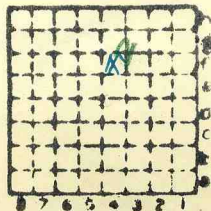


W. Virginia CC.

487

✓
MI 169



Sec. 5

T. 9 ~~N~~
S.

R. 3 ~~E~~
W.

Index No.



Mine originally operated by: (1) **West Virginia Coal Co.**

Date **1907**

Original name or number: **#1**
Illinois Coal Report p.

LATER OPERATORS

Date	Operator	Name or No.
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		



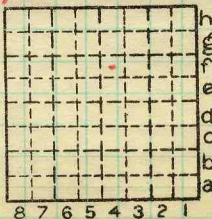
* Also owners #See ownership sheet

Railroad, Wagon, Idle, Abandoned *Before 1930*
Mo. P. SHIPPING MINE
IDENTIFICATION

County No. **487** Coal No. **6**

Quad. **W. Frankfort** Part

County **Williamson**



Sec.	5
T.	9
R.	3
N.	S.
E.	W.

Index No. **0705 f4**

COAL MINE OPERATOR

Period				Tons			
Mo.	Day	Year	Mo.	Day	Year		

SUMMARIES

No. to No.

Railroad, Wagon, Idle, Abandoned

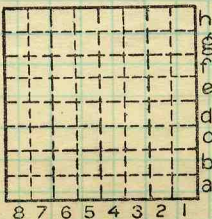
IDENTIFICATION

County No. 487 Coal No.

W. Frankfort

Quad. Part

County Williamson



Sec. 5
 T. 9 N.
 R. 3 E.
 W.
 Index No.
 0705 f4

COAL MINE—PRODUCTION



LOCATION AND ELEVATION

Location: side R. R. side R. R. side Highway No. on top. map Location sheet

Elevation: Method, 1. Est. () ft. 2. Inst. (kind Hand Level) 491 ft.

By G.H.C. NB79 p8 Data sheet

DEPTH

Authority To coal ft. Authority Rail to rail ft. Top of coal above rail. (Est. Rule) ft. To coal 108 ft.

ALTITUDE OF TOP OF COAL

By estimated data By instrumental data 383 ft.

Thickness

Max. in. Min. in. Aver. 78 in.

GEOLOGICAL DATA

Mine notes, date Brief Coop No. 169 Pyr. inv. Coal Ash inv.

CHEMICAL DATA

Analyses Face U. I. 12772-4 B. M. 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

Misc. tests: Coking. Cleaning Boiler

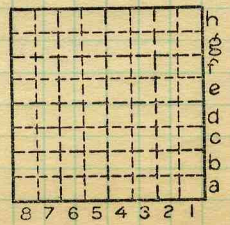
Published descriptions:—

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

County No. 287 Quad. W. Frankfort County Williamson

Coal No. Part 6

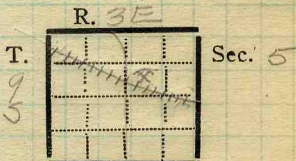


Sec. 5 T. 9 N. S. R. 3 E. W. Index No. 0705 f4

COAL MINE LOCATION AND DATA

Town, *Marion* Surface alt., _____ ft.
 Local Authority, *McHlpin, W.H. (M.M.)* Depth to coal, *108* ft.
 Alt. top coal, _____ ft.
 Level: Auth., _____ Thickness: Av. *84* in.
 Max. *96* in., Min. *66* in.
 Method, _____

R. R., *Mo. Pac.*



Location: authority, *Mine map*

(Show R. R.)

Operator

Mine Name or No.

19 *21* *West Virginia Coal Co.* *West Virginia*

Successor to

Date

Succeeded by

Date

Succeeded by

Date

PRODUCTION.

							U. S. No.
19			<i>1700-1800 ton daily</i>				

Geol. Notes? *Yes* Coop. No. _____

Coal secs? *3*

Analyses No. _____

Examined by *Netzeband*

Ref. *Loose leaf*

Coal bed name: Local

Survey No. *6*

County *Williamson*

Index No. *0705.76*

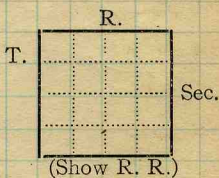
K.-ACTIVE SHIPPING OR LOCAL COAL MINE.

Town, *Marion*
 Local Authority,

Surface alt., ft.
 Depth to coal, *108* ft.
 Alt. top coal, ft.
 Thickness: Av. *6* *6* in.
 Max. *102* in., Min. *72* in.

Level: Auth.,
 Method,

R. R.,
 Location: authority,



Operator

Mine Name or No.

19 *West Virginia Coal Co*

Successor to
 Date
 Succeeded by
 Date
 Succeeded by
 Date

PRODUCTION.

									U. S. No.
19									

Geol. Notes?
 Analyses No.

Coop. No.

Coal secs?

Examined by

Ref.

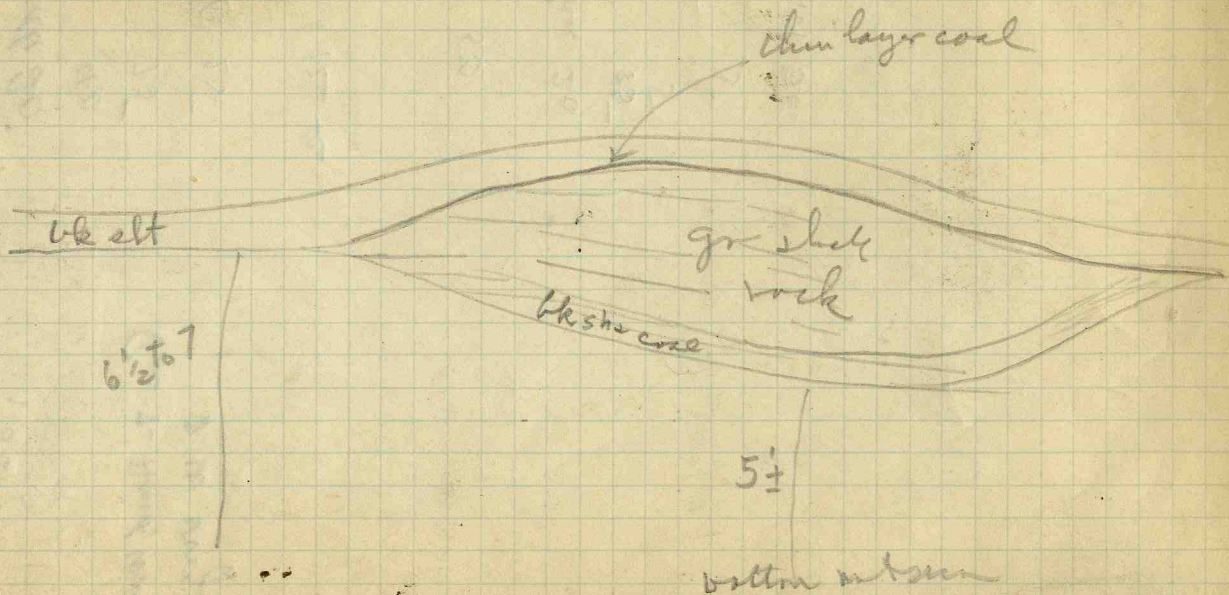
Coal bed name: Local
 County

Survey No.
 Index No.



K.—ACTIVE SHIPPING OR LOCAL COAL MINE.

Heartburg



Postage 15

Carbide 5

Lamp medle 20

Filin 40

Kuife 75

Sandwich 25

84
106-8

Per 7- Nend wall
D W veng

Postage 12 + 2

June 27

Blisf 50

Carbide Can 20

Carbide 25

Ruip 5

Orange 5

T. S. S. v. r. 30



COAL MINE NOTES.

COUNTY *Williamson*TOWN *Marion.*MAP No. *0705*T. *95*R. *3E*S. *5*OPERATOR *West Virginia Coal Co.*OFFICE *Marion*MINE *West Virginia.*

TIPPLE

ENGINES *Direct Acting.*

BOILERS

DRUM *Conical.*

SHAFT

CAGE made at Belleville.

HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

Machine mined. Chain machine

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

0705

COAL LAND OWNED

LEASED

HELD IN FEE

COST OF LAND OWNED

LEASED

HELD IN FEE

ADDITIONAL NOTES



COAL MINE NOTES.
CONTINUED.

OPERATOR *West Virginia Coal Co.* MINE *West Virginia.*
 ENTRANCE *Shaft* NAME OF COAL BED *#6*
 ELEVATION *491* THICKNESS OF COAL
 DEPTH TO FLOOR *116* MAX. MIN. AV. *8'*
 ALTITUDE OF COAL *375*
 LOCATION OF SECTION

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

SAMPLE No.

CAN No.

CONDITION

GROSS WEIGHT

TIME EXPOSED

NOT SHIPPED

NOT INCLUDED

SECTION

Feet

PHYSICAL PROPERTIES BY NUMBERS

ROOF

FLOOR

DIP *N.E.*

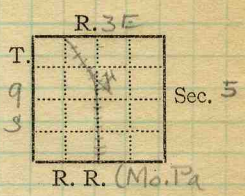
FAULTS, ETC.

GAS

COLLECTOR *Gady*

REFERENCE *11879 (C21+G3)* DATE *0705*

Mine Name or No., *Nol*
4 mile *SNE* from *Marion*
 Operator, 1918 *West Virginia Coal Co*
 Operator, 191



Entrance, *shaft* Elev., *485±* ft. $\left\{ \begin{array}{l} \text{above,} \\ \text{below,} \end{array} \right.$ *seal level*
 Depth to bottom coal, *108* ft. Alt. *377*

SURFACE DATA.

- A. Topography, *Gently rolling. No effect on Mining* See
 B. Surficial materials. (1) Character, *Glacial till & loess 5-10' ±*
 (2) Thickness, *5-10' ±* (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc. *None known*

- C. Outcrops, *No* (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, *7* Survey No. *6*
 Collector, *Cady June 27 1918*
 Mine, *W. Virginia* Co. *Williamson* Index No. *0705*
 L.—SURFACE SHEET (Geol.)

F. Thickness of rock above bed worked,

(1) Important variations, None

See

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

See

(1) Position, Between coal + ls caprock

(2) Character, - Gray shale or soapstone

(3) Persistence, Not persistent (1/3 mine? - my observation)

(4) Other workable coal beds,

See

H. Cap rock, Gertyna limestone

(1) Thickness, Reported 30' - doubtful

(2) Height above coal, 0 - > 5

See X-1+3

I. Immediate roof, ^① Blk shale or ^② gray shale ("rock") or ls.

(1) Thickness, ^① = 3' or less ^② = 5' or less (2) Contact with coal,

Coal tends to hold to blk shale

(3) Horizontal variation, Considerable -

See X-1, 2

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

(3) Persistence, None

K. Coal bed: Max. 108-9 Min. 60± Av. 78 inches

(1) Benches, 3.

(a) Position, Upper 12 to 18, Lower 18" to 22"

Middle - rest of bed

(b) Persistence, - Complete

See

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

shale plgs rarely 1/2" thick. Thin pyrite lenses rarely over 1/4". Coal fairly clean

See

(3) Irregularities in continuity of bed (due to deposition, erosion, or movement, - a few slips in roof

and coal

(a) Effect on mining, - little or none

See

See

SECTION				
Ft.	In.	Name	Index	Sym.

Collector, Cady June 27, 1918

Mine, W. Virginia

Co. Williamson

Coal: Survey No. 6

Index No. 0705

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

- (a) Relative hardness, *Harder than at Henderson Wallace*
by relatively soft
- (b) Lustre, *not unusual*
- (c) Fracture, " "
- (d) Texture, " " See
- (6) Impurities in coal, other than bedded, *Few vertical seams.*
- (a) Kind, *specimens of sulphur + white lime or gypsum*
- (b) Position and persistence, *Irregular.*
- (c) Rejected, *only when large - not common* Ease of separation, See

L. Floor: (1) Material, *fine clay*(2) Thickness, *not know - though several feet*(3) Variation, *squeezes when clay thick*

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

*In part of mine where b near coal cla.
 Squeezes take place prob. due to soft floor +
 heave caused by heavy limestone which
 is difficult to break*

See

(5) Clay sample No.

Location,

M. Stratigraphy, *1*

(1) Fossiliferous horizons underground,

Collection No.

Location,

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

See

Collector, *Cady June 27, 1918*Coal: Survey No. *6* Mine, *W Virginia*Co. *Williamson*Index No. *0705*

H+I Of much interest in this mine are the irregularities in the roof, which produce conditions rather difficult to handle

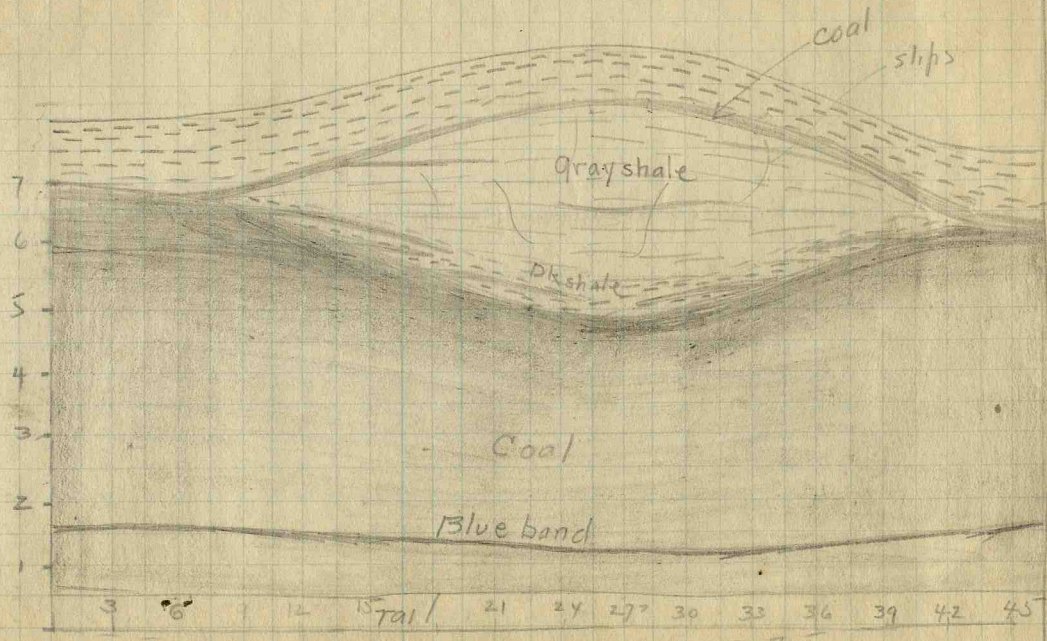
The normal roof of the coal is called black slate and normally runs 2 to 3 ft or less and lies between the coal & the limestone. In places the limestone rests directly on the coal - the shale being out at such places the coal is rather thinner than elsewhere. This does make a good top and the coal is pulled to the top. Elsewhere the coal is left on the top. In places gray shale forms the roof wedging under black shale which is commonly present above the gray shale. Where the gray shale is clean & without coal partings it holds up pretty well - but not so well as the slate. Commonly the coal is thicker under the gray shale than elsewhere. One measurement of about 9 feet was made at such a place.

Then there are ribs: These resemble the rock in the Danville region. In these a lens of gray shale commonly with 6-8" of thickness at the base lies in the upper part of the coal, separated from the true best roof but a stringer of coal at such places the coal fuses into the lens at the sides and the entire mass seems to be cut by stringers of coal. The coal at the thickest part of the lens may thin down to 5 feet or less for a very short distance (1-5 feet). The edges of the lens may be marked by chips and chips in roof are hard to hold.

Collector Cady June 27, 1918
Mine W. Virginia
X-Extrasheet 1 Co. Williamson

Survey No 6
Index No 0705

A sketch of one of the rocks is shown below



Coal No. 6

June 27 1918

Collector Cady
W-Virginia Mine

Index No. 0705

Co Williamson

X Extra 2

H In one place in mine where face occurs it was evident that the limestone caprock contained a cave 1 foot or so high. Fall seems to have been due to breaking away of lower bench of limestone.

This is a very interesting mine because of roof peculiarities.

Taken around by Mr. W^m Wallace.

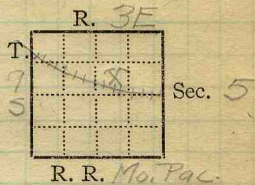
Extra 3 (Cady) June 27
W. Virginia

Index No 0705

Mine Name or No., *West Virginia*
 mile from

Operator, 1911 *West Virginia Coal Co. Co.*

Operator, 191



Entrance, *shaft* Elev., ft. $\left\{ \begin{array}{l} \text{above,} \\ \text{below,} \end{array} \right.$
 Depth to ~~bottom~~ coal, *108* ft. Alt.

SURFACE DATA.

A. Topography, *Slightly rolling* See

B. Surficial materials. (1) Character, *Clay & till.*

(2) Thickness, *30'* (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc. *There is 4' of quicksand between the clay & rock which gives trouble in shaft sinking*

C. Outcrops, (1) Character, See *X1*

(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.

Pfeiffer Herrin

See drill record sheet,

E. Notes on surrounding area,

See

Coal bed name: Local,

Survey No. *6*

Collector, *Natzband*

Mine, *W. Va.*

Co. *Williamson*

Index No. *0705.76*

L.—SURFACE SHEET (Geol.)

F. Thickness of rock above bed worked, 77' at shaft.

- (1) Important variations, See

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

Grey shale

- (1) Position, Above coal
 (2) Character, Grey, sandy shale, many slips
 (3) Persistence, In patches thruout mine
 (4) Other workable coal beds, See XI

H. Cap rock, Limestone

- (1) Thickness, 10-18'
 (2) Height above coal, Feather edge to 6'±
 See

I. Immediate roof, Black or grey shale.

- (1) Thickness, (2) Contact with coal,

Feather edge to 6'±
 (3) Horizontal variation, Black to grey shale - also in thickness See XI

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

- (3) Persistence, 2 to 6"
 Very little in mine

K. Coal bed: Max. 96 Min. 66 Av. 84 inches

- (1) Benches, None.
 (a) Position,

(b) Persistence, It is reported that it

breaks in 3 benches in some places See XI
 (2) Bedded impurities, kind, position in benches, persistence, ease of separation. Blue band (3/4 to 2" sticks to coal in some parts of mine. Charcoal lenses and clay partings not persistent.

See

- (3) Irregularities in continuity of bed (due to deposition, erosion, or movement, The bed is very

irregular due to erosion or dip See XI

- (a) Effect on mining, Make mining difficult See

SECTION				
Ft.	In.	Name		Sym.
26		Soil		[Green]
4		Sand		[Yellow]
45		Sandrock		[Blue]
13		Shale		[Yellow]
18		Limestone		[Red]
2		Bl. Slate		[Black]
7		Coal		[Grey]
57		Firday		[Yellow]

1 Di. = 10'

Collector, Netzeband

Coal: Survey No. 6

Mine, West Virginia Co. Williamson

Index No. 0705.76

K. (5) Physical character of Coal,

- (a) Relative hardness, *Coal hard for immediate vicinity Bottom coal hardest.*
- (b) Lustre, *Top-glance & dull, middle & bottom bright.*
- (c) Fracture, *Blocky - Good cleat but very variable*
- (d) Texture, *Laminated.* See

(6) Impurities in coal, other than bedded, kind, position, persistence, ease of separation, etc. *Pyrite stringers & lenses all thru coal and in all parts of mine. Calcite or gypsum fracture fillings. Pyrite rejected wherever possible. Sticks tightly to coal.* See

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

- (2) Thickness, *5' + 5" to lime boulders. Ls thought to be within another foot.*
- (3) Variation, *to be within another foot.*

(4) Note character, condition, tendency to heave, relation to undercutting, commercial value. *Grey shale, plastic when wet, heaves badly - several places lost thru heaves, used to undercut upon, value unknown.*

See

(5) Clay sample No. _____ Location, _____

M. Stratigraphy,

- (1) Fossiliferous horizons underground, *Shale + limestone - only in the west by observation.*

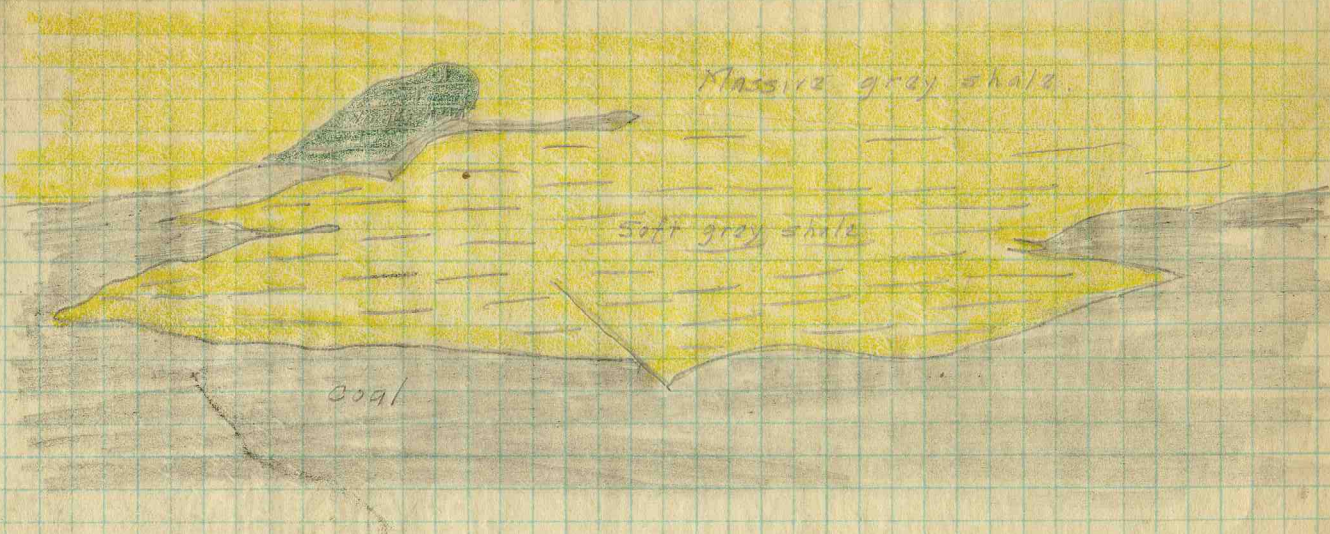
Collection No. _____ Location, _____

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

See

Collector, *Netzeband* Cola: Survey No. *6*
 Mine, *West Virginia* Co. *Williamson* Index No. *070576*

- H₂ 2nd & 7th East limestone comes to coal.
- I₃ Coal reported to be thicker under black slate. Black slate in all parts of mine in patches. Slate feathered edge to 18". Some places directly above coal, others between grey shale & limestone.
- K1₆ Mr. McAlpin reports that the coal breaks in three benches in some parts of mine but this is rare.
- B₃ In 10th West there a cave-in where a yellow clay runs in. The clay is wet and very plastic. Mr. McAlpin is of the opinion that the cave will reach the surface in time.
- I₃ The grey shale is very irregular and appears to occur in lenses between the coal and black shale in some parts of the mine. Its characteristic appearance in lenses is apparently due to deposition as in many places thin fingers of coal are found in the shale and in some places between the grey shale and the black shale which overlies it.
- The black shale is hard, brittle and fissil



3000' from bottom in Main East.

K3

The surface of the coal, both top & bottom, is very irregular, having many small hills and hollows in it. The irregularities are apparently due to deposition for there are very few slips in the shale and these are small, due to settling. The irregularities are very local, but occur in all parts of the mine.

(a)

Whenever slips occur in the roof timbering is required as the grey shale is very treacherous and comes down without warning.

Operator, *West Virginia Coal Co.* Date *June 20, 1921*
 Mine, *W. Va. Mine* Sec. *5* T. *9S* R. *3E*
 Located, *4 N.E.* miles from *Marion*
 Location in mine, *2nd E. off 6th N; #7 Room*

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
			<i>Shale</i>	
<i>10</i>	<i>1</i>	<i>1</i>	<i>Coal Roof 6-10"</i>	
		<i>2</i>	<i>Coal, pyrite stringers</i>	<i>38</i>
		<i>3</i>	<i>Pyrite</i>	<i>1/4</i>
		<i>4</i>	<i>Coal</i>	<i>7</i>
		<i>5</i>	<i>Shale</i>	<i>1/4</i>
<i>38</i>	<i>2</i>	<i>6</i>	<i>Coal, pyrite stringers</i>	<i>15</i>
		<i>7</i>	<i>BB shale</i>	<i>1</i>
		<i>8</i>	<i>Coal</i>	<i>15</i>
			<i>Trace 74"</i>	
<i>1/4</i>	<i>3</i>			
<i>7</i>	<i>4</i>			
<i>1/4</i>	<i>5</i>			
<i>15</i>	<i>6</i>			
<i>1/4</i>	<i>7</i>			
<i>15</i>	<i>8</i>			
			(Note character and thickness of floor)	
			Total thickness of coal.	<i>84</i>
		Condition, <i>As Mined</i>	Time, hr. min.	
		Wt. Gross, <i>25 lbs.</i>	Net, lbs.	
What Nos. shipped by Co.?				
Excluded from sample: No. <i>1, 7</i>				
Sample represents <i>73</i> in. tons.				
Impurities? How do they occur?				

Sample No. *1* Can No. *V-21-57* Lab. No. *12772*
 Collector, *Wilson* Coal: Survey No. *6*
 Mine, *West Virginia* Co. *Williamson* Index No. *070576*

Operator, *West Virginia Coal Co* Date *June 20, 1921*
 Mine, *W. Va.* Sec. *5* T. *9 S* R. *3 E*
 Located, *4* miles from *Marion*
 Location in mine, *2nd S. off 2nd E; Room #19*

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
			<i>L.S. Rept'd. 10-18'</i>	
		1	Coal pyrite lenses + stringers	52
		2	Pyrite	1/4
		3	Coal	18
		4	BB shale + charcoal	2
		5	Coal	17
			<i>Tape 85"</i>	
<i>52</i>	<i>1</i>			
<i>1/4</i>	<i>2</i>			
<i>18</i>	<i>3</i>		(Note character and thickness of floor)	
			Total thickness of coal.	<i>85</i>
<i>2</i>	<i>4</i>	Condition, <i>As Mined</i>	Time, hr. min.	
		Wt. Gross, <i>25</i> lbs.	Net, lbs.	
		What Nos. shipped by Co.?	<i>1, 2, 3, 5.</i>	
	<i>5</i>	Excluded from sample: No. <i>4</i>		
		Sample represents <i>83</i> in.	tons.	
		Impurities? How do they occur?		

Sample No. *7* Can No. *N-21-58* Lab. No. *12773*
 Collector, *Wilson* Coal: Survey No. *6*
 Mine, *West Virginia* Co. *Williamson* Index No. *070576*
 R.—COAL SAMPLE SHEET.

Operator, *West Virginia Coal Co.* Date *June 20, 1921*
 Mine, *W. Va.* Sec. *5* T. *9S* R. *3E.*
 Located, *4* miles from *Marion*
 Location in mine, *Face of 10th W.*

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
			<i>Shale 3-4' to fill</i>	
<i>14</i>	<i>1</i>	<i>1</i>	<i>Coal Roof 14"</i>	
		<i>2</i>	<i>Coal</i>	<i>11</i>
		<i>3</i>	<i>Charcoal</i>	<i>1/4</i>
		<i>4</i>	<i>Coal</i>	<i>18</i>
<i>11</i>	<i>2</i>	<i>5</i>	<i>Charcoal</i>	<i>1/2</i>
		<i>6</i>	<i>Coal</i>	<i>15</i>
<i>7</i>	<i>3</i>	<i>7</i>	<i>Pyrite</i>	<i>1/4</i>
		<i>8</i>	<i>Coal</i>	<i>18</i>
<i>18</i>	<i>4</i>	<i>9</i>	<i>BB shale</i>	<i>1</i>
		<i>10</i>	<i>Coal</i>	<i>4</i>
<i>1/2</i>	<i>5</i>	<i>11</i>	<i>Pyrite</i>	<i>1/4</i>
		<i>12</i>	<i>Coal</i>	<i>12</i>
<i>15</i>	<i>6</i>	<i>13</i>	<i>Pyrite</i>	<i>1/4</i>
		<i>14</i>	<i>Coal</i>	<i>2</i>
<i>7</i>	<i>7</i>		<i>78" tape</i>	
<i>18</i>	<i>8</i>			
<i>7</i>	<i>9</i>		(Note character and thickness of floor)	
<i>7</i>	<i>10</i>		Total thickness of coal.	<i>92</i>
<i>7</i>	<i>11</i>			
<i>12</i>	<i>12</i>		Condition, <i>As Mined</i>	Time, hr. min.
			Wt. Gross, <i>25 lbs.</i>	Net, lbs.
<i>1/2</i>	<i>13</i>		What Nos. shipped by Co.?	
<i>7/2</i>	<i>14</i>			
			Excluded from sample: No. <i>1, 9</i>	
			Sample represents <i>77</i> in.	tons.
			Impurities? How do they occur?	

Sample No. *3* Can No. *N-21-59* Lab. No. *12774*
 Collector, *Wilson* Coal: Survey No. *6*
 Mine, *West Virginia* Co. *Williamson* Index No. *0705.76*
 R.—COAL SAMPLE SHEET.

Pyrite

Geological occurrence

- 1) Manner: ① Pyrite is found mostly in thin lenses $\frac{1}{4}$ " and thinner and in vertical streaks and as intimate mixture of coal + pyrite
- ② Very locally in mine sulphur lenses up to 3" thick are found in top coal and roof - only seen along one entry for not over 50 feet.
- ③ Also as streaks or veinlets in septarian boulders in a few places.

2. Size of masses. Streaks (1) rarely over 6" to $\frac{1}{4}$ " usually $\frac{1}{16}$ " x 2" or 3". Impregnated coal + bright sulphur - effort 1" \pm quite commonly could not be recovered.
- (2) Sulphur balls ^{in slabs} weighing 50-100 lb. - 70% sulphur. Only about 6-10 seen. Unimportant because small quantity.
- (4) Streaks in septarian boulders. Sulphur prob. not over 10% whole. Much calcite. Possibly ls. impregnated with pyrite.

3 Measurements

Location	1	2	3	4	5	6	P x3	P %
	CP	CP	CP	CP	CP	CP		
1 5 N off 2nd E	740	760	79 $\frac{1}{2}$	77 $\frac{1}{2}$	680			<1
2 End 5 North	770	700	800	820	60 $\frac{1}{2}$	790		<1
3 Extreme E (2nd E)	75 $\frac{1}{2}$	790	810	870	771			<1
4 Main S (end)	720	62 $\frac{1}{2}$	690	690	63 $\frac{1}{2}$	60 $\frac{1}{2}$		<1
5 Extreme W	72 $\frac{1}{2}$	750	800	760	750	770		<1

- Notes. 1. Few bright faces sulphur
 2. " thin lenses + bright faces
 3. One S mass with small fine S.

Collector Cady June 27 Coal No 6
 Co. W. Virginia Coal Co.
 Mine No. 1 Pyrite #1 Co. Williamson Index No 0705

Sample No location Description

C18-8	Bottom	S from cars
C18-9	2nd E 200yd from Main S.	Sulphur boulder.
C18-10	5N off 2nd E	S-sprangle Bright S
C18-11	End of 2nd E	" " "
C18-12	End of Main S	Sulphur lvs 1/2 inch
C18-13	Exhaustive West	Piece of concretions.
C18-		

- 7 Pyrite rarely rejected except few concretions from roof
- 8 Percent of pyrite in concretions = 70-80%
- 9 Pyrite recoverable probably negligible doubt of a mine car load a month

This mine is little if any better than Henderson - Wallace mine