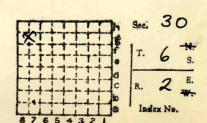
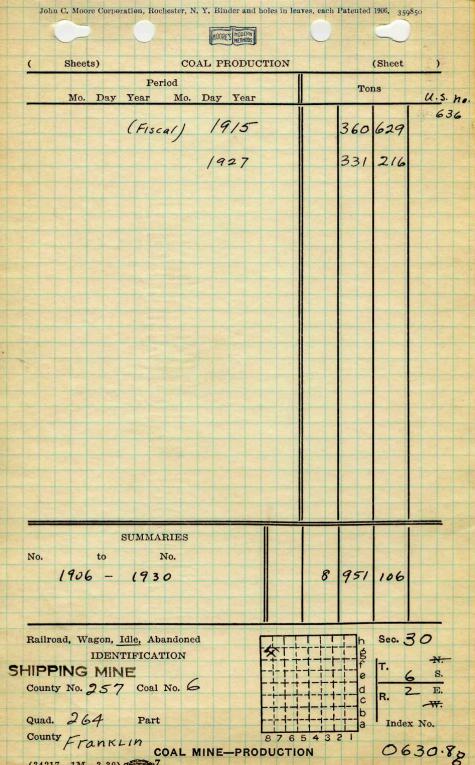
John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented.

MOORE'S MODERN METHODS

Form 180

OLD BEN COAL CORP. #12 Co. No. 257 Mine Index \$58





County No. 257 Coal No. 6 R. 2 E. Quad. Herry Part		LOC	ATION A	ND E	LEV	AT	ION	
side side Highway No. on top. map Location sheet Elevation: Method, 1. Est. (2. Inst. (kind PT DEPTH Authority Authority To coal Authority To coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. L. 4791, 4793-94 B. M. 22686-7-8-9-90thers Car U. I. Ors. Sulf U. I. Ash fusion U. I. B. M. Others Others Ash fusion U. I. Ash anal. U. I. B. M. Others Others Classification Misc. tests: Coking. Coal No. 6 R. R. R. R. Ft. 419.925- Co. Et. 419.925- Co. Et. 419.925- Co. Et. 419.925- Co. Et. Allivoid Allivoid Coal Ash inv. Coal Ash inv. Chers Others Others Others Others Others Classification Misc. tests: Coking. Cleaning Boiler T. 6 R. 2 E. Index No.	Location:	side /	. c	C.	B.	8.	Q	R. R.
on top. map Location sheet								R. R.
Elevation: Method, 1. Est. (2. Inst. (kind PT) 420.6 ct. By DEPTH Authority To coal ft. Authority To coal above rail. (Est. Rule) ft. Top of coal above rail. (Est. Rule) ft. ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. in, Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M.2686-7-8-9-90 incress of the coal and th		side Hig	ghway No.					
2. Inst. (kind PT) 420.6 ft. By DEPTH To coal Authority To pof coal above rail. (Est. Rule) ft. Authority Top of coal above rail. (Est. Rule) ft. ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. in, Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4741, 4743-94 B. M. 28686-7-8-9-80 thers Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash fusion U. I. B. M. Others	on top. map		Location	sheet				
DEPTH Authority Authority Top of coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. Others Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash anal. U. I. B. M. Others Others	Elevation: Method,	1. Est.	()			
Authority Authority Authority Top of coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in. Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. Others Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash fusion U. I. B. M. Others Others Others U. I. B. M. Others Others Others Others Others U. I. B. M. Others Other		2. Inst.	(kind	P7) 420.6 st.
Authority To coal Rail to rail Authority Top of coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness Max. in. Min. in. Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-9-9-90 ihers Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash anal. U. I. B. M. Others	Ву		WBI	2.			Data sheet	1 419.875- Co.El.
Authority Top of coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. Others Car U. I. Org. Sulf U. I. Ash anal. U. I. B. M. Others Others U. I. Classification Misc, tests: Coking. Coal No. 6 Rail to rail ft. ft. ft. Ft. Ft. Ft. Ft. Ft.		D	EPTH					
Top of coal above rail. (Est. Rule) To coal ALTITUDE OF TOP OF COAL By estimated data. By instrumental data Thickness in, Min, in. Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 22686-7-8-9-90thers Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash anal. U. I. B. M. Others Others U. I. Classification Misc, tests: Coking. Coal No. 6 Part Coal No. 6 T. 6 S. R. 2 E. Index No.	Authority						To coal	ft.
ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 22686-7-8-9-90 thers Car U. I. Org. Sulf U. I. Ash fusion U. I. Ash anal. U. I. B. M. Others Others Others U. I. Classification Misc. tests: Coking. Coal No. 6 R. 2 Index No. Index No.	Authority					I	Rail to rail	ft.
ALTITUDE OF TOP OF COAL By estimated data By instrumental data Thickness in, Min. in, Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 22686-7-8-9-90 iners 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 Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 Index No. Index No.		Top o	f coal at	ove	rail.	()	Est. Rule)	The second district the second
By estimated data By instrumental data Thickness in. Min. in. Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 22686-7-8-9-90 thers Car 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 Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Part Findex No.							To coal	487_ft.
By instrumental data Thickness in. Min. in. Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. Coal Ash inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 28686-7-8-9-90-thers Car U. I. B. M. Others Org. Sulf U. I. B. M. Others Ash fusion U. I. B. M. Others U. I. B. M. Others U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Index No.	ALT	ITUDE O	F TOP OI	CO.	AL			
Thickness in, Min. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-8-9-90thers Car U. I. Org. Sulf U. I. B. M. Others Ash fusion U. I. Ash anal. U. I. B. M. Others U. I. Classification Misc. tests: Coking. Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Index No.	By estimate	d data						-17
Max. in. Min. in. Aver. in. GEOLOGICAL DATA Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. Others Car U. I. Org. Sulf U. I. Ash fusion U. I. B. M. Others Ash anal. U. I. B. M. Others U. I. Classification Misc. tests: Coking. Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Index No.	By instrume	ental data						ft.
Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. Others Org. Sulf U. I. Ash fusion U. I. B. M. Others Ash anal. U. I. B. M. Others U. I. Classification Misc. tests: Coking. Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Coal Ash inv. Chemical DATA B. M. 2686-7-8-9-96-198-199-199-199-199-199-199-199-199-199		Th	ickness					
Mine notes, date Coop No. 58 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 B. M. 22686-7-8-9-90 iters Org. Sulf U. I. Ash fusion U. I. B. M. Others Ash anal. U. I. B. M. Others U. I. Classification Misc. tests: Coking. Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Coal Ash inv. Chemical DATA B. M. 2686-7-8-9-90 iters Others Others Others Cleaning Boiler T. 6 S. R. 2 E. Index No.	Max.	in, Min.			in	. A	ver.	in.
Coop No. 38 Pyr. inv. CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 E. M.22686-7-8-9-90thers Car U. I. Org. Sulf U. I. B. M. Others Ash fusion U. I. B. M. Others Ash anal. U. I. B. M. Others Others Others Classification Misc. tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Index No.			GEOLOG:	CAL	DA	ГА		
CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-8-9-90-197 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 Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Quad. Herrin	Mine notes, date _							
CHEMICAL DATA Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-8-9-90-197 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 Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Quad. Herrin						-		
Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-8-9-90 Others Org. Sulf U. I. B. M. Others Ash fusion U. I. B. M. Others U. I. B. M. Others U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Index No. Index No.	Coop No. 58		Pyr. inv.				Coa	al Ash inv.
Analyses Face U. I. 4791, 4793-94 E. M. 22686-7-8-9-90 Others Org. Sulf U. I. B. M. Others Ash fusion U. I. B. M. Others U. I. B. M. Others U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Cleaning Boiler Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Index No. Index No.	4444							
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 HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Part Part Index No.				-				
Org. Sulf U. I. Ash fusion U. I. Ash anal. U. I. B. M. Others Others U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 2.5 7 Coal No. 6 R. 2 E. Index No.			1,4793-				686-7-8-	
Ash fusion U. I. Ash anal. U. I. B. M. Others U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Index No.				-	-			
Ash anal. U. I. U. I. B. M. Others Classification Misc, tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Index No.								
U. I. B. M. Others Classification Misc. tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 E. Index No.				-	-			
Classification Misc. tests: Coking. Cleaning Boiler Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Quad. Herry Part Index No.	Ash anal.			-				
Misc. tests: Coking. Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Quad. Herry Part Index No.		U. I.			B. W			Otners
Published descriptions:— Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 R. 2 Index No.	Classification				-			
Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Quad. Herry Part Index No.	Misc. tests: Coking			Clea	ning			Boiler
Railroad, Wagon, Idle, Abandoned HIPPING MINE IDENTIFICATION County No. 257 Coal No. 6 Quad. Herry Part Index No.								
HIPPING MINE IDENTIFICATION County No. 2.5 7 Coal No. 6 T. 6 R. 2 Index No.	Published description	ns:—						
HIPPING MINE IDENTIFICATION County No. 2.5 7 Coal No. 6 T. 6 R. 2 Index No.								
County No. 257 Coal No. 6 R. 2 E. Quad. Herry Part		NONE INCH	ionea		-	T		h Sec. 30
County No. 257 Coal No. 6 R. 2 R. 2 Index No.	THENT	FICATION	J		×	T	+	8 - /
Quad. Herrin Part Harring Index No.		LICATION		V0 6	F			
Quad. Herrin Part -++	County 110. 23	++-+-	Coar I	, O	++	++-		
	Oved Harris		Desi	-	E	\pm		C -
County Franklin			Par			-4-	4-4-4-4-4-	Index 140.
87654321	County Frankli	N			L Q	7 6	54321	0630.8g
COAL MINE LOCATION AND DATA	+++++	COAL M	INF LOC	ATI	אכ			

(34215—1M—3-30) 7

John C. Moore Corporation, Rochester, N	V. Y. Binder and hole	s in leaves, each Paten	ted 1906. 162392
	MOORE'S MODERN METHODS		
COAL MIN	NING INVEST	GATIONS	
	ERATIVE AGREEM	MENT	
Mine Name or No., East. (#1)		R.25
mile I from Chri	stopher		
Operator, 1912		65T	Sec.30
United Coal Min	479 CO.		
Operator, 191		18 1 1 1 2	R. R. Z.
Entrance, Shaft Elev., 418	ft. { above, 7	track in	F Christopher
Depth to bottom coal, 5/6	ft. Alt. —	100	
	SURFACE DATA.		
A. Topography Polling.			
B. Surficial materials, (1) Char	racter Chaj	i, no gro	evel
mentioned.			
			sinking, of former
drainage lines, underground	l water strata, et		e 8 ft.
ped of linesto		1 ft. at	Charles Chicago and Charles and Charles
coal. Gray s	trale !	below H	715.
Sands + sha	les a	bove to	within
40 Pt 0 F SUI	tace.		
	Mallone	6.1	See
	Yellow o	recy 1	See X/
(2) Structure, (3) Fossil horizons			See See
Collection No.,			Dec
(4) Evidences of subsidence,	No.		See
D. Note collection of mine maps, of	drill records and	shaft logs.	
	14 C 411		
		See drill record	sheet.
E. Notes on surrounding area,			
			See
Coal bed name: Local, #6.	PERM	Survey	
Collector, FHKay			0630
Mine, East. (#1)	Co. Franklin		8
L.—SURFACE SHEET (Geol.)			

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 162392	
MODES WELLINGS	
Underground Data	
F. Thickness of rock above bed worked, 467 feet. (1) Important variations, About 400 ft. in valley in	
Valley bottom	
G. Note presence of strata having important effect on mining. Top coal. See	
10p coal See	
(1) Position, 1 or morated coal with Calo in grad	1
(1) Position, Forms roof. (2) Character, Laminated coal with CaCo3 in crack (3) Persistence, Throughout	La Contraction
(4) Other workable coal beds, See	
H. Caprock, Strale, gray, trand. SECTION	
H. Cap rock, Shale, gray, hard. (1) Thickness, Said to be 107 ft. In. Name Index Sym.	
(2) Height above coal,	
See	
I Immediate roof Coal.	
(1) Thickness, av 20" (2) Contact with coal, Usually 5mooth	
Usually smooth	
(3) Horizontal variation,	
See	
J. Draw slate. (1) Thickness, (2) Contacts	
(3) Persistence	
K. Coal bed: Max. //4 Min. /08 Av. /// inches	
(1) Benches,	
(a) Position, Top, middle, bottom.	
[25] [25] [25] [25] [25] [25] [25] [25]	
(b) Persistence,	
(2) Bedded impurities, kind, position in benches, persist-	
ence, ease of separation.	
Small dirt bands in	
middle; Blue band 25	
from bottom 1/2 in thick	
See	
(3) Irregularities in continuity of bed (due to deposition,	
erosion, or movement).	
(a) Effect on mining,	
See See	
Collector, F.H. Kay Coal, #6. State No. 0630	
Mine, United (#) East Co. Frank / 10 Co-op. No. 58	
M.—UNDERGROUND SHEET (Geol.)	

	John	C. M	ore Cor	pora	tion, Ro	chester, N	Y. Binde	er and ho	les in lea	ves, eac	h Patent	ed 1906.	162392
							MOORES	ODERN					
		100			4		~			~			
							GROUND		(cont'	d.)			
ζ.	(5)						in bencl		/-	-2 -	3.		
		(a)	Relat	ive	hardn	ess,	Lowe	56	>	01	ther	5.	
		(b)	Lusti	e,	Bri	ght,	but	ma	ny c	Tirt	bar	rds 1	in middle
						lock							
		(d)	Text	ıre,	La	mi	na7	te d				Se	ee
	(6)	Im	puritie	s in	coal.	other tl	han bed	ded,					
		(a)	Kind	, .	5 7	- Ca	2 CO 3	,+11	je,	len.	ses	40	racks
							ce, /						
	Ca	C	0.51	00	dei	te):	Ma	n.	ave	rag	e 70	0	isti-Tot
			Rejec					Eas	e of se	parati	on,		
				/	Vo							Se	e
	Flo	or:	(1) M	ate:	rial	Ch	av.						
	(2)	Thi	ickness	3	18	311	ay.	4	44				
	(3)	Vai	iation		50	1770		ove	27	12	100	0	
	(4)	No	te cha	ract	er co	ndition	tenden	ev to 1	neave	relatio	on to 1	ınderer	itting com-
					value.							inderec	
		11	057	TV	07	my.	He	ave		wt	7017	we	et
	10	0	VC	1	ial	67e	112	1/1	CA	70	55	+	
			np										
												Se	e
	(5)	Cla	y sam	ple	No				Loc	eation,			
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,									
1.	Str	tion	aphy										
				1115	horizo	ns unde	erground						
	4/					110	004	7	ree	- 7	tro	m	
1	Dia	Col	lection	N	110	pre	04	00	STOR	ation			
		CO1	100 0101.	1 1 1 1					100	acion,			
T	Not	00.0	n offor	at o	f door	drilling	in coal	mino	**000				
	1100	W	in chick		1000000								
						9	ass,	V /	17	PIC	200	U .	1
1	10,	1		7	the	2	nen	a	mu	Se.	1/7	CHOS	elves
2	y., !	170	1/1	//	4	16/	5 0	4	4	10	_ </td <td>111</td> <td></td>	111	
0	10	-	5	re	ai:		POF	0	2	CC			
		1	12/1	00	1/-	17/12	1600					Se	e
0	lecto	E. 7	H.19	6		Coal	40.				State		0630
Ti	ne.	F	250	-	#/1	Co.	Fro	17/4	1, 1			p. No.	
	_UN			TIN	a the	EET (C	in last	1/11/	17.		2030	p. 210.	

O N

Collector THRAY Coal # 6 State No. 0630

Mine East. (#1) Co. Franklin Co-op No. 58

X.—EXTRA SHEET No. (



COAL MINE NOTES.

0630

COUNTY Franklin. TOWN Christopher
T. 65
R. 2E
OPERATOR United Coal Mining Co.

ENGINES

BOILERS DRUM

CAGE

SHAFT HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

SIZE OF ENTRIES-MAIN

CROSS

ROOM

NECK

SIZE OF PILLARS-MAIN

CROSS

ROOM

SHAFT

CHAIN

BARRIER

SIZE

AMOUNT OF TIMBERING

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

0630

SIZES

PER CENT

PROPORTION AND SIZE OF WASHED COAL

DAILY OUTPUT

UTILIZATION

MARKETS

FREIGHT RATES

SELLING PRICES AT MINE

COAL LAND OWNED

LEASED

COST OF LAND OWNED

ADDITIONAL NOTES

LEASED

HELD IN FEE



COAL MINE NOTES.

OPERATOR United Goal Mining Gompany
ENTRANCE

NAME OF COAL BED

MINE */ Christopher.

ELEVATION

THICKNESS OF COAL

0630

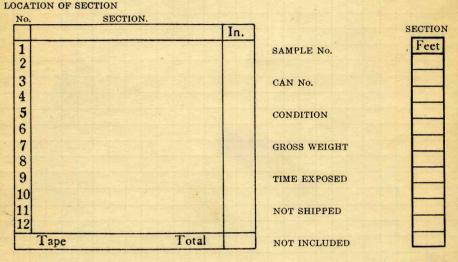
DEPTH TO FLOOR

MAX.

MIN.

AV.

ALTITUDE OF COAL



PHYSICAL PROPERTIES BY NUMBERS

ROOF

FLOOR

DIP '

FAULTS, ETC.

GAS

0630

0780



COAL MINING INVESTIGATION.

AL DANGE OF THE CANADA

COOPERATIVE AGREEMENT

Operator, United Co.	al Mining	C. Date,	3/295	- , 1912
Mine, Cast	Located			resteller
Location in mine, tae	(6 th)	with &	ast.	XXL
Total (vertical) depth fro	m surface at poir	it of sampling,	442	ft. 50/ 8

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 & 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.
	Goel claan which	4	10
2	Dirt Bony		220
3	Coal	/	9
4			
5			
* 6	(0 0 0		
7	Loon!		
8			1-77/4
9			
11			
12	4		
13	lap coal not me		
14	alude de	. V	
15			
16			
17	1 #, 1		+ 2/-
	TOTAL,	6	172
Is coal wet or	dry? moise		
Time exposed,			minutes.
Weight,	64 gross,		net.
What are the	impurities, and how do they occur?		
What are ship			
What are excl-	uded from the sample?		

*Direction (N., NE., etc.

Coal bed, †Nearest railway station.

Mine,

MPLE NO, CAN OAL SAMPLE SHEET.

Sampler.

Co.

0630



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator,

mate Date,

miles* from †

, 191

Mine. 6 a 29

Located /

Location in mine, Apply VA Av 15 70015

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 \(^3_8\) 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 agal	cloan and		6
2 break	X III		
3			SA SA
4			No. of Part of
5			
6	4 (0	
7	p va		
8			
9			
10			
11 11			
12 7 7/ 90	al strafte		
13			
14			
15			
16			
17			Z
	Total	L, /	
Is coal wet or dry?		95	
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?

*Direction (N., NE., etc.)

Coal bed, Nearest railway station.

Town,

Mine.

Sampler.

0630



COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator,	entell Coal & min, Date, 3/	291	, 191 2
Mine, Tax	Located / miles* Gaz fr	om + Class	stophe 1
Location in	mine, tace 6 th South Eas	1820	2/1
Total (vertice	cal) depth from surface at point of sampling,	42 ft.	
In desc	ribing the beds and character of the members,	note any m	ember that is
rejected by	the miner. Note all clay and sulphur partings,	whatever th	heir thickness.
Exclude from	n sample all clay and sulphur partings 3 inch thi	ck or over (a	and even those
of less thick	ness if they are rejected at mine or tipple).	100	
	Section of Bed at Point Samplei).	
No.	DESCRIPTION.	FEET.	INCHES.
1	and along & high	4	77
2	alankoud the		7
3	and a		2
4	That Roud		1 Barrell
5	Capl	1	19
6			
7			
8			
9	000		
10			
11			
12			
13			A Park Control
14			
15		V	

Is coal wet or dry?

16 17

Time exposed,

Weight,

What are the impurities, and how do they occur?

gross,
do they occur?

hours,

What are shipped?

What are excluded from the sample?

*Direction (N., NE., etc.)

Mine,

Coal bed, †Nearest railway station,

(41)

TOTAL,

Co. A

38 li

I.—COAL SAMPLE SHEET. Sampler.

#479

0630

minutes.

net.



COAL MINING INVESTIGATION

Operator, United Galmining Cordate,

Mine, Cart Location in mine.

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

ft.

191

0630

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.

SECTION OF BED AT POINT	SAMPLED.	
No. DESCRIPTION.	FEET.	INCHES.
1 Cool Blance Break	5	2,
2 Dint Bonni		2/2
3 Doel aleard and the	ialet 1	11
4	9 10 10	
5		
6		
7 / 0		
8		
9		
10		
11		
12		A CONTRACTOR OF THE PARTY OF TH
13		
14		
15		
16		1
	OTAL,	3/2
Is coal wet or dry?	JIAL,	
Time exposed, hours,	53	minutes.
Weight, 67 gross,		net.
What are the impurities, and how do they occur?		
What are shipped?	1/12/11/11	
What are excluded from the sample?	/	
	Coal bed,	61
*Direction (N., NE., etc.).	Vearest railway statio	on. 10 0
Town, Mine Mine	(#1) Co.Tra	nklin
SAMPLE NO A HOAN NO.	No.	6
I.—COAL SAMPLE SHEET. Sampler.	MF- 3	0



CHRISTOPHER. UNITED NO. 1 MINE.

Analyses 22686 to 22691 (p. 33). Bituminous coal, Illinois field, from United No. 1 mine, a shaft mine at Urbain, 1 mile east of Christopher, on the Eldorado branch of the Illinois Central R. R. The mine also has shipping connections with the Chicago & Eastern Illinois R. R. and the Chicago, Burlington & Quincy R. R. Coal bed. No. 6 of the Illinois geological survey; Carboniferous age, Carbondale formation. The coal is of firm character and uniformly thick, averaging 9 feet 5 inches. A "blue band" or dirt band, consisting of bone, shaly coal, or gray shale 18 to 30 inches above the floor, is found almost everywhere. The main roof is gray, impure shale, 15 to 110 feet thick, which falls readily when exposed. The immediate roof consists of 14 to 30 inches of coal of good quality. The floor is hard brittle clay of variable thickness. The shaft is 507 feet deep. The bed was sampled by H. I. Smith July 30 and 31, 1915, as described below:

Sections of coal bed in United No. 1 mine.

Sample	A	В	C	D	E
Laboratory No	22686	22687	22688	22689	22690
Roof, main, shale.	Ft. in.	Ft. in.	Ft. in.	Ft. in.	Ft. in.
Coal left up in mining		(a)	(a)	(a)	(a)
Coal		1 111	1 53	1 54	111
Coal, bony		1 51		91	b1 21
"Sulphur".		1 02		1	31 b1 8 b2
Coal					82
Coal, bony		1			b2
Coal		1 3	4 13	3 5	2 1
Gray coal		$\frac{7\frac{1}{2}}{2}$	S. A.L.	10 10 10 10	9
Coal, bony		3		Miner Televis	c 1
Coal		8	4.	c 31	c 63
Coal	STATE OF THE PARTY	had Alas		tuited and	31
Coal, bony				and well was	1
Coal	1 83	1 31	i 5½	1 81	1 3
Floor, clay.			- ISON DIBIN	Mario St. Vall	And the second
Thickness of coal mined		7 63	7 5	7 71 7 33	7 31
Thickness of coal sampled	5 111	6 104	Supplied 1	7 33	6 4

a Not measured; estimated thickness 20 inches, seemingly coal of good quality. b Soft "mother coal," not included in sample.

Section A (sample 22686) was measured at the face of 19 room, 7 east panel, 8 southeast entry. Section B (sample 22687) was measured at the face of 6 room, 5 panel, 4 south entry. Section C (sample 22688) was measured at the face of 6 room, 2 west panel, 9 northeast entry. Section D (sample 22689) was measured at the face of 9 room, 8 panel, 8 southeast entry. Section E (sample 22690) was cut at face of 5 south entry, 250 feet south of 5 panel.

The ultimate analysis of a composite sample made by combining face samples

22686, 22687, 22688, 22689, and 22690 is given under laboratory No. 22691.

The mine is worked on a modification of the room-and-pillar system. In 1915 the coal, as a rule, was undercut with chain breast machines, and then snubbed and shot down with permissible explosives. The coal was sized on shaking screems of different sized openings, making possible a large number of sizes and combination of sizes. Pickers were employed on the cars. Screenings were not washed or coked. There were four loading tracks, with a capacity of 68 loaded and 68 empty cars. The average daily output of the mine was 2,500 tons.

Frenklin Co. Lindex No. 0630.09