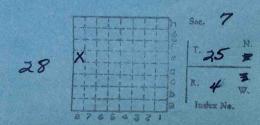
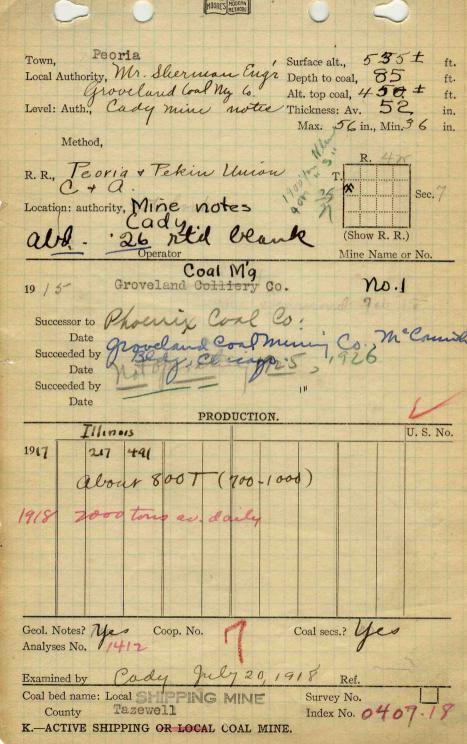
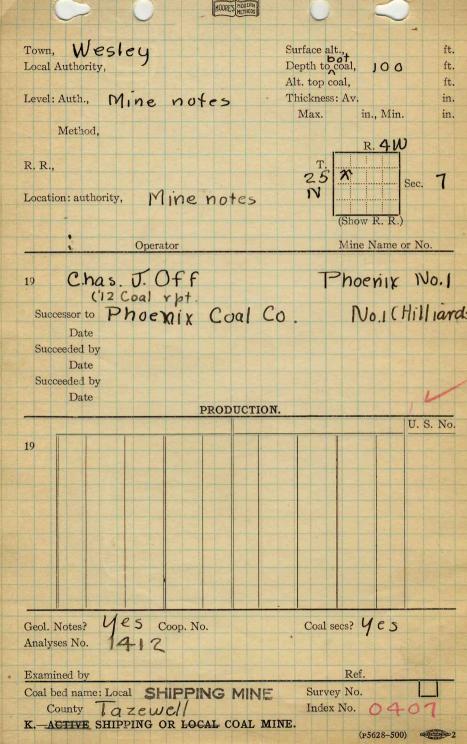


Phoenix C.C.



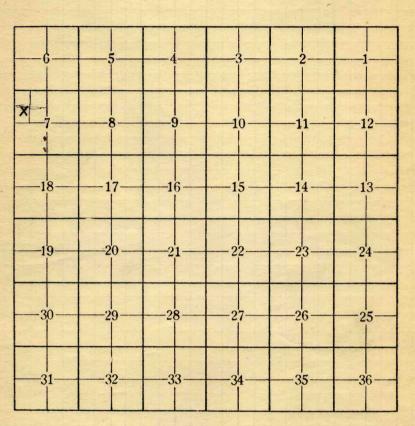
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Zahlyjugstate geological survey. COUNTY TOJEWELL
TOWNSHIP 25H

RANGE 4W



Operator Chas. J. Off.		
Cffice address Peoria. Phyer	11x Co	al Co.
Office address Peoria. Phoen Mine name or number	coaln	per 1)
Surface at mine is feet abo	ove sea	levél
or about feet (above) (below	m) railr	oad
station at		
Denth to bottom of coal is	feet	
Average thic ness of coal is	feet	inche
		/
Timely note changes in name and	pridregg	/

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1994, (5529-500)

Mine Name or No	Mine Address Peoria				
Operator Groveland Coal Co					
Main Office AddressMcCormick 1	Building				
	Chicago				
Location of Mine:					
Township NameGroveland	County Tazewell				
Section No. Township	25 N Range 4 W				
Indicate location of mine and position in plat of section below. North					
	The state of the s				
24	Kindly state number of feet from quarter section lines:				
L.	1920 from N. line				
1	from E. line				
West	gfrom S. line				
	400from W. line				
	Idle entire year 191.gYesYes				
	Abandoned (date) 19				
MM 19th South					
HIPPING MIRE					
Surface landing isfeet above sea level or aboutfeet (above) (below) railroad station at(nearest town).					
Depth to top of coal is	Data from Mr. Sher et 4 inches. Engineer				
Do not fill in below this line.					
Coal Bed Name Survey No. 5					
County Tazewell	Index No 0 4-0.7				

V-MINE LOCATION SHEET.

Operator, 191 Groveland Coal Co, Sec. Operator, 191 R.R. ft. Jabove, Entrance, Shaft Elev., 535 sea level C&A Depth to bottom coal. Alt. SURFACE DATA. A. Topography, Relief of nearly d50 feet See B. Surficial materials. (1) Character, Glacial drift. (3) Effect on mining and shaft-sinking, of former (2) Thickness, drainage lines, underground water strata, etc. See See C. Outcrops, (1) Character, See Peoria Quad map See (2) Structure, (3) Fossil horizons, See Collection No., See (4) Evidences of subsidence, D. Note collection of mine maps, drill records and shaft logs. Probably some available See drill record sheet, E. Notes on surrounding area, Mine reported to lie south of one of the faults for wh ch Peoria County is famous. Not encountered in this mine. Survey No. Coal bed name: Local, Collector, Cady July 20. 1918 Index No. Mine, Groveland No 1 Co. Tazewell L.—SURFACE SHEET (Geol.)

MOORES METHODS

Mine Name or No., No 1

mile o from Wesley



K. (5) Physical character of coal in benches, No benches present

Coal softer around horsebacks

(a) Relative hardness,

	elsewhere fairly hard	
	(b) Lustre, Bright and dull s	treaks as usual
	(c) Fracture, Nothing noteworth	See
(6)	(d) Texture, 11	Dee
(0)	Impurities in coal, other than bedded, B (a) Kind, in vert, streaks	right sulphur
	(b) Position and persistence, Not per	sistent nor common
	(a) Paineted a Fase	of separation, Not very
	(c) Rejected, Sometimes Ease	See
	por: (1) Material, Fire clay	
	Thickness, Not noted Prob	0.01
(3)	Variation,	2 It or more
(0)		
(4)	Note character, condition, tendency to hea	ave, relation to undercutting com-
	mercial value. Heaves when w	
WE	ater so that the floor os di	
		担任 非常 医 医 医 电
		See
(5)	Clay sample No.	Location,
M. Str	ratigraphy,	
(1)	Fossiliferous horizons underground,	
	Collection No.	Location,
N. No	otes on effect of deep drilling in coal mine area	as.
		MISCHELL STREET
		See
Collect	tor, G. H. Cady July 20, 1018	Coal: Survey No. 5
Mine,	Groveland #1 Co. Tazewell	Index No. 0407
N.—U	NDERGROUND SHEET (Geol.)	BEET SECOND

MOORE'S MODERN ... Thickness of rock above bed worked, Consid. Variation due to (1) Important variations, ravines. No effect on mining G. Note presence of strata having important effect on mining, Sandstone See Y- 1 above coal. (1) Position, 0 to 20 to 25 ft. possibly more (2) Character, Massive channel sandstone (3) Persistence, Practically persistent (4) Other workable coal beds, See H. Cap rock, Limestone SECTION 2 to 8 inches Ft. In. Name Index Sym. (1) Thickness, (2) Height above coal, about 2 fest X-6-SS I. Immediate roof, Black slate 20年 upto (1) Thickness, 14-16" (2) Contact with coal, 124 Tight. Poor prtgs above and belowact capri (3) Horizontal variation, Persitent see except where cut out by ss. J. Draw slate. (1) Thickness, (2) Contacts X-Call lower 2" st. & attached coal d.s. 14" BLIT (3) Persistence, Persistent Min. 36 Av. 50 K. Coal bed: Max. 56 (1) Benches, None coal no partings (a) Position, (b) Persistence, 4 4 Coal (2) Bedded impurities, kind, position in benches, persis-

tence, ease of separation.

Thin tor less bands of clay and mother coal at various places in

bed none persistent and not very imp.

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

Expensive

(a) Effect on mining,

Collector, Cady July 20 1918

Coal: Survey No.

Index No. 04-0

Mine, royeland Tazewell M.—UNDERGROUND SHEET (Geol.)

Extra notes

Groveland No. 1

G. The massive channel sandstone has the same appearance and the same relation to the coal as the sandstone in the Walben mine (Brewster & Evans) on the west side of the Illinois. The sandstone has a very irregular base and accordingly lies at various positions above the coal, in some places being entirely absent and in others resting practically on the coal. Conditions in this mine are considerably worse than in other mines from the fact that the sandstone apparently carries considerable water which tends to work down into the underlying shale especially where it is loosened by mining and cause the material to drop, It is reported practically impossible to hold the roof when what is called the draw slate comes down. This condition is in contrast with the condition in the mine of the Warsaw Cal Company at Edwards where a parting a few inches above the coal and in the black slate leaves a fine even roof that is reported to stay in good shape . In the Groeland mine when the "draw slate" comes down it is soon followed by all the rest of the material up to the sandstone. In some places this may mean as much as 20 feet of material As a result gardage is excessive in this mine, and it is difficult to see how the mine can be profitably carried on.

The so-called cap-rock is a layer of fossil-H. ifferous gray limestone 2-8 inches thick which in places is hard; more commonly shaly with no supporting strength. Miscalled cap-rock

The clod is rather massive dark gray shale which does not possess any supporting strength , Falls readily.

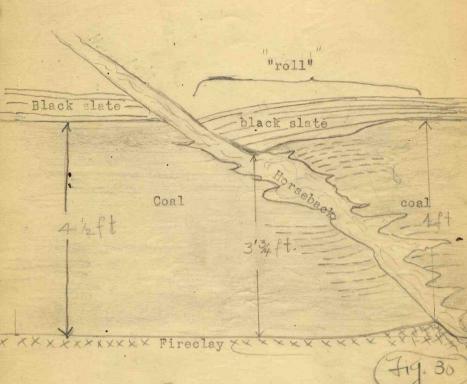
Coal No. 5 July 20, 1918 Cady Groveland Coal Co. Mine No. 1 Index No. 040 Tazewell Co.

Extra Sheet No. 1

- T. The immediate roof is the same black slate found all over Peoria Co. Contains the usual white limy markings, and some concretions. Biggest concretions I have seen in the region were in this mine. Some 1 ft, to 14 inches thick by 24" by 12" They are not especially numerous, I doubt whether any more numerous than the concretions in the roof of No.6 coal in the Centralia region. Do not appeal to me as being especially characteristic.
 - The contact of the slate and coal is tight. The break occurs commonly an inch or two below the slate. If it breaks in the slate then they lose the roof, and it falls as is noted above. The contact of coal and slate is commonly accompanied by a thin line and in a few places in the mine by balls of sulphur. Usually bright cryst, sulphur. This sulphur streak is not commonly over 4 inch thick, in fact it is usually nothing but a streak,
- J. The draw state has been described above as being the lower part of the slate and upper part of the coal. Effort is to keep it up if possible.
- K. The coal is very uniform in thickness. The on y departurs from uniformity are near the horse-backs or rolls. In these rolls the coal is commonly shoved apart and one side usually slips down the effect being a small step fault. The angle of fracture is usually acute. The result is that the horseback is commonly accompanied by what is known as a roll in the roof the vertical distance from the fire clay to roof commonly being reduced to about 3 feet. The sketch on the next page will illustrate the relationships.

Cady July 20, 1918 Groveland Coal Co, Mine No. 1

Coal No, 5



K2 - About the only bedded impurities are the thin streaks of clay and mother coal noted. On the east side of the mine sulphur bands like the brown sulphur found in the Walben mine are found near the horsebacks. These commonly are about 12 inches thick and may be 4 to 5 feet long or less. They are not very pure sulphur, apparently being interlaminated sulphur and mother coal, tho this may not be the case.

Cady July 20, 1918 Groveland Coal Co Mine No. 1 Coal No.5

K Measu

Measured sections:

Room 1 3rd stub off the 6th east entry
Coal 4'3" No sulphur Thin streaks of clay

and mother coal.

Black slate roof and fire clay floor Poor parting between coal and slate.

Room 6 off the 10th east entry

Coal 17"-Brown sulphur Coal

1 3/4"

53"

ditions are especially bad they have what are called blind slips in the coal and slates. These seem to be horsebacks without any clay filling. In the coal they are commonly filled with what the miners call "spar". This seems to be bright crystalkine sulphur rarely as much as \(\frac{1}{4}\)" thick. These are very hard to drill. As the fracture runs up into the slate there is apparently nothing in to mark it. It makes the roof very poor, however, and it is difficult to get the miners to work in the east entries,

Cady July 20, 1918
Groveland Coal Mg Co

Coal No. 5

Index No. 0407

In general the mining conditions in this mine are about as bad as they can be and still get coal out. Great credit attaches to the management in their apparent ability to make the operation successful. Costs are excessive because of the weak roof and the high pumping costs. As many as six pumps have been go ng at once in the mine. At present there are 4 I believe. A room that is dry one night may have a fall during the night and water will be poring in in the morning.

Cady July20, 1918 Groweland Coal Mining Co No. 1

MOORE'S MODERN' PYRITE See Extra GEOLOGICAL OCCURRENCE Sheet No. As bands o brown pyrite in some of the rooms, especially toward the east where horsebacks are numerous. Re atively few in number Size of Masses 12 - 3" x 3 - 4' long Very irregular Measurements to determine amount Total 3 4 5 P Px3 CPICP CPI CPI Coal | Pyrite 0% 54 1 1/3 0 1 1/3 0 Pyrite less than 1% Total Average Analyses, etc.

7 8 9 10 Notes 4. Samples. 5. Label No. Location in mine Notes 6.

Date July 20, 1918 | Coal No. 5 Collector G. H. Cady Operator Groveland C Co No. 25 Mine No, 1 Y-PYRITE SHEET (1)

Manner

Location in mine

10th off 6 E

3.

Jo.

6

Tazewell

Index No. 0 4-07

(8712-200-7-18)

None

RECOVERY

Method of rejection of pyrite

7.

1.

- Picked out ofcoal In mine (I)
- Per cent rejected much less than 1% (2) (3) At tipple
- (4) Per cent rejected Per cent of pyrite in rejected lumps 25 - 50
- Possible daily production of pyrite 9.
 - . Negligible
- Possibility of future production 0.
 - Pyrite ever cleaned and shipped?
 - (I) Method
 - (2) How loaded
 - (3) Consignee
 - (4) Price F. O. B. cars
- 12. Washing: Daily tonnage of refuse
 - (I) Maximum size
 - (2) Pyrite in refuse, per cent:
 - (3) Samples. No.
 - Sulphur samples. No. (4)
 - Conditions of recovery
- 3. General conclusion as to pyrite recovery Too small amount and

mostly low grade Collector

Coal No. Cady Date July 20 1918

Groveland Cock Co Tazewell Mine Z PYRITE SHEET (2)

Operator

(8713-200-7-18)

Index No. 0407

See Extr

Shee

No.

COAL MINE NOTES. CONTINUED.

OPERATOR Phoenix CoalCo.

MINE #1, Hilliards

ENTRANCE Shoff

ELEVATION

NAME OF COAL BED # THICKNESS OF COAL

DEPTH TO FLOOR /00

MAX. MIN.

AV.

ALTITUDE OF COAL LOCATION OF SECTION 3500 West of bottom. Face 6th Noff 1st MainW.

No.	SECTION.			
		In.		SECTION
1	Gray Slate Clean Coal Fire Clay	18	SAMPLE No. W50.	Feet
2	Clean Coal	54		
3	Fire Clay	24	CAN No.	
4				
5	I SEED OF		condition Dry	
6				
7			GROSS WEIGHT 30*	
8				
9			TIME EXPOSED 30	
10				
11 12			NOT SHIPPED / x 3	
	Ton	T		
	Tape	Total	NOT INCLUDED / 3	

physical properties by numbers \$6 Coal outerops along Ereak just up the hollow from the mine.

ROOF Slate, good

FLOOR Good Fire Clay.

DIP

1912 coalrpt shows C. J. Off as Proeniv Coal Co.

FAULTS, ETC. Some horse backs.

GAS

