

C. & N. W. LEASE, SECTION 29.

The product for the year was as follows:

|                     |                 | <u>PERCENT</u> |
|---------------------|-----------------|----------------|
| Bessemer,           | 10,694 tons     | 28             |
| Off-Grade Bessemer, | 2,864 "         | 8              |
| Section 29 No. 2,   | <u>24,500 "</u> | <u>64</u>      |
| TOTAL,              | 38,058 "        | 100            |

The 1917 shipments and balance on hand December 31st, 1917, were as follows:

|                     | <u>SHIPMENTS.</u> | <u>TONS.</u>  | <u>BALANCE ON HAND.</u> | <u>TONS.</u>  |
|---------------------|-------------------|---------------|-------------------------|---------------|
| Bessemer,           |                   | 20,343        |                         | 1,394         |
| Off-Grade Bessemer, |                   | 2,896         |                         |               |
| Section 29 No. 2,   |                   | <u>11,286</u> |                         | <u>27,312</u> |
| TOTAL,              |                   | 34,525        |                         | 28,706        |

The estimated ore in sight December 31st, 1917, was as follows:

|                                     | <u>BESSEMER</u> | <u>OFF-GRADE<br/>BESSEMER</u> | <u>SECTION 29<br/>NO. 2</u> | <u>TOTAL.</u>  |
|-------------------------------------|-----------------|-------------------------------|-----------------------------|----------------|
| Ore above 5th Level,                | 5,700           | 1,900                         | 15,200                      | 22,800         |
| " below 5th "                       | 6,990           | 2,320                         | 18,630                      | 27,940         |
| Prospective ore below<br>5th Level, | <u>103,500</u>  | <u>34,500</u>                 | <u>276,000</u>              | <u>414,000</u> |
| TOTAL,                              | 116,190         | 38,720                        | 309,830                     | 464,740        |

The estimate of 1917 shows an increase of approximately 15,000 tons in the amount of ore in sight, due almost entirely to a small amount of ore which has been developed below the 5th level. No change has been made in the estimate of prospective ore below the 5th, as the development work of 1917 did not advance far enough to permit of a more accurate estimate. Some changes have been made in the grade of the ore in the estimate as compared with the previous year, which changes have been the result of additional information gained during 1917.

The work for the year was confined to the development work on the 5th level, and to mining operations on the 5th and the sub levels above. At

the close of 1916 the greater part of the ore had been mined down to the sill floor of the second sub below the 4th. The work for the year in detail is as follows:

SUB LEVELS ABOVE THE 5TH:

2nd Sub above the 5th:

The balance of the ore left on this sub level on January 1st, 1917, amounting to about 2500 tons, was mined out in the early part of the year.

1st Sub above the 5th:

This sub level was developed during 1917 and the greater part of the ore mined out; there is about 4200 tons left in the pillars remaining here.

FIFTH LEVEL:

The 5th level ore body on Section 29 was developed from three raises which were put up from the 6th level. These raises were connected at the elevation of the 5th and a connection also made to the 5th level haulage drifts. Drifts were then driven from these raises across the ore body to the hanging and mining started. The development work had all been completed and mining was in progress here at the time the mine was flooded. It is estimated that there are 18,500 tons of ore remaining in the pillars here.

SIXTH LEVEL:

The main 6th level haulage drift crossed the Stephenson boundary line the last of January, 1917, and the work of extending this drift on C. & N. W. property was continued throughout the year. The drift was extended 530 feet to the south-east in arkose to the contact of the ore formation. At this point a curve was started to the north-east which, up to December 4th, had been extended 100 feet in jasper and lean ore. The last day that work was done here ore was encountered in the bottom of the drift dipping to the south-west, so that apparently the drift had just reached the main ore body on the 6th level.

During the year four raises have been put up from the side of the main haulage drift near the Stephenson boundary. These raises have all been

extended through to the 5th level and the ore mined on the sill floor of the 5th was handled through three of these raises. The ore in these raises was encountered near the elevation of the 5th level. The result of the work here indicates that the foot-wall on the South side of the ore body runs more nearly parallel to the boundary line than had been expected. This may result in a decrease in the tonnage expected in this territory, but the work has not advanced far enough to permit of any information on this question, except at the point where the raises were put up.

During the year three cross-cuts were turned off from the main haulage drift on Section 29 property; cross-cut No. 1 is located 70 feet from the boundary and was extended 30 feet to the north-east. Cross-cut No. 2 is located 230 feet from the boundary and was extended 35 feet to the north-east and cross-cut No. 3, located 390 feet from the boundary, was extended 8 feet.

The work of opening the 6th level has advanced to such a point that the ore body can now be quickly developed. The information which will be obtained from this work will be very valuable, for both the Stephenson and Section 29 properties. It had been planned to make a rapid development of the ore body at the elevation of the 6th level on Section 29 property and start mining here. From the records of the drill holes it seemed probable that the greater part of the ore was of Bessemer grade, and it was hoped to develop the ore so that a considerable tonnage would be available here during the shipping season of 1918. It is now impossible to predict when work can be resumed here, as no idea can be formed of how long it will require to unwater the mine.

C. & N.W. SECTION 29 MINE

AVERAGE MINE ANALYSIS ON OUTPUT FOR YEAR-1917.

| GRADE                | IRON  | PHOS. | SILICA | MANG. |
|----------------------|-------|-------|--------|-------|
| Section 29 Bessemer, | 59.72 | .050  | 8.32   | .330  |
| Section 29,          | 58.21 | .073  | 10.36  | .680  |
| Section 29 #2,       | 59.75 | .170  | 7.07   | .685  |

Above grades went into mixed cargoes.

ORE STATEMENT - DECEMBER 31ST, 1917.

|                          | SEC. 29<br>BESSEMER | SEC. 29 | SEC. 29<br>NO. 2 | TOTAL  | TOTAL<br>LAST YEAR |
|--------------------------|---------------------|---------|------------------|--------|--------------------|
| On hand Jany. 1st, 1917, | 11,043              | 0       | 14,194           | 25,237 | 0                  |
| Output for Year,         | 8,286               | 2,846   | 24,500           | 35,632 | 38,812             |
| Overrun,                 | 2,408               |         |                  | 2,408  |                    |
| Total,                   | 21,737              | 2,846   | 38,694           | 63,277 | 38,812             |
| Shipments,               | 20,343              | 2,846   | 11,382           | 34,571 | 13,575             |
| Balance on Hand,         | 1,394               | 0       | 27,312           | 28,706 | 24,237             |
| Decrease in Output-2%    |                     |         |                  | 772    |                    |
| Increase in Ore on Hand, |                     |         |                  | 4,469  |                    |

1917 - 1-8 Hr. Shift to Dec. 5th - Mine flooded

1916 - 1-8 Hr. Shift - Began hoisting January 20th, 1916.

C. & N. W. SECTION 29 MINE.



C. & N. W. SECTION 29 MINE

SHIPMENTS FOR YEAR-1917

| GRADE                | POCKET | STOCKPILE | TOTAL  | TOTAL<br>LAST YEAR |
|----------------------|--------|-----------|--------|--------------------|
| Section 29 Bessemer, | 5,876  | 14,467    | 20,343 | 1,511              |
| Section 29,          | 2,397  | 449       | 2,846  | 1,764              |
| Section 29 No. 2,    | 3,806  | 7,576     | 11,382 | 10,300             |
| Total,               | 12,079 | 22,492    | 34,571 | 13,575             |
| Total last Year,     | 13,575 |           | 13,575 |                    |
| Increase - 155%      |        |           | 20,996 |                    |

C. & N.W. SECTION 29 MINE.