3	6½
72 2	Fusain - soft, non - mineralized	3	7
1,3	Clarain - as above	4	21/2
71.	Pyrite band	4	23/4
7法	Clarain - fine to medium banding		
	with vertical cleavage	4	10
1½	Dull coal - band	4	111/2
11/2	Clarain - bright banded.	5	1
3/4	Shale	5	1 3/4
1支	Clarain	5	3
支	Shale (last two shaly represent		
	Blue Band)?	5	3 ½
6支	Clarain - medium to wide banded	,	3 4
	with 3/8" vitrain band	5	913
支	Shale and pyrite band	5	
22支	Clarain - fine to medium band with	)	9 3/4
	occasional 1/16" fusain.	7	
	Underclay	/	8
	NOTE: All mineral matter bands over		

½" were not included in sample.

By JAH-GE-HG Date 7/5/62 Quad. Part County MONTGOMERY

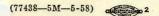
21

w.

т. 12

R. 5

Sec.



### Crown Mine

Coal #6
Sample # 3

From rib off 33rd S. entry, 15th W., 1st main N.

1400'S and 500'E of NW. cor., Sec. 28, T. 12 N., R. 5 W., 3rd P.M.

Total thickness of coal = 6'112"

Roof - black shale

NOTE: All pyrite and shale bands greater than ½" were omitted from sample.

Thickne	ss	T	ор
Inches		Ft.	In.
1	Bone coal, shale, pyrite inter-		
	laminated with coal		1
7克	Clarain, fine banded, bright		81/2
1	Shale and pyrite zone		9
7½ ½ 6½	Clarain, fine to medium banded, with		
	occasional 1/16" fusain band	1	31/4
1/2	Dull coal	1	3 3/4
5 3/4	Clarain, medium to coarse banded,	-	3 3/4
	bright	1	9 3
3/4	Shale band with pyrite nodules	i	-
7法	Clarain, fine to medium, banded,		10支
14	bright		-,
ı		2 2	5½ 6
1/2 5	Fusain, soft, non-mineralized	2	6
)	Clarain, fine to medium banded, with		
	many 1/8" pyrite bands and streaks		
	(horizontal) and pyrite filled cleats	2	11
12	Fusain, non-mineralized	2	11½
135	Clarain, fine to medium banded with		
	occasional pyrite bands (1/8") and		
			The state of

By JAH-GE-HG Date 7/5/62

Quad. Part.

County MONTGOMERY

Sec. 28

W.

т. 12

R. 5

Crown Mine - Sample # 3 - Coal # 6 Thickness Top Inches Ft. In. with decreasing pyrite filled cleating 4 1 之 Pyrite band 11 4 7 Clarain, bright banded 81 4 Shale band 8 3/4 4 Clarain - bright banded, medium to fine banded, with occasional pyrite , lenses about 1/16". 63 5 'Clarain - medium to coarse banded with vitrain bands up to 2" thick. zone has many pyrite filled cleats hard 5 11 1 Fusain - mineralized 6 0 33 Clarain - bright banded, medium to coarse banded - pyrite cleating 33 6 Shale band and pyrite 3 3/4 43 Clarain, bright banded, wide banded, with vitrain bands up to \" 6 83 13 Shale - interlaminated with fine vitrinite 9 3/4

Ву	JAH-GE-HG	Date 7/5/62

Part

County MONTGOMERY

pyrite cleat

Underclay

1 3/4



Clarain - bright coarse banded,



28 Sec. N. T. 12 s.

6

113

E. R. 5 W.

## Crown Mine

Sample # 4
Coal # 6

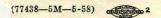
In lst main S.; 250'S of 7th W., off lst main S.
300'S and 2400'W of NE cor., Sec. 3, T. 11 N., R. 5 W.,
3rd P.M.

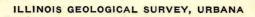
Sample taken from east rib, 8' from face Coal observed and collected is 6'11" thick. One foot is reported to be left as roof.

Thick	kness	T	ор
In	ches	Ft.	In.
44	Clarain - fine bright banded		41/2
支	Fusain - mineralized		4 3/4
11	Clarain - fine to coarse banded with		
	some vitrain band to 2", with fusain		
	up to 1/8", vertical cleating with		
	calcite	1	3 3/4
1/2	Pyrite band	1	42
4 3	,		
	banded, with vitrain bands up to 4"	1	9
支		1	91/2
3/4	Clarain - as above	1	10%
支	Dull coal	1	10 3/4
2	Clarain - bright banded, with vitrain		
	up 3/8"	2	3/4
1支	Fusain - mineralized with a few thin		
	pyrite bands	2	2
5社	Clarain - medium to coarse banded,		
	bright	2	7法
3/4	Zone of pyrite and shale and thin		
	vitrinite	2	8
15	Clarain - bright banded, fine to		
		h Sec.	3
	By JAH-GE-HG Date 7/5/62	f	N.

County MONTGOMERY

T. 11





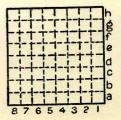
## Crown Mine - Sample # 4 - Coal # 6

Thickness		Гор
Inches	Ft.	In.
medium bands	3	11
½ Shale band	3	111
7½ Clarain - brig	ght banded, fine to	
medium	4	61/2
1 Shale - dark	gray to black (Blue	
Band)	4	7支
2 3/4 Clarain, fine	to medium banded, with	
	train up to ½" 5	10支
1/8 Shale	5	10 3/8
12 5/8 Clarain - brig	ght banded, with vitrain	
up to ½ in.	6	11

By JAH-GE-HG Date 7/5/62

Quad. Part.

County MONTGOMERY



T. 11



( pq. 1)

NOTES OF OBSERVATIONS MADE IN CROWN MINE OF THE FREEMAN COAL MINING CORPORATION, FARMERSVILLE, ILL.

T. 12 N., R. 5 W., Montgomery County.

Oct. 29, 1959 J. A. Simon K. E. Clegg

In 7th. main north, a fault trends N. 80 W., with approximately 1' of downthrow on the NE. Fault surface dips approximately 80 towards the SW locally (Reverse fault). The fault zone is about 3' across where measured on the mine working face, is filled with loose gouge of coal and roof shale. Some roof shale has been dropped downward into the gouge. All gouge material was soft, badly broken, and very thoroughly mixed. Sizes range from almost powdered material to pieces several inches across.

Coal on the north side of the gouge zone, adjacent to the foot wall, and some of the coal in the gouge, had a distinct brown color as though oxidized by percolating ground water in the broken zone.

Adjacent to the fault the coal face retains the prominent N. 35 W., cleat common to this part of the mine. (See photographs of brecciated fault zone)

Brecciated fault continues northwest across the 6th. main north where the vertical displacement is about 30" on the southwest block. On the west rib of the 6th. main north comes close to a N. 35 W., trending slip fault with a normal SW downshrow, in such a manner that a small norst block stands between the two faults (See sketch) B

				-12
Date_O	ct. 29, 1959	T. 12NR. 5W	Hitti	f
				e
Quad		. Part		d
				b
County	Montgomery	Index No.	8765432	]a



(Pg. 2)

In the 4th & 5th main north entries the prominent fracture pattern in the roof appears to be equally well developed in two directions; N. 55 E., and N. 55 W., with no vertical displacement noted. (In most of the rest of the vicinity, the N. 55 W., fracture is much more prominent and is characterized by various amounts of slipping on the southwest side. The coal face in the 4th and 5th main north is solid with normally developed cleat. The brecciated fault visible in the 6th. and 7th. main north entries was not observed in the 4th. and 5th. main north.

Near survey station 4162, in a cross cut between the 1st. and 2nd. main north entries, is a fault striking about N. 30 W., with a dip of 50 to 55 E., and downdropped about 3½! on the east. Roof limestone comes down to within 6" to the top of the coal where it can be seen in the roof. Soft black shale of the immediate roof lies between the limestone and the coal. (Photo. of Wm. Morris, chief engineer, standing by this fault)

General observations: - Area of brecciation is apparently due to NW-SE trending fractures, some of which show displacement from a few inches to about 2 feet. Fault trend is about at right angle to extension of cutout observed in west and northwest part of the mine

Brecciated trend along north main entries, as indicated on accompanying sketch appears to be 800 to 1000 feet long. In general, mining area to SE was

not affected by fracturing.

Although fractures do not appear markedly different from "compactional" slips, these probably represent actual faults with resultant brecciation of roof and coal. One zone, described in notes and photographed, appears to be result of fault gouge along the fault zone (J. A. Simon)



(Pg. 4)





Photo#1 (Key Photo)

Photo. # 2





Photo.#3

Photo #4.

Photographs 1, 2, 3, & k, showing brecciated fault in 7th. main north entry of Crown Mine Oct. 29, 1959 (See mine map (pg. 6) for location within mine.



## (Page.5)



Photo #5

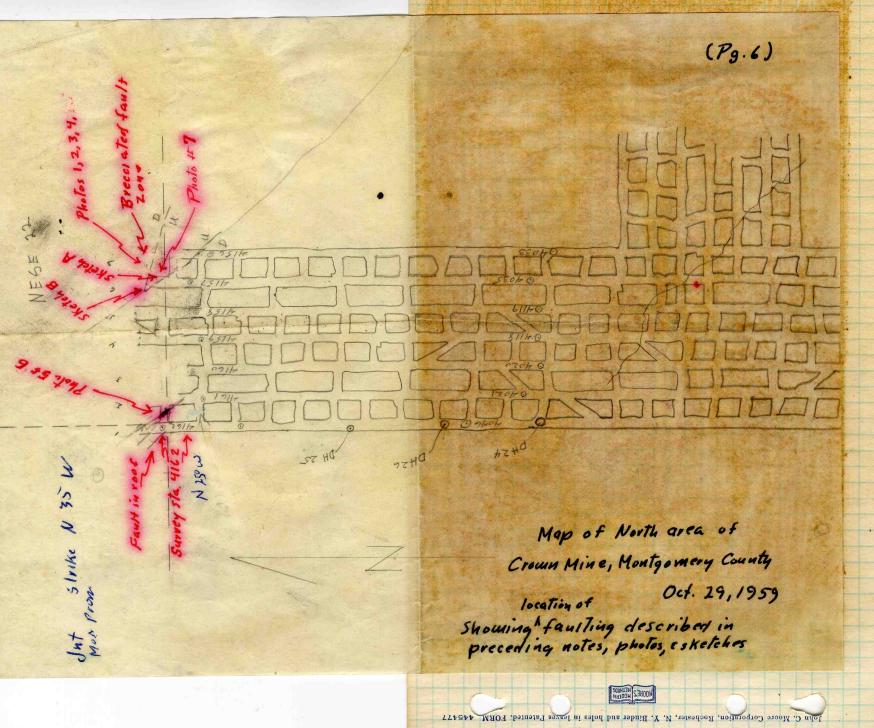


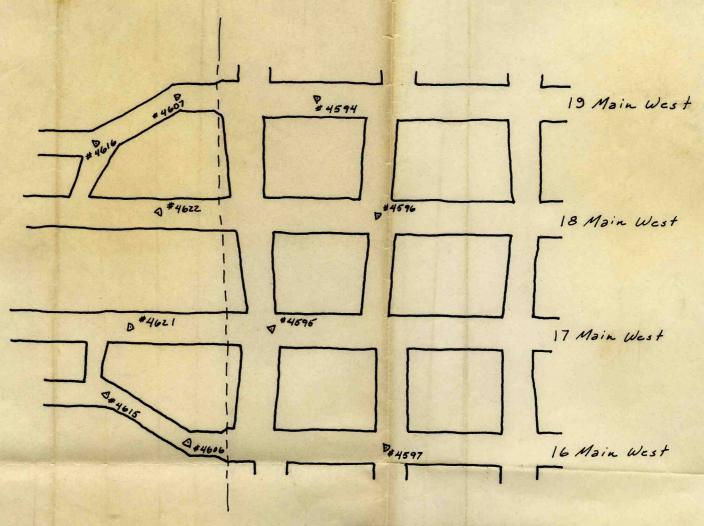
Photo #6



Photo # 7

Photographs 5, 6, & 7, Showing Wm. Morris by fault in roof of cross cut between 1st. & 2nd. main north entries. Also photo of fault in east rib of 6th. main north - Shown in Sketch A.





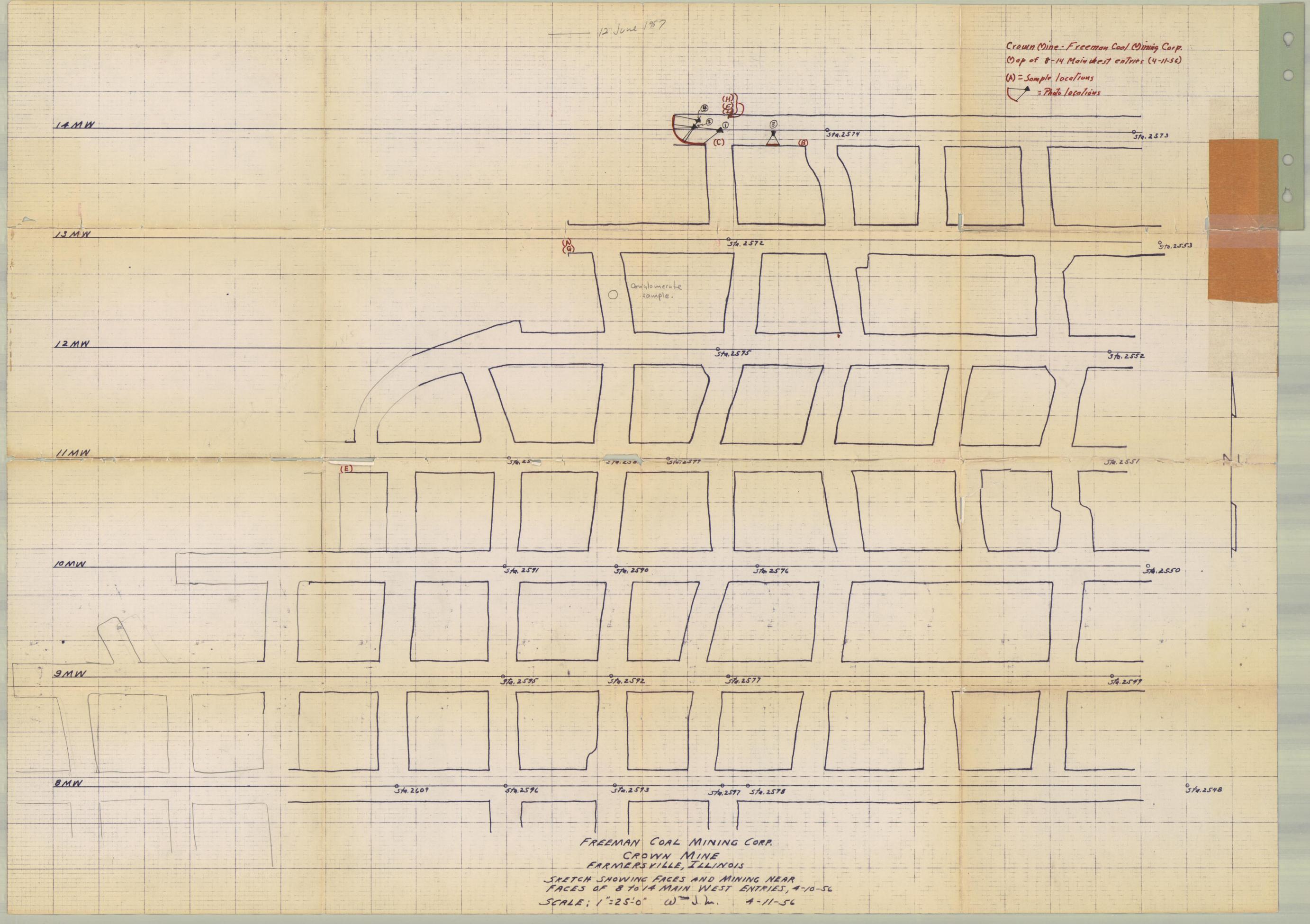
FREEMAN COAL MINING CORP.

SKETCH OF 18 MW WASHOUT

SCALE 1"-50'

8-16-60

12N-5W montgomeny County Freeman Coal Co. Crown Mine Visit WHS, 548, 3/20/59 26th North off 14th w off Main N Room 8
About 130' beyond room 8
Main out out 23 d N-22 N off 14th woffMain N About room 25 Cutout along entry 23 d angling to 22 N. (Room 13 hit cutout us sic. entr +3 rd N.





Notes from Crown mine of Freeman Coal Mining Corp., Farmersville, Ill., by K. Clegg, P. Potter, D. Farris, & J. Simon. Apr. 10, 1956

Most of notes are from main 11, 12, 13, & 14 west entries. Prime consideration given to a washout in the No. 6 coal. Samples were collected, photos taken, and field observations on orientation of plant debris and slickensides obtained.

- Photo 1 = Full picture of west end of 14 main west.

  Facing west from a point about 60 west of 2574 showing coal, coal-sandstone conglomerate & shale roof.
- Photo 2 = Closer view of coal, coal-sandstone conglomerate & shale roof near west end of 14 main west.
- Photo 3 = Detail of coal-sandstone conglomerate on south wall of main 14 west. About 30 west of \$\triangle 2574
- Photo 4 = Picture of west end of 14 main west, showing replacement of coal by siltstone
- Photo 5 = North-west corner of west end of 12 main west twest of △ 2575. Showing angular unconformity of siltstone over eroded coal.

Samples from Crown mine of Freeman Coal Mining Corporation, Farmersville, Ill., by K. Clegg, P. Potter, D. Farris, & J. Simon (April 10, 1956)

(A) Clay conglomerate. 13 main west entry. Below 3° of coal. 83° west of \$\Delta\$ 2572.



-2-

- (B) Sandstone from south side of 14 main west, 10° west of \(\textit{\righta}\) 2574. (oriented)
- (C) Oriented specimen from near last crosscut of 14 main west. From above crosscut about 55 west of △ 2574.
- (D) South wall of 11 main west. About 90° west of △ 2594.
- (E) Oriented sample from 90 west of △ 2594, 11 main west entry.
- (F) From "pinch-out" on north wall of 14 main west 60 ° W. of △ 2574. Sample from "junction" of upper & lower shales. (See samples H & I)
- (G) Clay conglomerate from below 3° of coal at location 83° W. of △ 2572 in 13 main west.
- (H) Top shale from north side of 14 main west near "pinchout" of coal. 60 west of △ 2574
- (I) Bottom shale from north side of 14 main west near "pinchout" of coal. 60° west of 4 2574.

Entry 14 Main West

Description of lithologies shown on previous pages

Upper shale: gray, medium grained with irregular silty layers up to 2" thick. Also present are sideritic nodules from 1 to 4" across, and occasional sideritic bands up to 1" thick. Many large plant compressions, mostly stems and trunks



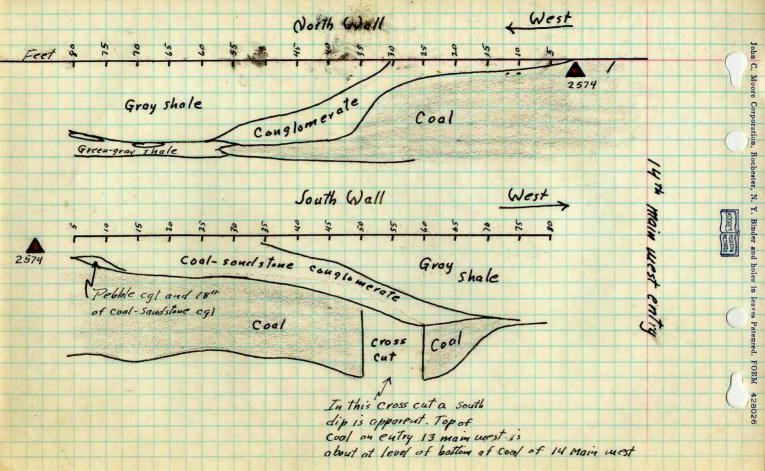
of small trees up to 1. Apparent bedding dips from subhorizontal to as much as 30 degrees. Bedding dips to north on north wall of entry. This shale contains abundant large slickensides west of marker 2574. Their orientation is as follows:

	1200								
		S	39	E	1	23	S	)	
		N	38	W		23	N		
•		N	36	W		21	N		
		N	6	W		-	N		
		Due N				_	N		
v.		N	66	W		12	W		
		N	73	W		_	N	N	
		N	44	W		15	N	N	
		N	42	E		23	N	E	
			100						

-3-

Lower shale: gray, greenish gray, dark gray in part and many small slickensides with apparently random orientation. Some carbonaceous and coaly material.

Pictures 1, 2, 3 and 4 were taken. Samples B & C collected.





Entry 13 85 feet west of Sta. 2572.

Clay stone conglomerate cutting S 45 W under about 36" of coal. No cutout materials seen on south rib. Hard, gray, clay conglomerate. Unusually hard "flinty" in part. Sixty feet west of Sta. 2572 is a gray, greenish and dark gray, slickensided clay shale under 48" of coal (opposite cross cut). This unit was not seen on the south rib.

A large tree trunk oriented approximately
S 45 W occurs 55' west of Sta. 2572 in normal (?)
roof. Only bottem few inches of roof seen. Light
gray coaly very very carbonaceous, occasionally
slip fractured shale. Much plant debris. Bolting
to limestone?

The following slickenside orientations were obtained:

5 S S 32 E S 73 E 23 SE S 35 E 22 SE 12 SE S 34 E N 76 E 16 NE 32 N N 3 W N 70 E 25 NE 38 NW N 45 W 23 W N 82 W

Shale gently truncating cool

Shale 2572 A

Entry 12

-5-

Most of entry shows normal relations except at west end slidkensides are uniformly oriented to northwest.

Coal & cgl. Coal Gray Shale
Contact
N.15W-10°NW

Coal has apparent 40 dip to south.



Slickensides of entry 12 are dipping as follows (quadrang orientation only):

NW	N	ŀ
NW	NW	I
N	NW	P
E	NW	I
N	NW	1
NW	NW	I
SE	N	1
NM	NW	I
N	NW	1
NW	NW	1
	N	1
	N	1
	NW	1
	N	1

-6-

Entry 11 90 feet west of Sta. 2594.

Channel appears at west end of entry. Upper 1 foot of coal has a sand and coal conglomerate. This is overlain by a uniform, medium gray, silt-stone that is finely laminated. An oriented sample, (Specimen E), was obtained from the siltstone and sandstone congl. Only two slickensides observed (because coal forms most of roof), one dipping to the NW, the other to the north.



mn - ze - 409 . tif

Full picture of west end of 14 main west. Facing west from a point about 60' west of sta. 2574 showing coal, coal-sandstone cgl., and shale room.

(6-10-56) Crown mine, Farmersville, Ill.



m - 22 - 010 . tit

6loser view of coal-sandstone, coal cgl., and shale roof near west end of 14 main west.

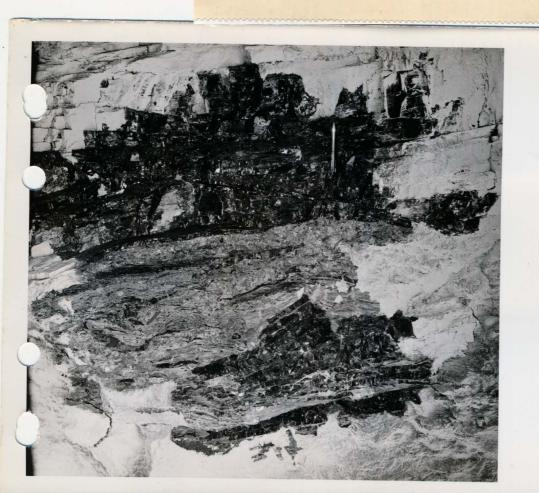
(6-10-56)

Crown mine, Farmersville, Ill.

Detail of coal-sandstone cgl. on south wall of main 14 west. About 30' west of Sta. 2574.

(6-10-56)

Crown mine, Farmersville, Ill.





MA-22-012.tip

Picture of west end of 14 main west showing replacement of coal by siltstone washout material.

(6-10-56)

Crown mine, Farmersville, Ill.



M1 - 22 - 013 . +if

North-west corner of west end of 12 main west. About 'west of sta. 2575. Showing angular unconformity of stitstone over eroded coal. (6-10-56)
Crown mine, Farmersville, Ill

originals - see typed copy

Notes from Crown mine
Freeman Coal Mining Corp
Farmersville, Ill.
(Apr. 10, 1956)

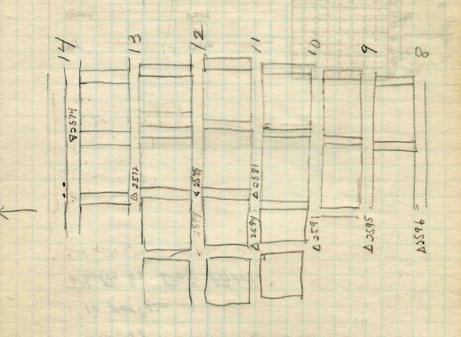
Notes in field by Poul Potter

K. Clegg - P. Potter - J. Simon - D. Farris
in party.

Photos by Dale Farris

By Date T. S.

Quad. Part County 8 7 6 5 4 3 2 1



Sketch of part of Crown mine, Farmersville,

A final map of area @ 1=501 is Also appended is dasted mid-1957. P.TD. Notes from Crown mine of Freeman Coal Mining Corp., Farmers ville, Ill. by. K. Clegg. P. Potter, D. Farris, & J. Simon Apr. 10, 1958

Most of notes are from main 11, 12, 13, 14 west entries. Prime consideration given to a washout in the No. 6 coal. Samples were collected, photos. taken and field observations on orientation of plant debris and slicheusides obtained.

Photo-2 = Closer view of Coal, coal-sandstone congloments
shale roof near west end of 14 main west

Photo= 3 = Detail of coal-sandstone conglowerate on south wall of main 14 west. About 3d west of A 2574

Photo=4 = Picture of wese end of 14 main west, showing replacement of coal by sillstone

Photo-5 = North-west corner of west end of 12 main west 'west of \$2575. Showing augular unconformity of siltslove over evoded coal.

By Date Quad. Part County

Sec. N. T. S. P. R. W. Index No. 8 7 6 5 4 3 2 1

Samples from Crown mine of Freeman Coal Mining Corporation, Farmersville, Ill. by. K. Clegg, P. Potter, D. Farris, & J. Simon (April 10, 1956) A) Clay conglowerate. 13 main west entry Below 3' of coal. 83' west of A 2572 (B) Sandstone from south side of 14 mans west, 10' west of 1 2574. (Oviented) Oviented specimen from near last crosscut of 14 main west. From above crosscut about 55' W. of A 2574 D) South wall of 11 main west, About 140' west of A 2594 Oriented sample from 90' west of \$\Delta 2594, 11 main west entry From "pinch-out" on mosth weall of 14 main west 60' W. of A 2574. Sample from "Junction" of upper + lower shotes (See samples H & I) Clay cgl. from below 3' of cool at location 83' W. of \$2572 in Brain west N. d c R Date By\_ E. CR. Quad. Part +----W. County.

ILLINOIS GEOLOGICAL SURVEY, URBANA

0 0 mm 2

(87469-10M-10-49)

H Top shale from north side of 14 main west near "pinchout" of coal. 60' West of \$\Delta 2574

Bottom shale from north side of 14 main west near "pinchout" of coal. 66' west of \$\Delta 2574

By. Date Quad. Part County\_

Sec. d c R. a Index No.

N.

S.

E.

W.

(87469-10M-10-49) ILLINOIS GEOLOGICAL SURVEY, URBANA

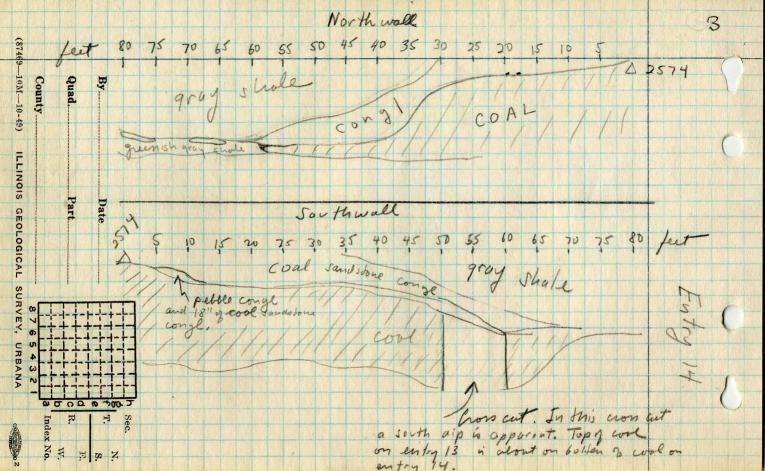
Entry 14 Main west Attologies shown on Description & Upper shale: gray medium grained with cregilar Gilty lagers up to 2" thick. Also present one and occossioned siderini banas up to Compressions Just grange plant and Apparent bedding dipps from a 30 degrees. Bedding dipps form a 30 degrees. Bedding dips to nonth Lower shale: gray, greenish gray, dank gray, small stylkens des with apparently randon orientation. Something carbon areons and conly material. Scondains abundant large slichen sides west & manhar 2574. Their orientation is as to lows. N. By. Date E. Quad. CR. W. County... (87469—10M—10-49) ILLINOIS GEOLOGICAL SURVEY, URBANA Charles 2

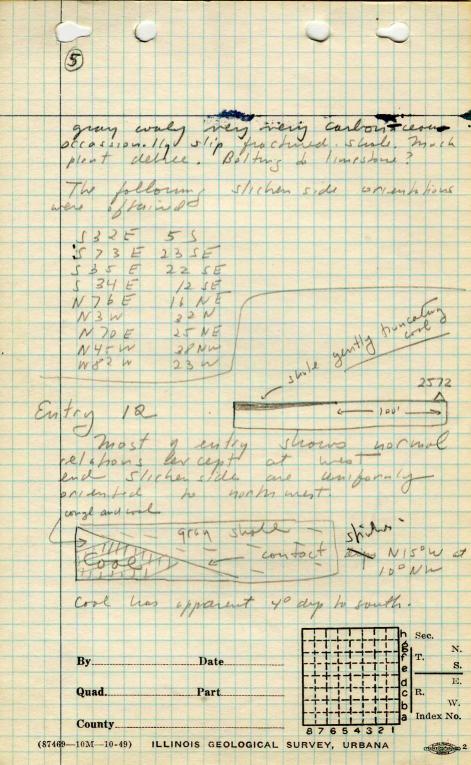
upper 235 .5375 N38 W -23 N N36 W 21 N NEW -N - N Due N 12 W N66.W N 73W -Nh N44W 15 NW N 42 F 23 NE Pictures 12,3 and y were taken x Entry 13 85 feet west of Sda 2572 Clay stone conglowerate cutting 5 45 h under about 36" of work No cutout maderials seen on south rich hand "flinty" Jin port. Sxity feet trust of sta 2572 is a gray gazenish and dark gray, slickers ded clay shale under 48 inches of coal (opposite cross cost). This int was not seen on fre south wich. A large tree bunk oriental appoint 5.45 W. Occurs 55 west of Sta 2572 for inches of roof seen. Light gray Sec.

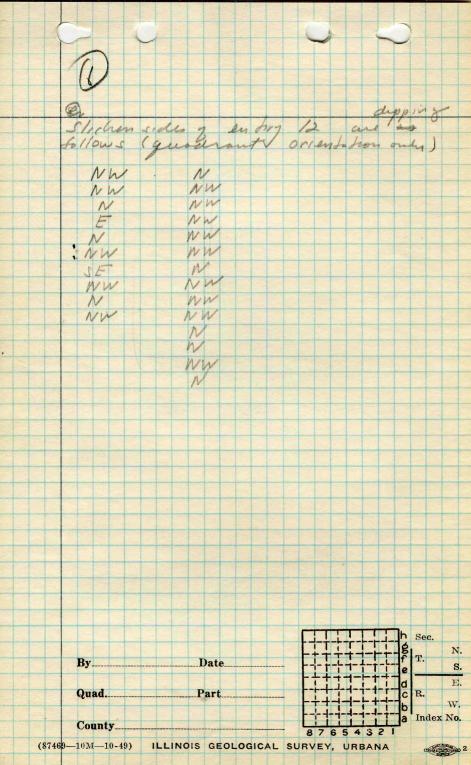
T.

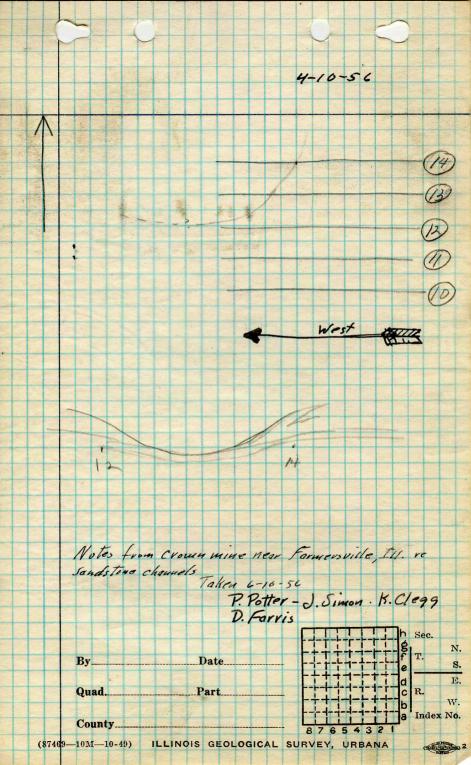
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Inde N. By Date 13. Part Quad. W. County\_\_\_\_ (87469-10M-10-49) ILLINOIS GEOLOGICAL SURVEY, URBANA communico 2









South Wall 14th Mainw. Apr. 10, 1956 Coalssegl 1 Ciss pebbleCongl in this cross ant South dip prominently entry 13 about on bottom of coul entry 14

East Upper shale: gray med grained with receptor selly layers up to 2' thick with siderite indules from 1 do 4" access and accessioned siderate bough up to 1" Thick thing large plant impressions prostly streams and drunchs of small trees (up to 1'). Apparent leddring dips From subboryonful keep to 450. Dips to worth on north side y entry. Lower shake gray, greanish grayy dark group in part much stichensial Cartonaceous and cooky meteral. Sw Con of West entry 2 14 Crown Mine, Farmerswille 6-10-56 Sec. N. By S. E. Quad. W. a Index No. (87469-10M-10-49) ILLINOIS GEOLOGICAL SURVEY, URBANA delumber 2

Picture #1 full picture of west und Picture #12 distailed photo of fore at some 30' west of A2574 is defailed picture of cool and courge in 14th entry Picture #4 Picoure #5 North west comor of west and of 12 andry. feet west 2 △ 2575.



## From Crown Mins, Formersville, Ill. 6/10/56

Dip and shipe & Slichen sides in entry #14 bs 39 E-235 N38W - 23°N N36W-21N N6 W 1- °N DVEN N65W + 12°W N73W - NW VERY GENTLY N44W - 15 NN N 42 F - 23°NE #13 532 E - 505 573E - 23°SE S35E - 22°SE 534B-12°SE N76E-16NE N3W - 32°N N70E - 25°NE N45W-38°NW N82W - 23°W #/2 NHW = 772NE

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 439756 MOORE'S HODERN 190 west 2 word 2594 Entry 11 sole appears at 1 st word of present watry Some sandy cool con in my funt of cool about 1. Shole well "Channel appears at west end of entry sand and cool cough in aggre 1' g cool. This is overlain by inform mughin grays sitts done that is firely Jaminuted. Collected an oriented sample from siltodone and sandstone congl. Fees available stidensides in rong decourse cool forms most of roof event o 2594. Chemal oppears to ut west and & entry Crown Mins Farmersville, Ill @ one to MW, N.

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 439756 MODERN S Entry 13 Wend of entry 85' w of sta A 2572 Clay stone conglomerate (samp,) cutting 5450W under about 36" of coal No cutout materials seem on 5 rib, Higrary clay coggl. very hard, "Flinty"in part."
60' W of Sta \$2572 Gray, greenish, and dk gray slickensided clay shade under 48" + of low (opposite cross out) Not seen on south rib Alarge tree frank oriented 5 45 2 W 55' w of \$2572 in normal? root. Only bottom for inches of roof seem. 2t, gray, couly very carbonaceous, occ. slip fracture, much plant debris Bolting to limestone?? Crown Mine, Formersville, Ill (6-10-36)

John C. Moore Corporation, Rochester, N. Y. Binder and holes in Icaves Patented. FORM 439756 HOORE'S MODERN Crown Mins, Farmers ville Ill. 6/10/56 13º NU 12 46 634 15 NE 1 22 E 14 NE 37115 N 45 E ENT NW NW SE NW NW NW no har nw

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 439756 MOORES MODERN west foce 100 WW 151 apparent dip is 4 % to South Crown Mine Earmersville, Ill (6-10-56)