THE FERRIS HAGGERTY MINE

Carbon County, Wyoming

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SUMMARY

The Ferris Haggerty Mine is situated about 19 miles west of Encampment, Carbon County, Wyoming. It has produced about 22,000,000 pounds of copper from a vein enclosed in quartzite and metamorphic rocks. The workings are caved and inaccessible, but available information indicates that a small tonnage of ore below the 400 foot level was left in the mine.

With the possible exception of leaching insitu no further consideration of this property is suggested except in the event of an acute shortage of copper.

INTRODUCTION

The Ferris Haggerty Mine, situated 19 miles by road and trail west of Encampment, Wyoming, was examined by a Bureau of Mines engineer who was accompanied by Ralph S. Platt, Jr., of Encampment. The location can be further designated as situated in T 14 N, R 86 W, about four miles west of Bridger Peak, Carbon County, Wyoming.

The examination was made during the month of October, 1942.

HISTORY

The property was discovered and operations commenced at the close of the nineteenth century. From the time of preliminary exploration until 1908 the mine was worked vigorously, resulting in a reported

production of 22,000,000 pounds of copper.

The company which operated the mine was manipulated by a group who were reported to have sold many millions of dollars worth of stock in the company. In addition to preparing the mine for operation, the company constructed roads, camps, mills, smelters, trams, and utilities. One of the former company superintendents reported to the Bureau of Mines engineer that it was estimated that the total production of the mine from the inception of operations until the mine was closed in 1903 was valued at $3,000,000. During this same operating period it was reported that the company expended $17,000,000.

A report on this property in the files of the International Smelting and Refining Company in Salt Lake City, Utah, indicates that these early operators did not leave a workable amount of ore in the mine.

This report together with the findings of the Bureau of Mines engineer, who gained access to the workings by means of a rope through the upper caved shaft, indicates that a limited amount of ore may be available below the 400 foot level. Although considerable stoping has been accomplished below this level, the extent of which is unknown, it is evident that pillars are still remaining in this section.

For some years after the company ceased operation, the property was in litigation, which resulted in its sale to the Morse Bros. Machinery Co. of Denver, Colorado. This company salvaged the improvements and machinery that could be sold and virtually abandoned the remainder, retaining title to the land and mine which is still held by this firm.

PHYSICAL FEATURES

The mine is in an area of sharp relief on the south slope of Haggerty Gulch. (See Figure 1.)

Encampment is the shipping point and communication center for the area.

MINE WORKINGS

There are several thousand feet of underground workings consisting of tunnels, cross-cuts, raises, stopes and winzes, all of which are caved and inaccessible.

DESCRIPTION OF THE DEPOSITS

The deposit is a typical vein deposit formed along a bedding plane fissure between quartzite footwall and a schist, gneiss and quartzite hanging wall.

The upper part of the ore-shoot near the outcrop was 8 feet thick and about 200 foot wide. On the tunnel level these dimensions have decreased to a 4-foot thickness and a 25-foot width, according to reports in the International Smelting and Refining Company files.

The oxidized ore and all of the ore of the zone of secondary enrichment have been extracted. The primary ore consists of disseminated chalcopyrite in a hard siliceous gangue. (See Figures 1 and 2.)

SAMPLING

Two samples of the primary ore were obtained from the old tram buckets. These samples are assumed to be representative of the ore below

the tunnel level remaining in the stopes.

The samples are as follows:

F.1	3.95% Cu	Trace Ag	No Au.
F.2	4.6 % Cu	.03 oz. Ag	No Au.

METALLURGY

Preliminary mill tests by the Bureau of Mines on the primary ore indicate that a very excellent recovery can be obtained, by means of flotation.

POSSIBLE PLANS FOR OPERATION

Since about one-half second foot of water issuing from the drain tunnel contains a small percentage of copper in solution, the possibility of leaching insitu should not be overlooked in the event a small private operator should undertake the operation of the property.

Claims on Ferris-Haggerty Property

Romeo Lode
B-115, P-78

Cor. No.1-iden. Cor. No.4 Mondemin- W½ Cor. Sec. 15 bears

S. 62°27' E. 2315.3'

1st. Course N. 16°11'E. 600' to cor. No.2, iden. to cor. No.3 Mondemin.

2nd. Course N. 73°49'W. 498.7' to cor. No.3,

Quartzite Stone. 6X10X12 Mk. 3/204 and 1/180

3rd. Course S. 16°11'W. 300'-D.S. bears S. 73°49'E. 178'; 564.5

to W.C. to cor. No.4 quartzite stone 6X9X14- Mk. W.C. 4/204 and W.C. 2/180.

600' to cor. No.4 under dwelling house; iden. to cor. No.2, Home Run;

4th. Course S. 73° 49'E. 498.7 ---------58.3594 ac

4th. Course S. 53°23'E. 1500' to cor. No.1

Mondamin Lode
B-115, P-77

Cor. No.1- quartzite stone 4X8X30 Mk. 1/204; W.¼ cor. Sec. 15 bears

S. 43°09'E. 895.5' and cor. No.3 Charlotte bears N. 15°00'W. 327.1

1st. Course N. 16°11'E. 324.53' X line 4-1 Paris at S. 53°23'E. 7.22'

Cor. No.4; 345.05 X line 3-4 Paris at N. 35°18'E. 19.23' from cor. No.4;

600' to cor. No.2 quartzite stone 4X8X24, Mk. 2/204;

2nd. Course N. 73°49'W. 1500' to cor. No.3 quartzite stone 6X6X24, 2-3/204

3rd. Course S. 16°11'W. 300'-D.S. bearsS. 73°49'E. 780'; 600' to cor. No.4

quartzite stone 4X6X24 1-4/204;

4th. Course S. 73°49'E. 1500' to cor. No.1

4th. Course N. 16°11'E. 5.5' X line 4-1 Rose Hill at. S. 58°15'E. 741.97'

from cor. No.1; 610.25' to cor. No.1

Charlotte Lode

B- 115 P-77

Cor. No. 1 - Granite rock in place 2'X2'X4' above general surface M.K.+ 1/204;
W.¼ Cor. sec. 15 bears N. 38°25'W. 526.7';
1st. Course N. 35°37' E. 600.09' to corner No. 2; pine post 6X8" M.K. 2/204 & 1/171. iden. to corner # 1, paris from which cor. #1 mutual bears N. 82°17' W. 442.1':
2nd Course, N.53°23'W. 1500' to corner # 3, quartzite stone in place 2X2X1' above general surface; M,K. 3/204 and 4-171 iden. to corner No. 4 paris;
3rd Course, S. 35°37' W., 300.045' -D.C. bears south 53°23' E. 880'-600.09' to corner No. 4- quartzite stone 4X8X30 M.K. 4/204+at corner post on quartzite ledge 3' above general surface, M.K. 4/171;
4th Course, S. 53°23'E., 7.22' X line 1-2; 916 X line 4-1. fraction at S.86°18' W. 228.8 from corner #1 thereof; 1500' to corner No. 1 (ex. tract A) 15.085 ac

Mutual Lode

B-115 P-76

Corner No. 1 (Schist Stone) ~~6X~~ 6X8X36", 1/204 W. ¼ Cor. Sec. 15, bears S.60°36'W. 274'.
1st Course, N. 63°18'W.,1485.4' to corner No.2, Schist stone, 6X8X24", 2/204.
2nd Course, S. 16°11'W., 305.125'-D.S. bears S.63°18' E. 50'; 610.25 to corner #3, quartzite stone 4X8X18', M.K. 3/204 & 1/105 ident. corner # 1 Jordon- on line 1-2. R.E. ex. at N.73°49'W. 745.7' from Corner # 1.
3rd Course; S.63°18'E. 758.44' X line 4-1, R.E. ex. at S.16°11'W. 138.43 from corner #1; 1485.4' to corner # 4- schist stone 3X12X36' M.K. 4/204.
3rd Course, N. 16°16'E. 300'-D.S. bears N. 73°49'W. 15'; 363' X line 3-4 june bug at S. 73°49'E. 30.66. from corner # 4 thereof; 600' to corner # 4, granite stone 4X8X26" M.K. 4/326
4th Course, N.73°49'W.30.66' X line 4-1, june bug; 1350'- No. 1 exclude 123 & 185.

23.545 ac

Paris Lode
B-87, P-493

Cor. No.1(pine post 6"X 6"-4.5' high Mk. 1-171; E¼ cor. sec. 16 bears S. 83°40'W. 681.32')

1st. Course N. 36°18'E. 300'-D.S. bears N. 53°23'W. 740'; 600' to cor. No.2-quartzite stone 6X15X30', Mk. 2-171;

2nd. Course N. 53°23'W. 789.8' X line 1-2 of surv. 111, fraction, N. 3°42'W. 592.78 from cor. No.1 thereof; 800.96' X line 2-3; 1500' to cor. No.3 in Wagon Road; N.E. cor. Sec. 16- N. 8°12' E. 1223.9'

3rd. Course S. 36°18'W. 20' to W.C.- quartzite stone 5X10X24" Mk. W.C. 3/171; 580.77 X line 1-2, Mondamin; 590.3 X line 2-3, fraction; 600' to cor. NO.4

Paddy D. Lode
B-87, P-460

Cor. No.1(granite stone 12"X15"X30" Mk. 1-326- on east line. 8-9, of surv. No.123, from which E¼ cor. Sec. 17 bears N. 61°32'E. 754.4')

1st. Course S. 16°16'W. 111.5'-D.S. bears S. 73°49'E. 671.94'; 223' to cor. No.2 (granite stone 4"X10"X24" Mk. 2-326;

2nd. Course S. 73°49'E. 102.6 X line 8-9; 1421.94' to cor. No.3 granite stone 5X10X26" Mk. 3-326.

3rd. Course N. 16°16'E. 223' to No.4. quartzite stone 6X8X24" Mk. 4-3-326 Iden. to cor. 3 Yellowstone.

4th. Course N. 73°49'W. 1421. 94-

Montenomah Lode
B-87, P-461

Cor. No.1(granite stone 6"X12"X27" Mk. 1-326 on east line 8-9 surv. No. ~~123~~ 123 also line 2-3 of Paddy D; E¼ cor. sec. 17, bears N. 46°09'E. 869.5') 1st. Course S.16°16'W. 600' to cor. No.2- granite stone 5"X9"X24" Mk. 2- 326.
2nd. Course S. 73°49'E. 275.79 line 8-9) 1350' to cor. No.3- Syenite Stone 4X7X24 Mk. 3-326

Yellowstone Lode
B-87, P-167

Cor. No.1(10"X6"X12" Syenite Stone, Mk. 1-326 and 1-106- identical to cor. No.1 of Olive D.)
1st. Course S.16°16'W. 333.48' intersect line 1-2 of Surv. No. 187- Battle Creek No.3-at N.73°49'W. 0.85' from cor. No.1; 453.68' intersect line 8-9- East line of Surv. No. 123- Verde Placer; 600' to cor. No.2,(Diorite Stone, 4"X10'X24" Mk. 2-326.
2nd. Course S. 73°49'E. 57.26' intersect said line Surv. No. 123; 1489.2' to cor. No.3(granite stone 6X8X24" Mk. 3-326.)
3rd. Course N. 16°16'E. 300'- D.S. bears N. 73°49'W.25'; 600' to cor. No.4 (quartzite stone 5X8"-Mk. 4-326 and 1-185 Maybelle.
4th. Course N. 73°49'W. 1488.84' intersect line 4-1 of Surv. No. 187 at N. 16°11'E. 333.48' from cor. No.1 thereof; 1489.2' cor. No.1
20.394 ac Exclude areas in No. 123 and No. 187

Osceola Lode
B-64, P-351

Cor. No.1 (30"X10"X6" Syenite Stone Mk. 1-4-106- W¼ cor. Sec. 16 bears N.78°18'W;899.7'; 18"⁄ pine B.T. N. 16°20'E; 32.8'; Thence N.16°13'E.300' (-D.S. bears S.73°49'E. 739.3') 600' to cor. No.2;
2nd. Course S.73°49'E. 1466.3' to cor. No.3;
3rd. Course S.16°13'W. 600' to cor. No.4
4th. Course N.73°49'W. 14663

Olive D. Lode
B-64, P-351

Cor. No.1 (30"X10X6 Syenite Stone) Mk.1-106--- W¼ cor. Sec. 16 bears S.67°07'E. 607.1'; dead pine,
12"⁄ B.T.-S.74°00'W. 14.3';
1st. Course N.16°13';E. 300' (-D.S.
S.73°49'E. 525') 600' to cor. No.2.
2nd. Course S.73°49'E. 406.7' (Sec. 2)
1500' to cor. No.3, identical to cor. No.2 Osceola;
3rd. Course S16°13'W. to cor. No.4 Identical to cor. No.1, Osceola;
4th. Course N.73°49'W. 917.7 to Sec. L. -1500' to No.1