

PRINCETON MINE.

The Princeton Mine has been closed since August 27th, 1921. The mine pumps have been operated and the main haulage levels kept in repair. Operations can be resumed on short notice. The present wooden shaft house should be replaced with the steel shaft house now at the Francis Mine. This would equip this property so that two skips could be operated in balance and permit ore to be produced at a lower cost than would be possible with the present headframe.

The shipments for the year and balance of ore in stock are as follows:-

	<u>SHIPMENTS</u>	<u>IN STOCK DEC. 31-1925.</u>
Princeport,	0	9,160 tons
Cambridge,	13,213 tons	140,629 "
Sec. 19 Princeport,	0	1,313 "
" " Cambridge,	<u>0</u>	<u>19,979 "</u>
Total,	13,213 tons	171,081 "

Shipments were 7,453 tons of Cambridge ore in 1924, the gain in 1925 was 5,760 tons. Practically all of this ore was shipped by all rail to Springfield and East St. Louis, Illinois. It was loaded with scraper and double-drum puffer over grizzly and all chunks broken by hand. The loading expense was no greater than the average cost of loading by steam shovel.

The estimated tonnage in the mine, sub-divided as required by the State Tax Commission, is as follows: (This includes ore on Sections 18 and 19, Princeton Mine property, and on C. & N. W. Ry. Co. Lease, Section 19):-

Non-Bessemer Ore:

Developed,	1. Sec. 20 Princeport,	72,552 tons
	2. " " Cambridge,	562,161 "
	1. Sec. 18 Princeport,	10,318 "
	1. C&NW Lease Sec.19 Princeport,	9,000 "
	2. " " " Cambridge,	<u>57,128 "</u>
Total Developed,		711,159 tons.

Total Developed Ore, brought forward, 711,159 tons.

Non-Bessemer Ore:

Prospective:	1. Sec. 20 Princeport,	20,000 tons
	2. " " Cambridge,	418,815 "
	1. C&NW Lease Sec. 19 Princeport,	5,000 "
	2. C&NW Lease Sec. 19 Cambridge,	<u>46,921</u> "
Total Prospective,		<u>490,736</u> "
Grand Total,		1,201,895 "

During the past year No. 2 Shaft has been retimbered from the surface to the 5th Level. At the time this work was started it was thought that only an occasional set would have to be replaced, it developed, however, that nearly every old set had to be replaced with a new one. New back lath, new casing plank and many new runners, ladder sollars and ladders were also installed. No. 2 Shaft was sunk by the Tod-Stambaugh Co., in 1902 and 1903, so that the shaft timber was about 22 years old. It is not wet and the timber had to be replaced on account of dry rot. This work was started in April and was practically completed on December 31st, 1925. There were six men employed on this work.

An abandoned steam line and 4" discharge line was removed from the shaft. Part of these pipes were in condition to be used again; the balance were rusted through and only good for scrap.

Retimbering was started on the 1st Level, where new bearers were installed. All the old sets from the 1st Level to surface were replaced. Near surface, the shaft was close-timbered. When this work was completed, new bearers were installed at the 2nd Level and the section from the 2nd to 1st Level was retimbered. The sections from the 3rd to 2nd, 4th to 3rd and 5th to 4th, were then repaired, nearly all old sets being replaced with new ones. A total of sixty sets of shaft timber was installed, new ladder sollars from surface to 5th Level, some new ladders, new casing plank from surface to 5th Level, new back-lath and thirty-two new shaft runners. The 5th Level Plat

was bulk-headed, the old shaft timber being used for this purpose. This level will not be used again as all the ore has been mined above it. The bulk-heads provide a support for the shaft timber near the plat.

Due to repair work at No. 2 Shaft, comparatively little repair work was done on the main levels during the latter part of the year. Frequent inspections were made and the bad places have been kept open with props. Two gangs of timbermen will be kept busy for the most of 1926 getting the levels in good condition. The following is a detail of the repair work done on the main levels during 1925:-

5TH LEVEL:

Twelve props were put in on the 5th Level plat in the early part of the year.

6TH LEVEL:

On the 6th Level, twenty-nine sets of timber and twenty-five props were installed.

7TH LEVEL:

On the 7th Level, thirty-two sets of timber and twelve props were installed.

The props on the 6th and 7th Levels were installed during the time the shaft was being repaired, to hold up the sets until repair work could again be started on the main levels.

PRINCETON MINE

AVERAGE MINE ANALYSIS ON OUTPUT FOR YEAR 1925

GRADE	IRON	PHOS.	SILICA	MANG.
Princeport,		(No Production)		
Cambridge,		(No Production)		

AVERAGE ANALYSIS ON STRAIGHT CARGOES FOR YEAR 1925.

GRADE	IRON	Mine PHOS.	SILICA	MANG.
Princeport,		(No Shipments)		
Cambridge,		(All Mixed)		

ORE STATEMENT - DECEMBER 31ST, 1925.

	PRINCE- PORT	SEC. 19 PRINCE- PORT	CAMBRIDGE	SEC. 19 CAMBRIDGE	TOTAL	TOTAL LAST YEAR
On Hand Jan. 1, 1925,	9,160	1,313	153,842	19,979	184,294	191,747
Output for Year,	-	-	-	-	-	-
Transferred,	-	-	1,519	1,519	-	-
Total,	9,160	1,313	155,361	18,460	184,294	191,747
Shipments,	-	-	13,213	-	13,213	7,453
Balance on Hand,	9,160	1,313	142,148	18,460	171,081	187,294
Decrease in Ore on Hand,					16,213	

1925 -- Mine Idle during Year.

1924 -- Mine Idle during Year.

PRINCETON MINE  
SHIPMENTS FOR YEAR-1925

GRADE	POCKET	STOCKPILE	TOTAL	TOTAL LAST YEAR
Princeport,	-	-	-	-
Sec. 19 Princeport,	-	-	-	-
Cambridge,	-	13,213	13,213	7,453
Sec. 19 Cambridge,	-	-	-	-
Total,	-	13,213	13,213	7,453
Total Last Year,			7,453	
Increase,			5,760	

PRINCETON MINE

COMPARATIVE WAGES AND PRODUCT

	1 9 2 5	1 9 2 4	INCREASE	DECREASE
PRODUCT	-	-		
No.Shifts & Hours				
AVG. NO.MEN WORKING				
Surface	4	3	1	
Underground	6	6	0	
Total	10	9	1	
AVG.WAGES PER DAY				
Surface	4.54	4.81		.27
Underground	4.69	4.98		.38
Total	4.85	4.91		.06
WAGES PER MO. OF 25 DAYS				
Surface	113.30	120.25		6.95
Underground	115.00	124.50		9.50
Total	121.25	122.75		1.50
PRODUCT PER MAN PER DAY				
Surface				
Underground				
Total				
LABOR COST PER TON				
Surface				
Underground				
Total				
AVG.PRODUCT BRK'G & TRM'G " WAGES CONTRACT MINERS				
TOTAL NO.DAYS				
Surface	975	1095		120
Underground	1767	1667½	99½	
Total	2742	2762½		20½
AMOUNT FOR LABOR				
Surface	4433.88	5272.89		839.01
Underground	8858.79	8307.04	551.75	
Total	13292.67	13579.93		287.26

Proportion Surface to Underground Men:

- 1925 - 1 to 1.5
- 1924 - 1 to 2
- 1923 - 1 to 1.33
- 1922 - 1 to 2
- 1921 - 1 to 2.81
- 1920 - 1 to 3.1
- 1919 - 1 to 4.69
- 1918 - 1 to 3.48