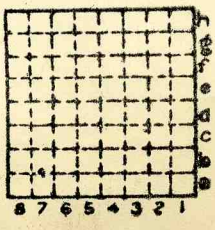
OLD BEN #11

mi.#666, BM64

253

S-9



Coal Report 1913

## Prospective Mines

The Chicago, Wilmington and Vermilion Coal Co. is sinking a new modern mine, which will be fire-proof throughout. The main shaft is down about 500 feet and they expect to strike coal within the next few feet, while the air shaft is down a little over 400 feet. This mine is located four miles northwest of West Frankfort on a branch of the C., B. & Q. R. R.

The Ohio Valley Mining Co. is sinking a new and up-to-date mine, which will also be constructed of fire-proof material. The main shaft is down now about 100 feet, the depth of the coal at this point is about 500 feet. This mine will be known as their mine No. 9, which is located two miles east of West Frankfort.

The third shaft in the district to be completed under the new law, requiring them to be constructed of fire-proof material, was sunk by the Christopher Coal Mining Co., near Christopher, Franklin County.

The recently completed shafts were sunk by a method which is of much present day interest. Instead of employing reciprocating drills mounted on tripods or shaft bars, the company adopted hand feed hammer drills of the Sullivan Class D.B. 19 pattern. These were equipped with 1¼-inch hexagonal hollow steel, sharpened with 6-point rose bits and operated by air at 80-pounds pressure by a single stage air compressor having a capacity of 130 cubic feet of free air per minute. Air was furnished these drills through a 3-inch pipe, which was later used for automatic air signals.

The main shaft is 13x21 feet in the clear and was commenced May 27, 1912, and reached the coal vein, 12 feet in thickness, on November 27, 1912, 593 feet from the surface. The air shaft, 12 feet by 24 feet, was started a few days later and reached the coal in practically the same length of time. The formation penetrated varied from soft shale to the hardest kind of limestone.

The shafts are curbed in the usual way, using 6x12 yellow pine timbers, and a solid concrete wall was used down to the depth of 41 feet and rests on 12-inch I beam horn-set.

Steel buntons were used in both shafts and the sides were lined between the concrete with fire-proof material.

The escapement shaft is built in the same way and is equipped with a main and material hoist, the cage being 10 feet 6 inches by 6 feet. All material will be lowered in this mine at this shaft. The steps are made of



Air will be furnished to the mine by a large fan run by two 150 H.P., A. C. General Electric motors.

The mine is equipped with electric haulage and will eventually use twenty-four haulage motors, including gathering motors; a number of these locomotives are arranged for tandem operation, so that in case of breakdowns, substitution can be made. All tandem locomotives can be used either as 6-ton gathering locomotives or 12-ton main line haulage locomotives.

The tipple shaker screen and tower at escape shaft was erected by the Wisconsin Steel and Iron Company of Milwaukee, Wis. The engine-house at hoisting shaft is 100x146 feet and is built of brick; the engine-house at escape shaft, blacksmith shop, office and other out-buildings are also built of brick, which makes this a fire-proof plant throughout.

This mine is located about one and three-fourth miles northwest of the Zeigler District Colliery Company's mine, and two and one-half miles northwest of Christopher, on the C., B. & Q. R. R., and has five loading tracks, one track to be used exclusively for loading box cars, thus not interferring with the regular loading.

Mine originally operated by: (1) ~~Zeigler District Coal Co.~~ Christopher C.C. #1

Date ~~1906~~ 1913

Original name or number:

Illinois Coal Report p. ~~1888-1936~~

LATER OPERATORS

| | Date | Operator | Name or No. |
|---|---|---|---|
| 2 | ~~1916~~ 5 1915 | Christopher Coal Mining Co | 2. #1 |
| 3 | 1917 | Old Ben Coal Corp | #11 |
| 4 | | | |
| 5 | | | |

Coal Rept 1915

CHANGE OF NAME.

Zeigler District Colliery Company, North mine, to Christopher Coal Mining Co., No. 1; Christopher Coal Mining Co., No. 1 to No. 2 mine; Southern Illinois Coal Co. to Taylor Mining Co.; William A. Wather to Williams & Lassak; William Gemper to Strong & Clark; Sam Hazel to Jess Allen; Clements & Doolin to R. L. Clements; Herman McDaniel to J. F. Raulston.

IMPROVEMENTS

| | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | 350' W of NE Corn. SW SW (1948) 1946 OK |

* Also owners #See ownership sheet

Railroad, Wagon, Idle, Abandoned Shaft

C.B.&J.R.R. 1954

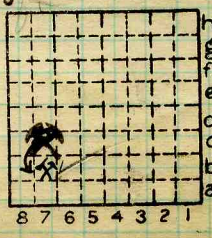
IDENTIFICATION

9-9 Coal Rept #9

County No. 253 Coal No. 6

Quad. 264 -Herrin (1948) Part 9'6"

County Franklin




Sec. 14

T. 6 N. S.

R. 1 E. W.

Index No.

COAL MINE OPERATOR 0514 b7

( Sheets) COAL PRODUCTION (Sheet )

| No. | Period Mo. | Day | Year | Mo. | Day | Year | Tons | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1931 | 12 | 31 | 1931 | 41 | 552 |
| Idle | | | | | | 1932 | | |
| Idle | | | | | | 1933 | | |
| Idle | | | | | | 1934 | | |
| Idle | | | | | | 1935 | | |
| | | | | | | 1936 | 101 | 835 |
| 9 | 1 | 1 | 1937 | 12 | 31 | 1937 | 489 | 106 |
| S-9 | 1 | 1 | 1938 | 12 | 31 | 1938 | 372 | 606 |
| | | | | | | 1939 | 469 | 668 |
| | | | | | | 1940 | 526 | 645 |
| s-9 | 1 | 1 | 1941 | 12 | 31 | 1941 | 612 | 747 |
| S-9 | 1 | 1 | 1942 | 12 | 31 | 1942 | 794 | 615 |
| | | | | | | 1943 | 1 054 | 665 |
| | | | | | | 1944 | 1 222 | 923 |
| | | | | | | 1945 | 1 085 | 542 |
| | | | | | | 1946 | 909 | 900 |
| | | | | | | 1947 | 912 | 402 |
| | | | | | | 1948 | 1 101 | 178 |
| | | | | | | 1949 | 696 | 459 |
| | | | | | | 1950 | 772 | 992 |
| | | | | | | 1951 | 625 | 734 |
| | | | | | | 1952 | 526 | 629 |
| | | | | | | 53 | 90 | 505 |

SUMMARIES

| No. | to | No. | | |
|---|---|---|---|---|
| 1906-1930 | | | 13 457 | 373 |
| | | | 13 600 | 760 |

Railroad, Wagon, Idle, Abandoned

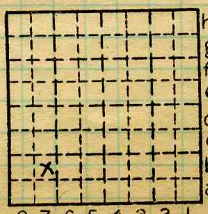
IDENTIFICATION

S-9

County No. 253 Coal No. 6

Quad. 264 Part

County Franklin




Sec. 14

T. 6 N. S.

R. 1 E. W.

Index No. 0514 B7

COAL MINE—PRODUCTION

MOORE'S MODERN METHODS

## LOCATION AND ELEVATION

Location: side R. R.

side R. R.

side Highway No.

on top. map Location sheet Map Files #11-73-27C

Elevation: Method, 1. Est. ( ) ft.

2. Inst. (kind PT ) 492.66 ft.

By NB603 p.13 Co. Elev. Data sheet

107 DEPTH

Authority J. Dunn To coal 607 ft.

Authority Rail to rail ft.

Top of coal above rail. (Est. Rule) ft.

To coal 588 ft.

ALTITUDE OF TOP OF COAL

By estimated data

By instrumental data -95 ft.

Thickness

Max. 147 in. Min. 102 in. Aver. 108 in. 114

## GEOLOGICAL DATA

Mine notes, date 1918

Coop No. BM64 Pyr. inv. Coal Ash inv.

## CHEMICAL DATA

| | | | |
|---|---|---|---|
| Analyses Face | U. I. | B. M. 30892-3-4-5-6 | Others |
| Car | U. I. | B. M. | Others |
| Org. Sulf | U. I. | B. M. | Others |
| Ash fusion | U. I. | B. M. | Others |
| Ash anal. | U. I. | B. M. | Others |
| | U. I. | B. M. | Others |

Classification #BM64 R.I. 129 U.C.I. 145

Misc. tests: Coking. Cleaning Boiler

Published descriptions:—

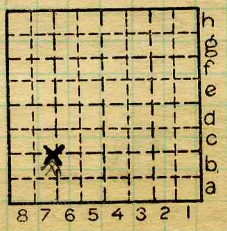
Railroad, Wagon, Idle, Abandoned

## IDENTIFICATION

County No. 253 Coal No. ☐ 6

S-9 Quad. ~~Duquoin~~ Herrin 264 Part

County Franklin




Sec. 14

T. 6 S.

R. 1 E.

Index No. 0514-7b

## COAL MINE LOCATION AND DATA

(34215—1M—3-30)

MOORE'S MODERN METHODS

Location and Elevation Data

Location: Exact ~~Approximate~~

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

Location by W. B. Roe.

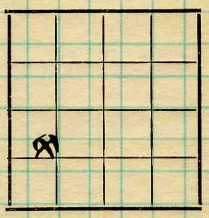
Date 5-23-31 Notebook No. 603 Page 13-109

Looseleaf ref.

Map files No. 11-73-27c

Description of location

Position in sec., ¼ sec., 40 acres



Sec. 14

T. 6 ~~N.~~ S.

R. 1 E. ~~W.~~

feet from North line

feet from East line

feet from South line

feet from West line

Other description:

Farm

No.

Company Old Ben Coal Co

No. 11

County No. ~~63~~ 63

Elevation 498.4 ft.

By W. B. Roe

498.4
G.8
505.2

Method: Level, transit, alidade, hand level

Alidade

Elevation of ~~Ground~~ Casing

Height of point above ground 0

Date 5-23-31 Notebook 603 P. 13-107

Looseleaf ref.

Map files No. 11-73-27c

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

County Franklin Quadrangle Herrin Index No. 0544

(45576—1M—10-30)

MOORE'S MODERN METHODS

Location and Elevation Data

Location: Exact ~~Approximate~~

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

Location by W. B. Roe.

Date 5-23-31 Notebook No. 603 Page 13-106

Looseleaf ref.

Map files No. 11-73-27c

Description of location

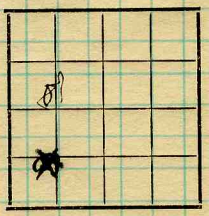
Position in sec., ¼ sec., 40 acres

4050 feet from North line

feet from East line

feet from South line

1050 feet from West line



Sec. 14

T. 6 ~~N.~~ S.

R. 1 E. ~~W.~~

Other description:

MN 1918

Farm

No.

Company Old Ben Coal Co

No. 11

County No. 253

492.7
485-9
6.8

Elevation 485.9 ft. Co. Elev. 492.66 (Use this)

By W. B. Roe.

Method: Level, transit, alidade, hand level Alidade

Elevation of Ground

Height of point above ground 0

Date 5-23-31 Notebook 603 P. 13-106

Looseleaf ref.

Map files No. 11-73-27c

Description of item: (drill hole, mine, etc.) Mine shaft

County Franklin Quadrangle Herrin Index No. 4 0514.76

(45576—1M—10-30) 7

Mine Name or No., Old Ben No. 11.
1 3/4 mile N. from Christopher
Operator, 191

Operator, 191

R.
T. Sec.
R. R.

Entrance, Elev., ft. { above, below,
Depth to bottom coal, ft. Alt.

SURFACE DATA.

A. Topography, See
B. Surficial materials. (1) Character,

(2) Thickness, (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc.

See
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, Survey No.
Collector,
Mine, No. 11 Co. Franklin Index No. 0514
L.—SURFACE SHEET (Geol.)

F. Thickness of rock above bed worked, 588½ ft.
(1) Important variations,

See

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

See

(1) Position,
(2) Character,
(3) Persistence,
(4) Other workable coal beds,

See

H. Cap rock, gray clay shale
(1) Thickness,
(2) Height above coal,

See

I. Immediate roof,
(1) Thickness, (2) Contact with coal,

(3) Horizontal variation,

See

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

(3) Persistence,

K. Coal bed: Max. 147 Min. 102 Av. 122 inches
(1) Benches, three distinct, other less important,
(a) Position, lower, below blue band; middle and upper.
(b) Persistence,

See

(2) Bedded impurities, kind, position in benches, persistence, ease of separation. Blue band compact gray clay rock separates first and second benches. Occasional bedded pyrite lens below blue band.

See

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

See

(a) Effect on mining,

See

| SECTION | | | | |
|---|---|---|---|---|
| Ft. | In. | Name | Index | Sym. |
| | | | | |

Collector,
Mine, Old Ben #11 Co. Franklin
Coal: Survey No.
Index No. 0514

M.—UNDERGROUND SHEET (Geol.)

K. (5) Physical character of coal in benches,

(a) Relative hardness, Lower part & lower bench very hard and thin bedded. corrugated Ply/Slip

(b) Lustre, bright and dull.

(c) Fracture,

(d) Texture, See

(6) Impurities in coal, other than bedded,

(a) Kind,

(b) Position and persistence,

(c) Rejected, Ease of separation,

See

L. Floor: (1) Material, clay shale.

(2) Thickness,

(3) Variation, contour of coal is irregular but the coal holds its thickness very well.

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

See

(5) Clay sample No. Location,

M. Stratigraphy,

(1) Fossiliferous horizons underground,

Collection No. Location,

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

See

Collector, Coal: Survey No.

Mine, No. 11 Co. Franklin Index No. 0514

N.—UNDERGROUND SHEET (Geol.)

MOORE'S MODERN METHODS

Operator, Old Ben Coal Corp. Date 9/5/18
Mine, No. 11 Sec. 14 T. 6S R. 1E
Located, 1 3/4 miles from Christopher
Location in mine, 2nd N. entry off of 12th W. of NW. 1000 ft W. 1300 ft N

| GRAPHIC SECTION | | | DESCRIPTION OF SECTION (AT POINT SAMPLED) | | |
|---|---|---|---|---|---|
| In. | | No. | No. | (Note character and thickness of roof) | Inches |
| | | | | Roof: gray clay shale | |
| 24? | | 1 | 1. | Top coal left in roof | 24? |
| | | | 2. | Upper bench mined mostly bright coal | 4 1/2 |
| 4 1/2 | | 2 | 3. | Mother coal | 1/2 |
| | | | 4. | Coal | 22 |
| | | | 5. | Upper part Blue band | 1/2 |
| | | | 6. | Coal in blue band | 2 1/2 |
| 1/2 | | 3 | 7. | Blue band | 3 |
| 22 | | 4 | 8. | Lower bench of coal | 22. |
| 2 1/2 1 1/2 3 | | 6 7 | | | |
| 22 | | 8 | | Floor - Clay and shale | |

(Note character and thickness of floor)
Total thickness of coal.

Condition, Standard B/M Time, 1 hr. min.
Wt. Gross, 48 lbs. Net, 4 lbs.
What Nos. shipped by Co.? 2, 3, 4 & 8

Excluded from sample: No. 1, 5, 6 & 7.
Sample represents 89 in. tons.
Impurities? How do they occur?

Sample No. Can No. 280 B/M. Lab. No. 30892
Collector, Schroyer Coal: Survey No.
Mine, Old Ben #11 Co. Franklin Index No. 0514
R.—COAL SAMPLE SHEET.

Operator, Old Ben Coal Corp. Date 9/5/18
Mine, No. 11. Sec. 14 T. 68. R. 1E
Located, 1 3/4 miles from Christopher
Location in mine, Main west entry, 4500 ft W of shaft.

| GRAPHIC SECTION In. | | No. | DESCRIPTION OF SECTION (AT POINT SAMPLED) No. (Note character and thickness of roof) | Inches |
|---|---|---|---|---|
| | | | Roof:- Gray clay shale | |
| ? | | 1 | 1. Top coal left for roof | |
| 19 | | 2 | | |
| 12 | | 3 | 2. Coal- hard, brilliant luster | 19 |
| 23 | | 4 | | |
| 1 | | 5 | 3. Coal, dull and bright interbedded | 12 |
| 6 1/4 | | 6 | | |
| 5 1/4 | | 7 | 4. Coal. bright | 23 |
| 15 1/2 | | 8 | 5. Mottled coal | 1 |
| 7 | | 9 | 6. Coal | 6 1/4 |
| | | | 7. Blue band | 5 1/4 |
| | | | 8. Coal | 15 1/2 |
| | | | 9. Coal, hard, thin beds | 7 |
| | | | Floor: Gray clay | |
| | | | (Note character and thickness of floor) | |
| | | | Total thickness of coal. | |

Condition, Standard B/M. Time, hr. min.
Wt. Gross, 43 lbs. Net, 4 lbs.
What Nos. shipped by Co.? 2,3, 4,5,6, 8 [illegible]

Excluded from sample: No. 1 6 7
Sample represents 8 3/4 in. tons.
Impurities? How do they occur?

Sample No. Can No. 524 B/M. Lab. No. 30893
Collector, Schroyer Coal: Survey No.
Mine, Old Ben # 11 Co. Franklin Index No. 0514
R.—COAL SAMPLE SHEET.

Operator, Old Ben Coal Corp. Date 9/5/18
Mine, No. 11 Sec. 14 T. 6S. R. 1E.
Located, 1 3/4 miles from Christopher
Location in mine, 1st N.E. 2705 ft E. and 300 ft N.

| GRAPHIC SECTION | | | DESCRIPTION OF SECTION (AT POINT SAMPLED) | |
|---|---|---|---|---|
| In. | | No. | No. (Note character and thickness of roof) | Inches |
| | | | Roof:- gray clay shale | |
| | | | 1. Top coal left for roof | |
| 5-4(?) | | 1 | | |
| | | | 3. Slate parting | |
| | | | mother coal | |
| | | | 5. Mother coal | |
| 30 | | 2 | 6. Coal } Blue | |
| Unmeas'd | | 3 | 7. Hard gray clay } Band | 6 1/4 |
| 2-4 | | 4 | | |
| 1 4 2 1/2 2 1/4 | | 5/16 | 8 Coal | |
| 2 1/2 | | 8 | | |
| 28 | | | | |
| | | | (Note character and thickness of floor) | |
| | | | Total thickness of coal. | |

Condition, Standard B/K. Time, hr. min.
Wt. Gross, 55 lbs. Net, 4 lbs.
What Nos. shipped by Co.? 2, 3, 4, 5, 6 & 8.

Excluded from sample: No. 1. & 7.
Sample represents 90 3/4 in. tons.
Impurities? How do they occur?

Sample No. Can No. 20 B.O/M. Lab. No. 30894
Collector, Schroyer Coal Survey No.
Mine, Old Ben #11 Co. Franklin Index No. 0514
R.—COAL SAMPLE SHEET.

Operator, Old Ben Coal Corp. Date 9/5/28.
Mine, No. 11 Sec. 14 T. 8. R. 1E.
Located, 1 3/4 miles from Christopher
Location in mine 1st S. E. 4th East Pannel Room 29.

| GRAPHIC SECTION In. | | No. | DESCRIPTION OF SECTION (AT POINT SAMPLED) No. (Note character and thickness of roof) | Inches |
|---|---|---|---|---|
| | | | Roof:- gray clay shale. | |
| 30 | | 1 | 1. Top coal left for roof | 30. |
| 39½ | | 2 | 2. Coal. 3. Coal, bright & dull interbedded | 39½ 32 |
| 82 | | 3 | 4. Blue band | 1½ |
| 1½ | | 4 | 5 Coal | 24 |
| 24 | | 5 | 6. Coal, top ½ bed coal gold | 3 |
| 3 | | 6 | | |

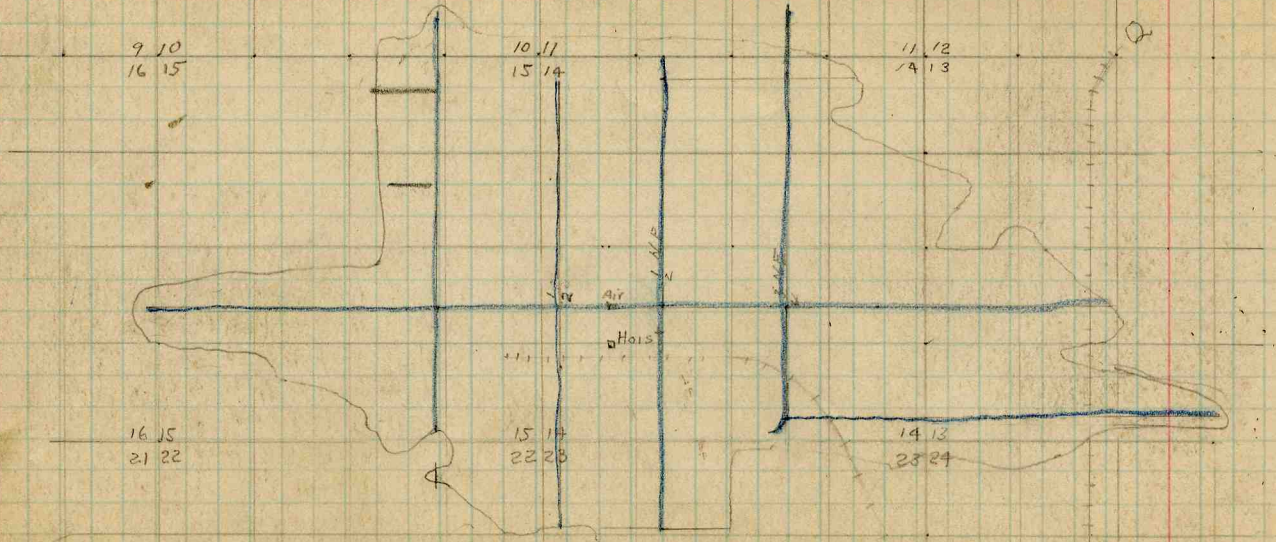
(Note character and thickness of floor)
Total thickness of coal.

Condition, Standard Time, 55 hrs min.
Wt. Gross, 55 lbs. Net, 4 lbs.
What Nos. shipped by Co.? 2, 3, 5 & 6.

Excluded from sample: No. 4
Sample represents 98½ in. tons.
Impurities? How do they occur?

Sample No. Can No. 243561 Lab. No. 30895
Collector Schroyer Coal: Survey No.
Mine, Old Ben #11 Co. Franklin Index No. 0514
R.—COAL SAMPLE SHEET.

Sketch Map of Old Ben No. 11 Mine




X1

Franklin 05/14.12

See Extra Sheet No.

Entrance shaft - 619 feet rail to rail

Kind of tipple

Motive power for hoist electric

Source if electrical C.I.P.S. Big Muddy - Goltowel

Kind of hoist (cage, skip, etc.) cage

Kind of haulage motor

Mining equipment

Note any features of the equipment that are of special interest

SURFACE DATA.

A. Topography, slightly uneven

B. Surficial materials, (1) Character, clay surface

(2) Thickness, (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, 6 Survey No.

Collector, HEC

Mine, No 11 Co. Franklin Index No. 0519.12

**L.—SURFACE SHEET (Geol.)**

F. Thickness of rock above bed worked, C8 log in files - 0516

(1) Important variations, See

G. Note presence of strata having important effect on mining, See X2

(1) Position, immediately over coal - and within coal

(2) Character, shale, locally somewhat sandy

(3) Persistence, upper one everywhere, lower one in West only

(4) Other workable coal beds See

H. Cap rock,

(1) Thickness,

(2) Height above coal, See

I. Immediate roof, shale,

(1) Thickness, >30' (2) Contact with coal, wet and loose

(3) Horizontal variation, N.D. See

J. Draw slate, (1) Thickness, (2) Contacts none

(3) Persistence,

K. Coal bed: Max. 150 Min. 100 Av. 108 inches

(1) Benches, two to five

(a) Position, above and below BB

(b) Persistence, everywhere See X2

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

shale and pyrite bands, charcoal partings - The bands are in most places tight See X2

(3) Irregularities in bed (due to deposition, erosion, or movement), some small slips esp. in west and north See X2

(a) Effect on mining, Impt. locally See X2

| SECTION | | | |
|---|---|---|---|
| Name | Ft. | In. | Sym. |
| | | | |

Collector, IEE Coal: Survey No.

Mine, No 11 Co. Franklin Index No. 0514.12

M.—UNDERGROUND SHEET (Geol.)

259693

K. (5) Physical character of Coal,

(a) Relative hardness, bottoms hardest, tops next, middle part soft

(b) Lustre, top brightest, bottom dullest

(c) Fracture, top half more regular, blocky, middle

(d) ~~Texture,~~ more friable, bottom laminated See X Z

(6) Impurities in coal, other than bedded, kind, position, persistence, ease of separation, etc. much pyrite and calcite in facing some pyrite balls

See

L. Floor: (1) Material, med to light gray clay

(2) Thickness, N.D. > 30"

(3) Variation, N.D.

(4) Note character, condition, tendency to heave, relation to undercutting, commercial value. Heaves readily, even where apparently quite dusty - An entry 8 mos. old and abandoned may have come up 18"

See

(5) Clay sample No. Location,

M. Stratigraphy,

(1) Fossiliferous horizons underground, roof shale has abdt plants in parts of mine, especially in entries off the Main West.

Collection No. Location,

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

See

Collector, HEC Cola: Survey No.

Mine, No 11 Co. Franklin Index No. 05/14-12

N.—UNDERGROUND SHEET (Geol.)

| Symbol (1 division=3 in.) | Description | Inches |
|---|---|---|
| | | and 8 tho |
| | top coal - est. | 30 - 0 |
| | coal | 3 - 7 |
| | charcoal | 0 - 1 |
| | coal | 1 - 3 |
| | charcoal | 0 - 1 |
| | coal | 3 - 3 |
| | char | 0 - 1 |
| | coal | 5 - 5 |
| 24 | char | 15-6 0 - 1 |
| | coal | 24-2 8 - 4 |
| | char py | 0 - 2 |
| | coal | 7 - 5 |
| 36 | char in 3 bands, max 3/8 | 1 - 4 |
| | coal | 4 - 1 |
| | pyrite | 37-7 0 - 1 |
| | char + py | 2 - 2 |
| 48 | pyrite | 0 - 1 |
| | coal | 5 - 5 |
| | char + py | 0 - 1 |
| | coal | 50-0 4 - 0 |
| 60 | char | 0 - 1 |
| | coal with some thin charcoal partings | 17 - 2 |
| | shale and shy coal "BB" | 3 - 2 |
| | | 90 5 |
| 72 | Coal, hard, sl. bony, not well exposed but showing dense and laminated texture | 32 - 2 |
| | | 102 - 7 |
| | Under clay | |
| 84 | Tape 102-5/8 | |
| | Section in off | |
| 96 | off | |
| | Where we ate lunch Saturday | |
| 108 | | |

Collector, HEC

Mine. No 11 Co. Franklin

Coal: Survey No.

Index No. 05 14.12

Q.—COAL SECTION SHEET.

INDEX (36713—500—7-20)

$K_3$ Slip trending ca N-15°E across the 16th North off Main West at 2nd x cut - Down 36"± on West Coal is ca 12'-14' thick here - Not precisely measured

G- The shale roof - as usual thru out the district - is to much fractured to stand alone hence the top two or three benches of coal are left up for roof. Locally the lower 10"-12" of shale will fall leaving a fine smooth shale bed, excellent roof. Most parts of the roof, tho, fall readily up to 15 or more feet, so that lagging is needed.

K-1 The coal seems to part in several benches -

| | | |
|---|---|---|
| top | 12-18 | } most hard and brightest |
| 2nd | 12-18 | } two or all three left for roof |
| 3rd | 12-15 | } |
| 4th | 24-30 | } these soft and friable |
| 5th | 60-66 | } to blue band |
| 6th | 24-36 | below blue band - hard, locally bony |

These are not uniformly developed, but all are commonly recognizable in the faces.

$K_3$ The blue band is usually frozen, tho may not be so tight. Charcoal ptgs usually loose - Thick (2"-3") charcoal chunks up to 36" long are not rare.

$K_3$ a Add. (cf above) Where slips are met - in west, the walls of a pair of entries may vary 3 or more feet locally. In places the slips pinch the BB out giving rise to the idea among the miners (et al) that no BB is present. In reality it is usually thicker than usual, when the face is cleaned up thus:


Here a slip is met along the face the hanging wall lying over the slip line, the foot wall below as in the section at the right.
These are more common where the coal has partings other than the BB.

Collector HEC Index No. 0514-12

X-2 EXTRA NO. 2 County Franklin

# Additional Notes on Old Bench 11.

Maximum grade in coal is on Main East between 6th and 7th North where the coal rises 21 feet in 600 feet


Ver. + hor. scale 1 div = 25 feet

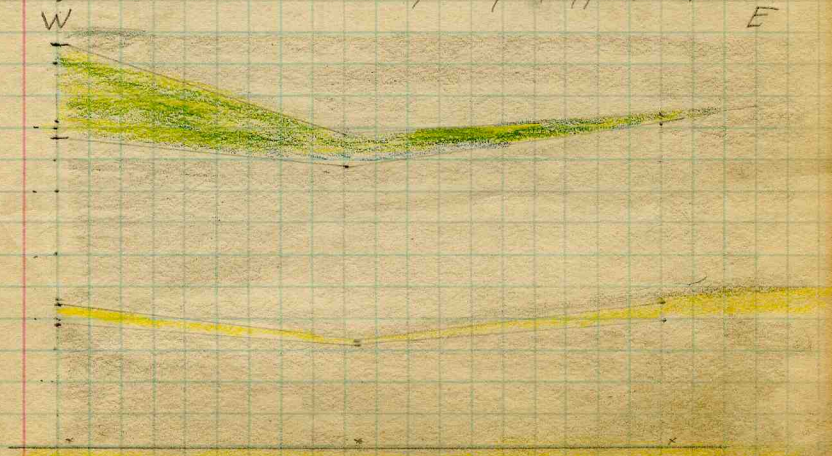
This does not seem too high for an original slope of coal deposition

Measurements in 1 West off 4th NW show as follows:

| | | | |
|---|---|---|---|
| | In. | | Thickness |
| Roof to base of shale split | 75 in | = | 17¾ In |
| Split at face of entry | | | 17- " |
| | In. | | |
| Base of split to floor clay | 61 | 53 | 58 |
| Thickness of split | 1½ | 6 | 18 |
| Base of Blueband to floor | 24 | 19 | 23 |
| Thickness of BB | 3½ | 1 | 3½ |
| | (A) | (B) | (C) |

See next page for addenda

Plotted, this gives the relations below - Note that no linear measurements were made and hor. distance is not scaled - Vert. greatly exaggerated. 1 div = 6"

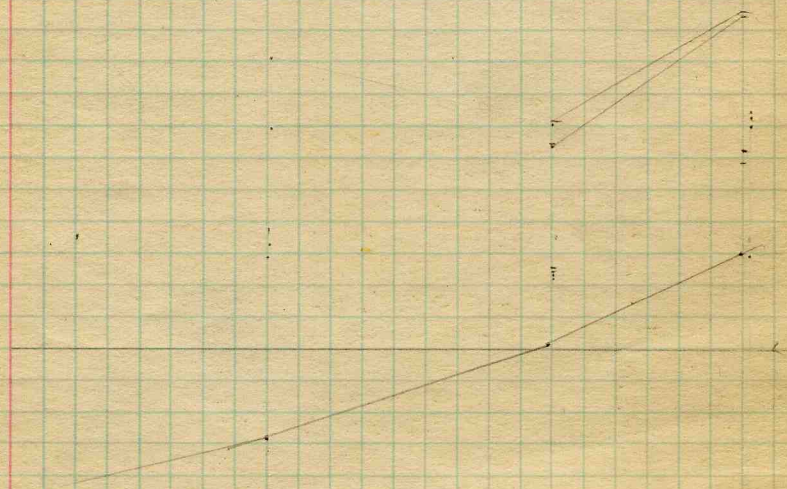



X 3

Franklin 0514-12

It is apparent that only the most careful measurements of distance between floor, roof, and shale partings at precisely measured intervals along entries will give results of sufficient accuracy for study of the amt of compression of the coal & when the roof was last taken. This could be done with this a period of months, while the face was being advanced when the coal is fresh, the floor not heaved and the datum points easily recognized.

The points at which measurements were made were determined by Mr. Jones with considerable accuracy so that the following revision of that section of split coal is as follows.



Franklin 0514-12

X4

| Symbol | Description | Inches |
|---|---|---|
| (1 division = ½ in.) | | |
| | "Slate" – usual shale roof | |
| | top coal 30 | 30-0 |
| | Main bench | 74-[illegible] |
| | B13 2 ¾ @ 31 ½ from floor | |
| | 2 ½ @ 32 0 " " | |
| | Blue band 2 ¾ | 2-4 |
| | Coal | 22-0 |
| | Bottom bench, hard and bony | 10-0 |
| | | 138-4 |

Section at A on mine map.
West rib of 2nd NW ca 1400 FT N of main West, 450' N and 150' E of West ¼ Cor of sec 14 where roof fall obscured complete measurement.

Collector, I & EC
Mine. No 11 Co. Franklin
Coal: Survey No.
Index No. 0514·12

Q.—COAL SECTION SHEET.

| Symbol (1 division=3 in.) | Description | Inches |
|---|---|---|
| | coal - measured back from face to slip". → This is the usual roof, thinner here account low angle slip in top. | 22 - 0 |
| | Coal | 9 - 6 |
| | charcoal parting | 0 - 2 |
| | Coal middle bench | 49 |
| | To top of middle bench 49 | |
| | To B/B Coal 43½ — 0-4½ | |
| | Floor | |

Section measured at face of Main West, Locus "D" on mine maps 1050' S. and 250' W. of West ¼ cor sec 15 Minor partings disregarded

Floor clay

Collector, HEC

Mine. No 11 Co. Franklin

Coal: Survey No.

Index No. 0514-12

Q.—COAL SECTION SHEET.

Symbol 4 | Description | Inches

(1 division = 3 in.)

Top coal - Thickness not known.

70

7

coal 70-0

Section at Face of 16th N.W.

"C" on Mine maps.

shale band (BB) 7-0

coal 26-4

Floor clay

103-4 +

Collector, HEC

Mine. No 11 Co. Franklin

Coal: Survey No.

Index No. 0514.12

Q.—COAL SECTION SHEET.

1 div = 6 inches

| Symbol | Description | Inches |
|---|---|---|
| | shale roof | |
| | Coal, penetrated by drill in roof - quality doubtful, possibly shale partings in it. | 73-0 |
| | Coal with shale lenses | 8-0 |
| | Coal | 25 |
| | shale with coal ptgs | 3 4 |
| | coal | 7 6 |
| | shale | 1 2 |
| | coal | 8 4 |
| | shale | 7-0 |
| | Coal | 10-0 |
| | shale | 14-0 |
| | coal | 15-2 |
| | shale B13 | 6-0 |
| | Coal,- | 30 |
| | | 209 2 |
| | Floor clay | |

850' South & 650' E of West ¼ Cor of Sec 15

(Scale: 1 division = 3 inches).

Sect. 30' South of face of 14th N off Main West - Locus "B"

Sample No. Can No. Lab. No.

Collector, HEC Coal: Survey No.

Mine, No 1 Co. Franklin Index No. 0514.12

Q.—COAL SECTION SHEET.

At 6th N off 2nd E off 3rd NE off Main, East the coal rises so that a 4 foot cut is now being made to reduce the grade. The top of the coal is not exposed but the base shows rather good coal below the blue band zone. The clean shale band is not present, its place being taken (?) by two bony layers each 1¼" thick at 23" and 27" above the floor clay. Sloping floor may add 1" or 1½" to these figures for accuracy. It thus appears that the "blue band" is lower in the coal on this hill than in the "purple coal". The difference in comp. of the band here and where typically developed suggests that it may not be of same age in the two places —.

At 100' from max cut for new grade the band is 24½" – 25" above floor, and is ½" to 2" thick – Tabulated: —

| Locus | | Height – | Thickness |
|---|---|---|---|
| 1. Point of max cut | | 24 | 1¼ bony |
| 2 100' West of | (sample 2) | 24½–25 | ½ – 2 bony |
| 3 – 7 cut West | | 23 | 1½ shale |
| 4th South | | 26½ | 1½ bony |

X5 Old Ben No 11 Franklin 05 14 12

## Christopher. Old Ben No. 11 Mine.

Analyses 30892 to 30896 (p. 31). Bituminous coal, Illinois field, from Old Ben No. 11 mine, a shaft mine 1¾ miles north of Christopher, in sec. 14, T. 6 S., R. 1 E., on the Chicago, Burlington & Quincy R. R. Coal bed, Herrin, or No. 6; Carboniferous age, Carbondale formation. The thickness of the bed averages 10 feet 2 inches. There are three distinct benches—lower one (below "blue band"), middle, and upper; lower part of lower bench is very hard and thin-bedded. Cover at points of sampling, 590 feet. The bed was sampled by C. R. Schroyer on September 5, 1918, as described below:

*Sections of coal bed in Old Ben No. 11 mine.*

| Section<br>Laboratory No. | A.<br>30892 | B.<br>30893 | C.<br>30894 | D.<br>30895 |
|---|---|---|---|---|
| Roof, gray clay shale. | *Ft. in.* | *Ft. in.* | *Ft. in.* | *Ft. in.* |
| Coal | | | 4 6? | 2½–3 |
| Coal | 3 8½ | 1 7 | 2 11 | 3 3½ |
| Coal, dull and bright | | 1 0 | | 2 8 |
| Coal, bright | | 1 11 | | |
| "Mother coal" | ½ | 1 | | |
| Coal | 1 10 | 6½ | 2 0 | |
| "Blue band" | | [a] 5¼ | | [a] 1½ |
| Clay, coaly | [a] 1½ | | | |
| "Mother coal" | | | 1½ | |
| Coal | 2½ | | 2½ | |
| Gray rock | [a] 3 | | [a] 2½ | |
| Coal | 1 10 | 1 3½ | 2 4 | 2 0 |
| Coal, hard thin | | 7 | | 3 |
| Floor, gray clay. | | | | |
| Thickness of bed | 8 0 | 7 5 | 12 3½ | 8 4 |
| Thickness of coal sampled | 7 7½ | 6 11¾ | 12 0½ | 8 2½ |

[a] Not included in sample.

Section A (sample 30892) was cut at face of 2 north entry, 12 west entry, 1 northwest entry, 1,000 feet west, 3,500 feet north of main shaft. Section B (sample 30893) was cut at face of main west entry, 4,500 feet west of main shaft. Section C (sample 30894) was cut at face of 1 northeast entry, 2,700 feet east and 300 feet north of main shaft. Section D (sample 30895) was cut at face of 1 southeast entry, 4 east panel, 29 room, 2,000 feet east of main shaft.

The ultimate analysis of a composite sample made by combining face sample 30892 to 30895 is given under laboratory No. 30896. At time of sampling the daily output was 4,500 tons.