



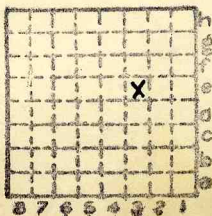
Form 180

Superior Coal Co., #4

M.i.#188

254

S-9



Sec. 10

T.	7	N.
R.	7	W.
Index No.		

2310 e3



Mine originally operated by: (1)

Date Superior Coal Co.

1917

Original name or number: #4

Illinois Coal Report 1917 p.

LATER OPERATORS

Date Operator Name or No.

2

3

4

5

6

7

8

9

10

11

12

13

14

30' N 710' E of SW corner SW NE (1948)

1946 OK

* Also owners

#See ownership sheet

Railroad, Wagon, Idle, Abandoned Shaft

C.&N.W.

IDENTIFICATION

County No. 254

Coal No. 6

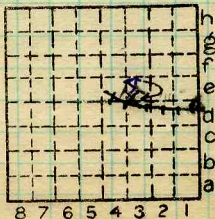
Gillespie

Quad. 200

Part 8

County Macoupin

(1948) 7'0"



Sec. 10

T. 7 N.

R. 7 W.

Index No.

2310 e3

COAL MINE OPERATOR



(Sheets) COAL PRODUCTION (Sheet)

No.	Period						Tons	
	Mo.	Day	Year	Mo.	Day	Year		
						1935		
						1927	523	866
						Av. Daily "	3	000
						1931	725	457
						1932	249	534
9	1	1	1936	12	31	1936	660	662
9	1	1	1937	12	31	1937	761	786
S-9	1	1	1938	12	31	1938	559	740
						1939	631	803
						1940	697	511
S-9	1	1	1941	12	31	1941	753	626
S-9			1942			1942	921	591
						1943	908	708
						1944	926	270
						1945	827	930
						1946	781	507
						1947	808	868
						1948	684	280
						1949	635	228
						50	584	432
						51	572	751
						52	506	319

#9

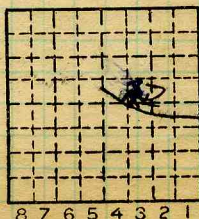
SUMMARIES

No.	to	No.		
1917		1935	11	748155

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

County No. 254 Coal No. 6
 Gillespie
 Quad. 200 Part 8
 County Macoupin



Sec. 10

T. 7 N.
 R. 7 W.

Index No. 2310 e3

COAL MINE—PRODUCTION



(Sheets) COAL PRODUCTION (Sheet)

Period						Tons	
Mo.	Day	Year	Mo.	Day	Year		
					53	373	391
		Abnd.			1954	178	906

SUMMARIES

No. to No.

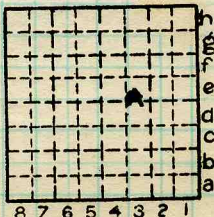
Railroad, Wagon, Strip, Idle, Abandoned June, 1954

Sec. 10

IDENTIFICATION

County No. 254
 Coal Report No. S-9
 Quad. 200
 County Macoupin

Coal No. 6



T. 7 N.
 R. 7 W.
 Index No.

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA





LOCATION AND ELEVATION

Location: side R. R.
 side R. R.
 side Highway No.

on top. map Location sheet **Map Files #9-59-21**

Elevation: Method, 1. Est. () ft.
 2. Inst. (kind **PT**) **638.1** ft.

By **NB591 PSM p.45-304** Data sheet

DEPTH

Authority To coal **314** ft.
 Authority Rail to rail _____ ft.
 Top of coal above rail. (Est. Rule) _____ ft.
 To coal **307** ft.

ALTITUDE OF TOP OF COAL

By estimated data _____
 By instrumental data **331** ft.

Thickness
 Max. **72** in. Min. **96** in. Aver. **84** in.

GEOLOGICAL DATA

Mine notes, date **1921**
 Coop No. **188** Pyr. inv. Coal Ash inv.

CHEMICAL DATA

Analyses Face	U. I.	B. M.	81085-6-7-8	A.I.M.E. Suppl. Bull. 153 Others P.2495
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
#188	U. I.	B. M.		Others

Classification **R.I. 123 U.C.I. 142**

Misc. tests: Coking. Cleaning Boiler

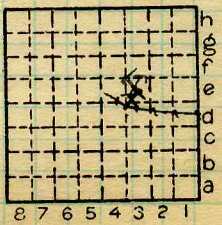
Published descriptions:—

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

County No. **254**
3-9 Gillespie
 Quad. **200**
 County **Macoupin**

Coal No. **6**
 Part **8**



Sec. **10**
 T. **7** N.
 R. **7** W.
 Index No.

2310.e3

COAL MINE LOCATION AND DATA



Town, *Gillespie* Surface alt., *636.5* ft.
 Local Authority, *Jas. Powell Ass't. Supt.* Depth to coal, *307.1* ft.
 Alt. top coal, *329.4* ft.
 Level: Auth., *F.F. Jorgensen Engr.* Thickness: Av. *84* in.
 Max. *96* in., Min. *72* in.
 Method, *From engr's notes.*

R. R., *Chicago & Northwestern.*



Location: authority, *Mine map in office*

(Show R. R.)

Operator

Mine Name or No.

19 *21* *Superior Coal Co.* *No. 4*

Successor to

Date

Succeeded by

Date

Succeeded by

Date

PRODUCTION.

							U. S. No.
19			<i>3000 ton daily Av.</i>				

Geol. Notes? *Yes*
 Analyses No.

Coop. No.

Coal secs? *3*

Examined by *Netzband*

Ref.

Coal bed name: Local

Survey No. *6*

County *Macoupin*

Index No. *2310.65*

K.—ACTIVE SHIPPING OR LOCAL COAL MINE.



2521

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906.
(35031-500-6-25)

Mine Name or No. 4 Mine Address Wilsonville

Operator Superior Coal Co.

Main Office Address Gillespie, Illinois

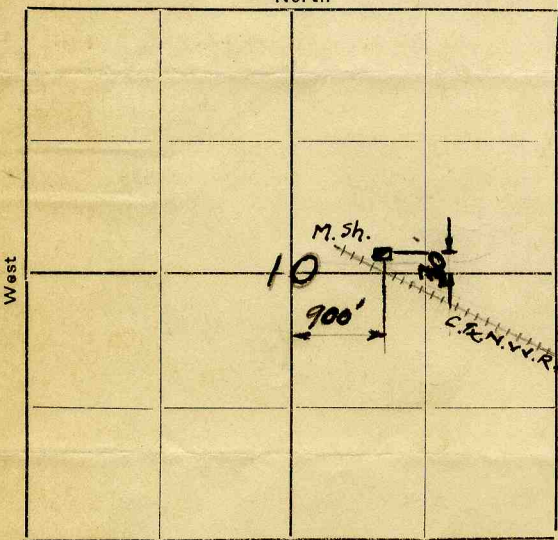
Location of Mine:

Township Name DORCHESTER County MACOUPIN

Section No. 10 Township 7 N 8 Range 7 W

Indicate location of mine and position of R. R. in plat of section below.

North



Kindly state number of feet from quarter section lines:

----- from N. line

----- from E. line

30' NE 1/4 from S. line

900' from W. line

N.E. 1/4 Sec 10.

Idle entire year 19-----
Yes
No

Abandoned (date) 19-----

Surface landing is 636.49 feet above sea level or about ----- feet (above)

(below) railroad station at ----- (nearest town).

Depth to top of coal is 307.10 feet.

Average thickness of coal is 7' feet 0" inches.

Do not fill in below this line.

Coal Bed Name ----- Survey No. 6

County Macoupin Index No. 23 10

V-MINE LOCATION SHEET.



John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906, (35031-500-6-25)

Mine Name or No. 4 Mine Address Wilsonville

Operator Superior Coal

Main Office Address Gillespie Illinois

Location of Mine:

Township Name _____ County _____

Section No. 10 Township 7 ^N/_S Range 7 ^E/_W

Indicate location of mine and position of R. R. in plat of section below.

North

West

East

South

Kindly state number of feet from quarter section lines:

_____ from N. line

_____ from E. line

_____ from S. line

_____ from W. line

Idle entire year 19 _____ Yes
No

Abandoned (date) 19 _____

Surface landing is _____ feet above sea level or about _____ feet (above) (below) railroad station at _____ (nearest town).

Depth to top of coal is 200 feet.

Average thickness of coal is _____ feet _____ inches.

Do not fill in below this line.

Coal Bed Name _____ Survey No. 6

County Macoupin Index No. 2310



Town, *Wilsonville (Gillespie)*

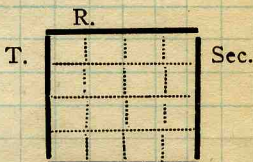
Local Authority,

Level: Auth., *Topog.*

Method,

Surface alt., ft.
 Depth to coal, *320 ±* ft.
 Alt. top coal, ft.
 Thickness: Av. in.
 Max. in., Min. in.

R. R.,



Location: authority,

(Show R. R.)

Operator

Mine Name or No.

19 *Superior Coal Company
 Gillespie Illinois*

Successor to
 Date

Succeeded by *Production App 4000 tons*
 Date

Succeeded by *Record 6000.*
 Date

PRODUCTION.

								U. S. No.
19								

Geol. Notes?

Coop. No.

Coal secs?

Analyses No.

Examined by

Ref.

Coal bed name: Local

Survey No. *6*

County *Macoupin*

Index No. *2310*

K.—ACTIVE SHIPPING OR LOCAL COAL MINE.



F. Thickness of rock above bed worked,

(1) Important variations, *see below* See

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

Limestone Cap Rock See

(1) Position, *0 to 10' above coal*

(2) Character, *Hard dense*

(3) Persistence, *yes*

(4) Other workable coal beds —

See

H. Cap rock, *limestone*

(1) Thickness, *7 to 10'*

(2) Height above coal, *0 to 10'* See

I. Immediate roof, *Hard shale*

(1) Thickness, *0 to 10'* (2) Contact with coal, *Even*

(3) Horizontal variation, *Not Much* See

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

(3) Persistence, —

K. Coal bed: Max. Min. Av. inches

(1) Benches,

(a) Position,

(b) Persistence,

See

(2) Bedded impurities, kind, position in benches, persistence, ease of separation, *Blue band clay and stony pyrite lamina.*

See

(3) Irregularities in bed (due to deposition, erosion, or movement), *very little.*

See

(a) Effect on mining,

See

SECTION			
Name	Ft.	In.	Sym.
<i>Limestone</i>	<i>7 to 10 ft</i>		
<i>Black slate</i>	<i>0 to 10</i>		
<i>#66001</i>	<i>7</i>	<i>6</i>	

Collector,

Coal: Survey No. *6*

Mine, *Superior #4 Co. Macoupin*

Index No. *2310*



759693

K. (5) Physical character of Coal,

- (a) Relative hardness, *More friable than coal from #1*
 (b) Lustre, *Bright and dull.*
 (c) Fracture, *irregular*
 (d) Texture, See

- (6) Impurities in coal, other than bedded, kind, position, persistence, ease of separation, etc. *Facings of pyrite and calcite. They are quite noticeable but contribute only a minor amount of ash.*

See

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

- (2) Thickness, *?*
 (3) Variation, *None*

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

See

- (5) Clay sample No. *A-166 - A-173* Location,

M. Stratigraphy, *—*

- (1) Fossiliferous horizons underground,

Collection No. *—*

Location,

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

See

Collector,

Cola: Survey No. *6* Mine, *Superior #4*Co. *Macoupin*Index No. *2310*



Symbol Description Inches

1 division=3 in.]

	<p>Superior Coal Co Mine No 4, Macoupin County Sect 10 Twp 9 N, R 9 W 3355 E and 2811 N lot shaft. North is N 31° 50' E of True N. Lime stone</p>	
←	<p>1" of black sandy shale - called clod</p>	A-167
	<p>Bright Clean Coal but very friable Conchoidal fracture</p>	
	<p>3/8" dull coal</p>	
←	<p>3/4" of Bone Coal, laterally changes to pyrite</p>	A-171
	<p>1/8" lamina of pyrite.</p>	
	<p>Horizon of pyrite (clayey) lenses</p>	
	<p>1/2" Mother coal</p>	
←	<p>3/8 to 1/2" stony pyrite, clayey</p>	A-168
←	<p>Blue band 1" thick</p>	A-169
	<p>Harder laminated coal</p>	
←	<p>Fire Clay - Early hard and slightly slip fractured. Light colored.</p>	A-166

Face Sample A-170

Collector. J
 Mine. Superior # 4 Co. Macoupin

Coal: Survey No. 6
 Index No. 2310



Symbol Description Inches

1 division=3 in.

	Superior Coal Company, Mine No 4 Macoupin County, Sect 10, Twp 7N Range 7 W. 1160 feet West and 3500 N of shaft. Mine N. is N.31° 50' East of True N.	
	Roof - Hard Black shale,	A-192
	Top of Coal	
	Bright clean but very friable coal	
	shaly parting.	
	1/4" pyrite	
	1/2" stony pyrite, some black shale and dirty Mother	A-196
	1 1/2" very black shaly material	A-195
	Blue Band 1/4" thick	A-194
	Fire Clay same as coal sect #1	A-193

Fire Sample A-197



F. Thickness of rock above bed worked, *No information*
 (1) Important variations, *See*

G. Note presence of strata having important effect on mining,
Limestone makes good roof in W. See X2
 (1) Position, *Above sh. & clod.*
 (2) Character, *Strong.*
 (3) Persistence, *Is a good roof only in W.*
 (4) Other workable coal beds, *No information.*
See

H. Cap rock, *Limestone*
 (1) Thickness, *No information.*
 (2) Height above coal, *Feather edge to 5'*
See X2

I. Immediate roof, *Shale*
 (1) Thickness, *0-5'* (2) Contact with coal,
 (3) Horizontal variation, *Varies considerable*
in character. See X2

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

K. Coal bed: Max. *96* Min. *72* Av. *84* inches
 (1) Benches, *Two*
 (a) Position, *Above & below B.B.*
 (b) Persistence, *Thruout mine.*
See

(2) Bedded impurities, kind, position in benches, persistence, ease of separation. *B.B. grey shale*

1/2" - 1 1/2"

See

(3) Irregularities in continuity of bed (due to deposition, erosion, or movement, *Slips & rock rolls*
See X2

(a) Effect on mining, *Trouble in driving entries thru rock.*
See X2

SECTION				
Pt.	In.	Name	Color	Sym.
?		Limestone		
5		Shale		
7		Coal		
1		Flour clay		
?		Limestone		
		<i>1 Div = 4'</i>		

Collector, *Netzeband*

Coal: Survey No. *6*

Mine, *Superior #4* Co. *Macoupin*

Index No. *2310.65*

M.—UNDERGROUND SHEET (Geol.)

County #254



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

(a) Relative hardness,

(b) Lustre,

(c) Fracture, *539 E N 55 E*

(d) Texture,

See

(6) Impurities in coal, other than bedded,

(a) Kind, *Pyrite lenses & bands (1/16 - 3/4" thick)*(b) Position and persistence, *For the most part above the B.B.*(c) Rejected, *Pyrite lenses ore 1/2"* Ease of separation,

See

L. Floor: (1) Material, *Flour clay 45' below*(2) Thickness, *6-12"*(3) Variation, *Only in color & thickness.*(4) Note character, condition, tendency to heave, relation to undercutting commercial value. *Light to dark grey clay, with many slickensides; does not heave; used to undercut upon; value unknown. Lenses 6" to 12"*

See

(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, *Netzband*Coal: Survey No. *6* Mine, *Superior #4* Co. *Macoupin*Index No. *2310.65*

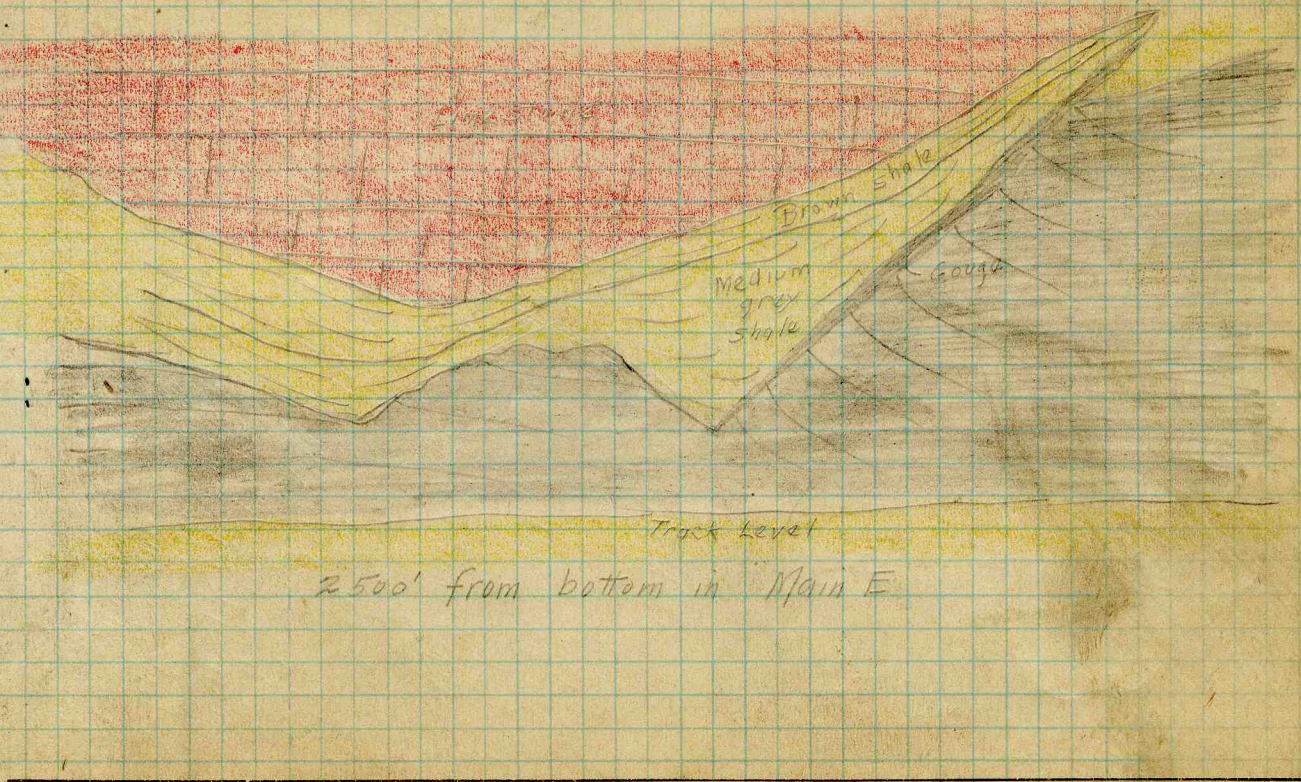
N.—UNDERGROUND SHEET (Geol.)

County #254



(36713-500-7-20)

INDEX



Collector Netzband
X-1 County #254

EXTRA NO. 1

Index No. 2310.65
County Macoupin



INDEX

(36713-500-7-20)

H

The lower surface of the limestone is very irregular, the relief is as great as $\frac{1}{2}$ ' in some places. Many of the nodules are long in relation to their width and are called rock rolls. The larger ones as shown in sketch are often accompanied by slips in the shale and coal.

In this mine the lower surface of the limestone appears to come up and down and the coal runs fairly level. The nodules of limestone project down into the coal. They appear to be deposited in depressions in the upper surface of the coal.

The above conditions hold true for the east side of the mine, the farther west the workings go, the less shale there is between the coal and limestone until in the present Main West, there is a clod of about two inches. The lower surface of the limestone is very regular in the west, but it has some slips showing displacements of $\frac{1}{2}$ to 4". The West workings are very wet from the 5th N.W. on west and it is possible that the water comes in thru these slips, altho the quantity is not sufficient to detect.

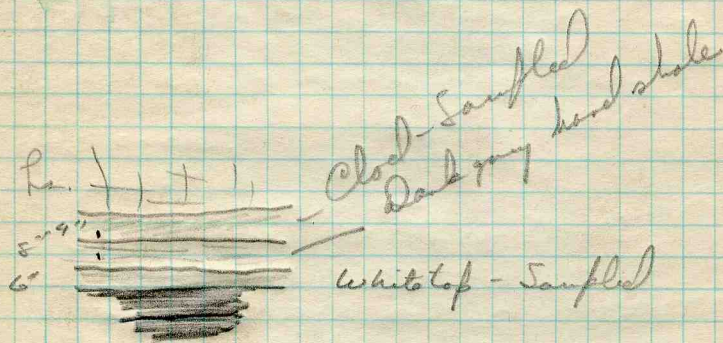
Collector Netzeband

X- R. L. Luntz #254 EXTRA NO. 2

Index No. 2310.65

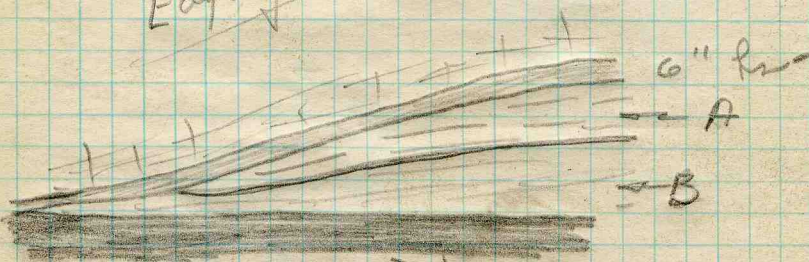
County Macoupin

is to be well described in the
condition as observed.



Roller
notes
From
1947

Edge of typical "roll"



B - dark grey
shale with an
irregular, angular
top surface with

A. above

A - Grey shale
shaly little fossiliferous
but rather weak

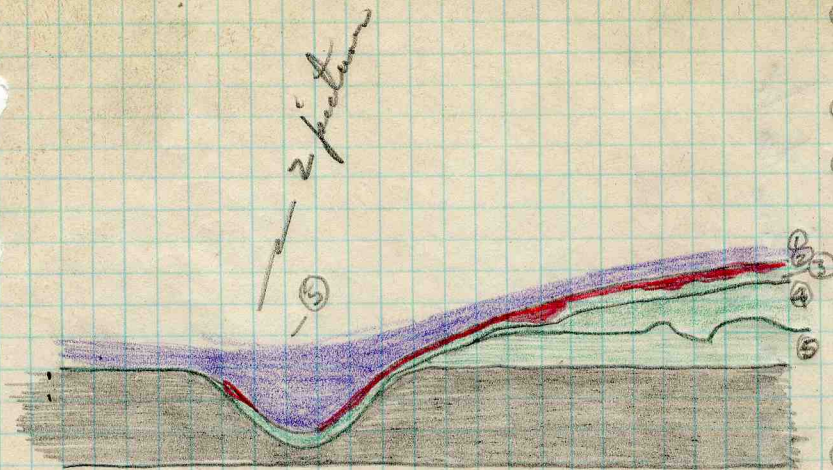
① normal bluish ls. - somewhat
clody in bottom 4 inches

② clod patches

③ med. to dark gray sh.
0-8" thickness somewhat
lony

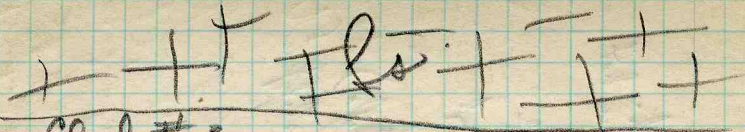
④ light gray shale - soft
flects in mud when wet

⑤ Brown gray (dark shale)
very shabby, chunky, slipped
and badly fractured



⑤ typical Madison Co. tet.

Face of 13⁷/₄ W.
11 4/5 S. 60

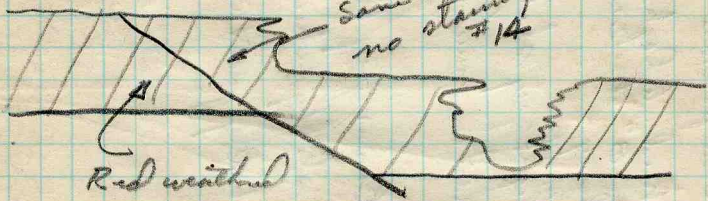


Clod #3

Scoopstone #7

Sam #4 bed
no staining #14

Oct. 10



Red weathered
sh. zone #4

Sketch for samples to be
analyzed

2 pictures -

They bear a striking similarity to the rocks of the Danwell Area except for the location with respect to the coal and in the material making up the sand area.

(Photographs taken at Mt. Olive & Stamford, Cal. Co. show a somewhat similar condition)

Length of high slate usually is between 20 and 150' sometimes being ^{slightly} larger.

For the most part the bottom contact of the limestone is very smooth even tho' the (smut?) layer of dark limestone* is usually present between the coal and slate or if not slate then the Herin.

* This refers to the thin highly fossilif. zone that ordinarily lies upon top of the coal. In this mine it seems to be a little more regular and well developed than in most places in the area. Usually being over 2" thick but almost always under 6". Was not seen to be thicker than 8".

In the high slate area the thicker material is highly slipped and slickensided. So much so and in such a variety of directions and patterns that the name locally applied to the material is

"CORRY SLATE"

Superior C.C. #4
W. of Wilamville

Notes by ROLF W. Roley

(south of Gillespie)

10-7N-7W

Macoupin County

Aug. 5, 47

Wright, W^m (mine mgr.)

no photos taken this trip

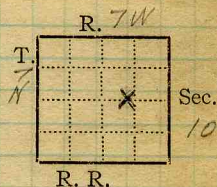
Visited 13W off 5th S.W.

In general the ^{immediate} roof is bad being impossible to hold by any timbering method used to date. However, the bad top is not thick over large areas being usually less than 18" thick. In the localities where the thickness is greater than 18" is where greatest difficulty is encountered. This change in thickness usually starts on a slip (i.e. end on a slip) and the increase ⁱⁿ thickness is very fast.





Mine Name or No., *4*
 mile from
 Operator, *1913 Superior Coal Co.*
 Operator, *191*



Entrance, *shaft* Elev., *636* ft. { above,
 { below,
 Depth to ~~bottom~~ coal, *302* ft. Alt. *334*

SURFACE DATA.

- A. Topography, See
- B. Surficial materials. (1) Character, See
- (2) Thickness, *80* (3) Effect on mining and shaft-sinking, of former drainage lines, underground water strata, etc. — *water increases in top lin in shaft - water runs to 20 feet of surface.*

- 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, *6* Survey No. *6*
 Collector, *P.T. Post*
 Mine, *No 4 Superior* County # *254*
 Co. *Macoupin* Index No. *2310.65*
 L.—SURFACE SHEET (Geol.)

30144-2M)



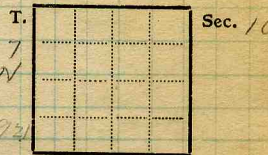
259693

TOWN
FARM
COMPANY
AUTHORITY
ELEVATION
COLLECTOR

TOWNSHIP

MAP No.

R. 7W



HOLE No.

DATE DRILLED Aug. 17, 1921

Netzaband

No.	STRATA	THICKNESS		DEPTH	
		FEET	IN.	FEET	IN.
	3rd E off 1st N. E.				
	shale				
	1 coal	24	1/2		
	2 pyrite	1	1/6		
	3 coal	12	1/2		
	4 pyrite lens	3	8		
	5 coal	8	3/4		
	6 pyrite lens	3	8		
	7 coal	17			
	8 shale pyrite band	3	4		
	9 coal	5	1/2		
	10 pyrite & gray shale B.B.	3	4		
	11 coal	12			
	Tapel	82	1/2		
		14	44		
		9	42		
	Time	5	hrs. 2 min.	2	
	Condition	Dry fresh			
	Weight	36#			
	Excluded	4, 6, 8, 10			
	N-21-122	Can No.	924	# 81085	

County **Macoupin**

Index No. **2310.65**

T. - DRILL RECORD.

Coal Sample

County #254



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

(a) Relative hardness, *Top bench hardest, Middle bench softest.*(b) Lustre, *Top bench brightest, other 2 Dull.*(c) Fracture, *Irregular*(d) Texture, *Cleat Locally well developed* See(6) Impurities in coal, other than bedded, *S. balls*(a) Kind, *S. balls & Lenses*(b) Position and persistence, *Mainly in Middle bench.*(c) Rejected, *None except larger.* Ease of separation, *Difficult.* SeeL. Floor: (1) Material, *Hard gray clay.*(2) Thickness, *3" - 18"*(3) Variation, *None noted.*(4) Note character, condition, tendency to heave, relation to undercutting commercial value. *None noted.*

See

(5) Clay sample No. *No* Location,

M. Stratigraphy,

(1) Fossiliferous horizons underground, *Fusulina in Cap Rock
Other forms abdt & black sh. shows
other shells, mostly pyritized*

Collection No.

Location,

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

See

Collector,

Coal: Survey No.

Mine,

Co.

Index No. *Mocoupin*

N.—UNDERGROUND SHEET (Geol.)

*2310.65**County No. 254*



Symbol	Description	Inches
	Black shale roof.	
	Coal	3+
	Sulphur Lens	-1
	Coal	3-
	Sh.	-2
	Coal	5-
	Sh	-3
	Coal	5-
	Sulphur	-1
S	Coal	8-6
Sh	Sulphur	-2
Sh	Coal	18-
	S. & Sh. (BB)	-4
S	Coal	6-2
	Sh	-5
	Coal	4-2
S	S. Lens	-2
	Coal	10-
	F.C. below	$93 \frac{3}{4}$
Sh	2800' NW of Bottom	
RS		
Sh		
S		
	30	

(Scale: 1 division = 3 inches).

Sample No. _____ Can No. _____ Lab. No. _____
 Collector, _____ Coal: Survey No.
 Mine, No. 4 _____ Co. Superior Coal Co. Index No. *Macoupin*
 Q.—COAL SECTION SHEET. _____ County No. 254 2310.65



July 2 1923. Gillespie

Superior Coal Co.
Mine No. 4.

7 & 8 W. on M.S. 4" clod parting above coal below black slate. At 9th W. on M.S. break is clean between coal and slate, with no clod.

5th Room W. off 7th W off M.S. 42" black slate, with no clod above or below. Argillaceous limestone slabby 3" zone comes down with the slate.

X 14th Room W off 5th W. off 1st SE
Slate thins to 5" with argillaceous limestone slabby 3" zone comes down with slate.

X Face of 12th Room N-200' off 5th W. off 1st SE. black slate thickens to 24".

X Neck of 10th Room W off 5th W off 1st S.E. 12" black sh. with 3" clod above.

X Face of 4th Room E off 5th E off 2nd S. off M.E. 15" black slate, - soapstone clay. 3" clod above.

County No. 254

Macoupin
2310.65



Superior Coal Co Mine No 4 -

Roof along Main West -

Slate from 6" to several feet as mapped - as far as 2nd South - a few inches of clod in most places lies bet. st and cap lin. A thin clod overlies coal ca 200 ft beyond 2nd South. St comes in bet 2nd X & 3rd X beyond 2nd South and clod - then clod to 3rd X st again beyond 1st X west of 4th S. then 100' clod then st to beyond 8th X - this thickens from 18" to 48" in 50 feet but this before 19th X ~~entry~~ where clod replaces it. St lies bet. 6th S and 1st X on West thence clod on West about 12" thick

Fault zone on air course entry ca 150' E of 7th N entry shows highly fractured st which has max thickness at E end of open space as mapped (now cut throes). 150' South on Main West entry the st is 36" thick and shows only slight slips which do not affect roof or core and then N West



Faulty condition in first 5 rooms of 2nd Pan U
off 3rd N. entry - -

The slate roof along the 2nd Pan gives place
to down waves of the special No 1 material
(samples) which is

This underlies the uneven roof line which
shows G'd relief locally in "depression tracks
and wallows". This condition appears in
the face of all five rooms, Nos 1384 having
been stopped when the zone was reached
No 5 just reaching the zone near the
end of the room.

This zone appears to be due to the
deposition of a limy mud in hollows
where the local swamp was shallow
and locally dry -

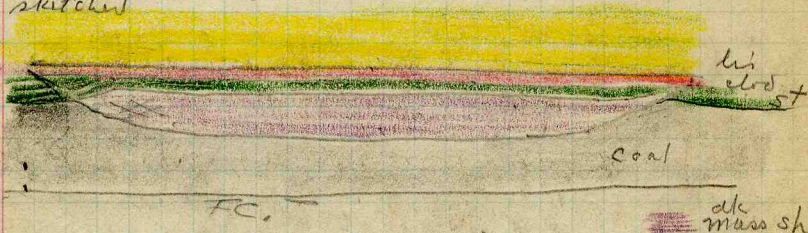
The BB (howark) is ca 20" from floor
in room 3 where the coal is ca 36" thick.
This suggests that the swamp level
or deposition conditions changed after
deposition of BB. Contrarily, the BB
has notes gray or may not be
identical with the BB of the main coal
& appears to be identical.

County No. 254

Macoupin
2310.65



Sup No 4 Gillespie
24" sh below the slate along 3rd N. entry is
cut out by slips on North - condition as
sketch



The slips bounding the dk mass shale appear
to be fractures due to weak zones yielding
during pressure on the beds.

The deposition probably corresponded to
the present disposition of the mass. sh.

County No. 254

Macoupin
2310.65

Eli Gony -

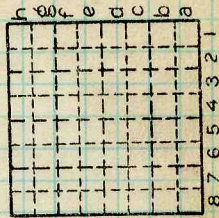
Wilsonville Ill

Fossils from T⁴



#4
Superior.
Location of Photographs.

Photo	Location	Description	Sec.				Index No.
			N.	S.	E.	W.	
1-1	Mouth of room 10, 13th W, 7th NW.	Black slate					
1-2	On S. rib between 10 & 11 rooms, 13th W, 7th NW, in entry	Fault (see sketch)					
1-3	Face of room 12, 13th W, 7th NW.	Section (see section drawn)					
1-4	Face of room 12, 13th W, 7th NW.	Sandstone "horseback" in coal and gray sh.					
1-5	16th W, about 50' W of 8th NW.	Ls. roll.					
1-6	Mouth of 18 th W, 5th NW.	Graben fault (hammer head in plane of fault.)					
1-7	"	"					
1-8	Near room 8 on E. rib, 2nd S., 6th E, 7th SE.	38" of soapstone and low-angle "slip".					
1-9	Near room 8 on W rib, 2nd S., 6th E, 7th SE.	18" of soapstone due to ls roll.					



By Spotti & Veugha. Date 9/9/40.

Quad. Gillespie. Part.

County Macoupin.

COUNTY NO. 254

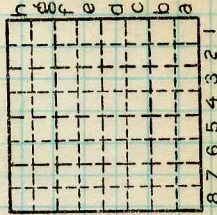
2310E3



#4
Superior
Location of Photographs.

-2--

Photo	Location	Description	Sec.	N.	S.	E.	W.	Index No.
			T.					
1-10	N. rib between rooms 4 & 5, 5th E, 5th SE.	"Slip" with reverse drag (see sketch)						
1-11	N. rib near room 15, 5th E, 5th SE.	36" of gray sh. (see section)						
1-12	S. rib near room 15, 5th E, 5th SE.	7" of gray sh. (across entry from photo 1-11; a distance of 21') (see sketch)						
2-1	On N rib, opp. room 15, 6th E, 5th SE.	Lenticular stratum of gray sh. shown from "featheredge"; boss in rib.						
2-2	Mouth of 7th SE entry, just N of 5th E, 5th SE.	Large ls. boss.						
2-3	5th E, 7th SE, between room 1 and 8th SE entry, on S. rib	Prominent "slip" with reverse drag.						
2-4	Between rooms 7 & 8,	Panoramic view of a series of "slips" in gray sh. & coal. (see sketch for dimensions)						
2-5	5th E, 7th SE, on							
2-6	N. rib.							
2-7								
2-8	Face of 5th E entry, 9th SE.	Fault in ls, underclay and coal. (see section plotted)						



By Speotti & Vaughn Date 9/11/90.

Quad. Gillespie Part.

County Macoupin.

COUNTY NO. 254

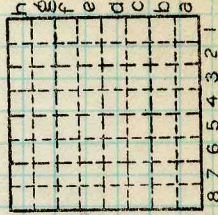
2310E3



#4
Superior
Location of Photographs.

-3-

Photo	Location	Description	N.	S.	E.	W.	Index No.
			Sec.	T.	R.		
2-9	Face of 10th SE entry	"slip" alongside a ls. roll.					
2-10	"	" (see sketch)					
2-11	On 9th SE entry, between 1st and 2nd X-cuts	Badly fractured soapstone, with top coal left as roof (see section)					
2-12	5th room, 2nd S, 6th E, 7th SE.	Bastard ls, with coal-bull-like concretions beneath it.					
3-1	In X-cut opp. room 6, 1st S, 6th E, 7th SE.	Bastard ls, concretionary. (see section)					
3-2	E. rib of 1st X-cut between 7th & 8th N, 5th SE.	Prominent "slip" with coal cut to about 3'.					
3-3	Face of 5th SE entry	Great thickness of bl. sl., badly fractured. (see section)					



By Spatti & Vaughran. Date 9/7/10.

Quad. Gillespie. Part.

County. Macoupin.

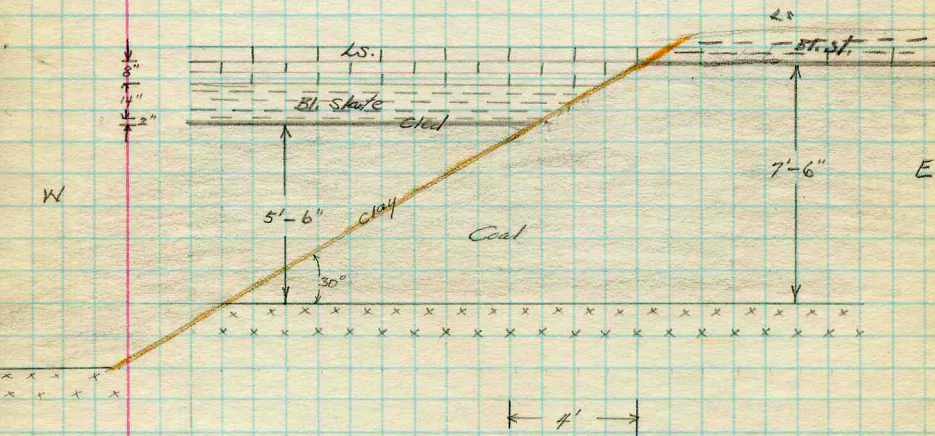
COUNTY NO. 254

2310 E3



Between rooms 10 & 11, 13th W, 7th NW,
in entry, on S. rib.

Photo 1-2

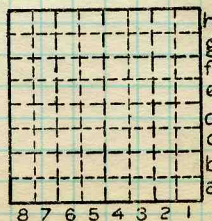


Scale: Feet
0 1 2 3 4 5

By A.E. Spatti Date 8/8/40

Co. Superior Part #4

County Macoupin



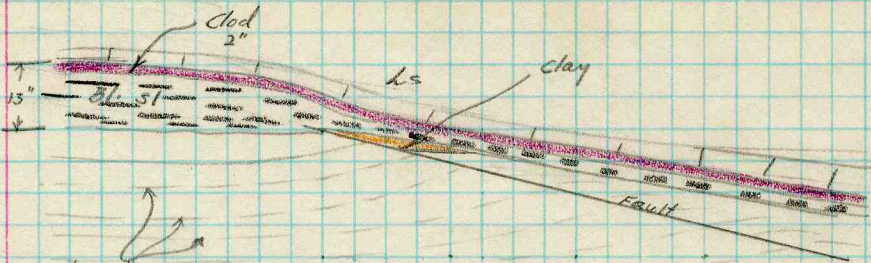
Sec.
T. N.
S.
E.
R. W.
Index No.

COUNTY NO 254

2310E3



Photo 1-10



N. Rib between Rooms 4 & 5, 5th E., 5th SE.

(Caprock very rolly in this vicinity, with many faults and "slips" in the bl. sl. and coal)

Note: Photo taken of above phenomenon.

COUNTY NO. 254

h	g	f	e	d	c	b	a
1	2	3	4	5	6	7	8

Sec. N. S. E. W.
T. R. Index No.

2310E3

Superior #4

By S. E. Speer Date 8/20/40

Quad. 254 Part. _____

County Macquipp.

COUNTY NO. 254



INDEX



15. caprock

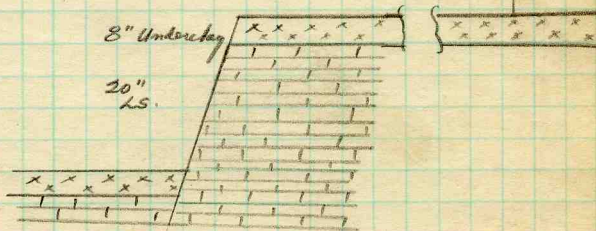
2" Clod

20" Soapstone

52" Coal

15. cap rock
2" Clod
20" Soapstone

52" Coal



Elevation

Photo 2-8
Face of 5th E. entry, 9th SE.

8" Underclay (face slickensided)

20" ls. (measurable)
face slickensided

9/4/40

Collector *Spotts, a. e.*

Mine *Superior #4 Co. Macoupin*

X.—EXTRA SHEET NO.

Coal: Survey No.

Index No.

6

COUNTY NO. *254* *2310E3*



INDEX



LS caprock.

4" "shell" of caprock ls.

2" clod.

24" Soapstone

Coal

Photo 1-3
Face of room 12, 13th W,
7th NW.

Collector Spatti, G. E.

Mine Superior #4 Co. Macoupin

X.—EXTRA SHEET NO.

Coal: Survey No.

Index No.

6

COUNTY NO. 254

2310 E3



INDEX



15. Caprock

2" Clod

11" Bl. slate

36" dk. gray str
(soapstone)

7'-3" Coal

Photo 1-11

N. rib near room 15, 5th E,
5th SE.

On this S. rib, the dk. gray str. is lenticular, from "featheredge" to "featheredge" in 110'; max. thickness shown in above section.

9/4/40

Collector Spotti, A. E.

Mine Superior #4 Co. Masoupin

X.—EXTRA SHEET NO.

Coal: Survey No.

Index No.

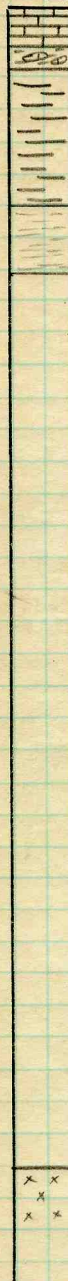
6

COUNTY NO 254

2310E3



INDEX



Ls. caprock

2" clod

13" bl. slate

7" dk. gray sh (soapstone)

7' Coal

Photo 1-12S. rib near room 15, 5th E
5th SE.

(At hammer)

This entry is 21' wide. Compare this section with that of the next page (which pictures the opp. rib) and note the diff. in thickness of bl. sl. and gray sh.

Apparently a lense-shaped body of gray sh exists, with the strike of its edge being NW-SE. The gray sh (soapstone) appears as a "feather edge" on the N. rib 165' before it appears on the S. rib, (while walking E31°50'S-dir. of entry)

9/4/40

Collector Spotti, A.E.

Coal: Survey No.

6

Mine Superior #4 Co. Macoupin

Index No.

X.—EXTRA SHEET NO.

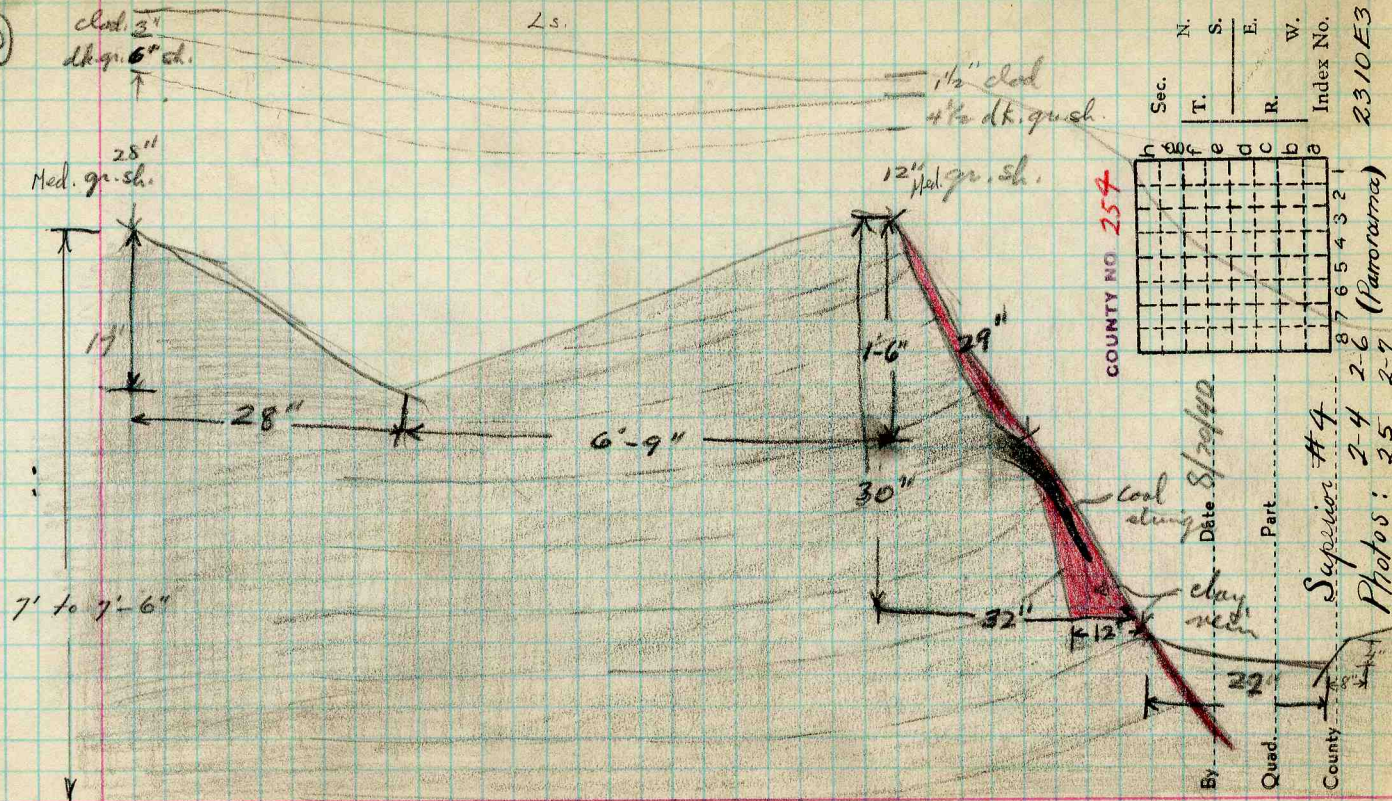
COUNTY NO. 254

2310E3

John C. Moore Corporation, Rochester, N. Y. Binder and notes in leaves, each patented 1900, 39, 460



(6)



clay parting Between rooms 7 & 8, 5th E, 7th SE

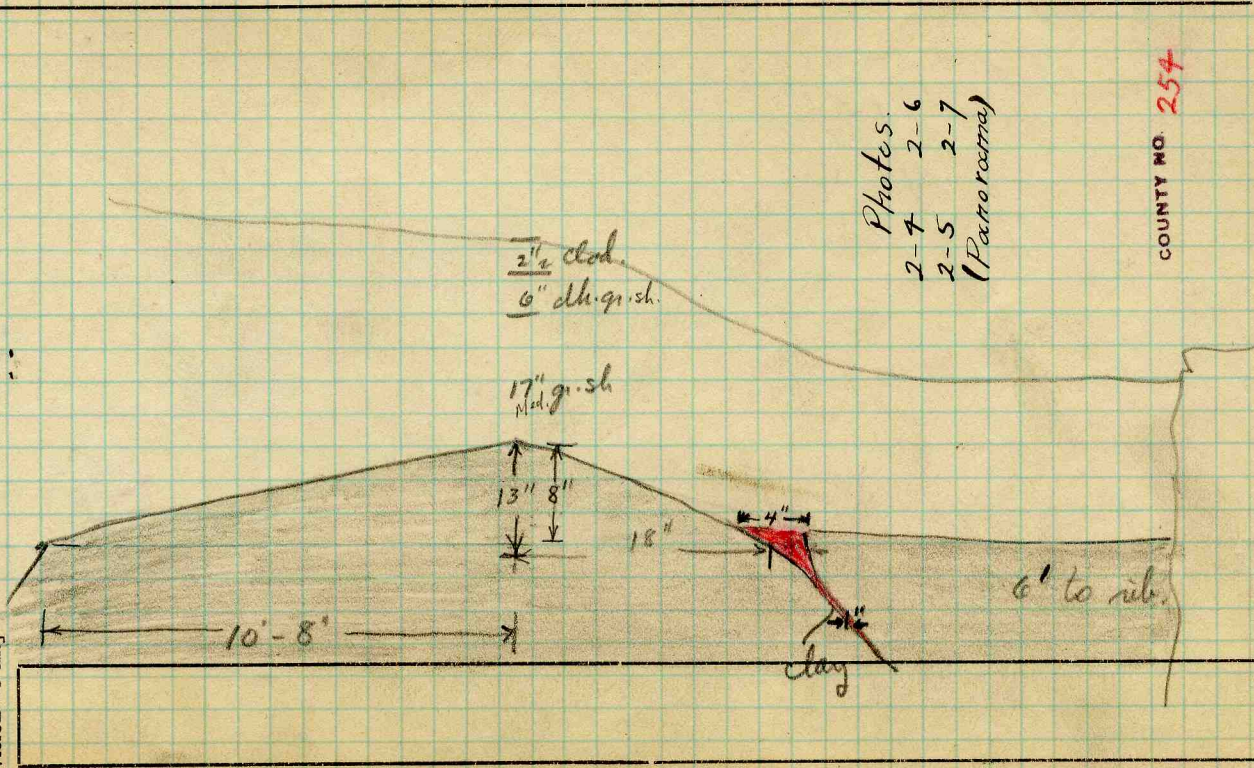


Description

Inches

symbol
division = 3 in.

7



Photos.
2-7 2-6
2-5 2-7
(Petroccina)

COUNTY NO. 254

Collector.

Mine.

Co.

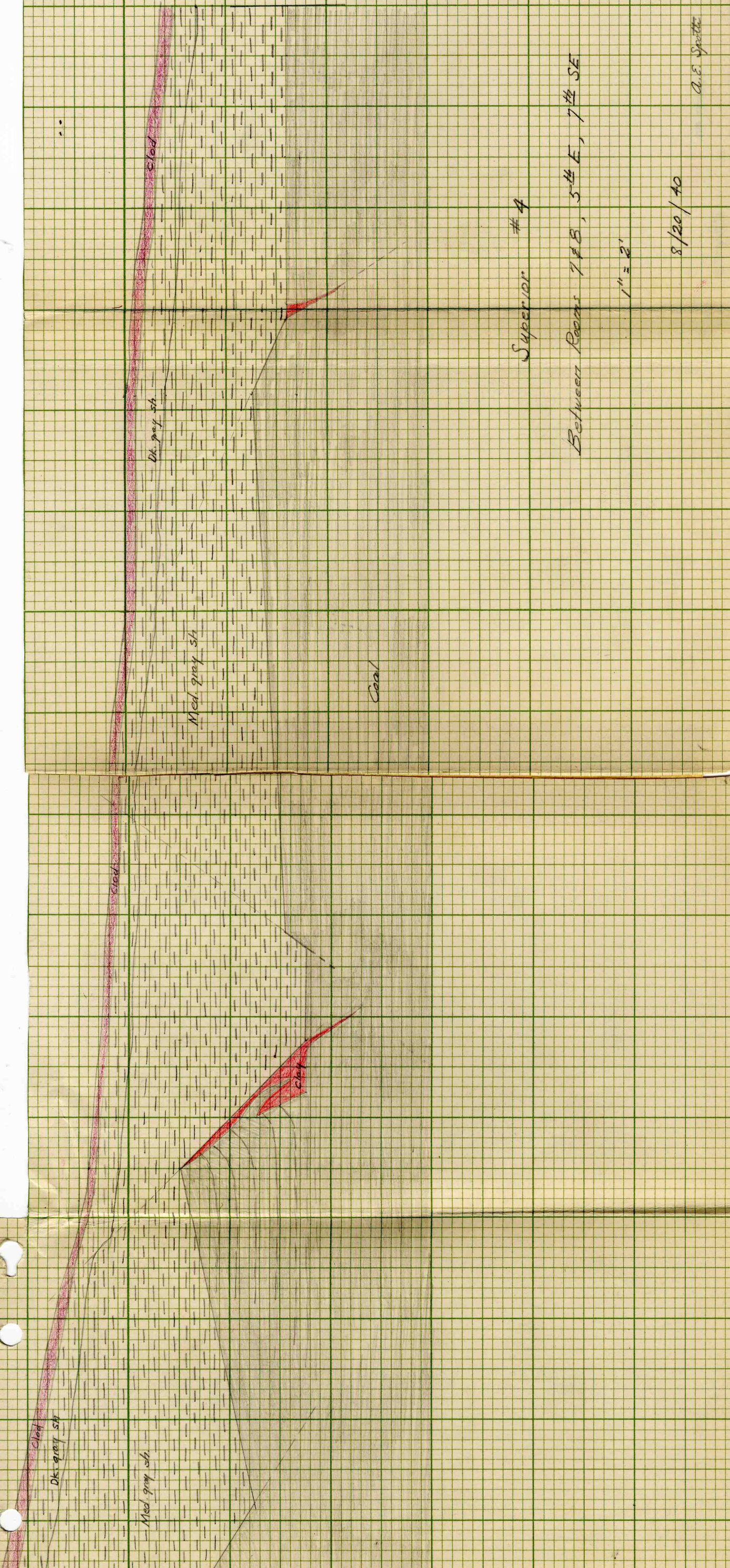
Q.-COAL SECTION SHEET.

Coal: Survey No.

Index No.

8/20/40

2310E3



Superior #4

Between Rooms 7th B, 5th E, 7th SE

1" = 2'

8/20/40

A. E. Spence



INDEX



LS. caprock.

3" Clod

8" med. gray sh, iron-stained.

12" light gray sh.

29" dk. gray sh. (soapstone),
fractured

10" Top coal, bright, glistening

7' Coal

Photo 2-11

On 9th SE entry, between 1st
and 2nd X-cuts.

Collector Spotti, A. E.
Mine Superior #4
X.—EXTRA SHEET NO.

Coal
Co. Macoupin

6 State No.
Co-op No.

COUNTY NO. 254

2310E3



INDEX



2" Clod

6 1/2" Soapstone

12" Bastard ls.

Note: Bastard ls. is concretionary, with largest concretion measuring 4-8" across.

Coal

Photo 3-1

In X-cut opp. room 6, 1st S, 6th E, 7th SE.

COUNTY NO. 257

Collector Spotti, G. E.

X-Superior #4.

EXTRA NO.

Index No.

County Macoupin 2310E3



INDEX



15 casrock

2" Clod

22" black slate, badly fractured

7' Coal

Photo 3-3
Face of 5th SE entry.

COUNTY NO. 254

9/4/40

Collector Spotti, a. e.

Mine Superior #4 Co. Maxcupin

X.—EXTRA SHEET NO.

Coal: Survey No.

6

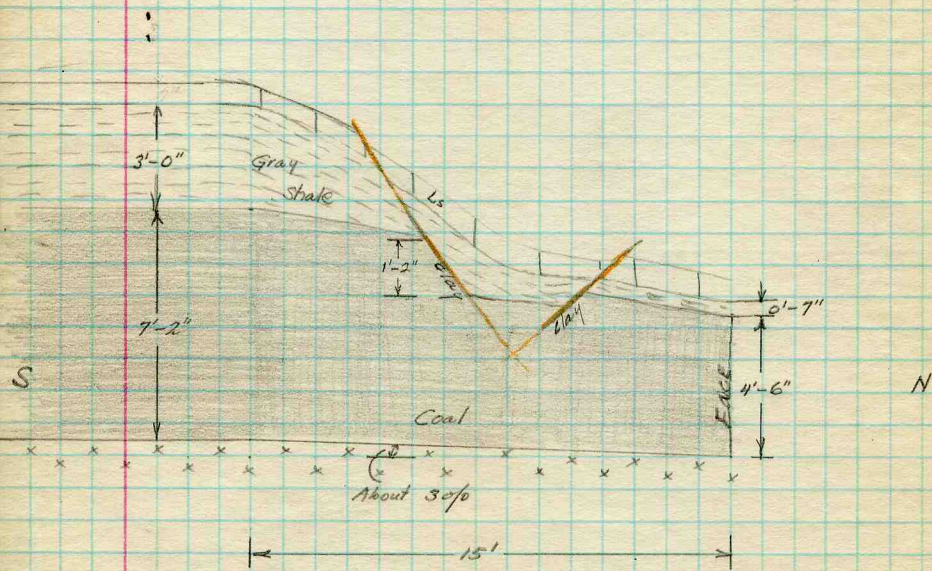
Index No.

2310 E3

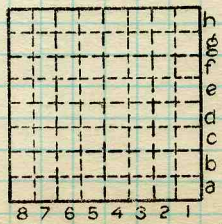


(X)

4th N, 13th N, 7th NW



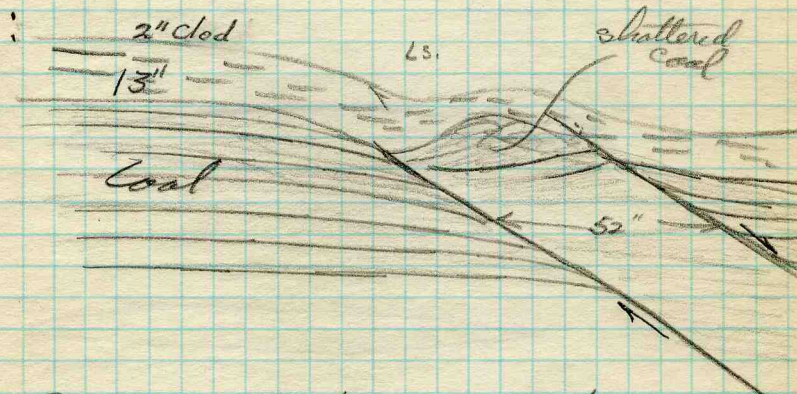
By A. E. Spotti Date 8/8/40
 Co. Superior Part. # 4
 County Macoupin



Sec. _____
 T. _____ N.
 E. _____ S.
 R. _____ W.
 Index No. _____

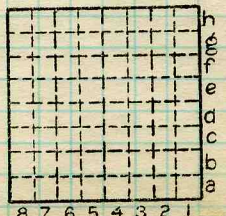
COUNTY NO. 254

2310 E3



Room 5, off 5th E, off 5th SE

By Date 8/20/40
 Quad Part
 County

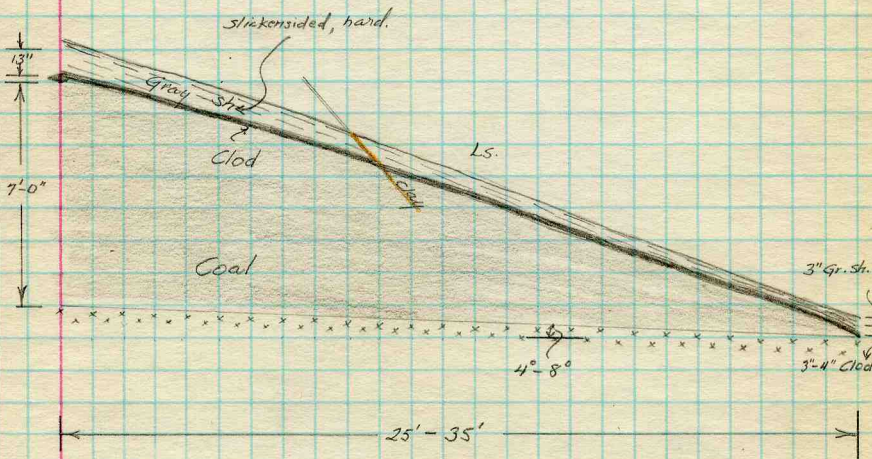


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 E.
 R. W.
 Index No.

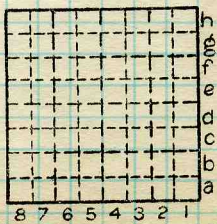


(3)

Face of 4th N, 20th W, 5th NW



By A. E. Spatti Date 8/8/40
 Co. Superior Part # 4
 County Macoupin



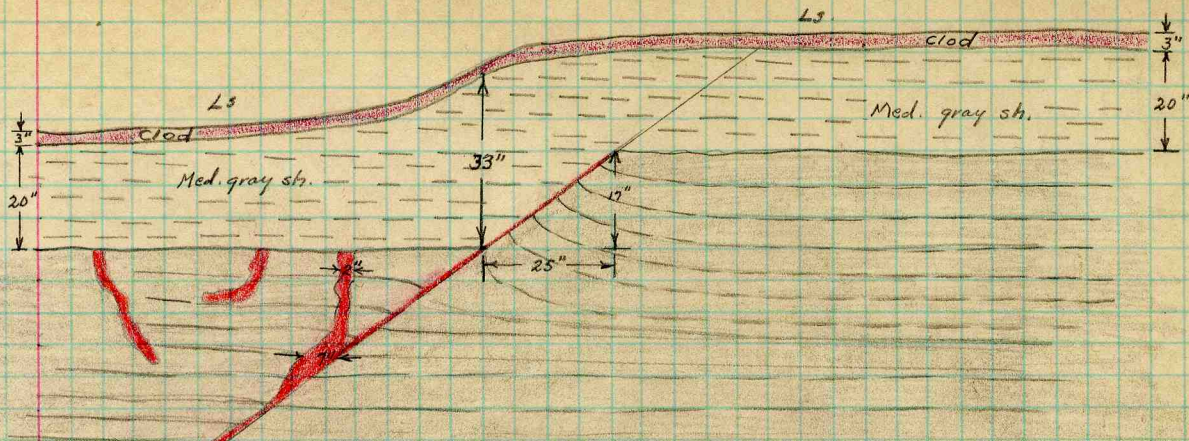
Sec. N. S. E. W. Index No.



COUNTY NO. 254

2310E3

(Z)

Superior #4



 clay
 clod

Scale: 1 \square = 6"

Face of 10th SE entry
A.E. Spotts

8/20/40



5th E, 9th SE, at room 4

This entire vicinity has a thick stratum of gray sh. (soapstone) immediately on the coal. The sh is badly fractured, "slipped", etc. and is very difficult to hold. There is no bl. sl. present. The face of the 5th E, 9th SE entry (then at room 5) runs directly into a large fault which may cut the coal out. Entry is in process of being driven so the full effects of the "slip", with the accompanying soapston is not visible.

In 6th E, 5th SE entry — great thickness of soapstone in a lenticular body. Max. thickness about 5' — pinching out to a "featheredge" at each end.

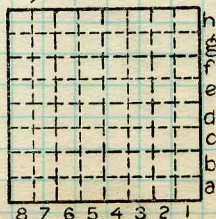
Room 3, 2nd S, 6th E, 7th SE. — roll of ls cutting across room at nearly 90° (strike N70°E). Unlike a boss, the roll is very elongated and is apparently a very local phenomenon since it does not occur in nearby parallel rooms.

Room 4, 2nd S, 6th E, 7th SE. — great thickness of soapstone at face of room. Three large concretions of ls. in this soapstone, a very unusual condition in this mine. Largest concretion was about 3' in dia. and the other 2 were 18" & 24". Limestone believed to correspond to bastard ls. of Sparta region.

By..... Date.....

Quad..... Part.....

County.....



Sec. N. T. S. E. R. W. Index No.



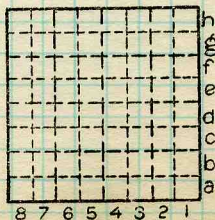
Room 5, 2nd S, 6th E, 7th SE. — coal-ball-like concretions found in S. rib immediately on the coal (215' from center of entry). A. gray sh. (soapstone) lies immediately on the coal and on the concretions, and the lower part is limy. Also, large concretions of bastard ls. lie near the base of the gray sh. (See photo 2-12; and sections on next page.)

From room 5 to room 8, 2nd S, 6th E, 7th SE. — great thickness of (4 1/2') soapstone on E. rib, with caprock rolling to W and reducing the soapstone to 18". Also, 7' of coal on E. rib and only 3' on W. rib. Entry is 21' wide. This roll runs for about 175' along entry.

By Spatti & Payne Date 8/27/40

Quad. Gillespie Part

County Macaupitt



Sec.

T. N.

S.

R. E.

W.

Index No.



INDEX



Ls. - coprocks

2" Clod

8" ~~Med~~ gray sh.

9" calc. gray sh.

coal balls & ls. boulders.

5' Coal

Superior #4

5th Room, 2nd S,

6th E, 7th SE

8/27/40

Sample 1 - coal balls

" 2 - limy sh

8/27/40

Collector

Coal



State No.

Mine

Co.

Co-op No.

X.—EXTRA SHEET No.

COUNTY NO. 254

2310E3



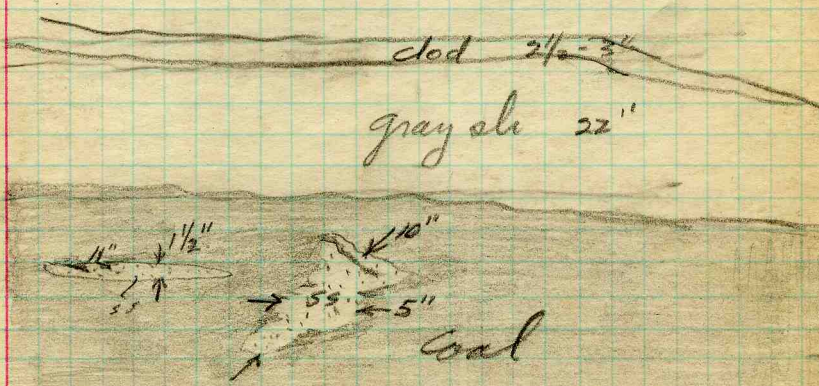
(A)

Sup. #4

2nd S, 6th E, 7th SE

at the face of this entry, on E side, is a small slip (sketched by J. N. P.). also at face are lenses and ~~and~~ horsebacks of sandstone in the coal proper. (Sample 3)

J. N. Payne



Face of 5th SE entry
Great thickness of bl. slate, very badly shattered and slipped. Med. gray sh. overlies the bl. slate and is beneath the clod. Region badly fractured and difficult to work



at featheredge of the lenticular
gray sh. the sh. is very poor.
Too badly fractured, etc. to measure

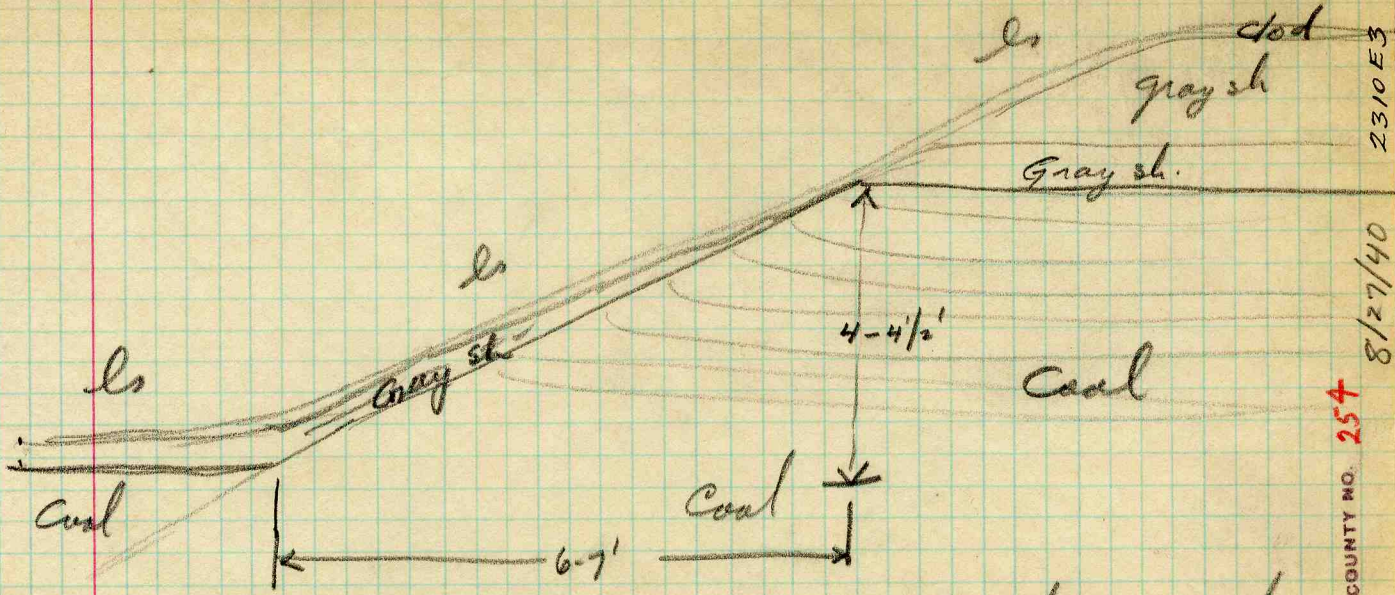
E. rib of 1st X-cut, between 7th
& 8th W, 5th SE

Prominent slip with coal
cut to about 3'. See sketch on
next page.

2310E3

COUNTY NO. 254

8/27/40



E. rib of 1st x-cut.
 (see previous page)
 between 7th and 8th, 5th SE

COUNTY NO. 254

8/27/40

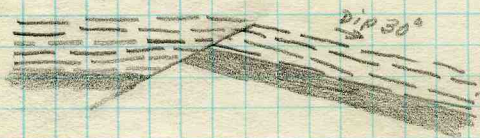
2310 E 3



Visited this mine with Dr. S. H. Cady, R. E. Spatti, Hollie Hoan Engineer of Mine #4, Bill Jarvis - safety inspector of Superior Coal Co. on 8/8/40. The mine was visited subsequently with Mr. Spatti + Mr. Jarvis on the following dates 8/20/40, 8/27/40. This is an excellent mine for the study of roof variations as practically all types are encountered.

The northwest territory was studied the first day. Here the blue band was generally about 14" above the base of the coal band a persistent band of pyrite called the steel band occurred about 20" above the base. The coal, especially in the upper part, was thinly laminated and broken into thin layers.

Numerous small faults are encountered in this section of the mine one good exposure of such a fault being observed between the 10th and 11th rooms in the 13th west entry of the 7th N off the Main West. (see diagram below.)

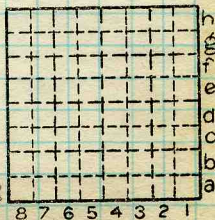


Date 8/9/40 T. R.

Quad. SUPERIOR No. 4 Part.

County Macoupin Index No. 2310E3

J. N. Payne





The southeast territory of the Superior No. 4 mine was visited with Gotti and Jarvis on 8/20/40

On the rib between rooms 425 or 5E off 53 on main E a fault on the west side of a large limestone roll shows an apparent reverse drag in the coal (see diagram below). The reverse drag shown in these faults may be due to reversal in movement of the fault, but it seems more likely to me that it is caused by bending of the upper layers of the coal and by the fracturing of the small arch produced. The evidence that seems to indicate this to me is that such reverse drag is commonly associated with faults surrounding limestone rolls and the fact that this apparent reversal or drag is confined generally to the upper part of the coal bed. Further one would expect more crushing to the coal along the fault plane if there were several movements. This location is occupied by a generally low area of limestone which is bounded by small faults.

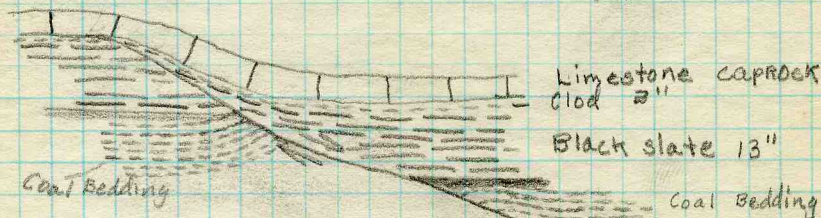
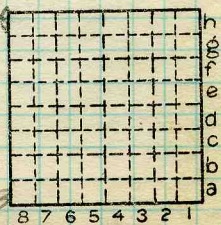


Diagram of fault on west side of large limestone roll. Note reversal in drag of coal bedding.

Date 8/20/40 T. R.
 Quad. SUPERIOR No. 4 Part
 County MAGUIRE Index No. 23.1053



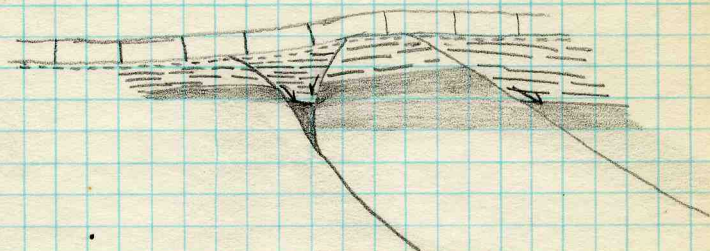


Diagram of series of faults on North side of large limestone roll, located between entry and first cross-cut in room 5.

Just west of room 15 there is a large wedge of gray and black shale with faults on each side. In this locality there are numerous limestone rolls.

A section of the roof strata measured on the north rib at Room 15 was as follows:

"Clod"	3"
Black "slate"	11"
shale, gray, hard, soapy feeling, highly slipped	32"

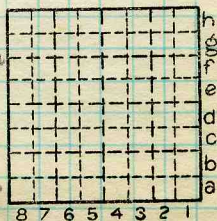
In contrast the section on the south rib just 21 feet due south of the above section was:-

"Clod"	3"
"Black "slate"	8"
shale, gray, hard, soapy feeling, highly slipped, darker than gray shale in section on north rib	12"

This change in thickness is due to lensing, the lense being 165' long E-W. The lense Date 8/20/40 apparently runs in a T. NW-S. R. direction

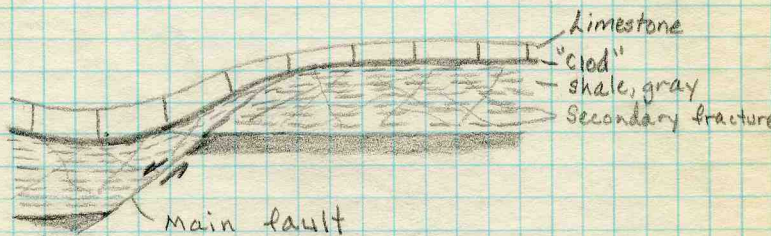
Quad... SUPERIOR No. 4. Part.....

County Macoupin Index No. 231053
J. N. Payne





At the face of the 4th N, or 13th W off 7th N of 1st Main W is an excellent exposure of highly fractured gray shale associated with bed roll in the limestone and a small fault with a vertical displacement of 14" as diagrammed below. Here there was no black slate in the section



In Room 4 of 2nd N of 16th W off 7th N of 1st Main W, a limestone "base" with the local down from an average thickness of over 7 feet to only 4 feet in thickness. Between the 4th and 5th rooms in the same entry the black slate is 28" thick with a hard boney streak (2 1/2" thick) near the middle of the slate.

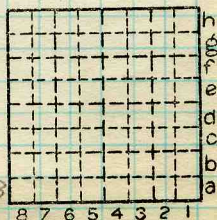
In Rm 2, 2 N, 13 W, 7 NW fault cuts thru

Date 8/8/40 T. R.

Quad. SUPERIOR No. 4 Part

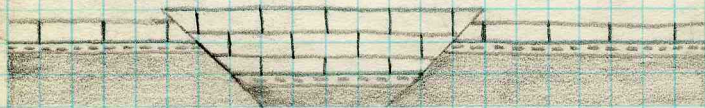
County MAGOWAN Index No. 2310E3

J. N. Payne





In the mouth of the 18th W off the 5th N off the Main W is a large down-faulted block of limestone. There is no black slate or "soapstone" at this locality and only a thin 2" to 3" layer of calcareous nodular gray shale, (called "clod" by the miners) interstratified between the coal and the limestone caprock. The limestone block has been faulted down on two sides with a vertical displacement of about 4 to 6 inches. The strike of the fault is about N 50° W as measured with a Brunton.



A section measured in the Main East faultage 200' E of the 2nd N off the Main E shows gray shale above and below 8 inches of black shale. In both gray shales and the black shale were badly fractured. The section was as follows:-

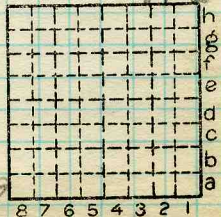
- | | |
|---|--------|
| 6. Limestone caprock | ? |
| 5. Shale, calcareous gray, containing small limestone nodules, "clod" | 2 1/2" |
| 4. Shale, gray, smooth | 14" |
| 3. Shale, black | 8" |
| 2. Shale, gray, smooth | 48" |
| 1. coal | 84" + |

Date 8/8/40 T. R.

Quad. SUPERIOR No. 4 Part.

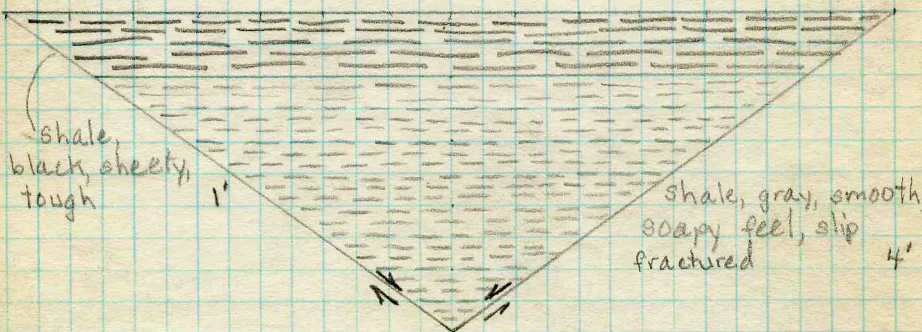
County MACDUPIN Index No. 2310E3

J. N. Rayne

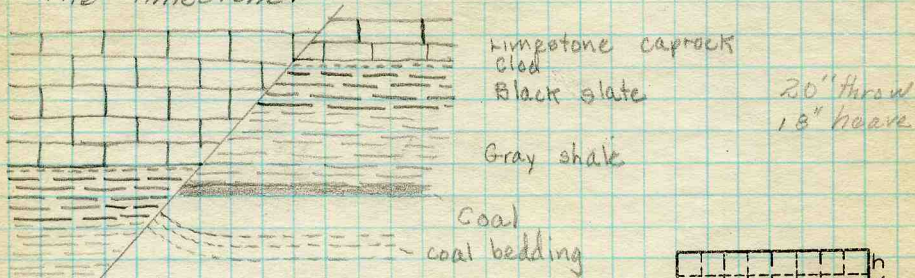




At Mouth of ROOM 16 of 5E off 5th south off Main E is a large wedge of gray shale and black slate running at an angle of 45° across the mouth of the room. The wedge is 5 feet deep (1 foot black "slate" + 4 ft. gray shale), and is 14 feet across the top. The wedge is faulted on both sides (see diagram below) and the roof material on both sides of the wedge falls badly. In the main entry a wedge of limestone runs into this and the faults apparently continue into the limestone at least a short distance.



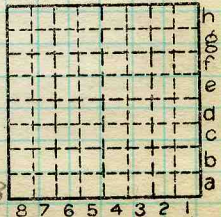
Between Room 1 off 5E off 75-E and 8th entry is a fault with reverse drag in the coal, which displaces the limestone.



Date 8/20/40 T. R.

Quad. SUPERIOR No. 4 Part.

County MACOMBIN Index No. 231053



J. N. Payne



Between Rooms 7 & 8 in 5thE off 7thS-E on north rib a series of faults is well exposed cutting the gray shale and coal (see drawing on large scale and panoramic photo). The black slate was missing from this section but the gray shale became quite dark in the upper 6 to 8 inches and it may be that this dark shale actually represents the black slate. The only argument in favor of this is its almost black color and the fact that it occupies the position in which the black slate is normally found. The elements found in the section here were:-

- Limestone caprock
- "clod" 2"-4"
- shale, dark gray, nearly black, smooth, soapy feel, highly slip-fractured 6"-8"
- shale, medium gray, smooth soapy feel, highly slip-fractured 12"-36"
- Coal 5'

The shale between the faults is much distorted and fractured as can be seen in photo. The lenticular shape of the gray shale is also brought out in the photo as the shale is seen to thin somewhat to the east (right as one looks at picture).

Took sample (No. 2) of shale at 16th room off 3E, off 7thS-E.

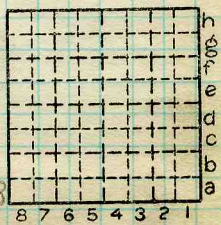
In room 1, off 5E off 9th SE the gray shale was so badly fractured that the room was abandoned because the roof was impossible to support. Took sample (#3) of gray shale here.

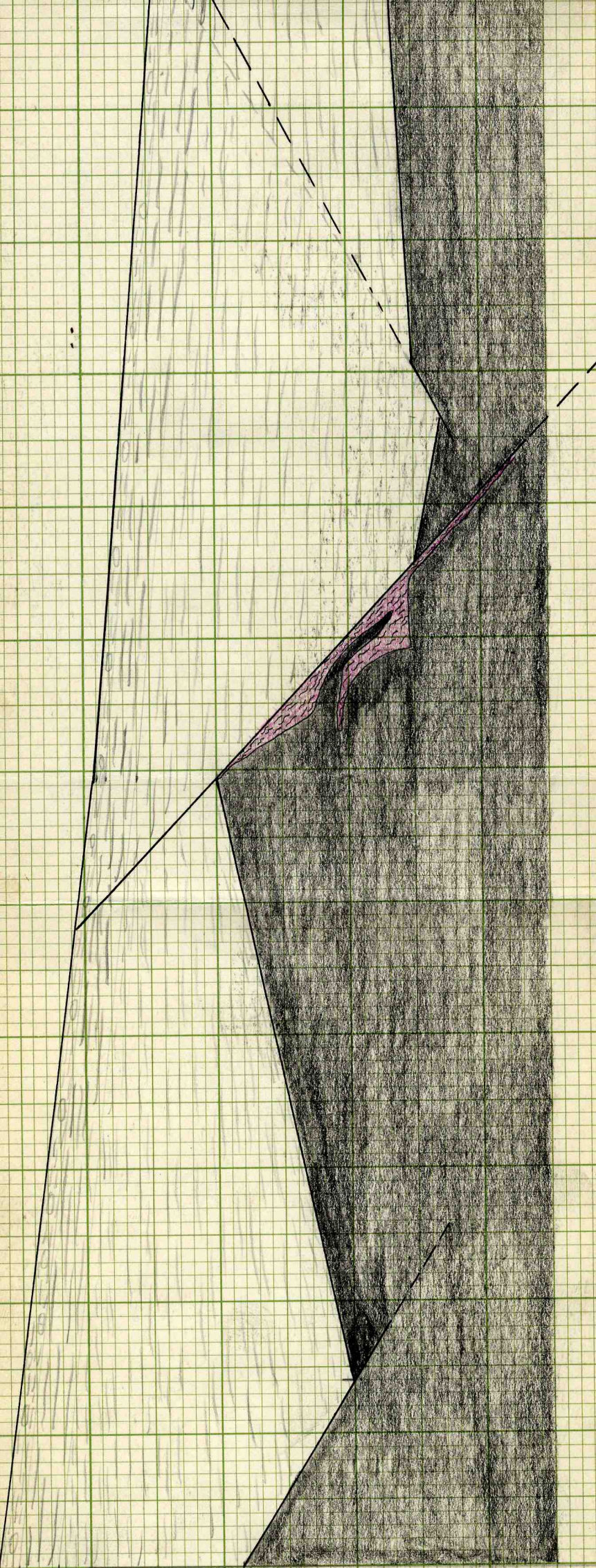
Date 8/20/40 T. _____ R. _____

Quad. SUPERIOR No. 4 Part. _____

County MACQUEEN Index No. 231253

J. N. Payne





W



At the face of the 105-E at about the location of room 5 a large slip down to the east and a limestone roll had just been encountered and it appeared that the combination of the slip and limestone roll might cut the coal out. The gray shale was quite thick at this point and badly fractured. No full thicknesses of the various elements were exposed so no measurements were recorded, however the coal was some 3 feet less than its normal thickness and the gray shale was over 2 feet thick. A sample of the gray shale containing a plant stem or root was taken (sample No. 4).

A section measured in the 6th SE was as follows:-



- | | |
|--|-----|
| 5. Limestone caprock | |
| 4. "clod" | 3" |
| 3. shale, black, sheety | 6" |
| 2. shale, light gray, with dark streaks, soapy, slip-fractured | 9" |
| 1. shale as above but generally darker | 14" |

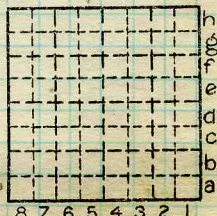
At the mouth of the 5th S-E the roof had fallen up, beyond the caprock and it had become necessary to support the roof with heavy steel girders and I-beams. The limestone caprock ~~at~~ in this area was quite impure and crumbled badly
(next page)

Date 8/20/40 T. _____ R. _____

Quad. SUPERIOR No. 4 Part _____

County MACOUPIN Index No. 231DE3

J. N. Payne





especially in the upper portion and especially upon short exposure to air. However this location affords a good section of the caprock and strata immediately above the caprock. The section measured was: -

- 5. shale, sandy, calcareous, light gray, weak, crumbly (SAMPLE No. 5) 36"
- 4. Limestone, impure especially in upper part, gray, nodular bedded 60"
- 3. "clod" 3"
- 2. shale, black, sheety, tough 18" to 36"
- 1. coal (reported) 84"

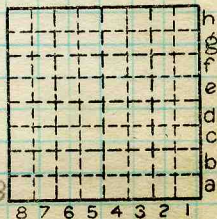
In the Main East 200' W of the 5 S-E a sample of the rotten limestone was obtained from a bore hole into the roof (sample No. 6)

Date 8/30/40 T. _____ R. _____

Quad. SUPERIOR No. 4 Part _____

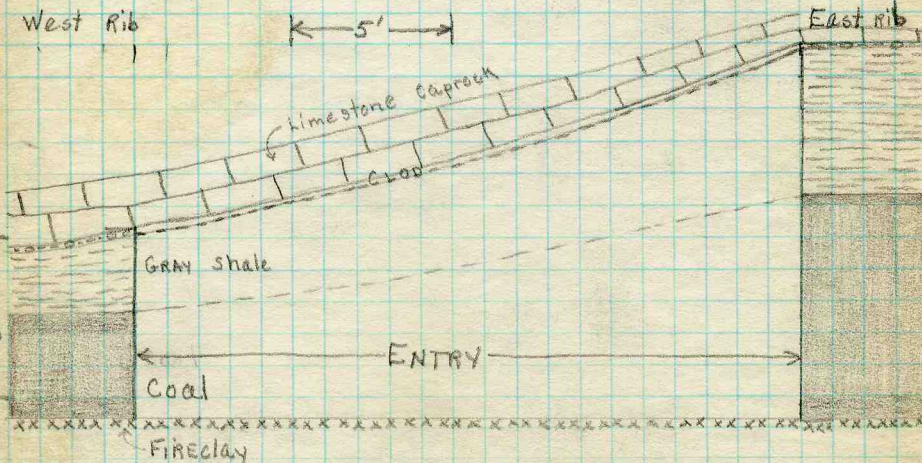
County MADISON Index No. 2310E3

J. N. Payne





At the face of 2nd S off 6th E off 7 S-E on E rib the section between the clod and the fireclay shows 4 to 4 1/2 feet of gray shale and 7 feet of coal, whereas on the west rib the limestone rolls down and cuts the section down so that there is only 1 1/2 to 2 1/2 feet of gray shale and only 3 feet of coal. This is peculiar in that the coal is cut down without the gray shale being absent yet there is no evidence of a fault at this particular place. The limestone roll is elongated with a trend of about N 31° 50' E from rooms 5 to 8.



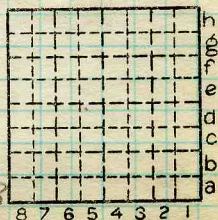
Diagrammatic representation of difference in section between East and west ribs of 2nd S off 6 E off 7 S-E between rooms 5 & 8, and near room 5.

Date 8/27/40 T. R.

Quad. SUPERIOR No. 4 Part

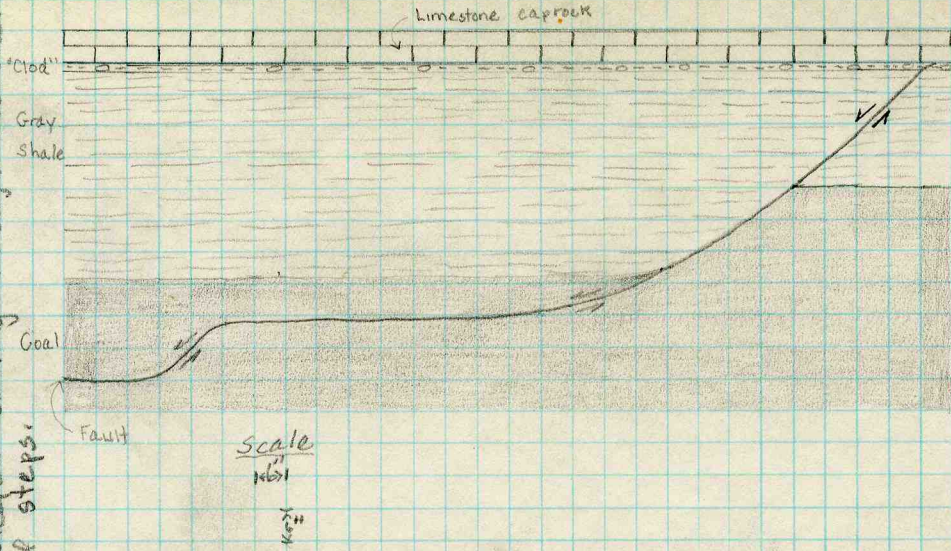
County MACCASPAIN Index No. 2310E3

J. N. Payne





A peculiar fault was noted on the east rib near room 8 2nd s. off 6E off 7S-E in which there was a pronounced flattening of the fault within the coal bed (see diagram below). The fault would flatten for a few feet then steepen cutting through the coal in a series of steps.



Date 8/27/40 T. R.

Quad. SUPERIOR No. 4 Part

County MACQUEEN Index No. 2310E3

J. M. Payne

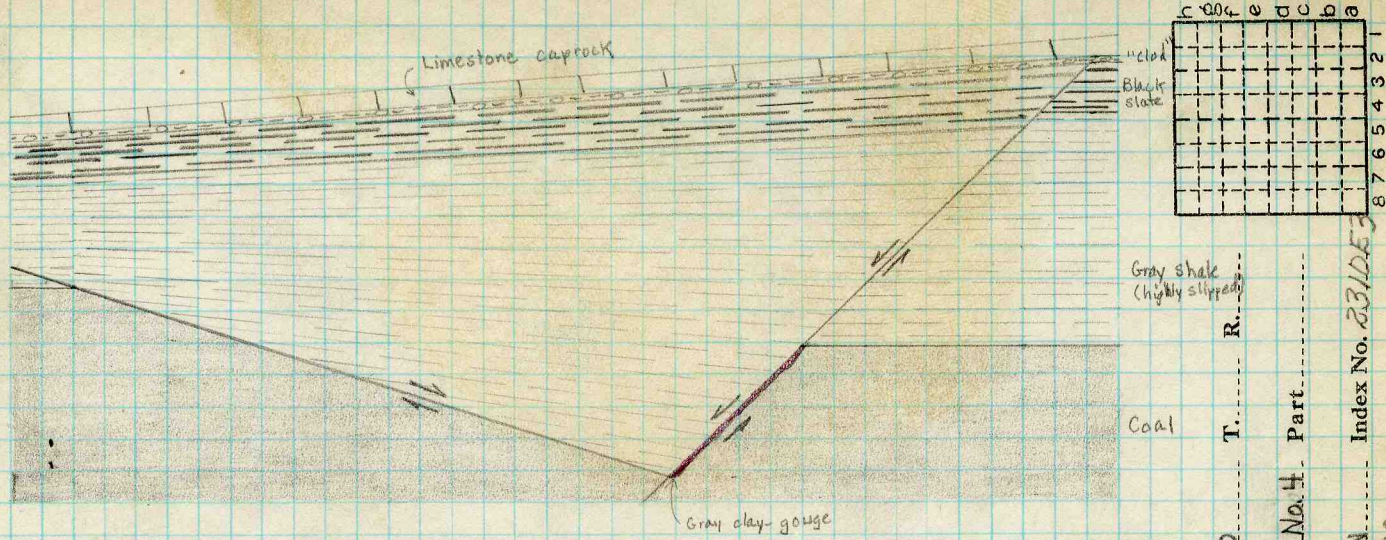


Diagram of intersecting faults in gray shale lense under limestone roll in Room 1 off 2nd S off 8'E off 5S-E on North rib.

Date 8/27/42 T. R.

Quad. SUPERIOR No. 4. Part

County MACQUEEN Index No. 231DE

J. N. Payne



From the face of the 5-S-E entry to the 7th and 8th W off the 5-S-E the gray shale is in lenses up to 200 feet in length is very badly fractured and comes with shots. At very face of 5-S-E the black slate rests on the coal and is badly slipped. Just to the north the gray shale comes in in a thick lense.

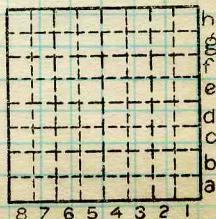
Joints in the black slate in the 6-S-E trend about N60°E.

Date 2/27/40 T. _____ R. _____

Quad. SUPERIOR No. 4. Part. _____

County MALDEN Index No. 231053

J. N. Payne

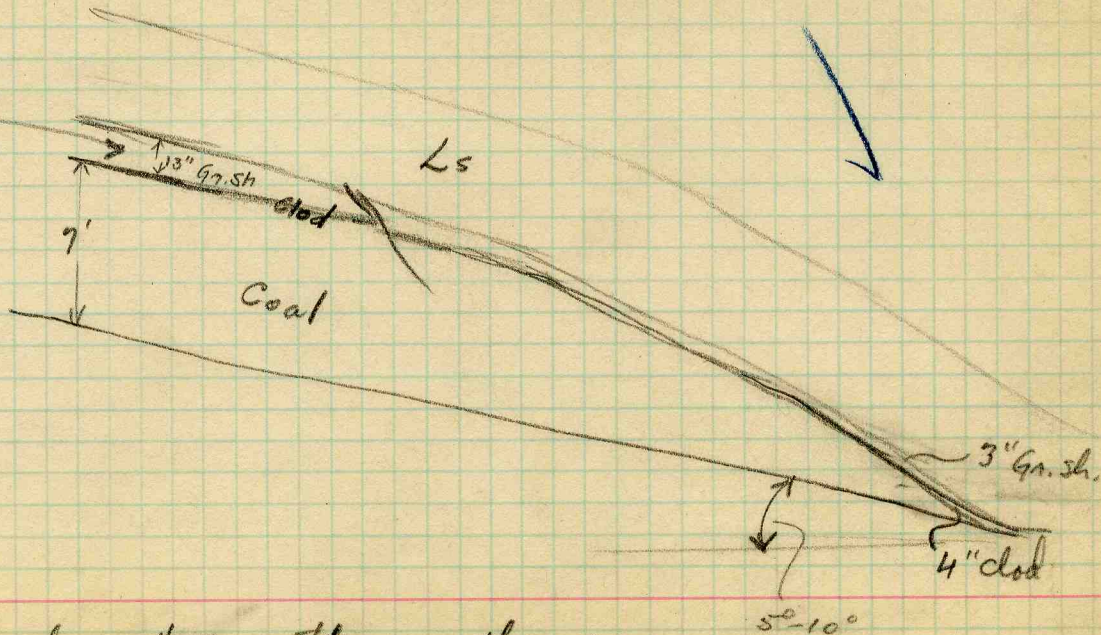


Superior #4



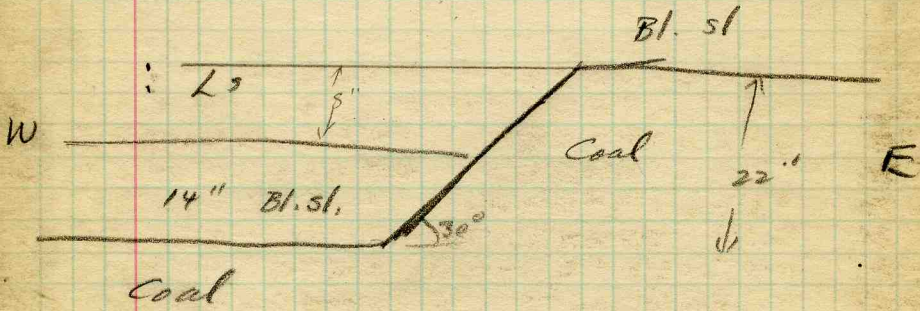
John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 318186

Sloppen-
sided,
hard.

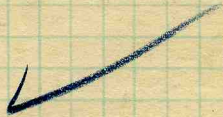


Face of 4th N, 20th W, 5th NW

Superior #4

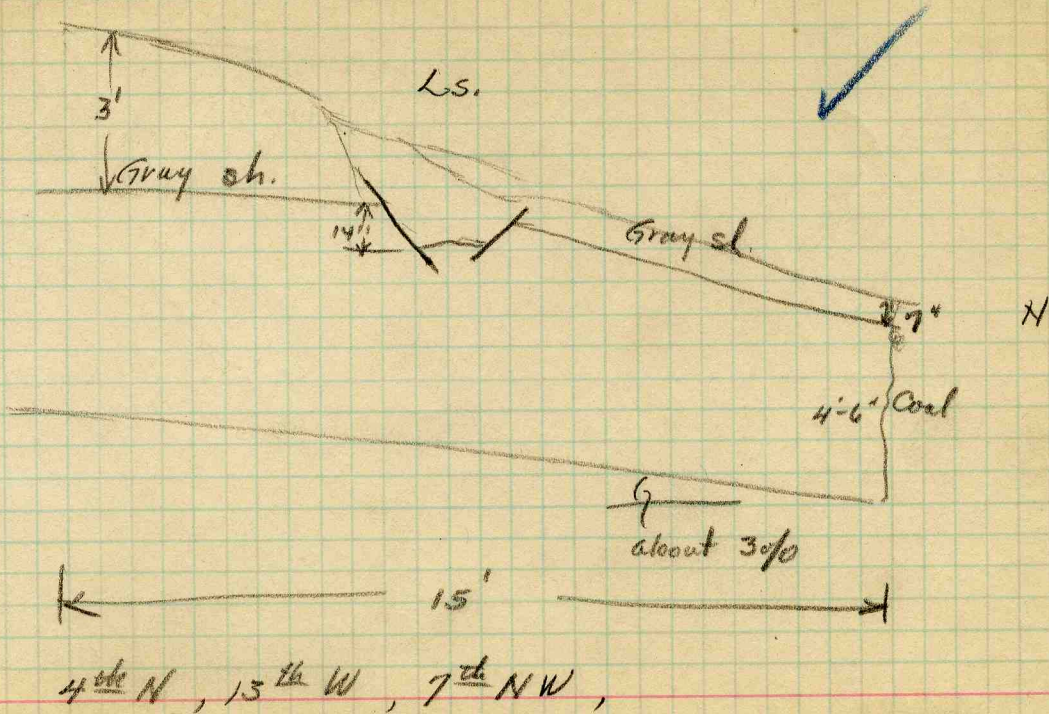


Between Rooms 10 & 11, 13th W,
7th NW, in Entry





Superior #4

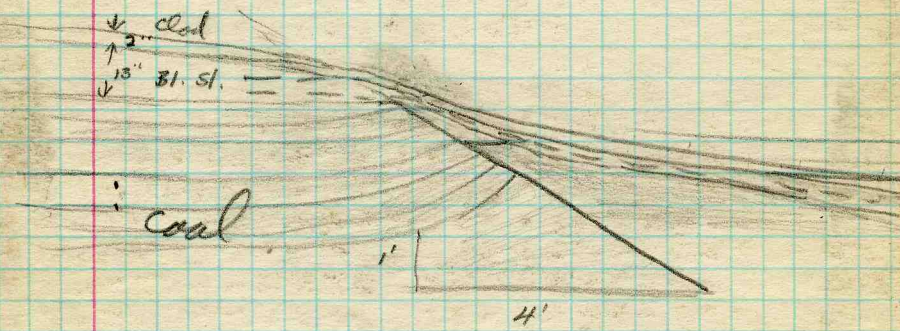




Seep. #4

SE workings

(1)

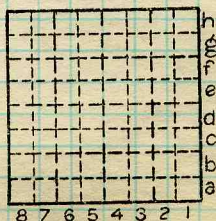


Get Photo.

Cap rock very rocky in this immediate vicinity, with many faults and slips in the coal & bl. slate.

Rib between Rooms 4 & 5, off 5th E
off 5th SE.

By Date 8/20/40
 Quad Part
 County



Sec. N.
 T. S.
 E.
 R. W.
 Index No.



Symbol Description Inches
 1 division=3 in.]

(4)



3" Ls. cap. red.
 clad.
 8" Bl. sl.
 12" dk. gray sh.

7'-1" Coal

* This entry is 21' wide
 Note Varying thicknesses of bl. sl. and
 the dk. gr. sh. across the 21'

S. Pil. at Room 15, 5th E,
 5th SE.

Apparently a trough like structure
 of the dk. gray sh. exists, with the
 strike of the trough being NW-SE.
 The dk. gray sh. is at a feather edge
 on the N side before it is shown on
 the S. side (walking E 31° 50' S) Distance
 of 105' from feather edge to feather edge

Collector.

Coal: Survey No.

Mine.

Co.

Index No.

Q.—COAL SECTION SHEET.

8/20/40

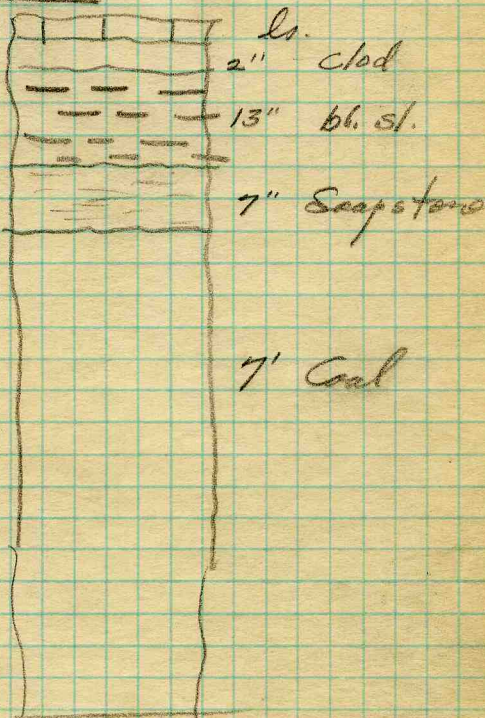


Description

~~7-8~~ Showing roll of ls. lumpy
1-9 cap rock, lower shell of ls.

1-11 Photo showing lenticular
structure of soapstone, and
contact between the soapstone
and the bl. sl.

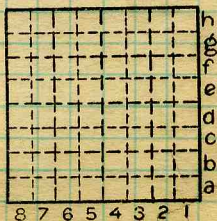
at hammer.



Date 9/4/40 T..... R.....

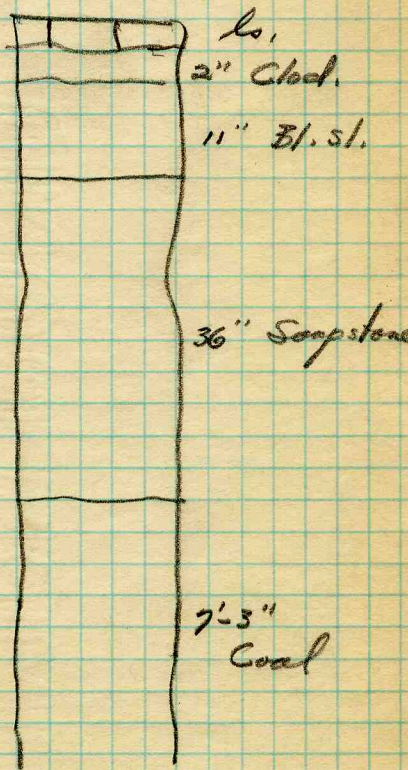
Quad..... Part.....

County..... Index No.....

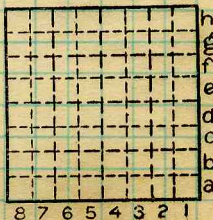




1-12 - Photo showing bl. sl. and soapstone at hammer:



Date A/4/40 T..... R.....
 Quad..... Part.....
 County..... Index No.....



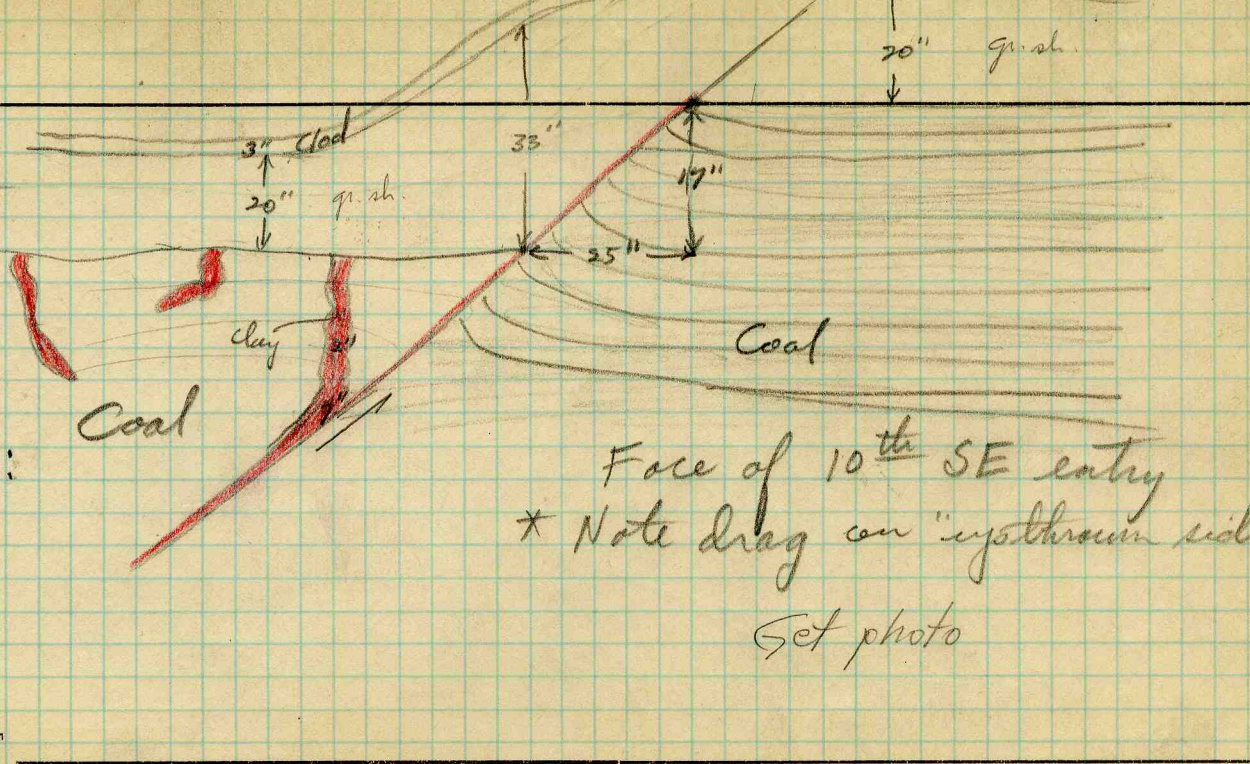


symbol

Description

Inches

division = 3 in.



Face of 10th SE entry
 * Note drag on "upthrown side"
 Get photo

 clay seams.

Collector.

Mine.

Co.

Q.—COAL SECTION SHEET.

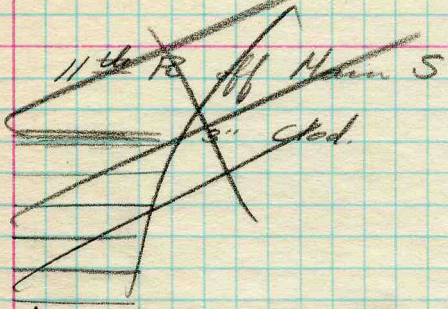
8/20/40

Coal: Survey No.

Index No.

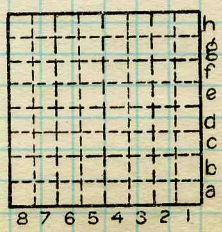


~~Course #7~~



5th E, 9th SE, at Room 4.
 This entire vicinity has a thick strata of gray sh (soapstone) immediately over the coal which is fractured, slipped, etc. and very difficult to hold. There is no bl. sl. present. The face of the 5th E, 9th SE ^{at 5th Room} entry is "smack-dab" into a large slip which may cut the coal out. Entry not completed so extent of soapstone down is not certain.

By Date 8/20/44
 Quad. Part
 County ~~W. Va.~~



Sec. N. S. E. W. Index No.



Symbol

Description

Inches

1 division=3 in.]

In 6th E, 5th SE - great thickness of gray sh (soapstone) in a lenticular strata. Max. thickness about 5' - pinching out to a feather edge at each end. Rather dry for usual soapstone.

Collector.

Mine.

Co.

Q.—COAL SECTION SHEET.

Coal: Survey No.

Index No.

8/20/40



Sup. # 4

Room 3, 2nd S, 6th E, 7th SE.

Roll of ls cutting ^{almost} at rt. E across room (strike N40E) — the roll cuts entirely across the room, and is not a local test or boulder. Is a local phenomena, however, and does not occur in parallel rooms.

Room 4, 2nd S, 6th E, 7th SE.

Great thickness of soapstone at face of room. 3' large concretion of limestone in this soapstone, a very unusual condition in this mine. Largest was out 3' in diameter and the other two were 18"-24" in dia. ~~Just to N. of these concretions the coal balls were found.~~

8/21/40



Room 5, 2nd S, 6th E, 7th SE
 Coal balls found in S rib
 immediately on the coal (215'
 from center of entry). A gray sh,
 soapstone, lies immediately on
 top of coal and the lower portion
 is limy. Also boulders of limy
 concretions are present on coal
 and at base of the gray sh. (See section)

2nd S, 6th E, 7th SE entry
 from room 5, down to
 room 8:

Great thickness of soapstone
 on E rib, with caprock dipping
 or rolling to W. About 4 1/2' of
 the soapstone on E rib and only
 18" on W. Also, 7' of coal on
 E rib and only 3' on W rib.

Entry is 22' wide. This roll
 runs for about 175' along entry.



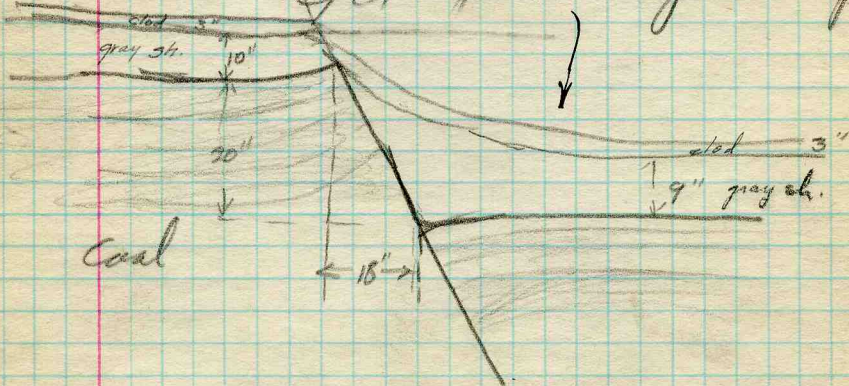
(5)

Mouth of 7th SE entry, just N of 5th E, 5th SE.

Get photo of large ls boulder

5th E, 7th SE, between Room 7 and 8th SE entry on S rib.

Get photo - from slip



Between Rooms 7 & 8, 5th E, 7th SE on N rib. (sketched on next page)

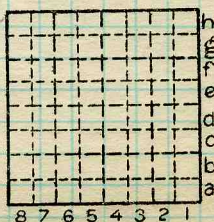
6th E entry between Room 7

& 8th SE entry on N rib
 About app. of 1st stratum.

By Date. 8/20/40

Quad. Part

County



Sec. N. S. E. W. Index No.



Superior #4 ⁽¹⁾

Presence of strata having imp. effect on mining:—
Limestone makes good roof in W.

- 1) Position — above sh. & clod.
- 2) Character — strong
- 3) Persistence — is good roof only in W.

Cap rock — Ls.

- 1) Thickness — no information
- 2) Ht. above coal — feathered edge to 5'

Immediate roof — sh.

- 1) Thickness — 0-5'
- 2) Contact with coal
- 3) Hor. variation — varies considerably in character



Track level

2500' from bottom in ~~the~~ Main E

The lower surface of the ls. is very irregular, the relief is as great as 5' in some places. Many of the nodules are long in relation to their width and are called rock rolls. The larger ones as shown in sketch are often accompanied by slips in the sh. & coal.

In this mine the lower surface of



#4 (2)

the ls. appears to come up and down and the coal runs fairly level. The nodules of ls. project down into the coal. They appear to be deposited in depressions in the upper surface of the coal.

The above conditions hold true for the E. side of the mine, the farther W. the workings go, the less sh. there is between the coal and ls. until in the present Main West there is a clod of about 2 inches. The lower surface of the ls. is very regular in the W., but it has some slips showing displacements of $\frac{1}{2}$ to 4". The W. workings are very wet from the 5th N.W. on West, and it is possible that the water comes in thru these slips, altho the quantity is not sufficient to detect.

Fossiliferous horizons underground, - Fusilina in cap rock. Other forms abundant, & bl. sh. shows other shells, mostly pyritized.

Netzeband.

July 2nd, 1923

7 & 8 W on MS. 4" clod parting above coal below bl. slate. At 9th W on MS. break is clean between coal and slate, with no clod.

5th room W. off 7th W off MS. 42" bl. slate, with no clod above or below. Argillaceous ls. slabby 3" zone comes



#4. (3)

down with the slate

14th Room W. off 5th W. off 1st SE
 slate thins to 5" with argillaceous ls.
 slabby 3" zone comes down with slate.

Face of 12th Room N. - 200' off 5th
 W. off 1st SE. bl. slate thickens to
 24".

Neck of 10th Room W. off 5th W
 off 1st SE. 12" bl. sh. with 3" clod
 above.

Face of 4th Room E off 5th E
 off 2nd S off ME. 15" bl. slate -
 soapstone clay. 3" clod above.

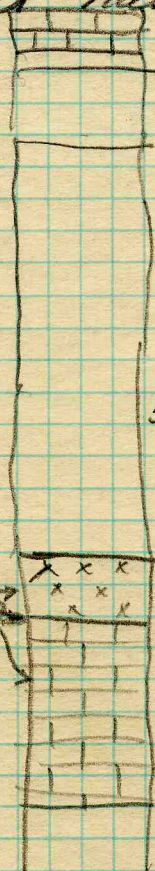


2-8

Fault in ls. in bottom, with fireclay exposed.

at hammer:

2" Clod
20" Sandstone



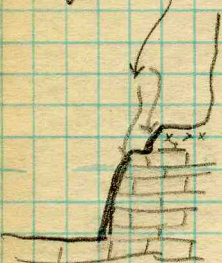
Face of 5th E entry, 9th SE,

52' coal

8" Fireclay

20" ls.

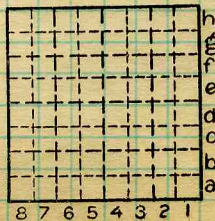
Face, directly into entry, was slickensided & slipped.



Date 9/4/40 T. R.

Quad. Part.

County Index No.





Sup. #4

2-2

9) Mouth of 7th SE entry, just N of 5th E, 5th SE.
Large ls boulder.

2-3:

10) 5th E, 7th SE, between Room 1 and 8th SE entry, on S rib Prom. slip with reverse drag.

Mined out by this date X

11) Face of 10th SE entry
Honeycombs of clay in coal, and also prom. slip.

1-8
1-9

12) Face Near Room 8 on E rib
2nd S, 6th E, 7th SE
13) { 38" of ~~flat~~ flattened slip on E rib
.78" " " on W rib due to ls roll.

2-12

~~4th Room - ls concretions.~~
14) 5th Room, 2nd S, 6th E, 7th SE
Coal balls & ls cones
(See also next room)

X

15) 2nd S, 6th E, 7th SE entry (at face)
Sandstone lenses & honeycombs in coal.

3-2

16) E. rib of 1st X-cut, between 7th & 8th W, 5th SE.
Prom. slip with coal cut to about 3' (sketches)
9/14/40



* see (17) Sep #4

1-2 ✓ 1) Between 10 & 11 Rooms, 13th W, off 7th NW in entry on S. rib, Slip

1-1 ✓ * see (18) Mouth of room 10, of above location, 13th W, 7th NW. Picture of bl. sl.

1-5 ✓ 3) 16th W about 50' W of 8 NW, ls. roll.

1-6 ✓ Hammer head in plane of fault. Mouth of 18th W, off 5th NW.
1-7 ✓ Graben fault. 9/3/40

X 5) On N. side of ls. roll in Room 5, (W. entry of 1st E cut.) off 5th E, 5th SE. Slips, with normal drag

1-10 ✓ 6) N. Rib between Rooms 4 & 5, 5th E off 5th SE. Slip with reverse drag

1-11 ✓ 7) Near Room 15, 5th E, 5th SE 36" of sh. on N rib & 7th on other. (S)
1-12 ✓

2-4 ✓ 8) Between rooms 7 & 8, 5th E, 7th SE on N Rib - 9/4/40
2-5 ✓ Series of slips (sketched by a.c.s.)
2-6 ✓
2-7 ✓



Superior #4

17) Face of 4th N, 20th W, 5th NW.

Coal pinches from 7' to 0'
in 25-35'.

18) 4th N, 13th W, 7th NW. —

: Double slip, resulting in grades

19) ✓ Get "up shot", showing slips,
etc. in the gray sh.

X 5th E, 9th SE, at Room 4

should be a good location for
exhibition of the gray sh.

X 20) Face of 5th E, 9th SE at 5th Room

entry abandoned.
Large slip of soapstone which
may cut the coal out.

✓ 21) In 6th E entry, 5th SE, on N rib, off
Room 15

2-1

Lenticular stratum of gray
sh. shown from feathered
end, and boulder in rib

✓ 22) Face of 5th SE entry

3-3

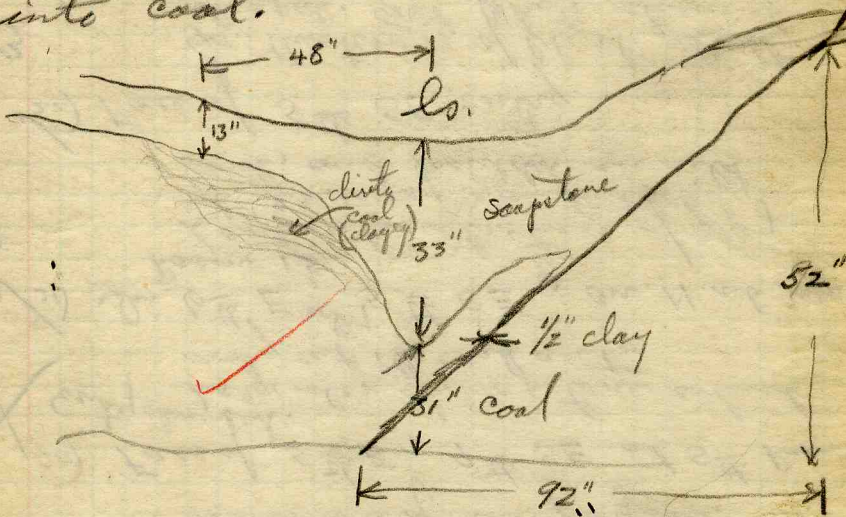
Gr. thickness of bl. sl. badly
slipped. Get photo showing
slips, gray sh, etc.

✓ 23) Face of 5th E entry, 9th SE

2-8

9/4/40

24) 2-9 Face of 10th SE entry.
 2-10 Slip of soapstone cutting
 into coal.



25) 2-11 On 9th SE entry between
 1st & 2nd X-cuts.

Badly fractured soapstone,
 with top coal left as roof.
 (Section drawn)
 immediately below.

9/4/45



#4

1-3. Face of Room 12, 13th W, 7th NW.

4" Bench of ls, 3" clod, 24" sandstone
coal.

1-4: Face of Room 12, 13th W, 7th NW
Sandstone horseback

MADISON COUNTY



Symbol Description Inches

(1 division = 3 in.)

1 1/2	ls. clod	
3"	clod	
8"	med. gray sh, badly iron stained	
12"	lt. gr. sh.	
29"	dk. gray sh, (soapstone), badly slipped & fractured.	
10"	Top coal - bright, glistening	

7' coal

2-11

On 9th SE^{1st} entry between 1st and 2nd X-cuts.

(photo taken)

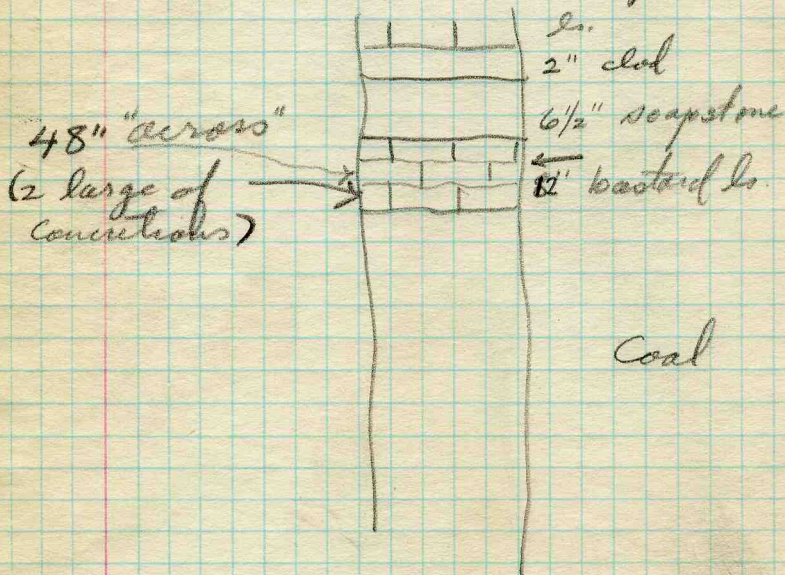
9/4/40

Collector, Coal: Survey No. □
 Mine, Co. Index No.

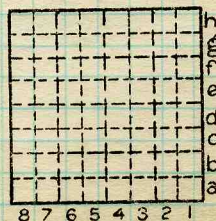


'3-1 In X-cut, opp. Room 6, 1st
 S, 6th E 7th SE.
~~In 1st S. entry X-cut, 6th E,
 7th SE, opp. Room 6.~~

Concretionary bastard ls.
 between soapstone & top of coal.
 Section thru middle of the bastard
 ls. :



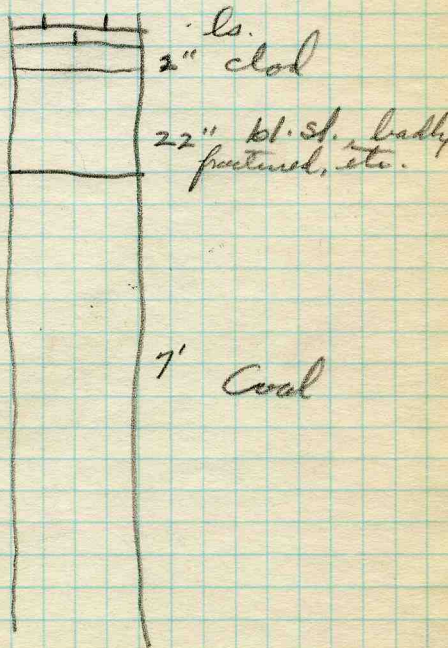
By Date 9/4/40
 Quad Part
 County



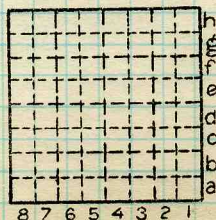
Sec. N.
 T. S.
 E.
 R. W.
 Index No.



3-3 Bl. sl., badly slipped & fractured.



By Date 9/4/70
 Quad Part
 County



Sec. N.
 T. S.
 E.
 R. W.
 Index No.