

Sahara cc bought up the O'Garra's  
properties in the 1930's. but these mines had  
been abd in 1924. There is no record of

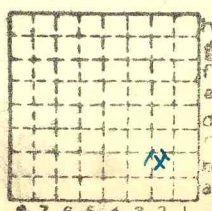
Sahara.

a Sahara #9

O'Gara #9

Mi. #43,  
BM 7

579



Sec. 21

T. 9 # S.

R. 6 E.

Index No.

Town, Harrisburg  
Local Authority,

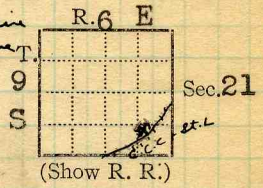
Surface alt., 380 ft.  
Depth to coal, 152 ft.  
Alt. top coal, 228 ft.  
Thickness: Av. in.  
Max. in., Min. in.

Level: Auth., Deuchler, NB97-p37

Method, H.L.

R. R., ~~Big 4~~ C.C.C + St.L.

1240' from E line  
780' from S line



Location: authority, Deuchler  
O' Gara map

Operator

Mine Name or No.

1906 O' Gara Coal Co  
332 So. Michigan Ave, Chicago.

No. 9

Successor to

Date

Succeeded by

Date

Succeeded by

Date

PRODUCTION.

U. S. No.

1915					511	115			
1925-26	Idle (Dept. of Mines)								
1927	- 0 -								
									#579

Geol. Notes? Yes    Coop. No. 43    Coal secs.? 11  
Analyses No. 4985 to 4990, 4992,    COUNTY  
U.S. 4636, B.M. 4413, 7421, 7420, 4414, 12795, 12794, U.S. 4622, State 1113  
Examined by Whler:KDW:    Ref.

Coal bed name: Local SHIPPING MINE    Survey No. 5

County Saline    Index No. 0821.71

K.—ACTIVE SHIPPING OR LOCAL COAL MINE

Idle since 1923



COAL MINE NOTES.

MAP No. *0821*

S. *21 S.E. SE*

COUNTY *Saline*

TOWN

T. *9S*

R. *6E*

OPERATOR *O'Gara Coal Co*

OFFICE *Chicago*

MINE # *9*

TIPPLE *Automatic Dump. Three tracks*

ENGINES

BOILERS

DRUM

SHAFT

CAGE

HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

*Electric Chain machines*

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 *shaker screen.*

RESCREENED

SIZES

PER CENT

PROPORTION AND SIZE OF WASHED COAL

DAILY OUTPUT *1300± Tons.*

UTILIZATION

MARKETS

FREIGHT RATES

SELLING PRICES AT MINE

*0821*

COAL LAND OWNED

LEASED

HELD IN FEE

COST OF LAND OWNED

LEASED

HELD IN FEE

ADDITIONAL NOTES





COAL MINE NOTES.  
CONTINUED.

OPERATOR *O'Gara Coal Co.*

MINE # *9*

ENTRANCE *Shaft.*

NAME OF COAL BED # *5*

ELEVATION *380*

THICKNESS OF COAL

DEPTH TO FLOOR *158.5* MAX.

MIN.

AV.

ALTITUDE OF COAL *221.5*

LOCATION OF SECTION *4<sup>th</sup> Room off 3<sup>rd</sup> W. off Main North. 400' NW from shaft.*

No.	SECTION.	In.
1	<i>Draw slate</i>	<i>1 1/2</i>
2	<i>Coal</i>	<i>7</i>
3	<i>Pyrite parting</i>	<i>1/8</i>
4	<i>Coal</i>	<i>79 7/8</i>
5	<i>Hard shale</i>	
6		
7		
8		
9		
10		
11		
12		
Tape		Total

SECTION

Feet



SAMPLE No. *W 35*

CAN No.

CONDITION *Dry.*

GROSS WEIGHT *35*

*79 7/8"*

TIME EXPOSED *45 min*

NOT SHIPPED

NOT INCLUDED *?*

PHYSICAL PROPERTIES BY NUMBERS

*Thickness of coal uniform.*

ROOF *1 1/2" Draw slate then hard gray shale Good roof.*

FLOOR *Hard gray shale.*

DIP

FAULTS, ETC. *No faults.*

GAS *Some gas.*

COLLECTOR *Wheeler  
Deuchler*

REFERENCE *N.B. 139, P. 14.  
97; 37*

DATE

*0821*

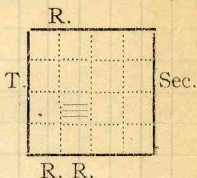
COAL MINING INVESTIGATIONS  
COOPERATIVE AGREEMENT

Mine Name or No., #9 O'Gara Coal Co.

1/4 mile SW from Harrisburg

Operator, 1912 O'Gara Coal Co.

Operator, 191



Entrance, Shaft Elev., 380 ft. { above,  
Depth to bottom coal, 158 ft. Alt. { below,

SURFACE DATA.

- A. Topography *Rolling* See
- B. Surficial materials, (1) Character
- (2) Thickness, (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc.

- 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, #51

Survey #5

Collector, K. White

State No. 0821

Mine, #9

Co. Saline.

Co-op. No. 43



## UNDERGROUND DATA (cont'd.)

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

(a) Relative hardness, *Very hard*(b) Lustre, *Very Bright*(c) Fracture, *semi-conchoidal to blocky*

(d) Texture,

See Sheets  
1, 2, 3.

## (6) Impurities in coal, other than bedded,

(a) Kind, *A few Sulphur balls and streaks*

(b) Position and persistence,

*Irregular*

(c) Rejected,

*Yes*

Ease of separation,

*By Hand*

See Sheets #2

L. Floor: (1) Material *Carbonaceous Shale* *Sandy, clay, calcareous*

(2) Thickness

(3) Variation

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

*Below, shale, a sand, [calcareous?] clay or (impure sandy lime?) pebbles. It contains numerous roots or stems; and slacks readily to a clay or muck.*

See Sheet #2

(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, *KD White*Coal *5*State No. *0821*Mine, *#9*Co. *Saline*Co-op. No. *43*

## INDEX

## Supplementary.

Notes made while sampling.

Coal averages a little over 6ft in thickness, is very hard & contains sulphur bands, especially near top & bottom. On west side of mine, a large amt of bone (up to 11 inches) of bone makes machine mining difficult. At the places sampled the lower half of the bed contained more clean coal than the top half.

Roof of gray shale darker than that of #6, holds up well in some parts of the mine.

Toward west side, boney coal and carbonaceous shale with partings & some horizontal slip planes, forms bad roof.

4-5 inches of draw slate occurs in some places under the bone. Roof is so slabby that altho it looks good, test shows it ready to fall.

Practically no fireclay in floor. Very hard carbonaceous shale. Grades down into sandst.?

Collector

Kay

Coal

#5

Mine

O'ara #9

Co.

Saline

State No. 0821

Co-op No. 43



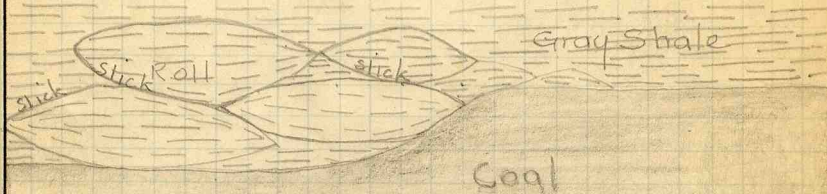
## INDEX

## North Side of Mine

1<sup>st</sup> N. 2<sup>nd</sup> W North

K<sub>5</sub> Bone coal with good coal between replaces top bench in this part of mine. It falls in blocks that are rather small, and the whole is gobed.

I The roof is full of slips nearly impossible to hold. Where slips are prevalent, slate appears to be blacker, and filled with plant impressions. The bone coal where it will stay up is left as roof, and makes a fairly good top. The parting between the bone coal and the other part of the bed is very distinct.



Sketch of Roll in Room 15-9th W. North  
Showing tendency of roof shale to occur in lenses whose surfaces are slickensided.

J In one room draw slate remained up as roof for 2 years, then the top of the entire fell shearing clean to the ribs. Mass about 3' thick.

K<sub>5</sub> Section Face 9th West, North  
Coal of section is very hard, (much harder than Franklin Co. coal); very bright; interlaced by cleavage planes along which calcite is deposited. Dull and bright coal are well mixed, thin bands of glance coal scattered thru bed. Layers of mother coal rather thin occur at frequent intervals. Some bone and a few sulphur balls and streaks also in bed.  
See Section, Sheet M

Collector K<sub>5</sub> White  
Mine 9

Coal 5  
Co. Saline

State No. 0821  
Co-op No. 43



## INDEX

## South Side of Mine

K5

9<sup>th</sup> W. North  
 Cleat N62°E  
 " N27°W

Dip towards swag on 3E. S entry 7°

South side of mine, boney coal occurs a couple of inches thick, at top of bed, Entire bed about same hardness, top coal is however some what drier

4<sup>th</sup> S off 4E. South

1. Coal (top coal) 13"
2. Coal, laminated, breaks up badly into small pieces filled with slips, planes make an angle about 70° with floor, considerable calcite scattered thru bed 6'-0"

Face 10<sup>th</sup> E. off Main South

1. Top bench 13"
2. Lower bench 4'-0"

The coal is bright, very hard, does not soil the fingers, Glance coal well desiminated in knife edge bands. Layers of mother coal 1/4" thick scattered thru bed. Sulphur in balls and streaks scattered thru bed, in varying amount in different parts of the mine, Calcite is universally present, especially along the slip planes of the bed.

- I. Where top is normal, it falls in thin tabular pieces. The shale has a pitted appearance due to small sulphur balls included in it. Pots, occur frequently in it, and generally have an irregular stringer of coal in their centre. Some of the slips occurring, have a definite direction one follows approximately a course of N10°W

Collector K D White  
 Mine # 9

Coal 5  
 Co. Saline

State No. 0821  
 Co-op No. 43

## INDEX

I

South Side of Mine  
 Roof a dark gray shale filled with sulphur balls.  
 A number of slips occur in roof shale. These generally make water at first. Roof in slips very bad, falls in masses 2' thick, cannot be held up,

J

Draw slate very carbonaceous, falls in square block and cannot be held up, falls in square blocks.

K<sub>r</sub>

Room 1, 3 S.E.  
 Section

1. Slate roof
  2. Draw slate; black and blocky 2'-0"
  3. Bone Coal 3"
  4. Coal (Variable thickness) 10"
  5. Coal 5'-8"
- Parting generally occurs in most of mine

The entire coal bed is filled with slip faces which are covered with calcite.

The bed is a series of flexures, the coal thinning down a foot or so on the raises.  
 Some of the high points apparently slope in all directions towards the swags.

Room 1, 3<sup>rd</sup> off 3 E.S.  
 Cleat N60°E  
 N35°W

5<sup>th</sup> N off 3<sup>rd</sup> E.S.  
 Cleat N55°E  
 " N32°W

Room 3, 9<sup>th</sup> E, Main South  
 Cleat N52°E  
 N36°W

1<sup>st</sup> N, 2<sup>nd</sup> W North  
 Cleat N55°E

Collector KD White

Mine # 9

X.—EXTRA SHEET No. 1

Coal # 5

Co. Saline

State No. 0821

Co-op No. 43





# COAL MINING INVESTIGATION

## COOPERATIVE AGREEMENT

Operator, *O'Gara Coal Co* Date, *June 19, 1912*  
 Mine, *#9* Located *1 1/4* miles\* *S* from † *Harrisburg*  
 Location in mine, *4th North off 3rd East South (2500' ft from shaft)*  
 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.	Coal	2	0
2*	Blue Band		1/2
3	Coal		3.
4*	Blue Band		1/2
5	Coal	3	7 1/2
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
<b>20</b>			
TOTAL,		5	5

Is coal wet or dry? *Damp*  
 Time exposed, \_\_\_\_\_ hours, \_\_\_\_\_ minutes.  
 Weight, *40* gross, \_\_\_\_\_ net.  
 What are the impurities, and how do they occur? *Blue Bands*  
 48.20  
 What are shipped? *1-3-5*  
 What are excluded from the sample? *2-4*

7.74 Coal bed, *#5*  
 \*Direction (N., NE., etc.). †Nearest railway station.

Town, *Harrisburg* Mine, *O'Gara #9* Co. *O'Gara Coal Co.*  
**SAMPLE NO.,** *50* **CAN NO.** *30* No. *43 (O'Gara)*  
 I.—COAL SAMPLE SHEET. Sampler. *0821*

*1616* *#4985* *Maxwell*  
*Stoff*  
*Wallace*  
 12620

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, O'Gara Coal Co. Date, June 19<sup>th</sup> 1912  
 Mine, O'Gara #9 Located 1/4 miles S from † Harrisburg  
 Location in mine, 3<sup>rd</sup> South, 4<sup>th</sup> West South (500' from shaft)  
 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 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.
1	Coal	6	7 1/2
2			
3			
4			
5			
6			
7			
8	21		
9			
10			
11			
12			
13			
14			
15			
16			
17			
TOTAL,		6	7 1/2

Is coal wet or dry? Wet  
 Time exposed, 2 hours, 30 minutes.  
 Weight, gross, net.

What are the impurities, and how do they occur? None

What are shipped? All

What are excluded from the sample? None

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

Town, Harrisburg Mine, #9 O'Gara Coal Co. O'Gara Coal Co.  
 SAMPLE NO. 28 NO. 28 No. COOP #43  
 I.—COAL SAMPLE SHEET. Sampler. Mc. Donald #821  
 Stafford  
 Wallager

#4986  
 12678



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, *O'Gara Coal Co.* Date, *June 19*, 191*2*  
 Mine, *O'Gara #9* Located  $\frac{1}{4}$  miles\* ~~S~~ from *Harrisburg*  
 Location in mine, *Face of ~~2nd West~~ North*  
 Total (vertical) depth from surface at point of sampling, *150* 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.
B. Coal 1 x	Roof - bone coal	—	—
2 x	Coal - fairly clean	1	6
3 x	Mother of Coal		$\frac{3}{4}$
4	Coal - dirt streaked	3	$1\frac{1}{2}$
5 x	Bone-coal		$\frac{1}{2}$
6	Coal - fairly clean		6
7 x	Bone coal & coal		11
8	Floor - hard carbonaceous	—	—
9	Shale		
10			
11			
12	#7 is mainly removed by undercutter - rest shipped		
13			
14			
15			
16			
17			
TOTAL,		6	$11\frac{3}{4}$ (?)

Is coal wet or dry? - *damp*  
 Time exposed, *0* hours, *50* minutes. *83 3/4 ?*  
 Weight, *40#* gross, net.  
 What are the impurities, and how do they occur? *Mother of coal and dirt bands scattered throughout.*  
 What are shipped? *2, 4, 6, part of 7*  
 What are excluded from the sample? *1, 3, 5, 7*

Coal bed, # *5*  
 \*Direction (N., NE., etc.) †Nearest railway station.  
 Town, *Harrisburg* Mine, *O'Gara #9* Co. *O'Gara Coal Co.*  
 SAMPLE NO. *73* CAN NO. *St. D. 42* No. *430821*  
 I.—COAL SAMPLE SHEET. Sampler. *Nobel & Smith.*  
*#4987*  
*12321* *83 3/4 - 12 1/4 = 71 1/4*

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, O'Gara Coal Co. Date, June 19, 1912  
 Mine, O'Gara #9 Located  $\frac{1}{4}$  miles \* S from Harrisburg  
 Location in mine, Room 40 - 2nd West North  
 Total (vertical) depth from surface at point of sampling, 150 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	Roof - Gray shale		
2	Draw Slate		5
3	Coal - Bright		4
4	Bone		1 $\frac{1}{2}$
5	Coal - Clean Bright		3
6	Sulphur		2 $\frac{1}{2}$
7	Coal - laminated - dirt bands		1 $\frac{1}{2}$
8	Sulphur		8 $\frac{1}{2}$
9	Coal - Clean	4	
10	Floor - Hard gray shale		
11			
12		2	6
13			
14		7	2 $\frac{1}{2}$
15			
16			
17			
TOTAL,		7	4 $\frac{1}{2}$

Is coal wet or dry? - dry  
 Time exposed, 2 hours, 45 minutes.  
 Weight, 70# gross, net.

What are the impurities, and how do they occur? Sulphur as pyrite - small dirt bands through coal - plates of CaSO4 on fractures  
 What are shipped? 3, 5, 7, 9  
 What are excluded from the sample? 1, 2, 4, 6, 8

Town, Harrisburg Mine, O'Gara #9 Co. O'Gara Coal Co.  
 SAMPLE NO. 79 OAN NO. S+D #3 No. 43 0821  
 I.—COAL SAMPLE SHEET. Sampler. Nebel & Smith.

# 4989  
9 3/2 - 10 4/2 = 83  
 12,514





# COAL MINING INVESTIGATION

## COOPERATIVE AGREEMENT

Operator, *O'Gara Coal Co.* Date, *June 20*, 191*2*  
 Mine, *O'Gara #9* Located *1 1/4* miles\* *S* from † *Harrisburg*  
 Location in mine, *Face of 4th East off North*  
 Total (vertical) depth from surface at point of sampling, *150* 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*	Roof-grayshale		
2*	draw slate		1 1/2
3	Coal-bright with dirt bands	2	10
4	Mother of Coal-Soft		2 1/2
5	Coal-dirt & sulphur banded	3	2 1/2
6*	Floor-hard grayshale		
7			
8			
9			
10			
11	Coal, dirty		
12			
13			
14			
15			
16			
17			
TOTAL,		6	2

Is coal wet or dry? *wet*

Time exposed, *50* hours, *50* minutes.  
 Weight, *50#* gross, net.

What are the impurities, and how do they occur? *-mother of coal dirt bands & bands of pyrite bedded at intervals*

What are shipped? *3, 4, 5*

What are excluded from the sample? *1, 2, 6*

\*Direction (N., NE., etc.). †Nearest railway station.  
 Coal bed, *#5*

Town, *Harrisburg* Mine, *O'Gara #9* Co. *O'Gara Coal Co.*  
 SAMPLE NO. *2* CAN NO. *St D 35* No. *43* **0821**

I.—COAL SAMPLE SHEET. Sampler. *Nebel & Smith*  
*#4990*

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, O'Gara Coal Co. Date, June 20, 1912  
 Mine, O'Gara #9 Located 1 1/4 miles\* S from Harrisburg  
 Location in mine, Face of 1st Southoff 9th West North  
 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	Roof - gray shale		
2	Coal - fairly clean	6	3
3	Bone coal		1
4	Floor - hard gray shale		
5			
6			
7			
8			
9			
10			
11			
12			
13		3	
14			
15			
16			
17			
TOTAL,			

Is coal wet or dry? - wet

Time exposed, 40 hours, 0 minutes.  
 Weight, 40 gross, net.

What are the impurities, and how do they occur? A few dirt streaks  
a little pyrite - few scales of CaSO4

What are shipped? 2

What are excluded from the sample? 3

\*Direction (N., NE., etc.) ✓ Coal bed, #5  
 †Nearest railway station ✓

Town, Harrisburg Mine, O'Gara #9 Co. O'Gara Coal Co.

SAMPLE NO. 1309 CAN NO. I.S.G.S. 47 No. 43 0821

I.-COAL SAMPLE SHEET. Sampler. # 4992 Nebel & Smith.





# COAL MINING INVESTIGATION

## COOPERATIVE AGREEMENT

Operator, O'Gara Coal Co. Date June 19, 1912  
 Mine, O'Gara #9 Located 1/4 miles\* S from † Harrisburg Ill.  
 Location in mine, Room 40, 2nd West North  
 Total (vertical) depth from surface at point of sampling, 150 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			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
	TOTAL,		

DRILL Hole Sample

18

Is coal wet or dry? normal  
 Time exposed, 0 hours, 0 minutes.  
 Weight, 4# gross, net.  
 What are the impurities, and how do they occur? \_\_\_\_\_

What are shipped? \_\_\_\_\_  
 What are excluded from the sample? \_\_\_\_\_

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

Town, Harrisburg Mine, O'Gara #9 Co. O'Gara Coal Co.  
 SAMPLE NO. 3x CAN NO. S.T.D. 44 No. 43 0821

I.—COAL SAMPLE SHEET. Sampler. Nebale & Smith

Operator, *O'Gara Coal Co* Date *August 27, '11*  
 Mine, *No 9* Sec. 21 T. 9S R. 6E  
 Located, *1* miles from *S. 7 1/2 Harrisburg on Big Four*  
 Location in mine, *Face of 2nd crosscut in Room 11 of R-3, off main S.*

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
			<i>Roof, blue shale</i>	<i>6</i>
	<i>1</i>		<i>Coal, bright</i>	<i>6</i>
	<i>2</i>		<i>Moist coal, or "sulphur"</i>	<i>---</i>
	<i>3</i>		<i>Coal, bright</i>	<i>---</i>
	<i>4</i>		<i>"Sulphur"</i>	<i>14</i>
	<i>5</i>		<i>Coal laminated with dirt bands</i>	<i>---</i>
	<i>6</i>		<i>Zone of sulphur</i>	<i>---</i>
	<i>7</i>		<i>Coal, bright</i>	<i>73</i>
			<i>Floor, hard clay</i>	
			(Note character and thickness of floor)	
			Total thickness of coal.	<i>79 1/4</i>



Condition, \_\_\_\_\_ Time, \_\_\_\_\_ hr. min.  
 Wt. Gross, \_\_\_\_\_ lbs. Net, \_\_\_\_\_ lbs.  
 What Nos. shipped by Co.? *4*  
 Excluded from sample: No. *4*  
 Sample represents *79* in. tons.  
 Impurities? How do they occur?  
*B.M. Bulletin 85, 198*

Sample No. \_\_\_\_\_ Can No. \_\_\_\_\_ Lab. No. *B.M. 12795*  
 Collector, *H. J. Smith* Coal: Survey No. *5*  
 Mine, *No. 9* Co. *Saline* Index No. *0821*



Operator, O'Gara Coal Co

Date Jan. 9, 1907

Mine, No. 9

Sec. 21 T. 9S R. 6E

Located, miles from Harrisburg on Big Four

Location in mine, 2000ft. S. W. of shaft, from 250' off W. 400 S. side

GRAPHIC SECTION

DESCRIPTION OF SECTION (AT POINT SAMPLED)

In.	No.	No.	(Note character and thickness of roof)	Inches
			Roof, excellent of sandstone	
	1		Coal	7 1/4
	2		Sulphur	1/2
	3		Coal	51 1/2
	4		Mother coal	51 7/8
	5		Sulphur	
	6		Coal	82 7/8
	7		Sulphur	
	8		Blue band	84 1/8
	9		Coal	87 1/8
	10		Mother coal	
	11		Coal	
			Floor - hard fire clay	
			(Note character and thickness of floor)	
			Total thickness of coal.	87 1/8



Condition, Time, Hr. min.  
 Wt. Gross, lbs. Net, lbs.  
 What Nos. shipped by Co.? 7.8  
 Excluded from sample: No. 7.8  
 Sample represents 85 1/8 in. tons.  
 Impurities? How do they occur?

Bulletin 22, 507

Sample No.

Can No.

Lab. No. 4413 B.M.

Collector, H. M. Gray

Coal: Survey No. 5

Mine, No. 9 O'Gara

Co Saline

Index No. 0821

R.—COAL SAMPLE SHEET.







Operator, ) O'Gara Coal Co

Date

Mine, No. 9

Sec. 21 T. 9S R. 6E

Located, miles from at Harrisburg on Big Four  
 Location in mine, 3000 ft S W 7 shaft, S 4 off W 4

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
	1		Coal	2 1/2
	2		Sulphur	3 1/2
	3		Coal	58 3/4 55 3/4
	4		Sulphur	---
	5		Mother coal	59 1/4
	6		Coal	83 3/4 24 3/4
	7		Sulphur	1/2
	8		Coal	48 3 3/4
(Note character and thickness of floor)				
Total thickness of coal.				88
Condition,		Time,	hr.	min.
Wt. Gross,		lbs.	Net,	lbs.
What Nos. shipped by Co.?		2, 4, 7		
Excluded from sample: No.		2, 4, 7		
Sample represents		87	in.	tons.
Impurities? How do they occur?		Bulletin 22, 507		

Sample No. \_\_\_\_\_ Can No. \_\_\_\_\_ Lab. No. B.M. 7420

Collector, G. S. Pope Coal: Survey No. 5

Mine, O'Gara No. 9 Co. Saline Index No. 0821





Operator, O'Gara Coal Co

Date Jan 9, 1907

Mine, No. 9

Sec. 21 T 9S R. 6E

Located, miles from Harrisburg on Big Four  
Location in mine, 1000 ft N + 200 ft E of shaft 64 on N side

GRAPHIC SECTION DESCRIPTION OF SECTION (AT POINT SAMPLED)

In.	No.	No.	(Note character and thickness of roof)	Inches
			Roof excellent, sandstone	
	1		Coal	1 3/4
	2		Sulphur	1/4
	3		Coal	16
	4		mother coal	---
	5		Sulphur	1/8
	6		Coal	21
	7		Sulphur	1/2
	8		Blue band	---
	9		Coal	10 1/2
	10		mother coal	4 1/4
	11		Coal	3 1/2
			7 floor, hard fire clay	
			(Note character and thickness of floor)	
			Total thickness of coal.	74' 94 7/8?



Condition, Time, hr. min.  
 Wt. Gross, lbs. Net, lbs.  
 What Nos. shipped by Co.?

Excluded from sample: No. 7, 8  
 Sample represents 81 3/8 in. tons.  
 Impurities? How do they occur?

Sample No. Can No. Lab. No. B.M. 4414

Collector, H. M. Gray Coal: Survey No. 5  
 Mine, O'Gara No. 9 Co. Saline Index No. 0821



Operator, *O'Gara Coal Co.* Date *August 27, 1911*  
 Mine, *No. 9* Sec. *21* T. *9S* R. *6E*  
 Located, *5 1/2* miles from *Harrisburg on Big Four*  
 Location in mine, *the main N 37 min S bet. rooms 18-19*

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.	No.	No.	(Note character and thickness of roof)	Inches
			<i>Roof blue shale</i>	
	1		<i>Coal bright</i>	<i>7 1/2</i>
	2		<i>Moist coal &amp; sulphur</i>	<i>1 1/2</i>
	3		<i>Coal bright</i>	<i>6</i>
	4		<i>Sulphur</i>	<i>1 1/2</i>
	5		<i>Coal laminated with dirt bands</i>	<i>15</i>
	6		<i>Bone or "sulphur"</i>	<i>1 1/4</i>
	7		<i>Coal bright</i>	<i>58 1/4</i>
			<i>Floor - Hard clay -</i>	
			(Note character and thickness of floor)	
			Total thickness of coal.	<i>89</i>
		Condition,	Time,	hr. min.
		Wt. Gross, lbs.	Net, lbs.	
		What Nos. shipped by Co.?		
		Excluded from sample: No.	<i>2, 4</i>	
		Sample represents	<i>87</i> in.	tons.
		Impurities? How do they occur? <i>B.M. 85 p 198</i>		

Sample No. \_\_\_\_\_ Can No. \_\_\_\_\_ Lab. No. *B.M. 12 794*  
 Collector, *H. J. Smith* Coal: Survey No. *5*  
 Mine, *O'Gara No. 9* Co. *Soline* Index No. *0821*  
 R.—COAL SAMPLE SHEET.  
*(2, 48)*



Operator, **O'Gara Coal Co.** Date **1/27/08**  
 Mine, **No. 9** Sec. **21 T. 9 S R. 6 E**  
 Located, **1  $\frac{1}{4}$**  miles from **Harrisburg SW.**  
 Location in mine, **4 Rm off 3 W, off Main N. 400 NW shaft**

GRAPHIC SECTION		DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.		No.	(Note character and thickness of roof)	Inches
7.12	Coal	1	Draw slate 1.5 in	7
	:	2	Coal	.12
	:	3	Pyrite parting	79.88
	Coal		Coal	
			Hard shale	
5.97				
36.16				
50.70				
7.17				
(Note character and thickness of floor)				
Total thickness of coal.				<b>87</b>
Condition, <b>Dry</b>		Time, hr.	<b>45</b> min.	
Wt. Gross, <b>35</b> lbs.		Net, lbs.		
What Nos. shipped by Co.?				
Excluded from sample: No.				
Sample represents in. tons.				
Impurities? How do they occur?				

Sample No. **W-35** Can No. Lab. No. **1113**

Collector, **Wheeler NB 139 p 14** Coal: Survey No. **5**  
 Mine, **O'Gara 9** Co. **Saline** Index No. **0821**

R.—COAL SAMPLE SHEET.



UNDERGROUND DATA

F. Thickness of rock above bed worked,

- (1) Important variations,

See

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

See

- (1) Position, *Above Coal*  
 (2) Character, *Dark gray shale*  
 (3) Persistence, *Entire Mine*  
 (4) Other workable coal beds,

See

H. Cap rock,

- (1) Thickness,  
 (2) Weight above coal,

See

I. Immediate roof *Dark gray shale + Bone coal*

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

*Bone coal 0' to 4'*

*Yes*

- (3) Horizontal variation,

*Bone coal occurs only on as roof on 1, 2, 3, 4. See sheets 1, 2, 3 North side*

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

*A very dark shale 2" to 24" av. 8"*

*with coal + shale*

- (3) Persistence

*Lenticular thickens and thins irregularly.*

K. Coal bed: Max. 8'-0" Min. 5'-0" Av. 6.83' inches

- (1) Benches, *One*

(a) Position,

(b) Persistence,

See

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

*A few sulphur and jack bands. Hand picked.*

See

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

*Slips and Rolls*

(a) Effect on mining,

See sheets 3

*Hard to hold roof*

See

SECTION				
Ft.	In.	Name	Index	Sym.
		Gray Carb Shale filled with plant impressions		
		Dull glauca well mixed		6
		Little Mother Coal		
		Considerable Mother Coal		5
		Little Mother Coal		4
		Few thin glauca		
		slip planes		3'
		slip planes		2'
		slip planes		1'
		slip planes		6"
		Fire clay		

Collector, *Kowhite*

Coal, *5*

State No. *0821*

Mine, *9*

Co. *Saline*

Co-op. No. *43*

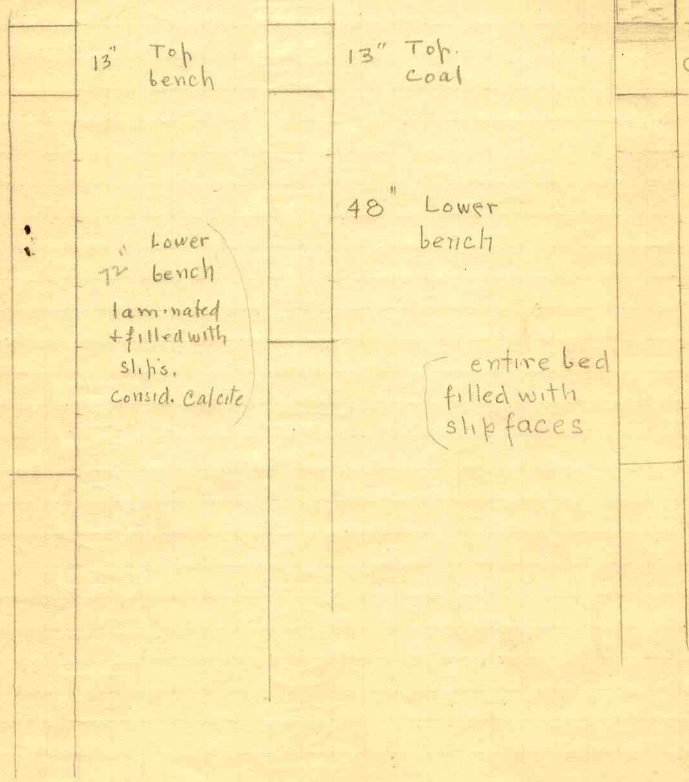


Room 3rd SE

27

26  
36  
Sec. -  
4S. off 4 E.S.

27  
Face. 10th E  
off Main S.



White

0821



*Sample.*—Bituminous coal; Illinois field; (Illinois No. 34) analyses Nos. 4413, 4414, 7420, 7421 (p. 90).

*Mine.*—No. 9, a shaft mine at Harrisburg, on the Big Four System.

*Coal bed.*—No. 5 of the Illinois Geological Survey. Carboniferous age, Carbondale formation. Roof, excellent, of sandstone; floor, hard fire clay.

The bed was measured and sampled at two points by K. M. Way on January 9, 1907, as described below:

*Sections of coal bed in No. 9 mine at Harrisburg.*

Section.....	A	B
Laboratory No.....	4413	4414
Roof, sandstone.....	<i>Ft. in.</i>	<i>Ft. in.</i>
Coal.....	0 7½	0 1½
Sulphur.....	0 ½	0 ½
Coal.....	3 8	1 4
Mother coal.....	0 ½	0 ½
Sulphur.....	0 ½	0 ½
Coal.....	2 7	1 9
Sulphur <sup>a</sup> .....	0 ½	0 1½
Blue band <sup>a</sup> .....	0 1½	0 ½
Coal.....	0 3	0 10½
Mother coal.....	0 ½	0 ½
Coal.....	2 7½	0 ½
Floor, hard fire clay.....		
Thickness of bed.....	7 3½	7 10½
Thickness of coal sampled.....	7 1½	6 9½

<sup>a</sup> Not included in sample.

Section A (sample 4413) was measured 2,000 feet southwest of the shaft, in room 25, off west entry 4 on the south side.

Section B (sample 4414) was measured 1,000 feet north and 200 feet east of the shaft, in east entry 4 on the north side.

The bed was also measured and sampled at two points by G. S. Pope, as described below:

*Sections of coal bed in No. 9 mine at Harrisburg.*

Laboratory No.....	7420	7421
Coal.....	<i>Ft. in.</i>	<i>Ft. in.</i>
Sulphur <sup>a</sup> .....	0 2½	0 5
Coal.....	0 ½	0 ½
Sulphur <sup>a</sup> .....	4 7½	1 2½
Mother coal.....	0 ½	0 ½
Coal.....	2 4	4 7
Sulphur <sup>a</sup> .....	0 0	0 ½
Coal.....	0 3½	0 10
Thickness of bed.....	7 4	7 1½
Thickness of coal sampled.....	7 3	7 ½

<sup>a</sup> Not included in sample.

Sample 7420 was taken 3,000 feet southwest of shaft, off south entry 4, off west entry 4.

Sample 7421 was taken 1,200 feet northeast of shaft, in room 3, off east entry 6.

For results of tests of this coal see mention of specific tests as follows—steaming tests: U. S. Geol. Survey Bull. 332, p. 123; Bureau of Mines Bull. 23, pp. 61, 159; washing tests: U. S. Geol. Survey Bull. 332, p. 123; Bull. 336, pp. 14, 16; coking tests: U. S. Geol. Survey Bull. 332, p. 124; Bull. 336, pp. 22, 28, 38.

For chemical analyses see part I of this bulletin, p. 90; also U. S. Geol. Survey Bull. 332, p. 123.

Collector, \_\_\_\_\_ Coal: Survey No. 5

Mine. #9 Co. Saline Index No. 0821.71

Q.—COAL SECTION SHEET.