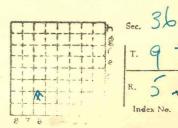
MOORE'S MODERN FORM 180

Sahara - ? O'Gasa # ?. 1565 mi. # 48

615



Town, Carrier Mills 403 +05 Surface alt., Local Authority, Depth to coal, ft. 335 Alt. top coal, ft. Level: Auth., Deuchler NB97-p70 75 Thickness: Av. in. Depth Kay(coop) Max. 90 in., Min. 60 in. Method. H. L. R. R., Big 4 Sec. 36 Location: authority, Deuchler; O'Gara map ald - Blank 24 Small.fault. (Show R. R.) Operator Mine Name or No. O'Gara Coal Co. No.7 1906 Successor to Date Succeeded by Date Succeeded by Date PRODUCTION. Fiscal U.S. No. 1915 None Geol. Notes? Les Coop. No. 48 Coal secs.? Analyses No. 5002 4995,5010 312, 1116 County Examined by Grout: Kay: Ref. SHIPPING MINE Coal bed name: Local Survey No. County Saline Index No. 0936a 2

K .- ACTIVE SHIPPING OR LOCAL COAL MINE.

#### COAL MINE NOTES.

TOWN

MAP No. 07368

T. 95

s. 36 SE. S.W.

OPERATOR O. Gara Coal Co.

OFFICE Chicago
MINE #7

COUNTY Saline

TIPPLE ENGINES

BOILERS DRUM

SHAFT

CAGE

HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

Shot off solid.

SIZE OF ENTRIES-MAIN

CROSS

ROOM

NECK

SIZE OF PILLARS-MAIN

CROSS

ROOM

SHAFT

CHAIN

BARRIER

AMOUNT OF TIMBERING 10 finiber in reems 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

COAL LAND OWNED COST OF LAND OWNED LEASED

LEASED

HELD IN FEE

HELD IN FEE

0936a

ADDITIONAL NOTES

### COAL MINE NOTES.

0936a

AV.

OPERATOR OGORA GOO/CO.

MINE #7 NAME OF COAL BED 5

ENTRANCE Shaff ELEVATION

MIN.

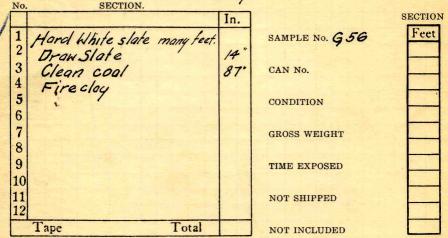
DEPTH TO FLOOR 83

THICKNESS OF COAL

ALTITUDE OF COAL 320

LOCATION OF SECTION \*3 Room Eintry.

MAX.



PHYSICAL PROPERTIES BY NUMBERS

#3 of section contains some sulphur.
Coal reported very uniform in quality to Eldora. (Sec. #59-61)

ROOF Hard slate, whitet; good root. Draw slate 14" will not stand

FLOOR Fire Clay.

DIP

FAULTS, ETC. No Foults,

GAS HO 905.

COLLECTOR Grouf.

Deuchler

REFERENCE M.B.7 P 61 N.897.70

0936a DATE



## COOPERATIVE ACREEMENT

Coo	PERAT.	IVE P	GREE	MENT		
Mine Name or No., O Gar	a	# R	7		R.5E	
. / mile NE from Carr	ier	N	11/5			T
Operator, 1912 Gara	oa,	18			T	Sec. 3
					9	
Operator, 191					5 8	
operation, 191					R. R. 5	
Entrance, Shaft Elev.,	ft. {	abov	e,		1.16.	19 4
Depth to bottom coal, 83 to to	f+ (	belov A				
Depth to bottom coar,			де. Эата.			
A D						
A. Topography 5/19/11/y	10	1/11	79		See	
B. Surficial materials, (1) Cha	racter	4	lay	4. 4		
(2) Thickness, 17 ft					shaft-sinking,	of forme
drainage lines, undergroun						
. No Trouble	10	5	1001	King.		
					See	
C. Outcrops, (1) Character,	7				See	
(2) Structure,					See	
(3) Fossil horizons					See	
Collection No.,						
(4) Evidences of subsidence,					See	
D. Note collection of mine maps,	Anill a	00000	a and	aboft lana	See	
Location from	0	Go	7 10	a Co	map.	
				See drill re	ecord sheet.	
E. Notes on surrounding area,						
In Saline #10		17 4	7-1	1/00	ma ter	in
In Saline #2	1111	4	12	nany	Su la Am	
halls.						
3/1 20, 5 1/	-	2-	1.	11	-4-54	
in S. makes	1	0	17	9 00	cheall	
worth loss		0	al	1010		
101/1000.					See	
Coal bed name: Local,	1583	-	and the same	Survey		TT
Collector, /Tay.				State No.	0936a	
Mine Mine	Car	5	/	Co on No		

L.—SURFACE SHEET (Geol.)



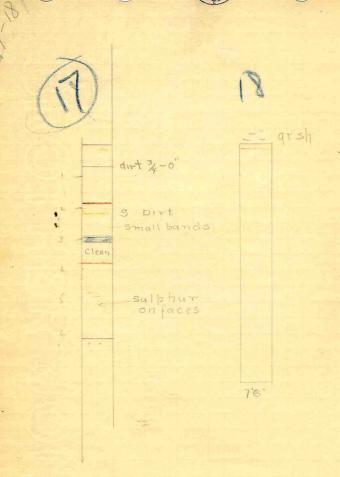
	Under	RGROUND	DATA			
Thickness of rock abo	ve bed work	ed,				
(1) Important variati	ons,					
				See		
Note presence of strat	ta having im	portant el	fect on mi	ining.		
				See		
(1) Position,						
	oal beds.					
				See		
Cap rock, Sha	le, gr	ay, F	and.	-	SECTION	
(1) Thickness				Ft. In.		Sym
(2) Height above coa	1, 6 10	ches				
			See X			
Immediate roof So	ime a.	s cap	5.			
		4				
(3) Horizontal variat	ion.					
			See			
Draw slate. (1) Thi	ckness To E	(2) Con	tacts			
Clean abov	e and	bel	ow.			
Coal bed: Max. 7	6 Min. 5-	+ Av.	6 3 inch	ies		
(b) Persistence.						
			See			
(2) Bedded impurities	s, kind, positi	on in ben		st-		
			See			
(3) Irregularities in co	ontinuity of h	ed (due to		m		
			ac positio			
crosson, or moven	10110).		See			
(a) Effect on min	ing					
(a) Direct off film			See			
laston //	Coal		J.C.	Chate N	0070	
Y Y	Coar,					a
	(1) Important variation Note presence of strate (1) Position, (2) Character, (3) Persistence, (4) Other workable of Cap rock, Shared (1) Thickness, (2) Height above coal Immediate roof (1) Thickness, (3) Horizontal variation Draw slate. (1) Thickness, (3) Persistence (1) Thickness, (a) Persistence (2) Bedded impurities ence, ease of separation of the composition, (b) Persistence, (2) Bedded impurities ence, ease of separation, or movements (3) Irregularities in coerosion, or movements (4) Position, (5) Irregularities in coerosion, or movements (6) Persistence, (6) Persistence, (7) Persistence, (8) Persistence, (9) Persistence, (10) Persistence, (11) Persistence, (12) Persistence, (13) Persistence, (14) Persistence, (15) Persistence, (15) Persistence, (16) Persistence, (17) Persistence, (18) Pe	Thickness of rock above bed works (1) Important variations,  Note presence of strata having important variation, (2) Character, (3) Persistence, (4) Other workable coal beds,  Cap rock, Shale, grade (1) Thickness, (2) Height above coal, Immediate roof (1) Thickness, (2) (3) Horizontal variation,  Draw slate. (1) Thickness, (3) Persistence  Coal bed: Max. 7'6" Min. 5-1 (1) Benches, (a) Position, (b) Persistence, (2) Bedded impurities, kind, positience, ease of separation.  (3) Irregularities in continuity of the erosion, or movement).  (a) Effect on mining,  Coal,	Thickness of rock above bed worked,  (1) Important variations,  Note presence of strata having important elector,  (2) Character, (3) Persistence, (4) Other workable coal beds,  Cap rock, Shale, gray, f. (1) Thickness, (2) Height above coal,  Immediate roof Same as can (1) Thickness, (2) Contact v. (3) Horizontal variation,  Draw slate. (1) Thickness, To 6 (2) Con (3) Persistence Throughout  Coal bed: Max. 7 6 Min. 5 + Av. (1) Benches, (a) Position, (b) Persistence,  (2) Bedded impurities, kind, position in bennence, ease of separation.  (3) Irregularities in continuity of bed (due to erosion, or movement).  (a) Effect on mining,  lector, Aay Coal,	(1) Important variations,  Note presence of strata having important effect on mi  (1) Position, (2) Character, (3) Persistence, (4) Other workable coal beds,  Cap rock, Shale, gray hard. (1) Thickness, (2) Height above coal, (3) Horizontal variation,  See  Draw slate. (1) Thickness, (2) Contact with coal, (3) Horizontal variation,  See  Draw slate. (1) Thickness, (2) Contact  See  Coal bed: Max. 7 6 Min. 5 + Av. 6 3 inch (1) Benches, (a) Position, (b) Persistence,  See  (2) Bedded impurities, kind, position in benches, persistence, ease of separation.  See  (3) Irregularities in continuity of bed (due to deposition erosion, or movement).  See  (a) Effect on mining,  See  Lector, May Coal,	Thickness of rock above bed worked,  (1) Important variations,  See  Note presence of strata having important effect on mining.  (2) Character, (3) Persistence, (4) Other workable coal beds,  Cap rock, Shale, gray, hard.  (1) Thickness, (2) Height above coal, 6 modes.  Immediate roof Same as cap. (1) Thickness, (2) Contact with coal,  (3) Horizontal variation,  See  Draw slate. (1) Thickness, 6 (2) Contacts  See  Oal bed: Max. 7 6 Min. 5 + Av. 6 3 inches  (1) Benches, (a) Position, (b) Persistence,  See  (3) Irregularities in continuity of bed (due to deposition, erosion, or movement).  See  (a) Effect on mining,  See  lector, May Coal,  State No.	Thickness of rock above bed worked,  (1) Important variations,  See  Note presence of strata having important effect on mining.  See  (1) Position, (2) Character, (3) Persistence, (4) Other workable coal beds,  Cap rock, Shale gray hard for the see  Cap rock, Shale gray hard (1) Thickness, (2) Height above coal, See  Immediate roof Same as cap. (1) Thickness, (2) Contact with coal, (3) Horizontal variation,  See  Draw slate. (1) Thickness, 76 (2) Contacts  See  Oral bed: Max. 76 Min. 5 + Av. 63 inches (1) Benches, (a) Position, (b) Persistence,  See  (3) Irregularities in continuity of bed (due to deposition, erosion, or movement).  See  (a) Effect on mining,  See  lector, A. Coal,  State No. 0936

M.—UNDERGROUND SHEET (Geol.)



		Underground	DATA (cont'd.)		
K.	(5) Physical charact	er of coal in benc	hes,		
	(a) Relative har	dness,			
	(b) Lustre,				
	(c) Fracture,				
	(d) Texture,			See	
	(6) Impurities in coa	d, other than bed	lded,		
	(a) Kind,				
	(b) Position and	persistence,			
	(c) Rejected,		Ease of separation		
				Soo	
L.	Floor: (1) Material	Sandy	gray shai	L	
	(2) Thickness	Vot In			
	(3) Variation				
-	Cont	ains ca	rbonaceoa	s matter	
	(4) Note character,	condition, tender	ncy to heave, relation	to undercutting con	n
	mercial valu	ie.			
10	t. Undercu	t. Wot	in most	-04	
12	71ne.				
				See	
	(5) Clay sample No.		Location,		
M.	Stratigraphy				
	(1) Fossiliferous hor	zons underground	d,		
	Collection No.		Location,		
		1 /11			
N.	Notes on effect of de	ep drilling in coa	i mine areas.		
				. See	
Col	lector,	Coal		State No. 09368	2
Mi		Co.		Co-op. No. 48	
N	-UNDERGROUND	SHEET (Geol.)			

9th West off 5. 2700 from strate Pirection N-S. Found only here entry Track.



Kar

MOORE'S MODERN METHODS #48

0936a

MOORES MODERN 4/00n

gray shake Small mother Very good Clean coal Cleat. N° 40° E N. 35° W 0936a

MOORE'S MODERN METHODS Br. Mottyer coal. S Dist. shale gray Clean. 11/014 Geaner. Small mother, Sulphar on Faces. # 48 6 0936a



	Underground Data	
F.	Thickness of rock above bed worked,	
	(1) Important variations,	
	Se	e la
G.	. Note presence of strata having important effect on mining.	
	Se	90
	(1) Position,	
	(2) Character,	
	(3) Persistence,	
	(4) Other workable coal beds,	
	Section of the sectio	-
H.		SECTION
		In. Name Index Sym
	(2) Height above coal, 6 inches	
	See X	
I	Immediate roof Same as cap.	
	(1) Thickness, (2) Contact with coal,	
	(3) Horizontal variation,	
	See	
J.		
	Clean above and below.	
	(3) Persistence Throughout	
K.	. Coal bed: Max. 7 6 " Min. 5 + Av. 6 3 inches	
L	(1) Benches,	
	(a) Position,	
	(I) P	
	(b) Persistence,	
	See	
	(2) Bedded impurities, kind, position in benches, persist-	
	ence, ease of separation.	
	See	
	(3) Irregularities in continuity of bed (due to deposition,	
	erosion, or movement).	
1	See	
	(a) Effect on mining,	
	See	
Col	ollector, H. H. Kay Coal, State N	Jo 0936a
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10
		INO.
TAT .	.—UNDERGROUND SHEET (Geol.)	



#### COAL MINING INVESTIGATIONS COOPERATIVE AGREEMENT

Mine Name or No., O'Gara No. 7 1 mile N.E from Carrier Mills Operator, 1912 O'Gara Coal Co.

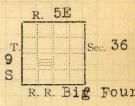
Operator, 191

Entrance, ShaftElev., Depth to bottom coal,

SURFACE DATA.

A. Topography Slightly rolling

B. Surficial materials, (1) Character Clay



See

See

See

See

See

See

(2) Thickness, 17 ft. (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc.

#### No trouble in sinking

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.

Location from O'Gara Co. map

See drill record sheet.

E. Notes on surrounding area,

In Saline No. 2, 17 ft.+floor material sandy shale with many sulphur halls.

3/4 mi. S. W. parting that shows in S. makes coal practically worthless.

Coal bed name: Local, 5 L.—SURFACE SHEET (Geol.)

Survey

State No. 0936a

Co. SalineCo-op. No. 48

See



#### UNDERGROUND DATA (cont'd.)

K.	(5)	Physical character of coal in benches,		
		(a) Relative hardness,		
		(b) Lustre,		
		(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.	Flo	r: (1) Material Sandy gray sl	hale	
		Thickness Not known		
	(3)	Variation		
-		Contains carbonaceous pyrite balls Note character, condition, tendency to he	s matter &	
	(4)	Note character, condition, tendency to he	eave, relation to undercutting con	)-
		mercial value.		
		Not undergut Wet in	n most of mino	
		Not undercut. Wet in	n most of mine.	
			See	
	(5)	Clay sample No.	Location,	
		医极大体医系统特尼医医治疗		
Μ.		tigraphy		
	(1)	Fossiliferous horizons underground,		
		Collection No.	Location,	
N.	Not	es on effect of deep drilling in coal mine ar	reas.	
			See	
Col	lecto	F. H. Kay Coal	THE RESERVE OF THE PARTY OF THE	-
Mi	10000	Gara No. 7 <sub>Co.</sub> Saline	L State No. 0936a Co-op. No. 48	
		DERGROUND SHEET (Geol.)	Со-ор. 10.	
TA.	-OTA	DERGROUND SHEET (Geol.)		



#### COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, O Gara Coal Co Date,
Mine, O Gara 7 Located / miles / from Carried Miles
Location in mine, Face of Mom 8 of 6 the assurance of the Total (vertical) depth from surface at point of sampling,

Total (vertical) depth from surface at point of sampling,

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).

		sample all clay and sulphur partings $\frac{3}{8}$ inch the		and even those
	of less thickn	ess if they are rejected at mine or tipple).  Section of Bed at Point Sample	ED.	
	No.	DESCRIPTION.	FEET.	Inches.
	1 X	Roof-grayshale		/
	2 × 3	Draw State	7	3
	4	Goal-clean except		
	5	mother of coal & a		
	Coal 7	Since Paline		
	Stks Min.char 8x	Hoor-carbonaceous		
	* pprik   10 ×	shale-fire clay		
The second	11			
	12			
	14	8		
	15			
100	17		67	-1
	757	TOTAL,	I botte	32
	Time exposed	dry? - dry attop dampa hours, 3		minutes.
	Weight,	75 # V gross,		net.
	What are the	impurities, and how do they occur? bed	ed sti	reaks of
9711194100	What are ship			
	What are excl	luded from the sample? /, 2,	bed. #5	
	927 30.	*Direction (N., NE., etc.). Nearest	bed, 75 railway static	
RE"	Town, Corr	70 1102	Co.094	a Joal Co
	I.—COAL SA	MPLE SHEET. Sampler.	No.	8 0936a
1	14995	2 84%		3 - Of the supposite Distriction

11926



#### COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, O

Mine, O Gara# 7 Located / miles\* N E from t Carrier Miles

Location in mine, Face of 3 Prom - 3 North of 15 West

Total (vertical) depth from surface at point of sampling, 75 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).

	of le	ss thicks	ness if they are rejected at mine or tipple).		
			Section of Bed at Point Sampled.		
		No.	DESCRIPTION.	FEET.	Inches.
		1×	Pas		
		2 *	Draw Flate		4 "
1.0		3	Draw Slate Coal - streaksofaint 4 sulphi Sulphy streaksofaint 4 sulphi	3数数	32
	dirty	X 4 x	Sulphur	L. L. Aller A.	7-
<b>S</b>	Coal	5	L DA I SITEANS OF MOTHER ATTOM	1 2	0
TO ST		6 ×	#loor-fine clay		
14.		7			
1000		** 8 9			
	Coal	10			
TO SE		11			
	XXX	12			
Separate Sep	XXX	13			
		14	Walter Company of the		
		15			
15 0		16			
	,	17		5	42
	1.05	1	TOTAL,	5	× 110
South		al wet o			minutes.
	Weig		40 # gross,		net.
100	Wha	t are the	e impurities, and how do they occur? - Supp	hur as	PNITTE
	m	othe	rofcoal 4dint streak	tedo	102
	Wha	t are shi	pped? 3 < 5		
	Wha	t are exc	cluded from the sample? 1, 2, 4, 6		
	-12		\ Coal be	ed, $\#3$	
	7.51		*Direction (N., NE., etc.). †Nearest ra	~ 1	
Man.			All Marie	Co. 090	M Coal Co
	BAM	PLH I	AMPLE SHEET. Sampler.	No.	0936a
	#	5007	- Surfett	+ ne	leel
(	381	1/2-	5=63/12		- commence
	i	240			

# HOORES HOOSEN HETHOUSE COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, Ogava Coal Go Date, 6 - Z Z - 191 Z
Mine, Ogava Thocated miles\* NE from the Carrier Mills.

Location in mine, Though the Carrier Mills.

Total (vertical) depth from surface at point of sampling,

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 \( \frac{2}{3} \) inch thick or over (and even those of less thickness if they are rejected at mine or tipple).

SECTION OF BED AT POINT SAMPLED

	SECTION OF BED AT POINT SAMPLEI	0	
No.	DESCRIPTION	FEET	Inches
2 2 3 Coal + Streates	Roof soft grey shale Coal - fairly clean latenstreaks of dirt - atentiakes of by rife baralelt	6	115
Coal + Streates 5 of direct 6	Floor-fireclay	0	
12 13 14 15 15	22		
Is coal wat or	r dry? - we t	6	112
Time exposed Weight, What are the			minutes. net.
What are ship What are excl		ed, #31	
Sample No.	rier Mills Mine, Ogard = 7 480 Can No. St Del	THE RESERVE AND ADDRESS OF THE PARTY OF THE	0936a
	+6 # 50/0		

Operator, O'Gara Coal Co. Mine, No.7

Date May 23 06 Sec. 36 T. 9 S R. 5 E.

Located,

miles from

Location in mine. 3rd room east entry

		No.	No. (No	No. (Note character and thickness of roof)					
				l white s		any it	1++		
			Draw	slate	14 in.				
			1 Cc	pal			87		
			Fire	clay					
	Coal								
4.8		1							
) L									
84									
	X × × ×								
E 30			(Note of	character and th	iolznogg of fl	202)			
6.30			(14000 (		s of coal.		8'		
6.30				Total thicknes					
6.30			Condition,	Total thicknes		hr.	min.		
6.30			Condition, Wt. Gross,	lbs.	Time,	hr. 1bs.	min.		
6.30			Wt. Gross,		Time,		min.		
6.21			Wt. Gross, What Nos. sh	Ibs. ipped by Co.? n sample: No.	Time,		min.		

Sample No. G-56 Can No.

Lab. No. 312

Collector, Grout N.B.7 p.61 Coal: Survey No. 5 Mine, O'Gara 7 Co. Saline Index No. 0936a

