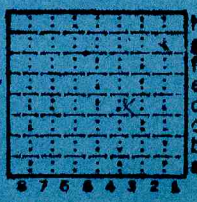
loc. sht. filed

U.S. Fuel Co.

Mine index 93

County No. 558



Sec. 19 D3

T. 18 N. S. E.

R. 11 W.

Index No.

✓

Mine originally operated by: (1)

Date 1906 VERMILION COAL CO.

Original name or number: No. 1.

AVER #13 Illinois Coal Report 1905 p.

LATER OPERATORS

	Date	Operator	Name or No.
2	1908	LITTLE VERMILION COAL CO.	
3	1909	BUNSEN COAL CO.	VERMILION
4	1917	U. S. FUEL CO.	VERMILION
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

*Also owners #See ownership sheet

Railroad, Wagon, Strip, Idle, Abandoned SHAFT MINE

C.E.&I. R.R 1932

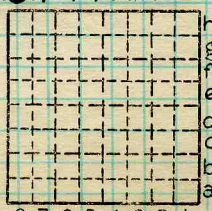
IDENTIFICATION

County No. 358 Coal No. ☐ 6

Coal Report No.

Quad. DANVILLE

County VERMILION



Sec. 19

T. 18 N. S.

R. 11 E. W.

Index No. 241903

COAL MINE OPERATOR

(Sheets) COAL PRODUCTION (Sheet)

Period Mo. Day Year	Period Mo. Day Year	Tons
	1906	9 815
	1907	9 800
	1908	330 342
	1909	403 500
	1910	505 519
	1911	683 130
	1912	640 664
	1913	792 315
	1914	726 413
	1915	659 143
	1916	757 533
	1917	877 920
	1918	976 574
	1919	757 089
	1920	839 573
	1921	753 088
	1922	693 732
	1923	938 081
June 30 1924	June 30 1924	980 681
July 1 1925	Dec. 31 1925	526 694
	1926	1 071 206
	1927	588 900
	1928	827 640
	1929	755 215

SUMMARIES

No.	to	No.			
1906		1929	16	981	938

Railroad, Wagon, Strip, Idle, Abandoned 1932 SHAFTMINE Sec. 19

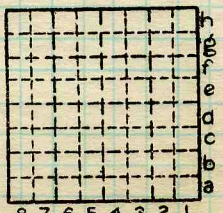
IDENTIFICATION

County No. 558 Coal No. □ 6

Coal Report No. _____

Quad. DANVILLE

County VERMILION



T. 18 N. S.

R. 11 E. W.

Index No. 241903

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)

(Sheets) COAL PRODUCTION (Sheet)

Period Mo. Day Year Mo. Day Year	Tons		
CONTINUED FROM PG. 1.			
1930	679	980	
1931	602	806	
1932	180	086	
1933			Abd.

SUMMARIES

No.	to No.			
1906	1932	18	444	810

Railroad, Wagon, Strip, Idle, Abandoned 1933 SHAFT MINE Sec. 19

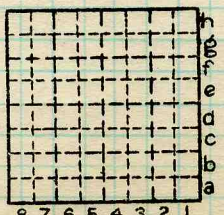
IDENTIFICATION

County No. 558 Coal No. □ 6

Coal Report No.

Quad. DANVILLE

County VERMILION



T. 18 N. ~~S.~~

R. 11 W. ~~E.~~

Index No. 241903

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)

Town, Westville, Kingstown (& P.)
Local Authority,
Level: Auth.,
Method,
R. R., ~~C.C.C.+St.L.~~, C+EI
Location: authority, U.S. Fuel Co.

Surface alt., 680 ft.
Depth to coal, 194.28 ft.
Alt. top coal, ft.
Thickness: Av. 72 in.
Max. in., Min. in.

R. 11W
T. 18N
Sec. 19
(Show R. R.)

Query #13 (1906+ | Operator | Mine Name or No.

19 Bunsen Coal Co. Vermilion

Successor to
Date
Succeeded by US Fuel Company Vermilion
Date 208 S. LaSalle St. Chicago
Succeeded by abandoned
Date 1925 (Coal Catalog) Q
1926 - letter from Co - wrote PRODUCTION. Vermilion

19			U. S. No.
1927	588	900	Vermilion mine
1928			L
1931	602	606	1930 #14
1932	180	086	
Idlos mce 1932 JCQ			

14

Geol. Notes? No Coop. No. 93 Coal secs.? No.
Analyses No. 4668 to 79 (12 anal) 81, 14682
Examined by Ref.
Coal bed name: Local SHIPPING MINE Survey No.
County Vermilion Index No. 2419.74

K.—ACTIVE SHIPPING OR LOCAL COAL MINE.

Location and Elevation Data

Location: Exact Approximate

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

Location by U.S. Fuel Co. map

Date ..... Notebook No. ..... Page .....

Looseleaf ref. .....

Map files No. 14-92-43

Aver #13

Description of Location

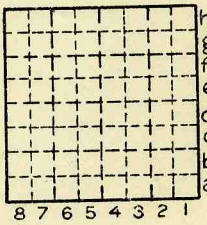
Position in sec., ¼ sec., 40 acres

..... feet from North line W. of R.R.

1380 feet from East line

2400 feet from South line

..... feet from West line



Sec. 19

T 18 N.
S.

R E.
11 W.

Airshafts on W.P.A. Photo stat map.
1610' fr. E. line 1400' fr. E line
2525' fr. S. line 4000' fr. S. line

Other description: .....

Opened 1906

Last operation April 1932

Abandoned Apr. 1941

Coop #93

1930 Summary Coal Dept, 180' to 7'2" #6

Mine Notes: 1909 (Williams) Dpth. of shaft 185'
1928 (Webb)
1912 (Kay) Dpth to butt of coal 180'

#7 coal 43' above #6 (Kay)

Farm .....

No. .....

Company U.S. Fuel Co.

.....

.....

No. Vermilion

County No. 558

Elevation ..... ft.

By .....

Method: Level, transit, alidade, hand level

.....

Elevation of .....

Height of point above ground .....

Date ..... Notebook ..... P. .....

Looseleaf ref. .....

.....

Map files No. .....

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

.....

County Vermilion Quadrangle Danville Index No. 2418 D2

149

(50167—5M—2-38) 2

MOORE'S MODERN METHODS

COAL MINING INVESTIGATIONS

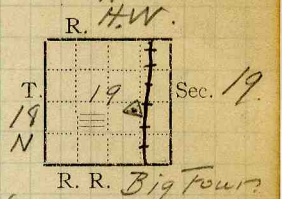
Cooperative Agreement

Mine Name or No., 6

2 mile S S. from Westville.

Operator, 1912 Bunsen Coal Co.

Operator, 191



Entrance, Shaft Elev., ft. { above, 677.234 / below, } ft. Alt.

Depth to bottom coal, 180

Surface Data.

A. Topography Level or gently rolling. See

B. Surficial materials, (1) Character

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

677
180
497 to top
503

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,

COUNTY NO. 10

See

Coal bed name: Local, #6. Survey #6

Collector, Kay. State No. 2419

Mine, Little Vermilion Co. Vermilion Co-op. No. 93

L.—SURFACE SHEET (Geol.)

MOORE'S MODERN METHODS

UNDERGROUND DATA

F. Thickness of rock above bed worked, ~~4 3 ft 6~~. 120 ft.

(1) Important variations,

See

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

Roof most important See

(1) Position,

(2) Character,

(3) Persistence,

(4) Other workable coal beds, #7 43 ft above #6. 48 inches.

See

H. Cap rock, (Soapstone)

(1) Thickness,

(2) Height above coal, Equivalent to I in places

See X 1

I. Immediate roof Gray sh. and some coal.

(1) Thickness, Variable (2) Contact with coal, Very uneven, interbedded with coal.

(3) Horizontal variation, Same material but no stratification.

See X 1.

J. Draw slate. (1) Thickness, (2) Contacts No.

(3) Persistence

K. Coal bed: Max 12 ft Min. 0 ft Av. 6 ft inches

(1) Benches, 2

(a) Position, Upper 3' 7" Lower 1' 11½"

(b) Persistence, Same throuout mine

See

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

Blue band. 7½ in. 23½ in from bottom. Dirt & bone. Some small dirt bands in upper bench.

See

(3) Irregularities in continuity of bed (due to deposition, erosion, or movement). Rolls from roof very important

See X 1

(a) Effect on mining,

See

SECTION

Ft.	In.	Name	Index	Sym.
1	8½	Coal		
		Slate		
1	10½	Coal		
	7½	Slate	#2	
1	11	Coal		
6	2	Total		

Collector, Kay. Coal, #6 State No. 2419

Mine, Bunsen 6 Co. Co-op. No. 93

M.—UNDERGROUND SHEET (Geol.)

B. of M.

Sample 1a. Can. 22645
Little Vermilion.
7th E. South face.
2 mi S. from Westville.

I.S.G.S.

Sample 1m. Can. 20758

B. of M.

Sample 1B Can. 22534

I.S.G.S.

Sample 1N Can. 22646 ✓

Discarded 7½ in blue band.

2/27, 1912.

UNDERGROUND DATA (cont'd.)

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

(a) Relative hardness, Apparently little difference

(b) Lustre, Coal dirtier in upper bench & duller.

(c) Fracture, Irregular.

(d) Texture, See

(6) Impurities in coal, other than bedded,

(a) Kind, Little S prob. gyp. in cracks.

(b) Position and persistence, In fine cracks in most of mine, but constitutes small amount.

(c) Rejected, No. Ease of separation, See

L. Floor: (1) Material Clay.

(2) Thickness few inches, up to 6 ft.

(3) Variation Said to be same material throughout.

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

Floor is dry, but swells readily upon becoming wet, this is used sometimes for raising track, No undercutting done. Heaving not characteristic, Have had no clay sampling done.

See

(5) Clay sample No. Location,

Will send sample later.

M. Stratigraphy

(1) Fossiliferous horizons underground, Many plant impressions in roof; have been collected previously, so none were taken

Collection No. Location,

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

See

Collector, Kay Coal #6 State No. 2419

Mine, L. Vermilion Co. Vermilion. Co-op. No. 93

INDEX

H. Roof very variable throout. Stringers of coal in roof weaken it

Roof, hard gr. sh. shows l, like bedding, falls in lumps, conchoidal. Usually falls until all sh. is reached. Dangerous roof.

K3. The rolls constitute the great problem.

K2. Blue band, dirt and bone. is discarded in block

Collector Kay
Mine Burson #6
X.—EXTRA SHEET No. 1

Coal 6
Co. Vermillion

State No.
Co-op No. 93 2419

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

Cooperative Agreement

Operator, Bunsen Coal Co Date, 2/27, 1912
Mine Little Vermilion Located 2 miles* S from† Westville
Location in mine, 7th E. South face
Total (vertical) depth from surface at point of sampling, 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 ⅜ 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.
1			
2	Shale, gray	+	
3	Coal, bright		2 0 3/4
4	Dirt band		thin
5	Coal		2 2 1/2
6	Blue band (dirt or bone)		7 1/2
7	Coal		2 3
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
	Total,		7 3 3/4

Is coal wet or dry?
Time exposed, hours, minutes.
Weight, gross, net.
What are the impurities, and how do they occur?

What are shipped? 2, 4, 5, 7
What are excluded from the sample? 7 1/2" blue band #6
Coal bed, Grape Creek (No 6)

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

Town, Westville Mine, Little Vermilion Co. Vermilion
SAMPLE NO. OAN NO. No. 93

I.—COAL SAMPLE SHEET. Sampler. Webb

(a) 2645 Oak.
(b) 2534 "
(m) 2070 Urbana
(n) "

#4670 → 2419

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

Cooperative Agreement

Operator, Bunsen Coal Co. Date, 2/27, 191

Mine, Little Vermilion Located 2 miles* S from† Westville

Location in mine, S. face

Total (vertical) depth from surface at point of sampling, 186 ft. to bottom

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.
1	Gray shale, (soapstone)		
2	Coal, laminated, dirty	3	11
3	lower half contains		
4	several small dirt bands.		
5			
6	Blue band, Dirt		
7	+ bone		8
8			
9			
10	Lower bench coal	2	7
11	Bright clean.		
12			
13			
14			
15	88/186 9,0		
16	792		
17	Tape Total,	7	4

Is coal wet or dry? Dry

Time exposed, 1 hr. 42 hours, minutes.

Weight, gross, net.

What are the impurities, and how do they occur? 7 Dirt bands in upper bench, small. Blue band #6.

What are shipped? Blue band rejected in lump only.

What are excluded from the sample? Blue band 8 in.

Coal bed, 8

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

Town, Westville Mine, Little Vermillion Co. Vermilion

No. 93

I.—COAL SAMPLE SHEET. Sampler. Webb. 2419

SAMPLE NO. CAN NO.

A 22499 Pgh; #4471 M 22482 Urbana

B 22508 " N 22606 "

4" I beam for 8' span.
6" " for 10' "
8 " for 12 "
12 " up to 16'

Sample

2 A — Can. No. 22499
Little Vermillion. 2 mi. S from Westville
Face main S.
Feb 27, 1912.

Urbana

2 M. Can. 22443. ✓

B. of M.

2 B. —— 22508.

2 N. —— 22606. ✓

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

Cooperative Agreement

Operator, Bunsen Coal Co. Date, 2/28, 1912

Mine, Little Vermilion Located 2 miles* 5 from† Westville

Location in mine, 7E off Main N.

Total (vertical) depth from surface at point of sampling, 180 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.
1			
2	Gray shale.		
3			
4	Coal, dull, laminated		4 3
5	fine bands dirt, S, and		
6	CaCO3		
7	Blue band, bone, + shale.		7
8			
9			
10			
11	Coal, B~~lack~~ clear		22 1/2
12	+ brighter than above		
13			
14	Clay.		
15	71.5) 70 (9.8		
16	643.5 56.50		
17	643.5 Taps		
	TOTAL,	5	11 1/2

Is coal wet or dry? Dry.

Time exposed, 1 hours, 20 minutes.

Weight, 35 gross, 10 net.

What are the impurities, and how do they occur? Fine dirt bands, Little S and CaCO3.

What are shipped? All except 7 in lump

What are excluded from the sample? 7

Coal bed, #6

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

Town, Westville Mine, Lit. Vermilion Co. Vermilion. No. 43

I.—COAL SAMPLE SHEET.

Sampler. J. M. Webb.

Sample No 4

SAMPLE NO. 4 CAN NO. #4676 — 22485 A, 22504 B, 22448 N, 22548 M

Pgh. Urbana

Can. 5748
Urbana. Sample 4 M.
Little Vermilion 7th E off Main N.

Sample 4 A. Pittsburg.
Can. 22485.

Sample 4 N
Can No. 21144
Urbana.

Sample 4 B.
Can No. 22504.
Pittsburg.

Sample 5 a Can No. 22400,
Pittsburg, Pa. 5 a

Sample No. 5, M. Can No. 22446 Pillar coal
Urbana Del. (Pillar work)

Sample 5 B. Can No. 22525.
Pittsburg Pa. Pillar coal

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

Cooperative Agreement

Operator, Bunsen Coal Co Date, Feb 29, 1912

Mine, Little Vermilion located 2 miles* S from† Westville

Location in mine, ~~1 N off S E North~~ Face of 7 West off main N.

Total (vertical) depth from surface at point of sampling, 200 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.
1	No record found. J. W. De Wolf (Lab sheet filled, however)		
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17	Total,		

Is coal wet or dry?

Time exposed, hours, minutes.

Weight, gross, net.

What are the impurities, and how do they occur?

What are shipped?

What are excluded from the sample?

Coal bed, Grape Creek

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

Town, Westville Mine, Little Vermilion Co. Vermilion

SAMPLE NO. 6 CAN NO. No. 93

I.—COAL SAMPLE SHEET. Sampler. J M Webb

A 22430 Pgh

B 22450

M 22562 Urbana

N 22484 "

2419

#4674

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

Cooperative Agreement

Operator, Bunsen Coal Co. Date, Feb 28, 1912

Mine, Little Vermilion Located 2 miles* S. from† Westville.

Location in mine, S. 7 W. Face

Total (vertical) depth from surface at point of sampling, 180 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.
1			
2	Coal, laminated, Bright to	4	2
3	dull, frequent small bands		
4	of dirt		
5			
6	Dirt		2½
7			
8			
9			
10	Coal, dull dirty		4
11			
12	Dirt, blue band.		3
13			
14			
15	Coal, Bright, clean		
16	except for small	2	7½
17	Sulph.		
	Tape Total,	7	1

Is coal wet or dry? Dry

Time exposed, 48 hours, minutes.

Weight, gross, net.

What are the impurities, and how do they occur? Sulphur in small bands, and fine dirt bands in upper bench.

What are shipped? All but blue band.

What are excluded from the sample? 6 + 12

Coal bed, #6.

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

Town, Westville Mine, Little Vermilion Co. Vermilion No. 93

I.—COAL SAMPLE SHEET. Sampler. J. M. Webb. 2419

Sample No. 3

SAMPLE NO. 3 CAN NO. A 22444 Pgh, #4678

B 22622 " M 22427 Urbana

N 5750 "

This sample should run high in ash, since some disagreement ~~exists~~ exists as to width of rejected bands.

Samples 2 + 3 should be higher than 1 in ash. Coal is really dirtier ~~by afterbut~~ but a few dirt bands were unnecessarily included.

3A. Can. No 22444.
Little Vermilion, 7th W. off Main S. Face
Pittsburg.

3M. Can No. 22427.
Urbana

3B — Can No. 22622
Pittsburg.

3N. — Can No. 5750.
Urbana

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, Brunson Coal Co Date, Feb 29 1912

Mine, Little Vermilion Located 2 miles* S from† Westville Ill.

Location in mine, 1 North 7th & 8 East North

Total (vertical) depth from surface at point of sampling, 200 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.
1	Gray shale		
2	Coal bright		2 1/2
3	Blue Band (Dirt)		1 1/2
4			
5	Coal bright		23
6	Blue Band		6
7			
8	Coal Dull		23 1/2
9			
10	Old pillar		
11			
12			
13			
14			
15			
16			
17			
	TOTAL,		78 1/2

78.5) 7.5 (9.6%
70 65
43 50

Is coal ~~wet~~ or dry?

Time exposed, 1 hour hours, 1 hour minutes.

Weight, 36 gross, net.

What are the impurities, and how do they occur? Blue clay

What are shipped?

What are excluded from the sample? 7 1/2 in

Coal bed, Grape Creek (No 6)

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

Town, Westville Ill Mine, Little Vermil Co. Brunson

No. 93

I.—COAL SAMPLE SHEET. Sampler. Jno. Kelly

SAMPLE NO. 5 CAN NO. 1 #4679

A 22400 Pgh

B 22525

M ~~22446~~ Urbana

N ~~22602~~

2419

Sample No. 5 K. Can No. 22602. Urbana. Ill.

Sample No. 6 A. Can No. 22430 Pittsburg, Pa.

Sample No 6 B. Can No. 22450. Pittsburg. Pa

Sample No. 6, 6 M Can No. 22562 Urbana, Ill.

Sample No. 6 K. Can No. 22484 Urbana Ill. Face of 7 West off Main Fold

ILLINOIS COAL MINE NOTES

TOWN Georgetown T. R. S. Little Vermillion CO.
COAL BED Grape Creek DATE 3.16.09 COLLECTOR R.Y. Williams
OPERATOR Little Vermillion Coal Co MINE Little Vermillion
HEAD OFFICE Old Colony Bldg Chicago, Ill.
CAPACITY 2200 Aver MARKETS, FRT. Chicago 65¢
ENTRANCE Shaft 185
CAGE Parker Steel Self Dumping ENGINES 1st Motion Danville
DRUM 8' Cylindrical 3 wide
SCREENS Shaking Parker 7' wide
1¼" 2½" 4" round. STORAGE None
VENTILATION Crawford + McCrimmon 20' 90 R.P.M. Blowing
GAS, SOURCE None
COAL THICKNESS, AV. 7½' MAX. 9½' MIN. 5½' horsebacks FT.
SECTION LOCATED Room #3 on 7 West South.

No.		In.	No.		In.
1	Roof		7	Charcoal	2
2	Coal	18	8	Coal	3½
3	Sulphur + Slate Parting	¼	9	Band	2
4	Coal	16	10	Coal	26
5	Charcoal	2	11	Floor	
6	Coal	8		TAPE	78

78 | 225 | 2.8
9 | 156
690
604

NOT SHIPPED 5,7,9 NOT INCLUDED ✓ CAN ✓ SAMPLE ✓

PHYSICAL PROPERTIES BY NOS.

Roof. Gray Sandy Shale 11' to 50' Treacherous
2-4-6-8-10. Lusterful Long Grained
Floor. 6"-18" Fireclay, above hard Sandstone.
Fireclay does not heave.

ROOF Gray Sandy Shale 11' to 50'
FLOOR Fire Clay 6"-18" then hard S. Stone.
DIP S.W. 1½% + 1½° W CLEAT Irregular Short.
FAULTS, ETC. Run NE + SW about 45° + are horsebacks.
MACHINES None
HAULAGE 2-10 Tons 2-6½ Ton Gathering
12 Mules. CARS 3 ton (Watt style) $40.
DRAINAGE No water to handle except surface water dropping down Sha
WORKING SYSTEM Room + Pillar
ENTRIES, MAIN 9 CROSS 9 ROOMS 30' X 200'
PILLARS, MAIN 21 CROSS 21 ROOM 10
DRAWN Largely TIMBERS Split + Round
8' long
4" Diameter.
Pillars between Entries + 1st Room 21'.

Note also: Variation in coal, impurities, roof, structure.
Collect records, analyses, fossils. Note land values, etc.

Brattice: Material:- Fallen Roof 6'-8' thick filled with with dust & Mud. When these leak too bad, They are plastered over with Cement. Brattices on the North side are so plastered. Others leak

Sprinkling: once every about 2 weeks, watercar is used on the mule haulage roads only.
Mine except South Entry was dry, but road contained more pulverized roof than coal.

Electrical Equipment for lights & Motors. Voltage 250
Cross bonding only around each switch.
Protected Flexible Bonding Inside Fish plate, on one rail only.
Trolley Wire 64" above rail, about 6" outside rail.
Motors built for 9" outside Rail.

Props. 4"-6" diam. 1¢ per ft. 8 ft long.

Ties Both sawed & hewed.
Sawed 4"x6" motor roads 7¢
hewed 3"x5" mule rooms 6¢

Rails in rooms 2½"x4". wood all kinds, mostly oak, 8#, 16#, 18.20
" on Main haulage 30#
" " Gathering motor haulage & mule haulage 16#

Augur Bits .22 ft diam = 2⅔"

Special "C" Powder, smaller grain than Regular "C".
Manufactured by United States Powder Co, Coalmont, Ind.

All rooms shot on solid.

Entries pick mined on top, sheared on Right side, and shot with a snubber and 2 holes on pavement.

13 Shifts Worked during March 1st to 15th 1909
27,319 Tons shipped " " " "
923 Kegs (25 lb) Powder " " " "
2,101 Tons per shift " " " "
71 Kegs (25 lb) Powder per shift.
1775# powder per shift.
1.18 Tons of Coal per pound of powder.

Room necks 9'x18' Track in center of room
Rooms average 5 Rows of Props on 5' centers.

Bottom Arrangement excellent:-
Concrete sides & arch extend back 167' from Shaft.
Width of Bottom 14'. Circular arch of 10' radius.
Double track throughout arch. Lighted at both ends with 8 incandescent bulbs.
On opposite side of shaft Holmes car hoist run by compressed air, Elevates empties.

Bad Practices observed:-
Solid shooting in rooms.
Large amount of powder used in blasting.
(the yield is only 29.6 net tons per 25-lb Keg of powder)
Mule haulage roads excessively dirty, Gob is dangerous to travel for men & mules.
Mine is very dry: but roof material forms more than 1/2 of dust on haulways.
Brattices (except north side) are leaky.
Begin shotfiring before all the men have left mine.
Hoist and lower men too rapidly.
Men travel haulage roads.
No lights or troughs at trolley wire frogs.
Sprinkling performed only on mule haulways, and that only about once every 2 weeks with water car dampening pavement.
One room neck turned in advance last crosscut.
Lights & lamps in cap
Large cans

Readings:-

Surface 1:50 p.m	Wet Bulb	31.75°
	Dry "	37.00°
	Barometer	29.04"
Foot of Shaft. 2:10 p.m.	Wet Bulb	47.00°
	Dry "	48.50°
	Barometer	29.265
	Velocity	330 '/min.
	Area	100. □'
Last Crosscut Main South Between Roos 5&6 3.00 p.m	Wet Bulb	59.00°
	Dry "	59.50°
	Barometer	29.272"
	Velocity	125.
	Area	42.
Surface 3:30 p.m Snow in air, sending down Scattered flakes.	Wet Bulb	32.00°
	Dry "	35.50°
	Barometer	29.05"
West Split Return 4:10 p.m Before shotfiring	Wet Bulb	55.00°
	Dry "	56.00°
	Barometer	29.235"
	Velocity	245.
	Area	63.
	Sample air Bottle #	8921.

CO_2 = 0.0% ; O_2 = 20.75% ; CO = 0.0%

North Split Return 4:20 p.m	Wet Bulb	46.00°
	Dry "	47.50°
	Barometer	29.235
	Velocity	200'/min
	Area	73.44

North Split Return
7:15 p.m
10 minutes after
Shot firers reached
Surface
110 Shots fired
16⅓ Kegs (25#) Powder

Wet Bulb	46.50°
Dry "	48.50°
Barometer	29.275"
Velocity	295.1/min.
Area	73.44□'

Sample Air # 8920
CO_2 = 0.0%; O_2 = 20.95%; CO = 0.0%

West Split Return
7:35 p.m
1 minute before
shot firers came out
& 3 minutes after last
shot was fired.

Wet Bulb	55.00°
Dry "	56.00°
Barometer	29.272
Velocity	310
Area	63.

West Split Return
7:45 p.m
10 minutes later than
above, but at same place
130 Shots fired
19¼ Kegs (25#) Powder.

Wet Bulb	55.00°
Dry "	56.25
Barometer	29.272
Velocity	310
Area	63.

Sample Air # 8919
CO_2 = .05% O_2 = 20.95%; CO = 0.10%

Surface
8:10 p.m

Wet Bulb	26.5°
Dry "	29.75
Barometer	29.07

Total shots fired in mine 3.17.09 was 479
the average shot containing 3.7-lbs powder, the yield
per shot being 4.37 net tons coal, per shot.

Continuation of Readings.
3-17-09.
Mine not Working

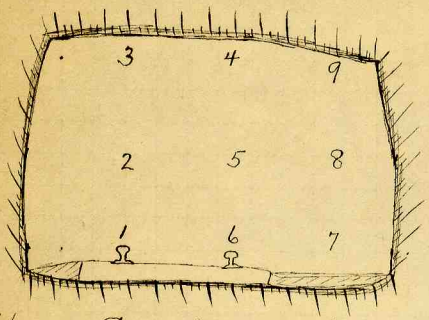
Surface 7:50 a.m	Wet Bulb	15.50°
	Dry "	17.00°
	Barometer	29.29"

Readings to go with Anemometer measurements below:-(at "C")

West Split Return 10:10 a.m	Wet Bulb	55.0°
	Dry "	56.0°
	Barometer	29.505
	Velocity	240
	Area	90.4

Readings to go with Anemometer measurements below:-(at "D")

Intake. North Split 50' North Airshaft 1:50 p.m	Wet Bulb	29.00°
	Dry Bulb	31.00°
	Barometer	29.45
	Velocity	1200
	Area	45.6



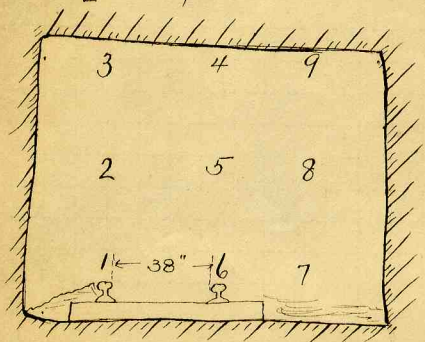
Elev. Section at A
Scale 1'

Very Uniform Roof & Rib from "A" to "C".

Timber set at "B" for trolley wire
2x4 Cap, Round Posts: 5" diam.

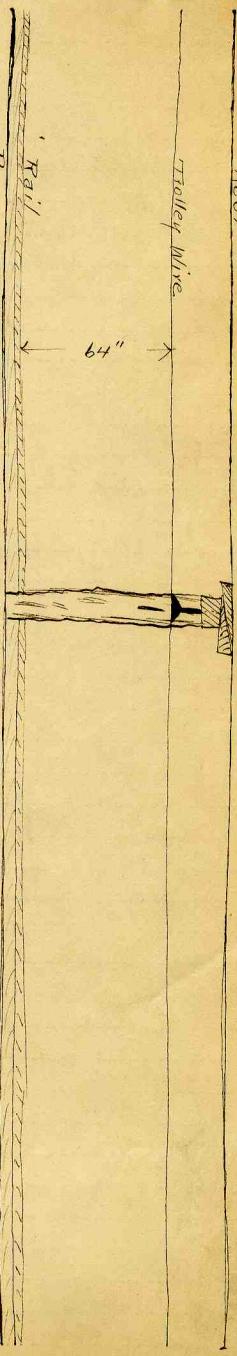
Mine Idle During Tests.
Brazil 20' Fan 90 R.P.M. Blowing

Looking Inby



End Elevation at "C".
Scale 1'

West Split Return.
Side Elevation.
Scale 1'



Morning of 3.17.09

Anemometer Readings at "C"

Position "1", 8" above Rail.

374'	Velocity per 2 minutes	187' per minute
342'	" " "	171' " "
362'	" " "	181' " "
362'	" " "	181' " "
4)1440		4)720 per minute
360'	Velocity per 2 minutes	180' " "

Position "2"

430'	Velocity per 2 minutes	215' per minute
434'	" " " "	217' " "
470'	" " " "	235' " "
512'	" " " "	256' " "
460'	" " " "	230' " "
5)2306		5)1153
461	Velocity per 2 minutes	231' per minute.

Position "3" 8" Below Roof.

350'	Velocity per 2 minutes	175 per minute
350'	" " " "	175 " "
370'	" " " "	185 " "
350'	" " " "	175 " "
4)1420		4)710
355	Velocity per 2 minutes	177½ per minute

Position "4" 8" Below Roof

294	Velocity per 2 minutes	147 per minute
330	" " " "	165 " "
332	" " " "	166 " "
294	" " " "	147 " "
4)1250		4)625
312½	Velocity per 2 minutes	156¼ per minute.

Anemometer Readings at "C"
(Continued)

Position "5"

422	Velocity per 2 minutes	211	per minute
426	" " "	213	" "
488	" " "	244	" "
482	" " "	241	" "
466	" " "	233	" "
5 | 2284		5 | 1142	
456 4/5	Velocity per 2 minutes	228 4/5	per minute.

Position "6" 8" above rail.

370	Velocity per 2 minutes	185	per minute
376	" " " "	188	" "
340	" " " "	170	" "
372	" " " "	186	" "
4 | 1458		4 | 729	
364 1/2	Velocity per 2 minutes	182 1/4	per minute.

Position "8"

366	Velocity per 2 minutes	183	per minute
432	" " " "	216	" "
420	" " " "	210	" "
432	" " " "	216	" "
4 | 1650		4 | 825	
412 1/2	Velocity per 2 minutes	206 1/4	per minute.

Position "9" 8" below roof.

320	Velocity per 2 minutes	160	per minute
344	" " " "	172	" "
328	" " " "	164	" "
3 | 992		3 | 496	
330 2/3	Velocity per 2 minutes	165 1/3	per minute.

Summary:— Anemometer Readings at "C" 3.17.09

Combining Positions "1","6","7" for travel of air on pavement, shows Average Velocity 8" above rail, 181 feet per minute.

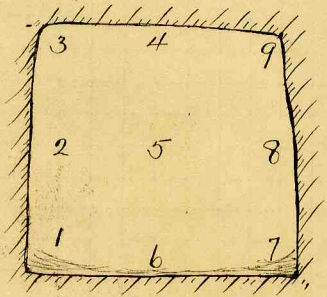
Combining Positions "2","5","8" for travel of air center of roadway. shows Average Velocity, 222 feet per minute

Combining Positions "3","4","9" for travel of air along roof, shows Average Velocity, 8" below roof, 166⅔ feet per minute.

Anemometer Readings at "D".

Noon 3.17.09

Location:—
North Split Intake
70' North of Airshaft.
In Aircourse.



End ~~Side~~ Elevation "D"

Scale 1".

Anemometer Readings at "D."

Noon 3·17·09.

Position "1." 8" above Pavement.

1080	Velocity per 2 minutes	540 per minute
1060	" " " "	530 " "
2)2140		1070
1070	Velocity per 2 minutes	535 per minute

Position "2"

1014	Velocity per 2 minutes	507 per minute
1016	" " " "	508 " "
2)2030		2)1015
1015	Velocity per 2 minutes	507½ per minute

Position "3". 8" below roof.

980	Velocity per 2 minutes	490 per minute
924	" " " "	462 " "
2)1904		2)952
952	Velocity per 2 minutes	476 per minute

Position "4" 8" below roof.

1258	Velocity per 2 minutes	629 per minute
1195	" " " "	597½ " "
1208	" " " "	604 " "
3)3661		3)1830½
1220⅙	Velocity per 2 minutes	610⅙ per minute

Position "5"

1200	Velocity per 2 minutes	600 per minute
1180	" " " "	590 " "
2)2380		2)1190
1190	Velocity per 2 minutes	595 per minute.

3.17.09.

Anemometer Readings at "D"
(Continued)

Position "6". 8" above pavement.

1400	Velocity per 2 minutes	700	per minute
1460	" " " "	730	" "
2)2860		2)1430	
1430	Velocity per 2 minutes	715	per minute

Position "7". 8" above pavement

1680	Velocity per 2 minutes	840	per minute
1698	" " " "	849	" "
1682	" " " "	841	" "
3)5060		3)2530	
1686⅔	Velocity per 2 minutes	843⅓	per minute.

Position "8"

1930	Velocity per 2 minutes	965	per minute
1900	" " " "	950	" "
2)3830		2)1915	
1915	Velocity per 2 minutes	957½	per minute

Position "9" 8" below roof.

1750	Velocity per 2 minutes	875	per minute
1648	" " " "	824	" "
1640	" " " "	820	" "
1600	" " " "	800	" "
4)6638		4)3319	
1659½	Velocity per 2 minutes	829¾	per minute.

Summary:- Anemometer Readings at "D" 3.17.09

Combining Positions "1", "6", "7" for travel of air on pavement,
Shows Average Velocity, 8" above rail, 698 feet per minute

Combining Positions "2", "5", "8" for travel of air center of roadway
Shows Average Velocity as 687 feet per minute.

Combining Positions "3", "4", "9" for travel of air along roof,
Shows Average Velocity, 8" below roof, 639 feet per minute

Location and Elevation Data

Location: Exact Approximate

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

Location by.....

Date..... Notebook No..... Page.....

Looseleaf ref.....

Map files No. 14-92-43

Description of Location

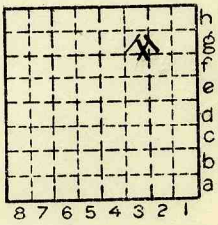
Position in sec., ¼ sec., 40 acres

.....feet from North line

1525 feet from East line

~~3450~~ 3975 feet from South line

.....feet from West line



Sec. 30

T 18 N.

R 11 W.

Other description:.....

Sunk

Farm.....

No.....

Company VERMILION MINE

.....

.....

No.....

County No. ~~[illegible]~~

.....

Elevation..... ft.

By.....

Method: Level, transit, alidade, hand level

.....

Elevation of.....

Height of point above ground.....

Date..... Notebook..... P.....

Looseleaf ref.....

.....

Map files No.....

Description of item: (drill hole, mine, etc.) AIRSHAFT ABD

.....

County VERMILION Quadrangle 149 Index No. 2430 G3

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