

Patrol 4277 Avenue File
ONE, Lane Co.

San Francisco, Calif. December 20th. 1912.

Mr. W. T. Clark,
Wenatchee, Washington.

Dear Sir:

Report on the Combination Mines Company.
Bohemia District, Oregon.

The Combination Mines' Group comprises eight non-patented lode claims, embracing approximately 160 acres, distributed as follows;
KOKOMO, KOKOMO No. 1, SILVER CONTACT, SILVER CONTACT No. 1, SILVER CONTACT No. 2,
TOPEKA, DELPHOS, DEBPHOS No. 1. (see plat No. 1.)

The property is located on Martin Creek, a headwater tributary of the Willamette River in the Calapooya Mountains. This E-W range is a connecting spur between the Cascades and the Coast Range.

The district is reached by stage from Cottage Grove, a distance of thirty-two miles, or by train of the Oregon Southeastern Ry. from Cottage Grove to Wildwood, seventeen miles, thence by stage sixteen miles. This furnishes a daily mail and passenger service within two miles of the property. Cottage Grove is in west central Oregon, on the main line of the Southern Pacific Ry. between Portland and San Francisco.

TOPOGRAPHY

The region is mountainous and well wooded. Excellent timber, Douglas fir, pine and cedar grows in abundance on all the claims; the surrounding lands are under control of the National Forest Reserve, additional timber can be purchased at a nominal figure.

Martin Creek, below its confluence with Quartz Creek (see plat No. 1.) discharges about 50 second-feet and has a grade of two percent, this would furnish ample water for milling and power purposes.

GEOLOGY

The rock formation as disclosed by the tunnel workings is made up almost entirely of andesites with varying textures from coarsely crystalline to microcrystalline, sometimes porphyritic. These wide extremes exist in the same eruptive mass. A later dark eruptive has been intruded, which closely resembles a diorite. The ore deposits are apparently associated with this eruptive and a light colored andesitic tuff. Heavy faulting in nearly any direction post-dates the deposition of the ore. The ore is composed of pyrite, chalcopyrite,

galena and zinc blende with some values in gold and silver. There has been a little mineralization since faulting but of no economic importance.

DEVELOPMENT

On the surface and in tunnels No. 1 & 2, two small veins have been encountered, known as Combination Veins No 1 & 2. These veins strike approximately north and south with a steep easterly dip. A sorted shipment of nine tons made fourteen years ago to the Selby Smelting Company, from vein No. 1 on the surface, was reported to have returned, \$ 29.00 per ton gold and silver. This shipment was made from a width of 6 to 15 inches. A sample from this vein 8 inches wide taken from tunnel No. 1, over the winze, returned: Gold= \$ 1.60, Silver = \$ 2.56.

A sample from No. 3 Tunnel, Vein No. 2, Width = 2-3 inches, returned:
Gold= 80¢ , Silver = 88¢.

These veins are poorly defined, small and of no great longitudinal extent; faulting occurs frequently (see plat No. 2,) and the contained values, ^{are too small} to justify further prospecting.

Near the center line of the Kokomo claim a strong regional fault traverses east and west (see plat No. 1 & 2), known as the Silver Contact vein. This fault is later than the Combination veins as defined in tunnels No. 1, 2, & 3, and varies in width up to six feet. It is composed of crushed country rock, much kaolin and a strong gouge, but contains no ore. North of this fault and associated with the dioritic intrusions, considerable prospecting has been done along belts or crushed zones of a quartz material; occasionally well defined ore shoots have been encountered. Invariably these shoots are small in width and can not be followed to any length free from faulting.

SAMPLING

A thorough sampling was made of these ore exposures. The most continuous being the shoot prospected by a raise in tunnel No. 3, elevation 2150 ft. (see plat No. 2.). This shoot is fifty feet long and its greatest width eight feet, but divided by a "horse" from a few inches to six feet wide, throughout its entire length.

The following is a complete list of samples.(see plat No.2)

| No. | Location | Width | Gold | | Silver | | Total gross value per ton |
|-----|--|----------|--------|--------|--------|--------|------------------------------|
| | | | ounces | value | ounces | value | |
| | | 8 inches | | | | | |
| 1 | Combination vein No.1 Tunnel No.1, over winze. | | 0.06 | \$1.60 | 5.22 | \$2.56 | \$4.16 |
| 2 | Crushed qtz. ma- terial, north of Silver-Contact V. | 15ft. | trace | | trace | | ----- |
| 3 | Combination vein No.2, tunnel No.2 | 2 1/2-3" | 0.04 | .80 | 1.76 | .88 | \$2.78 |
| 4 | Crushed qtz. ma- terial north of S.C. vein tunnel No.3. | 4ft. | trace | | ----- | | ----- |
| 5v | Same as No.4, E. 12ft. waste bet. #4-#5. | 3ft. | 0.16 | 3.20 | 1.24 | .62 | \$3.82 |
| 6 | Qtz. material E. of winze, south side of drift #3. | 7ft. | 0.12 | 2.40 | 0.48 | .84 | \$2.04 |
| 23 | Same location as #6, center of ore shoot taken by Sherman Clark. | 20 in. | 0.04 | .80 | 2.06 | 1.03 | \$1.63 |
| 7 | Tunnel #3, 30ft. down winze, south side of short drift at bottom. | 4ft. | 0.08 | 1.60 | 0.72 | .36 | \$1.96 |
| 8 | do north side | 8' | trace | | ----- | | ----- |
| 9 | do do west of No.8. | 3' | 0.08 | 1.60 | 0.32 | .16 | \$1.76 |
| 10 | Qtz. material N side of drift 15' east of winze T.#3 | 5' | 0.08 | 1.60 | ----- | | \$1.60 |
| 11 | North side of collar of winze shape, T. #3. | 12" | 0.10 | 2.00 | 7.10 | 3.55 | \$5.55 |
| 12 | Back of Raise tunnel #3. | 20" | 0.08 | 1.60 | 12.92 | 6.46 | \$8.06 |
| 13 | Side of Raise 25" of waste bet. #12 & #13 | 12" | 0.04 | .80 | 2.76 | 1.38 | \$2.18 |
| 14 | 10' east of R. back of drift. | 16" | 0.04 | .80 | 3.56 | 1.78 | \$2.58 |
| 15 | 10' E. of R. side of drift | 2' | 0.04 | .80 | 10.54 | 5.27 | \$6.07 |
| | 4 1/2' waste bet. #14 & #15 | | | | | | |

| No. | Location | Width | Gold | | Silver | | Total gross value per ton |
|-----|--|-------|--------|-------|--------|-------|------------------------------|
| | | | ounces | value | ounces | value | |
| 16 | 20' east of raise back of drift | 18" | trace | | | | |
| 17 | 20' east of R. side of drift, 6' waste bet. #16 & #17. | 6" | 0.16 | 3.20 | 18.44 | 9.22 | \$12.42 |
| 18 | 10' west of R. back of drift | 18" | 0.04 | .80 | 1.16 | .58 | \$1.38 |
| 19 | 20' west of R. 2' waste bet. #19 & #18. | 6" | ---- | | 1.60 | .80 | \$0.60 |
| 20 | SouthSide of small XE, 12' west of raise. | 18" | trace | | 9.60 | 4.80 | \$4.80 |
| 21 | 20' west of R. south side T. #3. | 8" | 0.02 | .40 | 1.48 | .74 | \$1.14 |
| 22 | Sample of mineral deposited in seams after faulting. Breast of north drift T. #3. | | 0.06 | 1.20 | 29.14 | 14.57 | \$15.57 |

A shipment of 580# assayed, Gold 0.23 oz.= \$4.60 ; Silver 16.37 oz.= \$8.18, total= \$12.78, mined from the raise in No.3 tunnel by Mr. Sherman Clark as follows; " I have taken this ore from the raise ore shoot-- from the lower band(see sample #13 this report) and over head(see sample #12 this report) in the raise..... In width the ore was taken from over 4', of as near an average as I was able to figure it. I threw out all the large pieces of waste, but shoveled in the small waste with the small broken pieces of ore; the ore is not sorted, but may be some better than would average in mining without sorting". Mined from the shoot referred to in last paragraph of page 2.

Gold has been figured @ \$20.00 per ounce and silver @ 50¢ per ounce, this is a safe price , the present silver market is much above the normal.

The numerous faults that followed the deposition of the ore are responsible for the present physical condition of the veins; the ore shoots are badly broken and those containing any values are small in width. In places the ground is heavy and mining will be expensive.

The ore in tunnel #3, exposed in the drift and raise, might be worked at a profit with other equally good shoots, but the possibilities it contains in itself are not promising. No calculation of ore in sight has been

made; the present ore exposures are not sufficient to permit of measurements for such an estimate. On the whole the assay values are too low and variable.

CONCLUSIONS

In view of the complex physical geology of the deposit, the low assay values and the limited extent of the known faulted ore bodies, further exploration in any direction is not justified, in hopes of finding better values in the faulted portions, as yet undeveloped.

Respectfully,

Henry C. ...
