SOUTH JACKSON MINE - 1924.

The product for the year was 33,262 tons.

Operations started at the pit on April 18th. The first loading was along the North edge. Here the analyses ran low and this section of the pit was abandoned and the shovel moved to the West side where loading continued until the pit was shut down on June 16th. On August 30th, loading was again started and continued until September 28th. This ore also came from the West side of the pit.

A dinky engine for spotting cars was rented for the season from the Republic Iron & Steel Company as the regular South Jackson engine was in use at the new hoist dam.

When mining operations closed down the last of September, the shovel crew and drillers spent the first week in October lowering the approach to the pit.

TUNNEL LEVEL.

Four years ago, a drift was driven on the tunnel level from the shaft to the South and East toward the Lucy workings. During the past summer a branch was driven 80' South from this drift and a raise 56' high put through to surface. This will drain the bottom of the pit and permit loading early in the season if it is necessary.

During the past few years the tonnage mined has been very small which increases the cost per ton as there is always a certain amount of dead work in opening and closing an operation - even an open pit. My estimates of the season's output for the past several years has been placed at 70,000 tons. If a larger product is desired, it could be mined, but additional equipment would be required. A revolving type, electric operated, caterpillar tread shovel would be ideal in this pit and would cut down the loading cost very materially.
DELAYS.

On April 28th, a rail turned over derailing four railroad cars. Two days were spent in cleaning up the wreck and repairing the track.
ESTIMATE OF ORE RESERVES OF DECEMBER 31, 1924.

Above present pit available by present system of mining:

On Southwest side - - - - - - - - - - - 35,000 tons,
North of Lucy Pit - - - - - - - - - - - 5,000 "
South and Southwest of Lucy Pit - - - - - - - - - 3,000 "

Total - 43,000 tons.

Below present pit and above drainage tunnel available by milling:

West of Crusher - - - - - - - - - - - - - 186,000 tons
Area below bottom of present pit shown by churn drilling - - - - - - - - - - - - - 105,226 "

Total - 291,226 tons.

GRAND TOTAL - 334,226 tons.

ANALYSIS

<table>
<thead>
<tr>
<th>Natural</th>
<th>IRON</th>
<th>PHOS.</th>
<th>SILICA</th>
<th>MANG.</th>
<th>ALUM.</th>
<th>LIME</th>
<th>MAG.</th>
<th>SUL.</th>
<th>IGNI.</th>
<th>MOIST.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>34.55</td>
<td>.066</td>
<td>36.00</td>
<td>2.00</td>
<td>1.42</td>
<td>.435</td>
<td>.175</td>
<td>.010</td>
<td>2.00</td>
<td>7.00</td>
</tr>
</tbody>
</table>
SOUTH JACKSON MINE

AVERAGE MINE ANALYSIS ON OUTPUT FOR YEAR 1924.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>IRON</th>
<th>PHOS.</th>
<th>SILICA</th>
<th>MANG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Jackson</td>
<td>35.47</td>
<td>.046</td>
<td>40.69</td>
<td>1.95</td>
</tr>
</tbody>
</table>

AVERAGE ANALYSIS ON STRAIGHT CARGOES FOR YEAR 1924.

<table>
<thead>
<tr>
<th>Mine</th>
<th>GRADE</th>
<th>IRON</th>
<th>PHOS.</th>
<th>SILICA</th>
<th>MANG.</th>
<th>IRON MOIST.</th>
<th>MANG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Jackson</td>
<td>37.16</td>
<td>.056</td>
<td>39.67</td>
<td>1.86</td>
<td>37.17</td>
<td>6.85</td>
<td>2.44</td>
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</table>

ORE STATEMENT AND SHIPMENTS FOR YEAR 1924.

<table>
<thead>
<tr>
<th></th>
<th>LAST YEAR</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output for Year,</td>
<td>33,262</td>
<td>12,812</td>
</tr>
<tr>
<td>Shipments,</td>
<td>33,262</td>
<td>12,812</td>
</tr>
<tr>
<td>Balance on Hand,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Output,</td>
<td>20,450</td>
<td></td>
</tr>
<tr>
<td>Increase in Shipments,</td>
<td>20,450</td>
<td></td>
</tr>
</tbody>
</table>

1924 -- Mine Idle Jan. 1st to Apr. 24th, 1924.
       1-9 Hour Shift, Apr. 24th to June 16th, 1924.
       Mine Idle June 16th to Aug. 30th, 1924.
       1-9 Hour Shift, Sept. 1st to Sept. 26th, 1924.
       Mine Idle Sept. 27th, to Dec. 31st, 1924.

       1-8 Hour Shift, May 29th to July 2nd, 1923.
       Mine Idle July 3rd to Dec. 31st, 1923.
### SOUTH JACKSON MINE

**Comparative Mining Cost for Year**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>1924</th>
<th>1923</th>
<th>INCREASE</th>
<th>DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Pit Costs</td>
<td>33,262</td>
<td>12,812</td>
<td>20,450</td>
<td></td>
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<tr>
<td>General Mine Accounts</td>
<td>.418</td>
<td>.521</td>
<td>.103</td>
<td></td>
</tr>
<tr>
<td>Cost of Production</td>
<td>.440</td>
<td>.555</td>
<td>.115</td>
<td></td>
</tr>
<tr>
<td>Original Cost</td>
<td>.803</td>
<td>.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>.160</td>
<td>.354</td>
<td>.194</td>
<td></td>
</tr>
<tr>
<td>Central Office</td>
<td>.014</td>
<td>.013</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Contingent Expense</td>
<td>.002</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Adjustment</td>
<td>.011</td>
<td>.033</td>
<td>.022</td>
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<tr>
<td>Winter Expense</td>
<td>.047</td>
<td>.163</td>
<td>.116</td>
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</tr>
<tr>
<td><strong>Total Cost on Cars</strong></td>
<td>1.477</td>
<td>1.923</td>
<td>.446</td>
<td></td>
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<tr>
<td>No. Days Operating</td>
<td>64</td>
<td>28</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>No. Hours &amp; Shifts</td>
<td>1-9</td>
<td>1-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg. Daily Product</td>
<td>520</td>
<td>548</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

#### Cost of Production

<table>
<thead>
<tr>
<th></th>
<th>1924</th>
<th>1923</th>
<th>INCREASE</th>
<th>DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>.213</td>
<td>.265</td>
<td>.052</td>
<td></td>
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<tr>
<td>Supplies</td>
<td>.287</td>
<td>.230</td>
<td>.063</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>.440</td>
<td>.555</td>
<td>.115</td>
<td></td>
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</tbody>
</table>
### COMPARATIVE WAGES AND PRODUCT

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>1924</th>
<th>1923</th>
<th>INCREASE</th>
<th>DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Shifts &amp; Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-9hr</td>
<td>32,262</td>
<td>12,612</td>
<td>20,650</td>
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</tr>
<tr>
<td>110hr</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AVG. NO. MEN WORKING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Underground (Pit)</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>AVG. WAGES PER DAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>4.51</td>
<td>4.91</td>
<td>.40-8.14%</td>
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<tr>
<td>Underground</td>
<td>5.02</td>
<td>5.33</td>
<td>.65-1.02%</td>
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<tr>
<td>Total</td>
<td>4.98</td>
<td>5.33</td>
<td>1.25</td>
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<tr>
<td>WAGES PER NO. OF 25 DAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>112.75</td>
<td>128.75</td>
<td>10.00</td>
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<tr>
<td>Underground</td>
<td>128.50</td>
<td>133.25</td>
<td>2.25</td>
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<tr>
<td>Total</td>
<td>124.20</td>
<td>123.25</td>
<td>1.25</td>
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<tr>
<td>PRODUCT PER MAN PER DAY</td>
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<td></td>
<td></td>
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<tr>
<td>Surface</td>
<td>378.00</td>
<td>453.54</td>
<td>75.54</td>
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<tr>
<td>Underground</td>
<td>31.27</td>
<td>26.50</td>
<td>5.07</td>
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<tr>
<td>Total</td>
<td>40.13</td>
<td>28.53</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>LABOR COST PER TON</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>.012</td>
<td>.011</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Underground</td>
<td>.159</td>
<td>.186</td>
<td>.027</td>
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</tr>
<tr>
<td>Total</td>
<td>.171</td>
<td>.197</td>
<td>.026</td>
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</tr>
<tr>
<td>TOTAL NO. OF DAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>88</td>
<td>28-1/4</td>
<td>59-3/4</td>
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</tr>
<tr>
<td>Underground</td>
<td>1053-3/4</td>
<td>483-1/2</td>
<td>570-1/4</td>
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</tr>
<tr>
<td>Total</td>
<td>1141-3/4</td>
<td>511-3/4</td>
<td>630</td>
<td></td>
</tr>
<tr>
<td>AMOUNT FOR LABOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>397.31</td>
<td>138.80</td>
<td>258.51</td>
<td></td>
</tr>
<tr>
<td>Underground</td>
<td>5282.38</td>
<td>2385.58</td>
<td>2904.40</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5689.29</td>
<td>2524.38</td>
<td>3164.91</td>
<td></td>
</tr>
</tbody>
</table>

1923 - Mine only operated 28 days; from May 29th to July 2nd.
1924 - "        " April 24th to Sept. 30th.