THIS MINE APPERENTLY OPENED AS ELDER + BIXLER CC IN 1919.

Elder + Bixler opened in 1913. MB. : Extended into Sec 23 and 24 Probably AT in Sec 13.

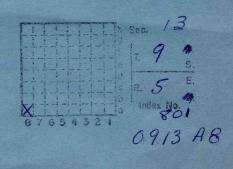
ABANDONED: JANUARY, 1972

SAHARA COAL CO.

MINE No. 16

Co≠ 594

5-39



SALINE COUNTY

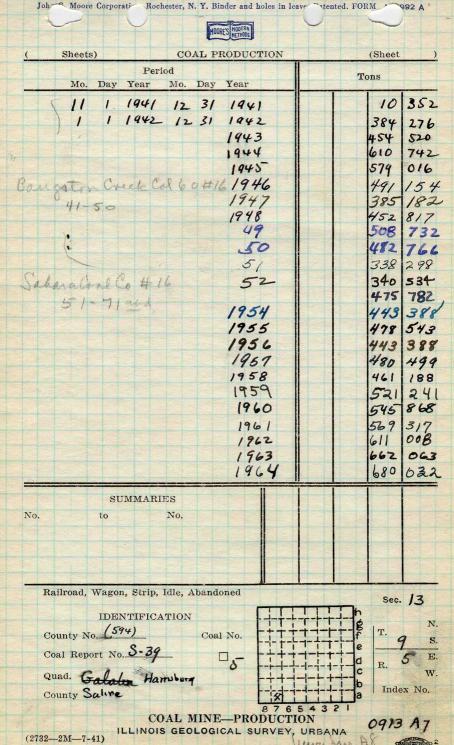
\$65 Index 801

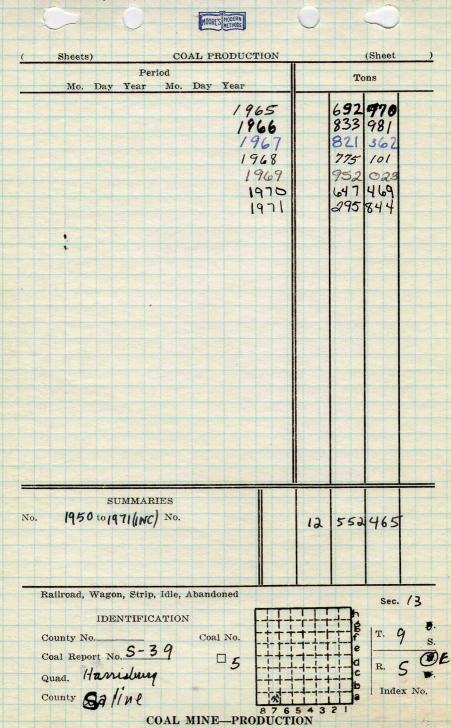


Sheets) (Sheet Period Tons Mo. Day Year Mo. Day Year ELDER + BIXLER CC 1919 1913 HARRISBURG CMC BLUEBIRD " 1921 112 1922 140 770V 1924 1925 1926 1927 462 2 ABANDONED 1930 IN 1941 REOPENED SUMMARIES No. No. to Railroad, Wagon, Strip, Idle, Abandoned Sec. IDENTIFICATION Coal No. County No ._ Coal Report No ... 05 R. Quad. Index No. County COAL MINE—PRODUCTION

(2732-2M-7-41) ILLINOIS GEOLOGICAL SURVEY, URBANA

2





(2732-2M-7-41)

ILLINOIS GEOLOGICAL SURVEY, URBANA

SAHARA COAL CO. MINE NO. 16

As told by Wally Lucas of Sahara to John Nelson on 5/27/77 (after mine had been abandoned).

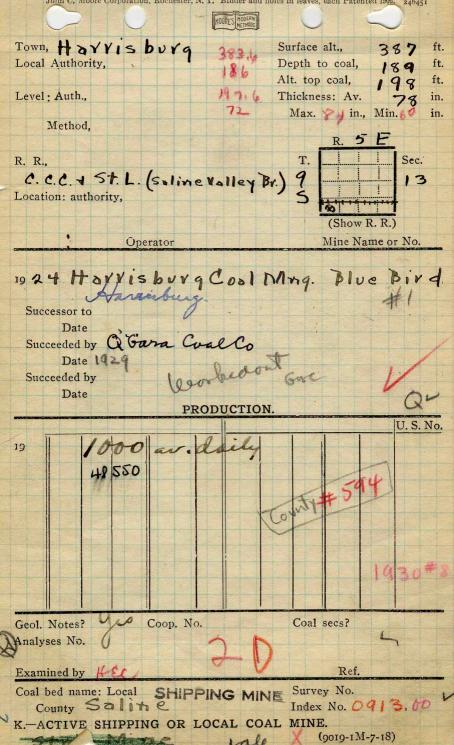
Along the northeast workings of the mine the coal increased to as much as 18 feet in thickness, of which the lower 6 feet or so was extremely good low-sulfur coal, and the rest was laminated shale and bone coal. Only the lower 6 feet was mined. The workings were halted because it became impossible to hold the top. The channel was never reached on the northeast.

A similar situation was encountered in the southeastern part of Mine No. 20. These workings were abandoned and sealed, and collapsed, producing a subsidence pond 10 feet deep.

In the southeastern part of Mine No. 16 the coal was split with bands of hard rock. These splits thickened eastward and brought a halt to mining. Again, the actual channel was not reached.

Split coal was also encountered in a meandering channel-like area in the southeast part of the mine. The coal split into two benches 10-20 feet apart. Only the upper was mined on the area inside the meander. This explains the local "high" on the No. 5 Coal as recorded on elevation sightings.

In the northernmost part of the mine the coal was extremely rolly with steep dips. A series of east-west trending faults was crossed, but none of these exceeded 48" displacement. The workings were eventually stopped due to the extreme wetness of the area.



| ٠ | | | | 9441 | | \sim |
|--------|----------------------|-------------------|-------------------------------|------------------|---|---|
| (55 | John C. M 29-500) | doore Corporation | , Rochester, N. Y | . Binder and hol | ics in leaves, each l | fatented 1988. |
| Mi | ne Name or | No. Blue | Bird Nok | Aine Address | Harris | burg, 111 |
| Op | erator/ | arris t | ourg C | Coal 1 | Tining. | Co. |
| Ma | ain Office Ad | dress/ | larris | burg, | 111.1 | |
| | | | | | • | |
| Lo | cation of Min | ne: | | | | |
| То | wnship Nam | e Carri | er Mill | County | Daline | |
| Sec | ction No | 13 | Township9 | South | Range | 5 E |
| | Indica | te location of mi | ne and position ection below. | of R. R. | | |
| , | | No | rth | | | |
| West | Saline Va | alley Brai | 3) | C+ S+ L | from quarter 87 815 50 Idle entire ye | te number of feet section lines: from N. line from E. line from W. line from W. line ar 19 |
| (be | | MINE87 | | sea level or a | bout(nearest t | feet (above) |
| into ! | | f coal is/8 | 1 | 6 | | |
| AV | erage tnickn | ess of coal is. | | | ches. | |
| - | ol Dod Ma | | | below this line. | 0 27 | |
| | unty S | line | | | Survey No | |

V-MINE LOCATION SHEET.







Sahara Coal Co. #16 Mine #5 coal

> 1834 18 4/3

1/8

1/4

1/8

1/4

1/8

1/8

1 3/4

18 1/4

5 1/8

5

Channel Sample

27S off the main E

Described by Harrison Recorded by Berger

Roof-Dark gray shale

Medium clarain with

Thickness (inches) 10 1/8

0 - 10 5/8 10 5/8 - 10 3/4

10 3/4 - 29 1/2

29 1/2 - 29 5/8

29 5/8 - 34 3/4

40 1/8 - 50 3/8 58 3/8 - 58 5/8

58 5/8 - 60 3/8

- 63

- 63 1/8

- 65 1/8

- 65 3/16

60 3/8 - 60 1/2

- 40

- 40 1/8

34 3/4 - 35

35

40

60 1/2

63 1/8

65 1/8

63

vitrain bands up to 1/2" Fusain band Medium clarain with vitrain bands verv

bright, clarain relatively dull Fusain band

Fine clarain Fusain band Coarse clarain, one

vitrain band up to 3/4" thick Fusain

Medium clarain Fusain

Medium clarain

Fusain Clarain 2 1/2 Fusain Fine clarain 2

Fusain 1/16 Harrison & Berger

Part

d C

Sec. 13 e T. 9 I R. 5

8765432

Saline County_



FORM 180 W ILLINOIS GEOLOGICAL SURVEY, URBANA

(p. 2)

Sahara Coal Co. #16 Mine #5 coal

Channel Sample

27S off the main E

Described by Harrison Recorded by Berger

Roof-Dark gray shale

| | | Thickness | (inches) |
|---------------------|------------|-----------|-----------|
| Fine clarain | 2 1/8 | 65 3/16 - | 67 5/16 |
| Fusain | 1/8 | 67 5/16 - | |
| Fine clarain | 4 | 67 7/16 - | |
| Fusain | 1/16 | 71 7/16 - | 71 1/2 |
| Fine clarain | 4 1/4 | 71 1/2 - | 75 3/4 |
| Fusain | 1/8 | 75 3/4 - | |
| Clarain | 1 1/2 | 75 7/8 - | 75 3/8773 |
| Bone coal, shaly | 1 | 77 3/8 - | 78 3/8 |
| Clarain | 1 3/4 | 78 3/8 - | 80 1/8 |
| Bone coal | 3/4 | 80 1/8 - | 80 7/8 |
| Medium clarain | 4 | 80 7/8 - | 84 7/8 |
| Fusain, mineralized | 3/4 | 84 7/8 - | 85 5/8 |
| Medium clarain | 3 | 85 5/8 - | 88 5/8 |
| T. / | 1 thick as | . 845/ | |

Floor - Fine clay

Harrison & By Berger Date 8-6-58 Part

Saline

County...

| h é | | | | | - | - |
|-------|---|---|---|---|----------|----------|
| T-I-f | | | | | ţ- | |
| ++-a | | - | - | | <u> </u> | - |
| c | - | - | - | - | +- | <u> </u> |
| a | 3 | _ | | | +- | - |

Sec. 13 N. т. 9 S. E. R. 5 W.

Section on Slope Banston Creek Colleries Mine No. 16 (Sahara No. 16) (Old Bluebird Mine)

Ca20'4

Soil SW 13; 98,5E 4 mi. W of

Harrisburg Swimming pool on Rt.13
Loess 2 mi. So. and 4 W.

lt. Sh.? badly weathered, showing gry in loess wash and iron stains

Bankston Ls.

Ca20" LS "Cap rock" badly weath. & appearing
somewhat nodular, dull reddish brn., rather
massive numerous fusilinids (big & fat)
Ca2" Sh. soft lt. gry.

3/4" Sh. brn with plant matr. Coal horiz.??? 3' clay, lt. gry. sty. weath reddish yellow.

Anvil Rock (?)

15' SS med.-thick bed and x bed med.- coarse grain, misc. weath. brn. on top foot or two lt. gry below

12. • Sts. med. dk gry, fine sdy stks.

Saline Bankston Slope JMS 10-5-42

MOORE'S MODERN HETHOUS

Herrin?

5-6' "bastard Ls. calcite filled, med. gry. sparse fos. joints rounded, eperdidal - angular fracture, fine grain, almost massive 3'. med. dk gry clod - draw slate

4'10" No. 6 Coal

36

4. U.C. lt. gry, slight iron stain

4' - SS, lt. green gry. avail. prob. calc. cement
"Tight" Med.-bed, med-fine grain
mine dry below this.
grading to

Softer sand mis

Sts, hrd, lt. gry with sandier beds

becoming

d darker and more carb some plant foss.

Saline JMS 10-5-42

Sahard 16 Slope

HOORE'S MODERN METHODS

Sts., dk. some plant foss. in all, about 36'

4" Sh. lt. gry soft 20-24" Ls., argil, med. dk. gry., and Sh.: vy fos

22" 5A Coal

8" Sts., sdy, brd., med. gry., roots

4-5' Sh., irregular med. bed, Soft, irny stks.
gry Sh. with plecypods just above Ls.

10" Ls. argil., med. gry, top brnish
marine foss.

Sh. even and thin bed, mic. 1

becoming

more sty. with alt. lt. and dk. 2 bands, quite mic.

ca79' to coal
Saline Sahara 16' slope
JMS 10-5-42

J. Schopp



Observations on lith every 3 or 4 ft. gave record of variation beds all more or less gry sty, and shy. definite lith demarcation is very difficult.

becoming more sdy

increasing sand, harder, It. 4 gry. banded

3

6

11

becoming more shy. med. gry. 5 med. bed Ca79*

with lt. gry sand stks.

Med. gry Sh. somewhat Sty. beds 1-2" thick 7 laminated with lt. gry sdy.

stks. med. It. gry sty. Sh. 8

lighter, more sdy, streaked. 9

Sh. med. gry. med-sub massive ped.10

Sh. Sty. med. gry. mic. med .- obscure bed somewhat slip fractured.

Med. lt. gry. Sh., thinner bed. 12 2-3" Sh., soft, med. gry. carb. pyr.?

6-8' No. 5 Coal

Sts. floor

Saline Sahara 16 elope JMS 10-5-42

John C. Moore Corporation, Rochester, Section on Slope Bankston Creek Collever Mine No. 16 (Sahara 910. 16) SW 13; 95 5E 4mi w of Harrisburg Swining pool of Rt. 13; & mi So + 4 w. ca20 + foess It Sh? badly weathered, showing in lokes wash + in itain Ca20" & S" Caprock" bodly weath +
appearing somewhat woulder
ca2: sh 3 minious fusitionide (big + fet)
3/4" Sh bon with plant pats. cootheris???
3' Clay, It grif sty, weath redish yellow. med - Thick bed of X becl med - coaras grain, me. It goy below foot a two Sec 13 Harrishing Quay Index No. Salune 0913 12' ± Sts, meddkgrys fine ody stifes Bankston Slope MB 10-5-42 Saline

John C. Moore Corporation, Rochester, N. HOORE'S MODERN Breton G Herry ? ecolcite filled, 5-6 "bastard" Ls, med gry, sparse for joints rounded, apheroidal-angular practure, fine grain, almost massive. 3" + med dk gry clod - draw state 4'10" No 6 Coal 4'+UC It gry, slight irn stain 4'+ 58, It green gry avail for Cale comented mine gain below this. med-fine gain Softer Garding To grading to Sts, had ltgry with pecoming darker + more carb some plant for. JMS 10-5-42 Saline Sahaa 16 Sloke

MOORE'S MODERN Sts, dk some plant fors. In all, about 36' 4"Sh Itgry Soft 20-24" Ls, argil, med dkgry, + sh: vy foss. 32" 5A. Coal -8" Sts, sdy, hod, medgry, roots. 4-5'Sh, irregular med bed, Soft, irng 5tks.

- gry 2h with plecypods just above Ls.

10"Ls, vargil., Med gry, top brnish, soft Marine foss Sh, even + thin bed, mic. becoming more 5 ty with alt. lt+dk 2 ca 79 to coal Salara 16 The 10-5-42

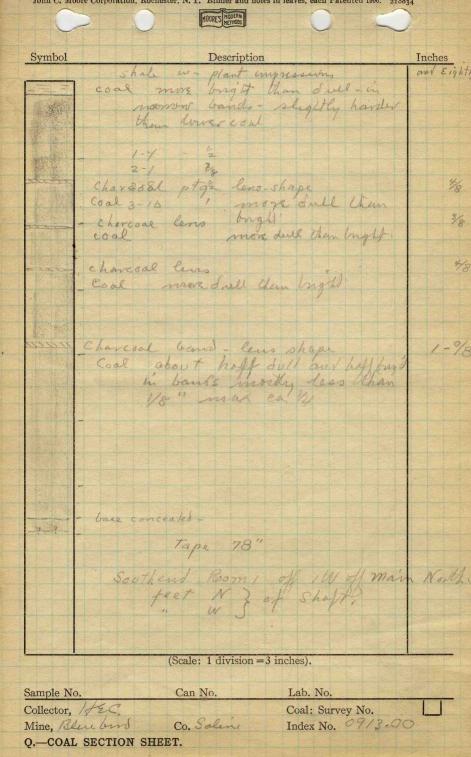
with It gry Sand Stors. Increasing sand, 4 harder, It gray banded becoming more shy, medges med gry Sh, somewhat Sty beds 1-2" Thick laminated with It gry sdy stks med Harry sty Sh 8 lighter, more sdy streaked. Sh, med gry, med - Sub marriage Sh, Sty med gry, mie 11 med - obsaire bed Somewhat slip fractured Med It gry Sh, Thinner bed, at bese 2-3" sh, soft, med gry. carb, pyr? 6-8' no 5 Coal sts floor The 10-5-42 Saline

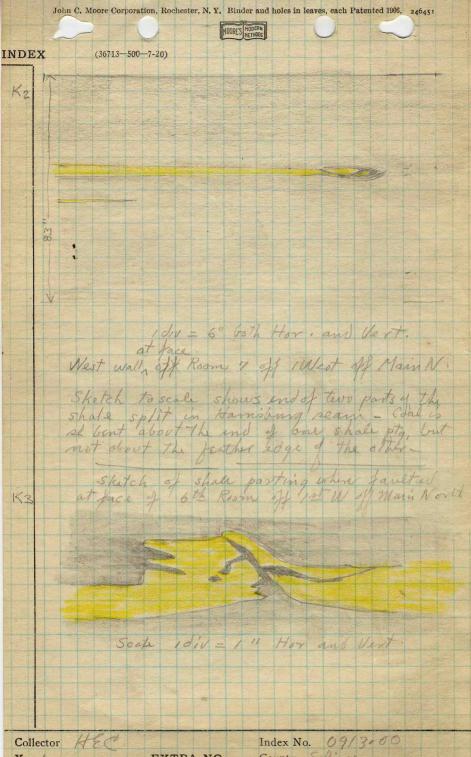
| WOODEN HOLDEN | |
|---|------------------------------|
| | See Extra Sheet No. |
| Entrance Shaft | 1 |
| Kind of tipple stee/ | |
| Motive power for hoist steam | |
| Source if electrical | |
| Kind of hoist (cage, skip, etc.) cage Kind of haulage motor -1-12 ton - on main haulage | |
| | |
| Mining equipment | |
| Note any features of the equipment that are of special interest | |
| SURFACE DATA. | |
| A. Topography, F/a+ B. Surficial materials, (1) Character, | |
| B. Surficial materials, (1) Character, | |
| (2) Thickness, (3) Effect on mining and shaft-sinking, of | |
| former drainage lines, underground water strata, etc. | |
| aramage most underground water strata, etc. | |
| | |
| | |
| | |
| | |
| | |
| C. Outcrops, (1) Character, | |
| (2) Structure, | |
| (3) Fossil horizons, | |
| Collection No., | |
| (4) Evidences of subsidence, | |
| D. Note collection of mine maps, drill records and shaft logs. | |
| | |
| | |
| See drill record sheet, | |
| E. Notes on surrounding area, | |
| | |
| | |
| | |
| | |
| | |
| | |
| Coal bed name: Local, Harrisburg Survey No. | |
| Collector, HE Culver, who worked at ISGS during 192 | 05 |
| Mine, Blue Bird Co. Saline Index No. 09/3. | 20 |

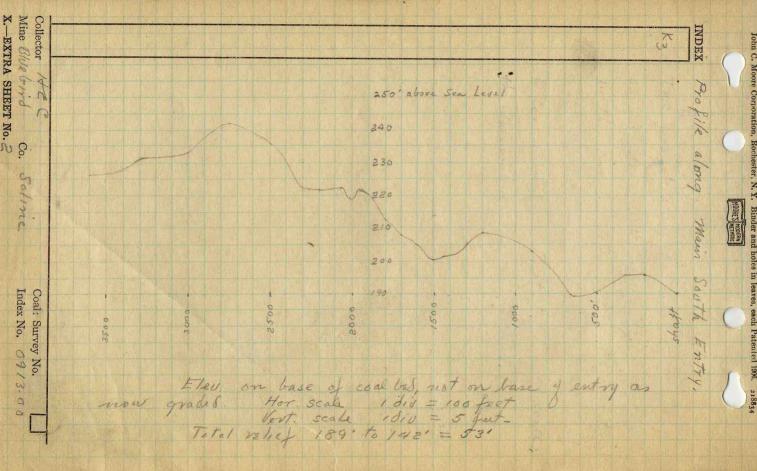
L.—SURFACE SHEET (Geol.)

| | 1 | All C. Mo | ne corp | oracion, | Twenest | - | | - | ies in i | eaves, | eaci | 1 Pater | ited 1 | 906. | 88643. | 4 |
|------|-----|-----------|---------|----------|------------|-------|---------------|--------|----------|--------|------|---------|----------------|-------|------------|------|
| | | 9 | | 0 | | | MOORE'S MODER | is l | | - | | | 1 | | | |
| | | | | | | | | | | | | | | | | |
| 7. | Thi | ckness o | of rock | k abov | e bed | worke | ed, | | | | | | | | | |
| | (1) | Import | ant va | riation | ıs, | | | | | | | See . | | | | |
| | | | | | | | | | | | | See | | | | |
| s. I | oto | e presen | ce of s | trata l | naving | impo | rtant et | tect o | n mir | ung, | | | | | | |
| | | | | | | | | | | | | See | | | | |
| | | Positio | | | | | | | | | | | | | | |
| | | Charac | | | | | | | | | | | | | | |
| | | Persist | | | | | | | | | | | | | | |
| | (4) | Other | worka | ble co | al bed | S | | | | | | | | | | |
| | | | | | | | | | | | | See | | | | |
| | | rock, | | | | | | | | | H | | CTO | TOT C | | |
| | | Thickn | | | | - | | | | | | Nam | reliand to the | TIC | N [In.] | Sym. |
| | (2) | Height | above | e coal, | | | | See | | | | Ivaili | | 1. | 111. | Sym. |
| T. | | dieta | | 11 | | | | 500 | | | | | | | | |
| | | ediate ro | | nale | (a) C | onto | t with | 201 | 1154 | | | | | | | |
| | 189 | 1 4 | 0 | 0 | | | t with o | | | | | | | | | |
| (| 3) | Horizon | ital v | ariatio | n. 74 | | 4 | 1 | | | | | | | | |
| | | e, Holo | 5911 | | n | me | reories | See | | | | | | | | |
| I. D | rav | slate, (| 1) Th | icknes | 88, | (2) (| Contact | 3 | | | | | | | | |
| | | NOY | 12 | | | | | | | | | | | | | |
| (| (3) | Persiste | ence, | | | | | | | | | | | | | |
| | | | | | | h | | | | | | | | | | |
| K. (| Coa | l bed: N | lax. | 34 N | Iin. | 0 | Av. 7 | 12 | inch | es | | | | | + | |
| | (1) | Benche | s, | rone | | | | | | | | | | | | |
| | | (a) Po | sition, | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | (b) Per | sister | ice, | | | | | | | | | | | | |
| | | | | | | | | See | | | | | | | | |
| (| (2) | Bedded | | | | | | | | ist- | | | | | | |
| | | ence, e | ease o | f sepa | ration | ne | me Es | ceps | 1 | | | | | | | |
| | 7 | he sh | 0/0 | ing | 4: | A-20 | N-UI | | | | | | | | | |
| | | | 110 | 1 | ing | | | | | | 90 | ala | 1 | 16 | 6 | |
| | | | | | | | | | 1/ | | 14 | S | 1 | | | |
| | | | | | | | | | XI | | | | | | | |
| | (3) | Irregul | | | | | | | | F | 1 | | | | | |
| | | movem | ent), | Fau | 1/5 | and | volls | | | | | | | | | |
| | | , D. | | | | | | See | X / | +2 | | | | H | | |
| | | (a) Eff | ect on | minin | g, spen | 32 | | | | | | | | | = | |
| ~ 11 | | 11 | | 14 | | | | See | C | - | | - | | 1 | | |
| | | or, / | | | | | | | | | | y No | | | | |
| | | Bluebr | | Co | | eler | re | | Inde | x N | 0. 6 | 291 | 3 - | 00 |) | |
| A | TTR | DERCI | OTIN | D CU | CET. | Casl | 1 | | | | 3 | | | | | |

| J | ohn C. Moo | re Corporation, Roche | ster, N. Y. | | i holes in | leaves, each | Patente | d 1906. 2188 | 34 |
|-----|------------|------------------------|-------------|------------------------|------------|--------------|---------|--------------|-----------|
| | | | | 100RE'S MODERN METHODS | | | | | |
| | 1 | | | | | | | | |
| K. | (5)Phys | ical character of | coal in b | enches. | | | | | |
| | (a) | Relative hardness | ss. to | 12000 | e h | andest | m | idelles | Stest |
| | | | | | | | | | 0 |
| | (b) | Lustre, to | · how | htest | 20.00 | will to | 1.1 | 44 | |
| | (c) | Fracture, | | 4 | | | | | |
| | | Texture, | | | | | | See | |
| | | ourities in coal, o | ther that | hedded | | | | DCC | |
| | | | | | | | | | |
| | (a) | Kind, Position and per | cictonoo | isco- | ran | - Tit | 7 5 | in mir | ne l |
| | (b) | Fosition and per | sistence, | no | 0/5/ | 0051118 | n a | | |
| | (1) | D 1 | | | T | c | | | |
| + | (c) | Rejected, | | | Lase | of separat | uon, | | |
| | | 4) 75 | 11 | | 1 0 | | | See | |
| L. | Floor; | 1) Material, ckness, 8 | alk g | ray 5 | hall | | | | |
| | (2) Thi | ckness, | + | | | | | | |
| | (3) Var | iation, no | Tm | Tier | | | | | |
| | | | | | | | | | |
| | (4) Not | e character, con | dition, t | endency | to hea | ave, relati | ion to | undercuti | ting com- |
| | | mercial value. | | | | | | | |
| | h | cares ol | ighte | y wh | in | much | ril | hus | cut |
| | n | noder top | dille | els | ewho | v2 - | 9 | this | acet |
| | h | under top | lin | kr - | 1 m | retricle | y? | | |
| | | no use to | nows | 1-0 | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | See | |
| | (5) Clar | y sample No. | | | | Location | | | |
| | | | | | | | | | |
| M | Stratigr | enhy. | | | | | | | |
| | | siliferous horizon | sundera | round | | | | | |
| | | | | | + | | 47 | 10 | |
| | 1 | N-W-ca | 1 tel | The state | arris | 1.180 | MIN | cally | - ap is |
| | 0.1 | V = UU - Ca | Coon | 4 07 | 121 | Loopie | mar | n NI | |
| - | Coll | ection No. | 4 41 | | | Location | , | | |
| | | | | | | | | | 1342 |
| | | | | | | | | | |
| N. | Notes o | n effect of deep d | rilling ir | coal mi | ne area | as. | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | See | |
| Col | llector, | HEC | | | | Coa | 1: Surv | ey No. | |
| | ne, Bli | | Co. | Salin | il | | | 0913 | 00 |
| N | -UNDE | RGROUND SHE | | | | | | | |
| | | | | | | | | | |







profile along the endin south entry this research on the roughest portion, 1800' to 2500' from the short has been unade one novemal scale It is apparent that the grades are wholly within the limit y original depressions.

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sample #1

Sahara Mine 16

1st SE of 0 SW Main West

1350'S, 550'E, center, Sec. 23-9S-5E

Saline County

Logged by H. J. Gluskoter, November 10, 1964 & Wm. H. Smith

No. 5 Harrisburg Coal Description

Total thickness - 59 inches

MYCHES Feet and tenths 0 21 3/4 Coal, normally bright banded, pyrite and calcite on vertical fractures; 1/8" fusain at 17%" 21 3/4 - 37社 Coal, normally bright banded, 1/8" fusain lenses at 1'9 3/4". 1'10½" zone of thin discontinuous pyrite lenses (3 or 4) from 2'1" to 2'4" 375" 371 Fusain, ½" 373" 4811 Coal, normally bright banded, 1/8" fusain at 47" 48" 59" Coal, normally bright banded, calcite on vertical fractures.

Note: Only the top unit described had calcite on the cleats.

By HJG & WHS Date 11/10/64

Quad. Part.

Sec. 23

T. 9 %.
S.
E.
R. 5 %.

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sample #2

Sahara Coal Company 16
Room 27 off 17th West off Main
North Entry
500'S, NE/c, Sec. 14-9S-5E
Salwe County

Logged by Gluskoter and Smith, November 10, 1964

No. 5 Coal Description

No. 4 Coal Description

No. 5 Coal Description

No. 5 Coal Description

No. 5 Coal Description

311

01

| | | | on vertical fractures. |
|---------|-----|-------|---|
| 3" | 60 | 22" | Coal, normally bright banded, minera- |
| | | | lized fusain band 18" thick at 6", |
| | | | other thinner fusain bands scattered |
| | | | |
| | | | throughout. 3/16" mineralized fusain |
| | | | at 14½". Entire unit and contains |
| | | | large amounts of fusain. |
| 22" | 600 | 28" | Coal, highly sheared. Fusain and shaly |
| | | | coal intermixed. Extremely soft. |
| | | | friable zone, highly mineralized. |
| 28" | 400 | 43311 | Coal, normally bright banded, calcite |
| | | | on vertical fractures, ½" fusain at |
| | | | 2'9½". Three thin mineralized fusain |
| | | | |
| 4.21.11 | | FCII | bands between $3'6\frac{1}{2}"$ and $3'7\frac{1}{2}"$. |
| 431 | | | Coal, normally bright banded. |
| 56" | - | 59" | Coal, very soft, sheared, much calcite |
| | | | on vertical cleat faces (5'3" - 5'3\" - |
| | | | Fusain soft.) With abundant thin |
| | | | fusain throughout. |
| 59" | 460 | 86" | Coal, normally bright banded, calcite |
| | | | on vertical fractures. 1/8" fusain |
| | | | bands at 6'6" and 7'2". |
| | | | bands at 0 0 and / 2 . |
| | | | |

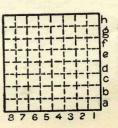
Coal, wide banded, calcite and pyrite

By HJG & WHS

Date 11-10-64

Quad. Part

County Salve



T. 9 S. E. R. 5 W.



Sample #2

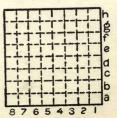
86" -105"

Coal, normally bright banded, very many, very thin, fusain lenses, calcite and some pyrite on cleat faces. Coal is soft, highly fractured.

By HIG & WHS Date 11-10-64

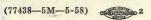
Quad. Part.

County Saling



Sec. 14

T. 9 N.
S.
R. 5 E.



ILLINOIS GEOLOGICAL SURVEY, URBANA

Sample 3

Sahara Mine 16

Room 51 off 6th West, 27 South, Main East
720'W, 150'S, NE/c, Sec. 25-98-5E

Logged by Gluskoter and Smith, November 10, 1964

No. 5 Coal Description

Top dark gray shale, hard, slaty, 6'8" consisting of:

Feet and tenths

0' - 13"

| | | | amounts of pyrite and calcite on |
|------|---|------|---------------------------------------|
| | | | cleat faces, thin (less than 1/16") |
| | | | pyrite stringers at 2½ - 4 - 6½ and 7 |
| | | | inches. Coal is much harder than at |
| | | | sample localities 1 and 2. |
| 13" | | 13½" | Fusain mineralized, hard. |
| 13社" | - | 36" | Coal, normally bright banded, calcite |

prominent on cleat. Soft fusain band 1/8" thick at 1'4 3/4" and another at 2'1½".

36" - 36 3/4" Fusain soft.

36" - 36 3/4" Fusain soft.
36 3/4" - 80" Coal. normal

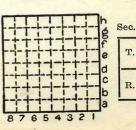
Coal, normally bright banded, calcite on cleat faces, several soft fusain lenses, coal is very hard, no prominent mineral bands or pyrite lenses.

Coal, normally bright banded, minor

By HJG & WHS Date 11-10-64

Quad. Part.

County SALINE



T. 9 S. E. R. 5



MLINE

19?

Notes on Sahara Coal Company, Mine No. 16 - visited by J. A. Simon and M. E. Hopkins on November 14, 1967

In general this mine is quite hilly with local relief as much as 40 feet. This "hillyness" may reflect the depositional variation related to the thick gray silty shales which overly the coal throughout the mine. However, in the area, near where Face Channel Sample #1 (November 14, 1967) was taken, there is a silty shale (or siltstone) split in the lower part of the coal. Mr. Boyd (Supt.) reports that it gets up to about 3' thick in the area. Nearby in Secs. (14) and 30, 98, 6E, a sinuous non-mined area 200'+ wide can be seen on the mine map. This would appear to be a "wash-out" but the coal is present. It was not mined because of the high rate at which it rises up over the area not mined. Main entries were driven under the coal in a few places. The cause of this abrupt rise and fall of the coal here is not known, but it could be that a non-compactable channel-fill occurs beneath the coal.

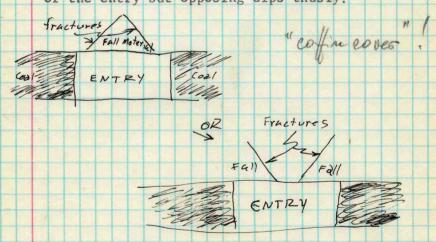
The immediate roof throughout the mine is a silty plant-bearing, gray shale carrying large flattened bark and stem impressions up to perhaps 3' across and 30' long. However, most of the plant material is measured in inches. Roof failures are of two principal types. (1) In the northeastern part of the mine, where face-channel sample 3 (November 14, 1967) was taken, there is up to 14' of intensely interbedded coal and shale, the coal making up about 25% and occurring principally as vitrain bands averaging &" in thickness. The amount of coal is variable from place to place Two rooms west of where sample 3 was taken, the coal makes up only about 5% of the overlying material. Coal thicknesses in this area are slightly lower than in adjacent area characterized

aline Co. Sec. 13 - 9S - 5E

Saline Co. Sahara #16

SALINE

by normal roof, about 5 to 6 feet as compared to 6 or 7 feet. When the coal is mined this interbedded coal and shale falls and is loaded out and run through the preparation plant. Rooms and entries as high as 20' were noted near center of NE 2 Sec. 13, 9S, 5E. (2) Occasional roof falls are the result of inclined slickensided fractures. Falls result especially when two adjacent fractures have similar strikes parallel to the length of the entry but opposing dips thusly:



Other falls occur at intersections and are probably related to fractures but this may not be so obvious. There did not appear to be a single dominant direction throughout the mine for these fractures.

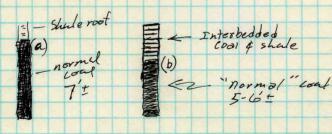
The area of intensely interbedded coal and shale roof seems to run NW-SE perhaps parallel to a sandstone channel which is known to lie to the east. The two are probably related in some way.



Need revisit of Mine No. 16

SALINE

- (1) Check on character of material under the comb where coal rises up sharply as in southeastern part of mine. This is the part of the mine where a sinuous, non-mined area can be seen on mine map. Is this a channel in the material below the coal? If so is it really below the underclay zone and in the sandstone part of the #5 cycle? Or is it in the gray silty shale complex that splits the coal in this part of the mine?
- (2) Sample for spore analysis; the upper part of No. 5 Coal in the mine where (a) a "full" height of coal occurs and (b) where the interbedded coal and shale occurs (as much as 14') to determine if the interbedded material is subsequent to the general deposition of No. 5 Coal or if it represents the upper part of the coal.



Sahara Coal Co. - Mine No. 16 - No. 5 Coal - Saline Count Face Channel Sample No. 1 - described by J. A. Simon and recorded by M. E. Hopkins 11/14/67 400'E, 300'N, SW/c NE NW - Sec. 30-9S-6E Face thickness 4'9" (some coal left in floor) Roof is gray shale with large plant fossils impressions Coal - normally bright banded Coal - bony Coal - normally bright banded with Kaolinite prominant on vertical fractures, pyrite more prominant in upper part, occasional vitrain bands up to 3" thick 3-213" Zone with normally bright banded coal and three soft nonmineralized fusain lenses up to 3" thick 213"-25" Coal - normally bright banded with white Kaolinite prominant on vertical fractures. with a 3" soft fusain lense at 30", some calcite on vertical faces in lower part 25-48" Fusain - slightly mineralized 48-48311 with pyrite, 2" to 2" thick Coal - normally bright banded, hard, calcite and Kaolinite on vertical faces Nothing excluded from face channel sample - Underclay not reached Bottom of coal sampled represents approximately the position of a shell parting which marks floor of mine in this area, however, there is no parting at point of sample, to east parting thickens



Sahara Coal Co. - Mine No. 16 - Sample No. 2 - described by M. E. Hopkins and recorded by J. A. Simon 11/14/67

225'W, 200'N, SE/c NW NW - Sec. 19-9S-6E - Room 14 off 1st W. 24th S. off main E - total thickness 93"

Roof - shale, gray with numerous carbonaceous flat plants and large fragments - one lepidodendron at least 18" in diameter, well laminated

Coal - normally bright banded, essentially free from any minerals on cleat facings

except some Kaolinite in the bottom 4" Fusain - soft, slightly cal-

careous Coal - normally bright banded, slight amount of Kaolinite on

vertical facings Fusain band - nonmineralized Coal - normally bright banded,

occasional thin fusain bands and partings, Kaolinite and calcite on vertical facings, vitrain prominant Coal and Shale - thinly inter-

laminated Coal - normally bright banded. several thin fusain and bony coal bands, hard Pyrite and coal - thinly inter-

Coal - normally bright banded with several thin bony bands, hard

laminated, about 2/3 pyrite

Nothing excluded from sample Claystone - seatrock, hard, carbonaceous

21-213"

213-46"

46-461"

0-21"

461-81" 81-815"

> 813-883" 883-89"

89-93" rootlets, very

carbonaceous

44-483"

48号-50号"

50%-53"

53-53%"

53청-59창"

591-64"

thin bony coal lense at base

Coal - bright banded with pyrite prominant on vertical fractures

Coal - bright but thinly banded,

Fusain band - soft, nonmineralized

Coal - bright, bony coal and shale

Bottom could not be dug out - more material similar to

slightly bony in parts

Coal - bright banded, vitrain bands up to 1/8" thick, inter-

laminated with bony coal

thinly interlaminated

that above is present