



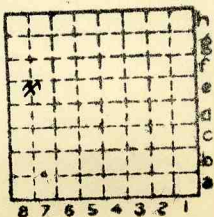
Form 180

Mine index # 57, BM 16, 146, 420

BIG MUDDY CARTERVILLE Mng. Co. #2

COUNTY # 274

S-7



Sec. 28

T.	7	N.
R.	1	S.
		E.

Index No.



Mine originally operated by: (1)

Date
1905

Big Muddy-Carterville Coal Co.

Original name or number:

Illinois Coal Report 1954 p. 75

Royalton

LATER OPERATORS

Date

Operator

Name or No.

INCORRECT LDA

1914 2 1916 Franklin Coal & Coke Co. No. 1

3 1924 Franklin County Coal Co. No. 1

4
5
6
7
8
9
10
11
12
13
14

*Also owners

#See ownership sheet

SHAFT Railroad, Wagon, Strip, Idle, Abandoned

2141 → 324 SRV

IDENTIFICATION

9'6"

County No. _____

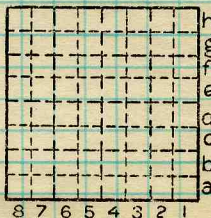
Coal No.

Coal Report No. _____

□ 6

Quad.

County FRANKLIN



Sec.

T. N.
S.

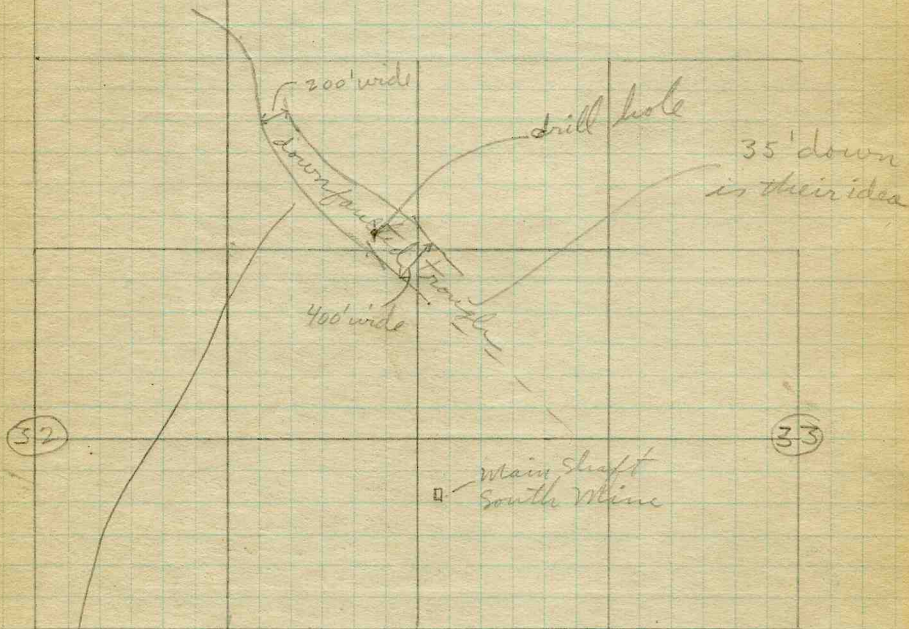
R. E.
W.

Index No.

COAL MINE OPERATOR

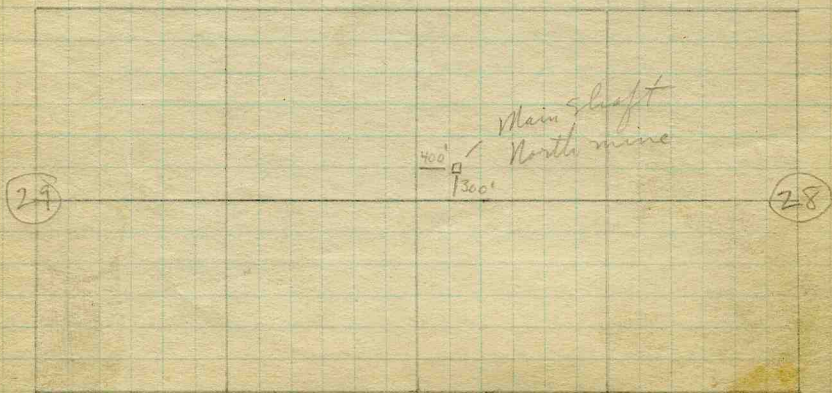


Franklin Coals Coke Co. - Royalton



12 33. - Frank. Co.

this is as far as fault is traced on the mine maps



12 28 - Franklin Co



Location and Elevation Data

Location: Exact Approximate

(Approximate only if no trace or record of original exists)

Location by W. B. Roe

Date July 27, 1932 Notebook No. 614 Page 17(2138)

Looseleaf ref. _____

Map files No. 5-28-28

Description of location

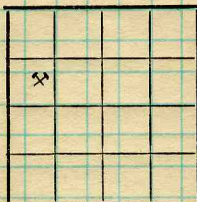
Position in sec., 1/4 sec., 40 acres

1925 feet from North line

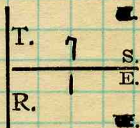
_____ feet from East line

_____ feet from South line

925 feet from West line



Sec. 28



Farm _____

Other description: _____

MN 1912

No. _____

Company _____

Franklin County Coal Co., Inc.

No. Royalton mine #7?

County No. 107

Elevation 414.4 ft.

By W. B. Roe

Method: Level, transit, alidade, hand level

Plane table and alidade

Elevation of Curb

Height of point above ground _____

Date July 29, 1932 Notebook 614 P. 17(2138)

Looseleaf ref. _____

Map files No. 5-28-28

Description of item: (drill hole, mine, etc.) Air shaft - active shipping mine





COAL MINE NOTES.

1228

COUNTY *Franklin*

TOWN

MAP No. *10228*

T. *75*

R. *1 E*

S. *28 N.W. 1/4*

OPERATOR *Big Muddy Garterville Mining Co.*

OFFICE *Garterville.*

MINE *#2*

TIPPLE

ENGINES

BOILERS

DRUM

SHAFT

CAGE

HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

SIZE OF ENTRIES—MAIN

CROSS

ROOM

NECK

SIZE OF PILLARS—MAIN

CROSS

ROOM

SHAFT

CHAIN

BARRIER

AMOUNT OF TIMBERING

SIZE

PROPORTION OF COAL UTILIZED

AMOUNT AND CHARACTER OF WASTE

ACREAGE OF COAL MINED

ACREAGE OF COAL REMAINING

PROPORTION OF MINE RUN AND SCREENED COAL

METHOD OF SIZING

RESCREENED

SIZES

PER CENT

PROPORTION AND SIZE OF WASHED COAL

DAILY OUTPUT

UTILIZATION

MARKETS

FREIGHT RATES

SELLING PRICES AT MINE

10228 1228

COAL LAND OWNED

LEASED

HELD IN FEE

COST OF LAND OWNED

LEASED

HELD IN FEE

ADDITIONAL NOTES



COAL MINE NOTES.

CONTINUED

OPERATOR *Big Muddy Carterville Mining Co.* MINE #2

1228

ENTRANCE NAME OF COAL BED

ELEVATION *412* THICKNESS OF COAL

DEPTH TO FLOOR *315* MAX. MIN.

AV. *118"*

ALTITUDE OF COAL *97*

LOCATION OF SECTION

No. SECTION.

No.	SECTION.	In.
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
Tape		Total

SECTION

Feet

SAMPLE No.

CAN No.

CONDITION

GROSS WEIGHT

TIME EXPOSED

NOT SHIPPED

NOT INCLUDED

PHYSICAL PROPERTIES BY NUMBERS

ROOF

FLOOR

DIP

FAULTS, ETC.

GAS

COLLECTOR *Savage.*

REFERENCE

DATE

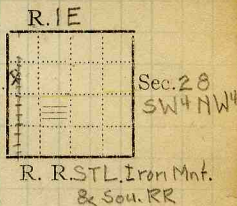
~~1028~~ 1228



COAL MINING INVESTIGATIONS
COOPERATIVE AGREEMENT

Mine Name or No., Mitchell Mine
mile from

Operator, 1912 Franklin Coal & Coke Co. 75 T.



Operator, 191

Entrance, Shaft Elev. 418 ft. { above,
Depth to bottom coal, 324 ft. Alt. 94 below,

SURFACE DATA.

- A. Topography Level to Rolling See
- B. Surficial materials, (1) Character A Yellow sandy clay
- (2) Thickness, 30' ± (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc.
No effect on shaft sinking.



- C. Outcrops, (1) Character, See
- (2) Structure, See
- (3) Fossil horizons See
- Collection No.,
- (4) Evidences of subsidence, See
- D. Note collection of mine maps, drill records and shaft logs.

See drill record sheet.

E. Notes on surrounding area,

See

Coal bed name: Local, # 6

Survey # 6

Collector, W. White

State No. 1228

Mine, Mitchell

Co. Franklin Co-op. No. 57

L.—SURFACE SHEET (Geol.)



UNDERGROUND DATA

F. Thickness of rock above bed worked, 294

(1) Important variations, Unknown.

See

G. Note presence of strata having important effect on mining.

None especial.

See

(1) Position,

(2) Character,

(3) Persistence,

(4) Other workable coal beds,

See

H. Cap rock, Ls.

(1) Thickness, 5'

(2) Height above coal, 22'

See

I. Immediate roof To coal.

(1) Thickness, 2' to 2'-6" (2) Contact with coal,

(3) Horizontal variation,

None

See

J. Draw slate. (1) Thickness, (2) Contacts

None

(3) Persistence

K. Coal bed: Max. 10'-6" Min. 9'-6" Av. 9'-6" inches

(1) Benches, 3

(a) Position, Top bench 2', Middle Bench 5'-6"
Bottom Bench 2'

(b) Persistence,

Over entire mine

See

(2) Bedded impurities, kind, position in benches, persistence, ease of separation.

Blue Band, a grayish brown shale 2' some dirt, clay, jack and sulphur bands in very small amount and irregular in occurrence and position

See

(3) Irregularities in continuity of bed (due to deposition, erosion, or movement).

A very small number of slips.

(b) Effect on mining,

See

None.

See

SECTION				
Ft.	In.	Name	Index	Sym.

Collector, Kowhite

Coal, #6

State No. 1228

Mine, Mitchell

Co. Franklin

Co-op. No. 56



UNDERGROUND DATA (cont'd.)

- K. (5) Physical character of coal in benches,
- Relative hardness, *Bottom coal hardest, then top, then middle bench*
 - Lustre, *Bright.*
 - Fracture, *Blocky*
 - Texture, *Banded.* See
- (6) Impurities in coal, other than bedded,
- Kind, *A few sulphur balls and streaks.*
 - Position and persistence, *irregular*
 - Rejected, *Yes* Ease of separation, *By hand* See
- L. Floor: (1) Material *Fire Clay.*
- Thickness *104*
 - Variation *None*
 - Note character, condition, tendency to heave, relation to undercutting, commercial value.
Similar to general condition of district. Upper part contains plant impressions and slick surfaces. Does not heave. Sump sunk 4 1/2' did not reach bottom See
 - Clay sample No. Location, See
- M. Stratigraphy
- Fossiliferous horizons underground,
Collection No. Location,
- N. Notes on effect of deep drilling in coal mine areas.

See

Collector, *Kowwhite*Coal # *6*State No. *1228*Mine, *Mitchell*Co. *Franklin*Co-op. No. *57*



INDEX

- Section Main Air Entry Room 4
- K5 1 Top Coal up (reported) 2'-6"
 2 Middle Bench bright hard coal. Glance coal in bands up to $\frac{1}{2}$ " thick, amount 25%. Impurities, a little black clay and a few sulphur streaks. Considerable number of mother coal bands. Calcite along glance coal in small amount 5'-4"
 3 Blue Band, a grayish brown shale 0'-2"
 4 Bottom Coal very hard contains a number of jack and some sulphur bands. 1'-11"

Face air shaft entry, coal similar to previous section
 Cleat Face N30°W
 Butt N30°E

Face Main South coal about same as previous section, contains however more sulphur balls of irregular size ^{in lower bench.} Face produce considerable gas, which escapes with a hissing sound.

A very clean parting of mother coal occurs between top and middle bench.

- I Top coal very hard brittle and bright, where measured contained considerable sulphur in balls and vertical streaks. Amount much less (according to report in other parts of mine. measured 2'-6")

Very few slips in roof.

Top coal never falls.

When top coal is pulled roof falls continually.

- K5 Coal as a bed is very hard, bright, and brittle shoots into good block coal. Practically no impurities go over screen into cars.

Collector K. White

Mine Mitchell

X.—EXTRA SHEET No. 1

Coal #6

Co. Franklin

State No. 1228

Co-op No. 57



INDEX

K5

General dip of coal is to the north
Bed lies practically in a plane with no
flexures.

Top is a gray shale, harder than the
general roof shale of the district.
It is rather dense, sandy and contains
plant impressions. A few slip occur
in it but give no trouble. It falls in
irregular masses, breaks into small
spalls on weathering.

K5

When slick faces occur in the coal
they are generally covered with calcite.

Gray shale in shaft 22' thick

Collector *rdwhite*

Mine *Mitchell*

X.—EXTRA SHEET No. 2

Coal #6

Co. Franklin



State No. 1228

Co-op No. 59



Log about one mile from Royallton

Clay	15'
Sandstone	16'-6"
Blue shale	1'-6"
Sandstone	10-0
Shale	29-0
"	17-0
Black slate	3'-7"
Coal	1'-2"
Blue shale	2'-0"
Conglomerate	5'-3"
Blue shale	26'-0"
"	63'-0"

Sandstone shale partings	20'-0"
Black shale	1'-0"
Coal	1'-1"

Coal	0'-7"
Clay shale	11'-3"
Blue	6'-0"
Sand	2'-0"

Sandstone shaly partings	4'-0"
Black slate	22'-6"
Coal	1'-8"
Sandstone	1'-10"
Sand shale	2'-0"
Blue	8'-0"
Lime stone Ls	2'-0"
Blue slate	2'-0"

Black slate	22'-6"
Coal	1'-8"
Sandstone	1'-10"
Sand shale	2'-0"
Blue	8'-0"
Lime stone Ls	2'-0"
Blue slate	2'-0"

Sandstone	91'-6"
Sand shale	8'-0"
Blue	10'-0"
Lime stone Ls	6'-0"
Blue slate	18'-0"
Sandstone	21'-6"
Blue shale	2'-6"
Blue slate	22'-0"

Limestone	91'-6"
Sandstone	8'-0"
Sand shale	10'-0"
Blue	6'-0"
Lime stone Ls	18'-0"
Blue slate	21'-6"
Sandstone	2'-6"
Blue shale	22'-0"
Blue slate	22'-0"

File With Mitchell Mine #1



Sand shale	18'-0"
Blue shale partings	21'-6"
sand Coal	11-6
Fire clay	2'-0"

#2

$$\begin{array}{r} 324 \\ 294 \\ \hline 30 \end{array}$$



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, *Franklin Coal & Coke Co* Date, *8-28* 191*2*
 Mine, *Mitchell* Located *at* miles* *—* from † *Royalton*
 Location in mine, *Room #9 off back air shaft*
 Total (vertical) depth from surface at point of sampling, *300* ft.

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings $\frac{3}{8}$ inch thick or over (and even those of less thickness if they are rejected at mine or tippel).

SECTION OF BED AT POINT SAMPLED

No.	DESCRIPTION	FEET	INCHES
X1	Roof-Top Coal-Soapstone	above	—
2	Coal-fairly clean		6 $\frac{1}{2}$
X3	Bone		
4	Coal-fairly clean	1	4 $\frac{1}{2}$
5	Mother of Coal		$\frac{1}{4}$
6	Coal-clean-bright	1	10
7	Coal-bony-dull-hard		8
X8	Bone & shale		1
9	Coal-clean-soft		4 $\frac{1}{2}$
X10	Bone & shale - blue band		2
11	Coal-clean-bright	1	10 $\frac{1}{4}$
X12	Floor-fire clay		—
13			
14			
15			
16			
17			
		310	
	TOTAL,		6 11

Is coal ~~wet~~ or dry? *Dry*
 Time exposed, *0* hours, *35* minutes.
 Weight, *50#* gross, net.

What are the impurities, and how do they occur? *bone, shale, mother of coal-dirt-pyrite in horizontal streaks*

What are shipped? *2, 4, 5, 6, 7, 9, 11*

What are excluded from the sample? *1, 3, 8, 10, 12*

Coal bed, *# 6*

*Direction (N., NE., etc.).

†Nearest railway station.

Town, *Royalton* Mine, *Mitchell* Co. *Franklin Coal and Coke Co*
 Sample No. *57C(sub)* Can No. *1565 53* No. *#57(sub)*

I.—COAL SAMPLE SHEET. Sampler. *Smith + Nebel* - 1228

#5507



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, *Franklin Coal & Coke Co.* Date, *August 28* 1912
 Mine, *Mitchell* Located *—* miles* *—* from † at *Royalton*
 Location in mine, *Face Room #4, 2nd S off Main E.*
 Total (vertical) depth from surface at point of sampling, *300* ft.

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings $\frac{3}{8}$ inch thick or over (and even those of less thickness if they are rejected at mine or tipple).

SECTION OF BED AT POINT SAMPLED

No.	DESCRIPTION	FEET	INCHES
x 1	Roof-Top Coal-Slagstone above		
2	Coal-clean-bright		4 $\frac{1}{4}$ $\frac{1}{4}$
3	Bone		
4	Coal-clean bright		3 $\frac{3}{4}$
5	Bone		$\frac{1}{4}$
6	Coal-fairly clean-	3	3 $\frac{1}{2}$
7	Mother of coal -		$\frac{1}{4}$
8	Coal-fairly clean-banded dull		10 $\frac{3}{4}$
x 9	Blue band-Gray shale	309	1 $\frac{1}{2}$
10	Coal-dull		$\frac{3}{4}$
x 11	Mother of coal		$\frac{3}{4}$
12	Coal-very clean-bright	1	8 $\frac{1}{2}$
x 13	Floor-fire clay		
14			
15			
16			
17			
TOTAL,		6	10 $\frac{1}{2}$

Is coal wet or dry? *-Dry*
 Time exposed, *35* hours, *35* minutes.
 Weight, *45#* gross, *shale net.*

What are the impurities, and how do they occur? *Bone dirt, pyrite, mother of coal in horizontally bedded streaks, CaCO₃ on cleat*
 What are shipped? *2, 3, 4, 5, 6, 7, 8, 10, 12*
 What are excluded from the sample? *1, 9, 11, 13*

Coal bed, *No. 6*
 *Direction (N., NE., etc.). †Nearest railway station.

Town, *Royalton* Mine, *Mitchell* Co. *Franklin Coal & Coke Co.*
 Sample No. *57B (sub)* Can No. *ISGS #205* No. *57 (sub)*

I.—COAL SAMPLE SHEET. Sampler. *Nebel & Smith*
#5508 1228



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, *Franklin Coal & Coke Co.* Date, *August 28* 1912
 Mine, *Mitchell* Located *—* miles* *—* from † at *Royalton*
 Location in mine, *Face Room 8-1st 50 ft 2nd W.S.*
 Total (vertical) depth from surface at point of sampling, *300* ft.

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings $\frac{3}{8}$ inch thick or over (and even those of less thickness if they are rejected at mine or tippie).

SECTION OF BED AT POINT SAMPLED

19.-Floor-fire-clay

No.	DESCRIPTION	FEET	INCHES
X 1	Roof Top coal ($3\frac{1}{2}$ ft) Soapstone above		$3\frac{1}{2}$
2	Coal-clean-bright		$\frac{1}{4}$
3	Mother of Coal		$3\frac{1}{4}$
4	Coal-clean-bright		$\frac{1}{4}$
5	Bone		$\frac{1}{2}$
6	Coal-dirty		$\frac{1}{4}$
7	Bone.		$11\frac{1}{2}$
8	Coal-fairly clean		$\frac{1}{8}$
9	Pyrite		$10\frac{3}{4}$
10	Coal-dirt streaked		$10\frac{1}{2}$
11	Mother of coal		$\frac{1}{4}$
12	Coal-clean-bright		$11\frac{1}{2}$
13	Mother of coal		$1\frac{1}{4}$
14	Coal-fairly clean-bright		$3\frac{1}{2}$
X 15	Bone & Gray shale		$2\frac{1}{2}$
16	Coal-clean-bright		$10\frac{1}{2}$
X 17	Blue band-gray shale		1
18	Coal-hard Bone		$10\frac{1}{2}$
	TOTAL		$9\frac{5}{8}$

308

Is coal wet or dry? *-Dry* → *6* hours, *30* minutes.
 Time exposed, *0* hours, *30* minutes.
 Weight, *40#* gross, *—* net.

What are the impurities, and how do they occur? *-Bone-shale-pyrite-dirt-mother of coal in hor. bedded streaks.*

What are shipped? *2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18*

What are excluded from the sample? *1, 15, 17, 19.*

Coal bed, *No. 6*

*Direction (N., NE., etc.). †Nearest railway station.

Town, *Royalton* Mine, *Mitchell* Co. *Franklin Coal & Coke Co.*
 Sample No. *57A (sub)* Can No. *S+D 30* No. *57 (sub)*
 I.—COAL SAMPLE SHEET. Sampler. *Nebel & Smith.* **1228**

#5509



USBM Bull 193 p. 148

ROYALTON. NORTH OR NO. 1 MINE.

Analyses 30205 and 30207 (p. 32). Bituminous coal, Illinois field, from North or No. 1 mine, opened by two shafts 317 feet deep at Royalton, on the Missouri Pacific R. R. Coal bed, Herrin, or No. 6, of the Illinois Geological Survey; Carboniferous age, Carbondale formation. Thickness of the bed averages from 7 to 11 feet; from $1\frac{1}{2}$ to 2 feet of roof coal is left in mining. Roof, gray shale; floor, fire clay; a "blue band" consisting of bony coal or shale and averaging from $\frac{1}{2}$ inch to several inches thick lies about 18 inches above the floor and is rejected by miners. Two car samples, one (30205) representing 13 cars and one (30207) representing 22 cars of coal, were collected by W. B. Plank on March 26 and 27, 1918.

System of mining, double-entry room and pillar. Prior to October 1, 1918, FF black powder was used for blasting down the coal in the rooms, but permissible explosives with No. 6 detonators were used in the entries only; since that time permissible explosives have been installed and used entirely. Machines were used for undercutting the coal. About 500 men were employed underground. Haulage was by electric locomotives and by mules. The daily average output of mine was 3,800 tons and the maximum day's run 4,154 tons. In 1917, 555,565 tons of coal were mined; the output for 1918 was 644,323 tons.

For description and analyses of other samples from this mine see Bureau of Mines Bull. 123, pp. 33, 174.

North #1 Mine Franklin Co. Coal No. 6 Index No. 1228.06



ROYALTON. NORTH MINE.

Analyses 20080 to 20083, and 20723 to 20726 (p. 33). Bituminous coal, Illinois field, from North mine, a shaft mine, at Royalton. Coal bed, No. 6 of the Illinois geological survey; Carboniferous age, Carbondale formation. The coal is firm and is of uniform thickness, averaging 9 feet 5 inches. Roof, gray impure shale; usually 18 to 30 inches of coal is left for protection. Floor, hard, brittle clay. Shaft, 315 feet deep. The bed was sampled at three points in the mine by J. W. Paul, H. I. Smith, and G. T. Powell on November 1, 1914, and at three other points by H. I. Smith on November 30, 1914, as described below:

Sections of coal bed in North mine.

Section.....	A	B	C	D	E	F
Laboratory No.....	20080	20081	20082	20723	20724	20725
Roof, shale.....						
Coal, 2 to 3 feet, left up in mining.....	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>
Coal.....	4 $\frac{1}{2}$	3 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{3}{4}$	7	4 $\frac{1}{2}$
Bone and "mother coal".....	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 10 $\frac{1}{2}$	3 8	1 $\frac{1}{2}$
Coal.....	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 10 $\frac{1}{2}$	3 8	1 $\frac{1}{2}$
Bone and shale.....	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 10 $\frac{1}{2}$	3 8	1 $\frac{1}{2}$
Coal and "sulphur".....	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 10 $\frac{1}{2}$	3 8	1 $\frac{1}{2}$
Coal.....	3 7 $\frac{1}{2}$	3 $\frac{1}{2}$	1 1	a 2 $\frac{1}{2}$	a 4 $\frac{1}{2}$	.. ..
Bone, shale, "mother coal".....	3 7 $\frac{1}{2}$	3 $\frac{1}{2}$	1 1	8	.. ..	.. ..
Coal.....	3 $\frac{1}{2}$	.. ..	1	.. ..	.. ..	.. ..
Shale, carbonaceous.....	a 3	.. ..	.. ..	.. ..	.. ..	3 5 $\frac{1}{2}$
"Mother coal".....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Coal.....	1 10 $\frac{1}{2}$	.. ..	3 $\frac{1}{2}$	.. ..	.. ..	.. ..
"Mother coal" and shale.....	.. ..	.. ..	3 $\frac{1}{2}$	.. ..	.. ..	.. ..
"Blue band".....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Coal.....	.. ..	11	2 3 $\frac{1}{2}$	1 7 $\frac{1}{2}$	1 a 2 $\frac{1}{2}$	.. ..
Bone.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Shale.....	.. ..	.. ..	.. ..	.. ..	.. ..	a 1
Bone, coal, and "sulphur".....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Coal.....	.. ..	9 $\frac{1}{2}$	.. ..	.. ..	a 9	.. ..
"Blue band".....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Shale.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Coal.....	.. ..	Streak.	.. ..	.. ..	.. ..	.. ..
Bone.....	.. ..	1 6 $\frac{1}{2}$	.. ..	.. ..	.. ..	1 9
Coal.....	.. ..	.. ..	3 $\frac{1}{2}$	.. ..	.. ..	.. ..
Shale, carbonaceous.....	.. ..	.. ..	2	1	.. ..	.. ..
Coal.....	.. ..	2 0	1 9	.. ..	.. ..	.. ..
Floor, clay.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Thickness of coal mined.....	6 8 $\frac{3}{4}$	6 11 $\frac{1}{2}$	6 8 $\frac{3}{4}$	6 2 $\frac{3}{4}$	6 7 $\frac{1}{2}$	6 11 $\frac{1}{2}$
Thickness of coal sampled.....	6 5 $\frac{3}{4}$	6 9 $\frac{1}{2}$	6 7 $\frac{1}{2}$	5 9 $\frac{1}{2}$	5 3 $\frac{1}{2}$	6 4 $\frac{1}{2}$

a Not included in sample.

Section A (sample 20080) was measured at face of 4 north entry, 2 main west entry. Section B (sample 20081) was measured at face of 27 room, 1 north entry, 1 main east entry. Section C (sample 20082) was measured at face of 1 main east entry, main north entry. Section D (sample 20723) was measured at face of 2 west south entry, about 2,000 feet west of the shaft. Section E (sample 20724) was measured at face of 26 room, 3 southwest entry, near entry. Section F (sample 20725) was measured at face of 1 east south entry.

The ultimate analysis of a composite sample made by combining face samples 20080, 20081, and 20082 is shown under laboratory No. 20083. The ultimate analysis of another composite sample made by combining face samples 20723, 20724, and 20725 is shown under laboratory No. 20726.

A modified panel, room-and-pillar system of mining, with cross entries, is used. From the shaft bottom double main entries extend at right angles north, south, east, and west for average distances of 3,000 feet, thus dividing the mine into four quadrants. In 1914 the coal was undercut by machines, and shot down with black blasting

USBM Prod 123 9/24-5

Coal No. - 6

North Mine

Franklin Co.

Index No. - 1228.06



See
Extra
Sheet
No.

Entrance *shaft*
 Kind of tibble *steel head frame with wood tibble*
 Motive power for hoist *steam*
 Source if electrical
 Kind of hoist (cage, skip, etc.) *Cage*
 Kind of haulage *Elec Motors for everything*
 Mining equipment
 Note any features of the equipment that are of special interest

SURFACE DATA.

A. Topography, *Relatively level*
 B. Surficial materials, (1) Character, *clay and sand*
 (2) Thickness, *20'* (3) Effect on mining and shaft-sinking, of
 former drainage lines, underground water strata, etc.

C. Outcrops, (1) Character,
 (2) Structure, _____
 (3) Fossil horizons,
 Collection No., _____
 (4) Evidences of subsidence, _____
 D. Note collection of mine maps, drill records and shaft logs.

See drill record sheet,

E. Notes on surrounding area,

Coal bed name: Local,

Survey No. 6

Collector,

Mine, *Franklin Coal Co.* Co. *Franklin*

Index No. *1228*



F. Thickness of rock above bed worked,

(1) Important variations,

see opposite side

See

G. Note presence of strata having important effect on mining,

Very poor shale roof.

See

(1) Position, *Immediately above coal*

(2) Character, *Soft light colored shale, many plant impressions*

(3) Persistence, *yes*

(4) Other workable coal beds

5' coal seam lies 35 to 50 feet below.

See

H. Cap rock,

None

(1) Thickness, *-*

(2) Height above coal, *-*

See

I. Immediate roof,

blue gray shale

(1) Thickness, *35'* (2) Contact with coal,

relatively even

(3) Horizontal variation, *None*

See

J. Draw slate, (1) Thickness,

(2) Contacts

(3) Persistence,

K. Coal bed: Max.

Min.

Av.

inches

(1) Benches,

Upper and lower

(a) Position,

above and below blue band.

(b) Persistence, *yes.*

See

(2) Bedded impurities, kind, position in benches, persistence, ease of separation,

Blue band with fair parting above and below, many dull coal bands, with bone coal band near top which has a fair parting on top side.

See

(3) Irregularities in bed (due to deposition, erosion, or movement),

Bed has gentle undulations, no steep grades

See

(a) Effect on mining,

None

See

SECTION		
Name	Ft.	In. Sym.

See also file of spot

Collector,

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M.—UNDERGROUND SHEET (Geol.)

15'	6"	clay
6	6	Soft sandstone
105		blue shale
5		sandy shale
13		"
2		stily sandstone
1		shale
	4"	Bony coal
	8"	fire clay
4	6	clay shale
24	6	sandstone
5	0'	blue shale
3	6	limestone P.
4	9	blue shale
1	11	coal 7
	8	fire clay
10	2	gray shale
2		clay shale
1		limestone PF
8		lime shale
6	6	limestone BCC
2	6	lime shale
66		sandy shale
35	4	blue shale
7	7	Bony coal
7	11	coal
	2	blue hard
2'		coal
2	3	fire clay

Diamond Lake
 hole in
 SW corner of
 NW 1/4 of NE 1/4
 of Sec 22
 Twp 75, R 1 E

Elev. 6.61
 391 ± TOPO.

#5 coal about 35 to 50
 feet below about
 4 1/2' thick

R 4 1/2

ILLINOIS GEOLOGICAL SURVEY, URBANA

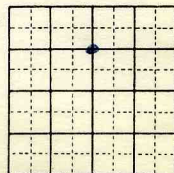
DIAMOND DRILL HOLE	Thickness	Top	Bottom
Clay	15-6	0	15-6
Soft sandstone	6-6	15-6	22-0
Blue shale	105-0	22-0	127-0
Sandy shale	18-0	127-0	145-0
Shaly sandstone	2-0	145-0	147-0
Black slate	1-0	147-0	148-0
Bony coal (Pond Creek?)	0-4	148-0	148-4
Fire clay	0-8	148-4	149-0
Clay shale	4-6	149-0	153-6
Sandstone	29-6	153-6	183-0
Blue shale	5-0	183-0	188-0
Limestone (Piasa)	3-6	188-0	191-6
Blue shale	4-9	191-6	196-3
Coal (#7-Danville)	1-11	196-3	198-2
Fire clay	0-8	198-2	198-10
Gray shale	10-2	198-10	209-0
Clay shale	2-0	209-0	211-0
Limestone (Bankston Fork)	1-0	211-0	212-0
Lime shale	8-0	212-0	220-0
Limestone (Brereton)	6-6	220-0	226-6
Lime shale	2-6	226-6	229-0
Sandy shale	66-0	229-0	295-0
Blue shale	35-4	295-0	330-4
Bony coal	0-4	330-4	330-8
Coal (#6-Herrin)	7-11	330-8	338-7
Blue Band	0-2	338-7	338-9
Coal (#6-Herrin)	2-0	338-9	340-9
Fire clay	2-3	340-9	343-0
T.D.		343-0	
#6 Coal Thickness 10-5 feet Elevation Top #6 Coal 61 ft.			

COMPANY Franklin County Coal Co.
 FARM North Mine
 DATE DRILLED 1914 ?
 AUTHORITY Correlations by C. J. Nelson
 ELEVATION 391' ±
 LOCATION Sw corner NW-NE
 COUNTY Franklin

NO.

COUNTY NO.

Sec. 22



75-16



250593

K. (5) Physical character of Coal,

- (a) Relative hardness, *Lower bench very hard, upper bench is finer and much less friable than at Lowell*
- (b) Lustre, *Bright but with an enormous number of dull bands*
- (c) Fracture, *irregular*
- (d) Texture, See

(6) Impurities in coal, other than bedded, kind, position, persistence, ease of separation, etc.

Practically no other impurities other than bedded. A very few foci of calcite were found and hardly a trace of those of pyrite were noted

See

L. Floor: (1) Material, *Fire clay*

(2) Thickness, *?*

(3) Variation, *Apparently none.*

(4) Note character, condition, tendency to heave, relation to undercutting, commercial value.

See

(5) Clay sample No. *A-258 and A266* Location,

M. Stratigraphy,

(1) Fossiliferous horizons underground,

Collection No.

Location,

N. Notes on effect of deep drilling in coal mine areas.

See

Collector, *Franklin County Coal Co*

Mine, *No 7* Co. *Franklin*

Cola: Survey No. *6*

Index No. *1228*



Symbol Description Inches

1 division=3 in.]

Franklin County Coal Co.
Franklin County, Sect 28, Twp 7S, R 1 E

this sample located in lower
central west edge of NE 1/4 of NE 1/4
of Sect. 33

Roof 3 1/2' of top coal which is
recovered later on the retreat.

Top of section

1' of very dull ashy bone coal A-260

M coal parting

Two mother coal streaks 3/8" wide with 1/4" coal between

Banded coal, light and dull
bands

Mother coal streak

laminated coal, light and
dull bands.

pyrite streak in bedding

1/4" bone coal, very dull

1 1/2" blue band. More bone coal than
clay here

Hard laminated coal

Fire Clay, light gray, darker on
top, some root impressions, very
firm and dry A-258

Face Sample A-261
Hand Specimens A-262, 263
" Blue Band A-264
Roof run same panel A-265

Collector. Franklin County Coal Co
Mine. No 7 Co. Franklin

Coal: Survey No. 6
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Symbol	Description	Inches
1 division=3 in.]	Franklin County Coal Co.	
	Franklin County, Sect 28, Twp 7S, R 1E	
	Sample in lower Central of NE 1/4 of SE 1/4 of Sec 20	
	Roof - About 26" of top coal, mined	
	10' of top of section	
	4 1/2 inches of shaly material with some coal streaks. More shale than coal	A-260
	← Bone and mother coal 1/2" thick.	
	Mother coal here but horizon of clay and bone coal band up to 1" thick	A-270
	No coal parting	
	Banded coal, light and dull coal	
	No coal parting	
	2 1/2" blue band, partly bony and with some coal stringers	A-267.
	Hard banded coal	
	No coal parting	
	Hard banded coal.	A-266
	Fire clay. Light colored. Considerable plant impressions. Firm and dry	A-266

Collector. Franklin County Coal Co

Coal: Survey No. 6

Mine. No 7

Co. Franklin

Index No. 1228

Q.—COAL SECTION SHEET. #



Operator,
 Mine,
 Location in mine,

Date
 Sec. T. R.

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
		(Note character and thickness of floor) Total thickness of coal.		
		Condition,	Time,	hr. min.
		Wt. Gross,	lbs.	Net, lbs.
		What Nos. shipped by Co.?		
		Excluded from sample: No.		
		Sample represents	in.	tons.
		Impurities? How do they occur?		

(1 division=3 in.)

Sample No.	Can No.	Lab. No.
Collector,		Coal: Survey No. <input type="checkbox"/>
Mine,	Co.	Index No.



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Bedded Impurities

Blue band. The blue band in this mine contains much more carbonaceous material than observed before and in places is hard to free from the coal. In such localities there seems to have been a gradual change from clay to coal without any decided parting. However a fair separation can be made with a pick, but as the miners sort out the blue band in loading they discard some coal that sticks to the blue band.

The blue band changes in character rapidly in a short distance. At the room where Coal section $\frac{2}{2}$ was taken the blue band showed imprints of plant remains. Several corrugated surfaces about $\frac{3}{4}$ " from crest to crest were found and these were only in the more clayey phases of the blue band. The blue band is much thicker in the north side of the mine and the refuse piled in the room was several times the amount that was discarded in the south section.

In addition to the blue band there is a horizon near the top of the section that changes from 1" of boney coal in the south side of the mine to $4\frac{1}{2}$ " of shaly clay with some coal streaks on the north side. On the latter side of the mine this is by far the most serious impurity as it crumbles into small pieces

Collector Franklin County Coal Co
Mine No 7 Co. Franklin Co

Coal: Survey No. 6
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and which makes it next to impossible to separate much of it from the coal. This band is full of imprints of vegetable remains, all of which left corrugated imprints on horizontal partings.

There are no impurities in this coal of any importance whatsoever other than bedded. The few facings of calcite are of no importance when considered in connection with the BB and upper shaly band.

Roof: By their mining method, the rooms are driven to the end, leaving from 24 to 36 inches of top coal. Then the top coal is mined on the retreat and during which operation some roof shale falls with the coal. One redeeming feature is that it falls big and is fairly easily removed when coal is loaded. It does add some to the ash in the coal that is mined on the retreat but it is of secondary importance when considered with the seam as a whole. Some puding is done at the tipple. The discard being chiefly blue band. Much however escapes in the middles and the screenings are very high in ash.

Collector Franklin County Coal Co
Mine No 7 Co. Franklin

Coal: Survey No. 6
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