

SOUTH JACKSON AND CRUSHER

CRUSHER.

In the latter part of April a small force from the Mechanical Department commenced to install the new electric equipment. This work was continued during May. On June 18th the crusher was started to handle principally ore from the Chase Mine. No trouble was experienced with the new electric equipment. Previously with the steam plant it was necessary to have two firemen, a brakeman, engineer, and machinist. With the present equipment it is possible to operate with one brakeman and a machinist. The crusher continued to work on a single shift until the 26th of July. On that date, at about 9 o'clock at night, during a severe storm, lightning entered the small controller house on the top landing and set it on fire. The watchman immediately telephoned to the fire department which arrived on the scene in a short time. One of the firemen happened to be an electrician. He telephoned to the Maas Mine, and as soon as the current was off, cut the wires. The fire was then easily put out. The switchboard, controller, and shanty were completely destroyed. The following two days were consumed in rebuilding the small shanty and installing a new switchboard and controller. A duplicate equipment was obtained from Princeton. On the 29th the crusher was again started. Work was continued until September 2d when it was shut down. During this time we crushed 13,028 tons from the Chase Mine; 20,241 tons from the South Jackson; 10,179 tons from the Morris-Lloyd; or a total of 43,448 tons. The total cost per ton for Operating and Maintenance was \$.058 for 43,448 tons. In 1913, on a total tonnage of 132,313, the cost was \$.072. If the tonnage in 1914 had been increased to the amount of 1913 it would have shown more plainly the large saving which is made by the use of electricity at this plant.

SOUTH JACKSON MINE.

Word was received June 17th to commence operations in the pit and on the morning of the 18th men were put to work. Mining was continued until Aug. 14th

on which date we had shipped a total of 20,241 tons. During the season the analysis from the mine held up well. The iron, as a rule, was above the guarantee. Practically no stripping was done and we were able to mine the small amount asked for without doing any dead work to speak of. If much ore is sold during the coming year it will be necessary to do some stripping.

A handwritten signature in cursive script, likely reading "M. Wilson", is located in the right-center portion of the page.

SOUTH JACKSON MINE

AVERAGE MINE ANALYSIS OF OUTPUT FOR YEAR-1914

GRADE	IRON	PHOS.	SILICA	MANG.		
South Jackson Crushed	41.95	.082	31.12	1.91		
AVERAGE ANALYSIS ON STRAIGHT CARGOES FOR YEAR-1914						
GRADE	Mine			Lake Erie		
	IRON	PHOS.	MANG.	IRON	MOIST.	MANG.
South Jackson,	41.95	.082	1.91	40.96	7.12	2.14
ORE STATEMENT AND SHIPMENTS FOR YEAR-1914						
				SOUTH JACKSON	TOTAL LAST YEAR	
Output for Year,				20,241	1,519	
Shipments,				20,241	1,519	
Mine operated from June 20th to August 14th.						

SOUTH JACKSON MINE.

COMPARATIVE MINING COST PER YEAR.

	1 9 1 4 .	1 9 1 3 .	INCREASE	DECREASE.
<u>PRODUCT</u>	20,241	1,519	18,722	
General Expense	.018	.171		.153
Maintenance	.005	.054		.049
Mining Expense	.259	.419		.160
Crushing & Sampling	.137	.035	.172	
Stripping	.004		.004	
<u>COST OF PRODUCTION</u>	.423	.609		.186
<u>DEPRECIATION</u>				
Original Purchase	.200		.200	
New Construction		.064		.064
Plant		.150		.150
<u>TOTAL DEPRECIATION</u>	.200	.214		.014
Miscellaneous		.011	.011	
Taxes	.058	1.201		1.143
Central Office	.018	.026		.008
Sundry Expense	.030		.030	
Fire Loss	.007		.007	
<u>COST ON STOCKPILE</u>	.736	2.039		1.303
Loading & Shipping	.001		.001	
Total Cost on Cars	.737	2.039		1.302
Number Days operating	42	12	30	
Number Shifts and Hours	1-10hr	1-10hr		
Average Daily Product	482	126	356	
<u>COST OF PRODUCTION</u>				
Labor	.252			
Supplies	.171			
TOTAL	.423	.609		.186

SOUTH JACKSON MINE.

COMPARATIVE AVERAGE WAGES AND PRODUCT.

PRODUCT '14 20,241 Tons	SURFACE.		UNDERGROUND.		TOTAL.	
	1914	1913	1914	1913	1914	1913.
PRODUCT '13 1,519 "						
Avg.no.men working	2	1	26	3	28	4
Avg.wages per day	2.32	2.17	2.26	2.28	2.27	2.26
Avg.wages per mo.25 days	58.00	54.25	56.50	57.00	56.75	56.50
Avg.product per man per day	121.6	31.48	9.85	5.76	9.11	4.87
Labor Cost per ton	.019	.069	.230	.396	.249	.465
Diff. in labor cost per ton	-.050	+.048	-.166	+.159	-.216	+.207

	1914	1913	INCREASE	DECREASE
<u>SURFACE</u>				
Total Number of Days	166½	48½	118¼	
Average Rate	2.32	2.17	.15	
<u>Amount</u>	386.90	104.96	281.94	
<u>UNDERGROUND</u>				
Total Number of Days	2056-¾	263-¾	1,793	
Average Rate	2.26	2.28		.02
<u>Amount</u>	4,654.17	601.62	4052.55	
Total Days	2,223½	312	1,911½	
Average Rate	2.27	2.26	.01	
<u>Total Amount</u>	5,041.07	706.58	4,334.49	
Labor Cost per ton	.249	.465		.216

No.Shifts and hours

1-10hr

1-10hr