Form MIR 2500-1-39 (HUB)

# THE M. A. HANNA COMPANY

CLEVELAND, OHIO

## Mine Inspection Report

No. 480
File X

Date Feb. 12, 1940

**MINE**

Name No. 6
Location Carrier Mills, Saline County, Illinois
Postoffice " " " "
Field Southern Illinois
Rate District Proposed rate to Chicago $1.555
Shipping Point Harrisburg, Ill.
Telegraph Office "
Telephone number Carrier Mills 93 R 2

**COMPANY**

Name Bankston Creek Collieries Company
General Office Chicago, Illinois

**EXECUTIVES**

President Frank H. Woods
Vice President Henry Woods
Secretary Frank Woods, Jr.
Treasurer " " "

**OPERATING**

General Manager C. T. Hayden
Superintendent Paul Halbersleben
Shipping Clerk James Miller
Prep. Mgr. : J. A. Bottomley

**SALES COMPANY**

Name Sahara Coal Company
Sales Manager E. W. Broeckl
Postoffice Chicago, Ill.
~~Telephone number~~ 59 East Van Buren Ave.

**RAILROAD**

Name New York Central
Division Southern Illinois
Branch

**SEAM** (Two seams are worked)

Name No. 5 and No. 6 (strip)
Elevation (above or below R.R.) No. 5 : 140' below

(See reverse side for average section; thickness, location and nature of partings; thickness of drawslate, if any; character of roof and floor.)

**COAL**

Character of High volatile
Structure #5 seam: medium; strip coal: soft
Preparation Good
General Uses Steam, domestic
Trade Name: No. 5 Seam : Sahara
No. 6 Seam : Sahara #6

**MINING**

| | Slope Mine | Strip Mine |
|---|---|---|
| Shooting | Permissible | Liquid oxygen |

Pick or machine mining Machine
Hand or machine loading Machine
Drift, slope or shaft Slope and strip
Handling (gravity, cage, monitors or conveyors) Conveyor
Power (purchased or made) Purchased
Haulage (steam, mule or electricity) Electricity for slope; trucks for strip
Number shifts worked (mine) 1
Number shifts worked (tipple) 2
Daily capacity, single shift No. 5 seam : 2500 tons
~~Daily capacity, double shift~~ No. 6 seam : 3000 tons

**TIPPLE** (McNally-Pittsburgh, new in 1936)

Number loading tracks 7
Capacity, empties 125
Capacity, loads 125
Number picking tables 1
Number loading booms 5
Mixing Trough— Yes
Grades cleaned and reassembled Can clean all grades then mix
Crusher— Have three crushers

| | | | |
|---|---|---|---|
| Type of | 1-roll | 1-roll | 2-roll |
| Capacity | 200t.p.h | 200t.p.h | 150 t.p.h |
| Grades crushed | lump | 3x6 | 1x3 |

Screens—
Type of Shakers & vibrators
Size and shape of holes—
LUMP Over 6" step & round
EGG Over 3" round
STOVE Over 2" round
NUT Over 1½" round
PEA Over 1" round
SLACK Thru ½ millimeter Wedge-wire
STOKER On ½ mm. & thru 3/8" Ty-rod
Domestic Mine Run— Not made
Size and percentage of Slack removed.

| Screening percentages— | | Percent |
|---|---|---|
| LUMP | Plus 6" | 7 |
| EGG | 3x6 | 19 |
| STOVE | 2x3 | 16 |
| NUT | 1½ x 2 | 13 |
| PEA | 1x1½ | 13 |
| ~~SLACK~~ | 3/8 x 1" | 12 |
| ~~Domestic~~ | ½ millimeter x 3/8" | 20 |

Oil, Vapor or Calcium Chloride Oil
Grades treated All

Mines producing coal of like character and quality:

Peabody Coal Company, Harco, Illinois, number 47 mine (# 5 seam worked).

Blue Bird Coal Company, Carrier Mills, Illinois, Blue Bird No. 3 Mine; sales agent is Ender Coal & Coke Company, Chicago. The no. 5 seam is worked at the Blue Bird mine, their daily output is 1500 tons, have a modern preparation plant with washer.

Sinclair Coal Company, Carrier Mills, Illinois, no. 5 seam, 2000 tons daily capacity, modern plant with washer, Delta Mine.

CLEANING PLANT (McNally-Pittsburgh )

Hydro or Pneumatic Hydro

Make 2 Jigs for the 0x3"; one jig for 3x6"

Sizes cleaned 0x3"(400t.p.h); 3x6"(150 t.p.h)

Resized see other side

SHATTER TEST

Size Not made

Size stability per cent

Slack index

Authority

| ANALYSES | MOISTURE | Dry Basis VOLATILE | CARBON | ASH | SULPHUR | AR BTU | Dry BTU | FUSION |
|---|---|---|---|---|---|---|---|---|
| LUMP | | | | | | | | |
| EGG | | | | | | | | |
| STOVE | 6.6 | 36.7 | 54.3 | 9.0 | 2.7 | 12410, | 13290 | 2100° |
| NUT | | | | | | | | |
| PEA | | | | | | | | |
| SLACK | | | | | | | | |
| STOKER | | | | | | | | |
| ROM | | | | | | | | |

AUTHORITY University of Illinois Bulletin no. 62. county average (Saline County).

Seam samples of the no. 5 seam, limestone & shale cover

AVERAGE SECTION OF SEAM

No. 5 Seam

Shale Roof (fair)

60" clean coal

Hard fireclay bottom

No. 6 Seam (strip Mine)

Average Overburden 35' (from 0 to 60' )

55" dirty coal

Soft clay bottom

(Show total thickness of Seam; location, nature and thickness of impurities; character of roof and floor; nature and thickness of draw-slate, if any; character of top, middle and bottom coal.)

GENERAL REMARKS: No analyses of the different grades were available at the mine office; the coal from the strip mine (number six seam) will run 1% higher ash and .50% higher sulphur than the coal from the slope mine (number five seam). Coal from the two seams is loaded separately : coal from the strip operation is run through the tipple on the day shift and that from the slope mine on the night shift. The strip coal is softer than that from the slope mine and has a higher moisture content, some of the strip coal that went through the tipple at the time of my visit was badly stained, the lump coal from the strip operation is crushed to minus 6"; screen lump coal from the # 5 seam only. They have an excellent preparation plant, the sizing and cleaning from both seams was okay. The dewatering screens are equipped with stainless steel wedge-wire with ½ millimeter openings, the thru material is pumped away from the tipple and is lost; the ½mm. x 3/8" size is dried after washing in a Christie Dryer (have three of these units, each with a capacity of 50 t.p.h.) that reduces the total moisture from 18% to 8%. In regard to the smaller sizes of the washed coal, there will be more of a fluctuation in the ash content from the strip mine than from the slope mine, this is due to the variation in the amount of reject material; reject at the tipple from th e strip mine runs about 25%. The life of the slope mine is 40 years and of the strip mine 15 years. The cost of mining will run about the same for both mines; have a tough overburden at the strip mine which makes the shooting cost run high. Liquid oxygen is used in shooting the overburden, they have their own plant for making the liquid oxygen and they claim that the cost of shooting is about ½ what it would be if they did not have this plant.

Inspector

P. C. Berry.