

Mr. M. M. Duncan, Vice-Pres. & Gen. Mgr.,
Ishpeming, Michigan.

Dear Sir:

I beg to submit the following report of the work done in the Gwinn District for the year ending December 31st, 1924.

The various subjects have been taken up under the following heads:-

GENERAL REMARKS
STEPHENSON MINE
FRANCIS MINE
GWINN MINE
PRINCETON MINE
AUSTIN MINE
GARDNER-MACKINAW MINE
GENERAL SURFACE
ANALYSIS OF COST SHEETS

GENERAL REMARKS.

The product of the Gwinn District Mines for the years 1924 and 1923, was as follows:-

| | <u>1924</u> | <u>1923</u> | <u>INCREASE</u> | <u>DECREASE</u> |
|----------------------|---------------|----------------|-----------------|-----------------|
| Stephenson Mine, (1) | 249,428 | 247,212 | 2,216 | |
| Austin " | 0 | 82,976 | | 82,976 |
| Francis " (2) | <u>39,031</u> | <u>110,550</u> | | <u>71,519</u> |
| TOTAL, | 288,459 | 440,738 | | |
| DECREASE - 1924, | | | | 152,279 |

(1) Includes overruns from stockpile shipments.

(2) Francis Mine abandoned April 30th, 1924.

The following table gives shipments for 1924, and ore in stock on December 31st, 1924:

| | <u>SHIPMENTS</u> | <u>IN STOCK DEC. 31-1924</u> |
|-------------------------------|------------------|----------------------------------|
| Stephenson Mine, | 186,899 | 475,738 |
| Princeton " | 7,452 | 184,295 |
| Gwinn " | 4,935 | 2,519 |
| Austin " | 0 | 43,233 |
| Francis " | 0 | 403,035 |
| Gardner-Mackinaw Mine, | <u>0</u> | <u>50,562</u> |
| TOTAL SHIPMENTS, | 199,286 | |
| Ore in stock Dec. 31st, 1924, | | 1,159,382 |
| Ore in stock Dec. 31st, 1923, | | <u>1,070,209</u> |
| INCREASE - 1924, | | 89,173 |

Shipments were relatively small in 1924, and at the end of the year there was more ore in stock.

GENERAL REMARKS:

The district is now 22 years old and probably has a life of from ten to twenty years, depending on the rate of production.

With the closing of the Francis there are now five mines in the district. Of these, the Austin has a comparative short life as the remaining ore in the shaft pillar can be removed in twelve months. The bottom of the Gwinn Mine deposit has been reached and developed for mining, so that this mine has a relatively short life. There is considerable ore in the Gardner-Mackinaw property, but in order to mine it the Mackinaw shaft must be sunk and new levels opened. The Gardner ore body is developed and can be mined out in a relatively short time, as there is only a limited tonnage on this property. The main reserve is in the Princeton Mine. The Stephenson Mine has a probable life of from four to five years at its present rate of operation.

The following statements are included in the report as they give the history of the district in a concise form:

STATEMENT SHOWING TOTAL ORE PRODUCED BY YEARS FROM 1903 TO 1924 - INCLUSIVE.

| YEAR | AUSTIN | PRINCETON | STEPHENSON | GWINN | FRANCIS | GARDNER-MACKINAW | TOTAL |
|-------|------------|-----------|-------------|---------|---------|------------------|-----------|
| 1903 | 1,086 | | | | | | 1,086 |
| 1904 | 30,118 | | | | | | 30,118 |
| 1905 | 57,210 (a) | 8,224 | | | | | |
| | | 48,889 | | | | | 114,323 |
| 1906 | 160,049 | 175,752 | | | | | 335,801 |
| 1907 | 192,424 | 174,457 | 8,333 | | | | 375,214 |
| 1908 | 197,525 | 124,346 | 78,419 | | | | 400,290 |
| 1909 | 203,129 | 144,882 | 142,816 | | | | 490,827 |
| 1910 | 64,705 | 115,782 | 214,500 | | | | 394,987 |
| 1911 | 145,221 | 96,670 | 226,022 | 537 | | | 468,450 |
| 1912 | 115,934 | 22,567 | 209,282 | | | | 347,783 |
| 1913 | 68,259 | 74,884 | 255,979 | | | | 399,122 |
| 1914 | | 3,256 | 214,608 | 46,389 | | | 266,253 |
| 1915 | | 122 | 207,724 | 127,300 | | | 335,146 |
| 1916 | 16,193 | 145 | 303,562 | 144,066 | | | 463,966 |
| 1917 | 51,659 (b) | 1,106 | 253,266 | 161,963 | 1,778 | | 467,560 |
| 1918 | 1,069 | 148,265 | 4,245 | 155,534 | 41,535 | 2,405 | 353,053 |
| 1919 | 14,896 | 193,228 | 2,402 | 137,847 | 80,528 | 69,326 | 498,227 |
| 1920 | 73 | 156,746 | 174,782 | 96,595 | 80,056 | 130,388 | 638,640 |
| 1921 | | 97,150 | 196,539 | 63,501 | 71,075 | 159 | 428,424 |
| 1922 | 50,905 | 74 | 213,223 (c) | 20,085 | 98,049 | 0 | 382,336 |
| 1923 | 82,976 | 0 | 247,212 | 27,334 | 110,550 | 0 | 468,072 |
| 1924 | 0 | 0 | 249,428 | 0 | 39,031 | 0 | 288,459 |
| Total | 1,453,431 | 1,584,333 | 3,202,342 | 983,151 | 522,602 | 202,278 | 7,948,137 |

(a) On hand when mine was taken over August 1st, 1905.

(b) Stockpile shortage.

(c) Stockpile overrun.

GENERAL REMARKS:

STATEMENT SHOWING SHIPMENTS FOR EACH YEAR FROM 1905 TO 1924, INCLUSIVE.

| YEAR | AUSTIN | PRINCETON | STEPHENSON | GWINN | FRANCIS | GARDNER-MACKINAW | TOTAL |
|--------|-----------|-----------|------------|---------|---------|------------------|-----------|
| 1905 | 44,653 | 47,290 | | | | | 91,943 |
| 1906 | 173,182 | 166,894 | | | | | 340,076 |
| 1907 | 195,950 | 177,863 | 6,305 | | | | 380,118 |
| 1908 | 111,229 | 36,033 | 52,588 | | | | 199,850 |
| 1909 | 125,727 | 42,935 | 64,206 | | | | 232,868 |
| 1910 | 188,587 | 89,442 | 225,726 | | | | 503,755 |
| 1911 | 107,394 | 28,189 | 128,839 | 230 | | | 264,652 |
| 1912 | 102,529 | 162,137 | 214,386 | | | | 479,052 |
| 1913 | 107,365 | 53,477 | 96,298 | | | | 257,140 |
| 1914 | 30,491 | 13,607 | 93,796 | 20,159 | | | 158,053 |
| 1915 | | 17,171 | 243,458 | 57,910 | | | 318,539 |
| 1916 | 64,521 | | 368,739 | 143,708 | | | 576,968 |
| 1917 | 44,420 | 150,375 | 496,712 | 188,070 | | | 879,577 |
| 1918 | 8,533 | 66,244 | 75,162 | 182,541 | 30,775 | | 363,255 |
| 1919 | 2,334 | 111,617 | 1,965 | 66,666 | 26,936 | 32,332 | 241,850 |
| 1920 | 3,665 | 153,609 | 110,924 | 196,593 | 34,199 | 49,051 | 548,041 |
| 1921 | | 23,916 | 77,077 | 64,515 | 16,220 | 19,889 | 201,617 |
| 1922 | 5,065 | 26,145 | 202,522 | 26,436 | 11,437 | 40,180 | 311,785 |
| 1923 | 94,553 | 25,642 | 74,368 | 28,529 | 0 | 10,264 | 233,356 |
| 1924 | 0 | 7,453 | 186,899 | 4,935 | 0 | 0 | 199,287 |
| TOTAL, | 1,410,198 | 1,400,039 | 2,719,970 | 980,292 | 119,567 | 151,716 | 6,781,782 |

STATEMENT SHOWING ORE IN STOCK AT THE CLOSE OF EACH YEAR, FROM 1903 TO 1924 INCLUSIVE.

| | | | | | | | |
|------|---------|---------|---------|---------|---------|---------|-----------|
| 1903 | 1,086 | | | | | | 1,086 |
| 1904 | 31,204 | | | | | | 31,204 |
| 1905 | 43,761 | 8,923 | | | | | 52,684 |
| 1906 | 30,628 | 18,681 | | | | | 49,309 |
| 1907 | 27,102 | 15,275 | 2,028 | | | | 44,405 |
| 1908 | 113,398 | 103,588 | 27,859 | | | | 244,845 |
| 1909 | 190,800 | 205,535 | 106,469 | | | | 502,804 |
| 1910 | 66,918 | 231,875 | 95,243 | | | | 394,036 |
| 1911 | 104,745 | 300,356 | 185,792 | 307 | | | 591,200 |
| 1912 | 118,150 | 160,786 | 180,688 | 307 | | | 459,931 |
| 1913 | 79,044 | 182,193 | 340,369 | 307 | | | 601,913 |
| 1914 | 48,553 | 171,842 | 461,181 | 28,537 | | | 710,113 |
| 1915 | 48,553 | 154,793 | 425,447 | 97,927 | | | 726,720 |
| 1916 | 225 | 154,793 | 360,270 | 98,285 | | | 613,573 |
| 1917 | 7,464 | 3,457 | 116,824 | 72,178 | 1,778 | | 201,701 |
| 1918 | -- | 85,478 | 45,907 | 45,171 | 12,538 | 2,405 | 191,499 |
| 1919 | 12,562 | 167,089 | 46,344 | 116,352 | 66,130 | 39,399 | 447,876 |
| 1920 | 8,970 | 170,226 | 110,202 | 16,014 | 111,987 | 120,736 | 538,135 |
| 1921 | 8,970 | 243,460 | 229,664 | 15,000 | 166,842 | 101,006 | 764,942 |
| 1922 | 54,810 | 217,389 | 240,365 | 8,649 | 253,454 | 60,826 | 835,493 |
| 1923 | 43,233 | 191,747 | 413,209 | 7,454 | 364,004 | 50,562 | 1,070,209 |
| 1924 | 43,233 | 184,294 | 475,738 | 2,519 | 403,035 | 50,562 | 1,159,381 |

GENERAL REMARKS:

The Stephenson Mine operated throughout the year, but on a reduced scale, starting July 28th. The Francis operated only 4 months, closing permanently on April 30th. The Gwinn, Princeton and Austin Mines have been kept in repair and ready for re-opening on short notice. The Gardner-Mackinaw Mine pumps were pulled in November, 1923, the mine flooded, but it can be pumped out and operations resumed on several months notice.

There has been a surplus of surface labor available throughout the year. The closing of the Francis Mine made it necessary to lay off a number of underground employes, but work was available at other company mines in Marquette County. Quite a number of the young first-class miners left the district in October and November on account of the four-day-a-week schedule. The shortage of miners has been made up, a number of surface men going underground for the winter, but the efficiency of the miners, as a whole, has been lowered.

On January 1st, 1924, there were 400 men employed in the district; on December 31st, 1924, there were 269, the decrease for the year being 131. This compares with a decrease of 52 between the same dates in the previous year. The number now employed in the district is the lowest since 1904.

All the 50 houses at the Gardner-Mackinaw location are vacant and have been boarded up. There are 23 vacant houses at Gwinn; 13 at the Austin Location and 5 at the Princeton Location. During the fall months there was a feeling of depression prevailing in the district due to operating only 4 days per week. This feeling is much better since the mines started working 5 days per week. There are a number of employees in the district who have large families, ranging from five to ten children, and when working only 4 days per week they were not able to make a living and in several cases the merchants had refused to extend them further credit. The extra day each week, starting in December, means better living conditions for their families.

The Austin 4-room school building which burned on December 13, 1923, was rebuilt with local labor in 70 days, being opened on February 28th, 1924. The cost was about \$17,000.00, while the estimate on contract was \$30,000.00.

GENERAL REMARKS:

Work on the new County Park near Gwinn was continued during the summer months. Nearly all of the park grounds have been cleaned of brush and dead timber, tables and seats have been provided, also camp stoves, etc. Considerable use was made of the park by the local residents, and also by other Marquette County people and tourists. The park would have been used more if the weather had not been so cool during the summer months. Improvements have not been completed and it is planned to continue the work during 1924. Over \$2,200.00 was expended on the park, the funds for this purpose being raised by a general County tax. The Marquette County parks are under the supervision of the Marquette County Road Commission.

GENERAL REMARKS: