## State Department of Geology and Mineral Industries

702 Woodlark Building Portland, Oregon

ORONOGO MERCURY MINES (Now Oregon Mining Co.)

BEAR CREEK AREA CROOK COUNTY

Owners: Pres. Wm. T. Ray, Burns, Oregon; Lee Williams, Manager; other members W. D. Ray and V. A. Harpo.

Location: Claims are largely in sec. 31. T. 17 S., R. 17 E.W. M., on the west side of Bear Creek. One mile southwest of the highway, at a point 2.7 miles south of the junction of Bear Creek and Crooked River, 23 miles southeast of Prineville.

Area: 5 unpatented lode claims and about 2,000 acres of patented land.

History: The first claims were staked in August, 1936, for quicksilver.
The "Oronogo Mining Company" was a Walla Walla corporation, with
R. E. Combs as manager. 11 or 12 flasks of mercury are said to
have been produced from these claims and from lands owned by
Dunham. When the new company was formed the land was bought
from Dunham, who is also receiver for the old corporation. The
new company is mainly interested in tin, and not in quicksilver.
The plant has been sold to the Barnes Butte Mine. W. T. Ray reports that 100 assays on "ore" from the claims have been made by
Beede in Portland, and that when buttons are infrequently recovered
they are 85 to 97% tin.

Equipment: Only the building and some tools remain of the retort formerly on the property. Several cabins remain for living quarters.

Geology and Development: The Bear Creek area is composed of rocks making up the Clarno formation (Eocene). The Clarno is composed of andesite, basalts, and rhyolites being superposed in that order; with frequent interbeds of tuff especially in the rhyolitic members. The Bear Creek section is probably near the base of the Clarno as the rocks are predominantly porphyritic grey and dark grey andesites, with one prominent red tuff interbed which cuts across the country in a north-south direction west of Bear Creek, and appears in the lower tunnel on the Platner property.

East-west and north-south major fractures have permitted extensive silicifying solutions to alter and replace the country rock for continuous distances of as much as a mile and widths up to several tens of feet. These silicified "dikes" (as they are locally called) have withstood erosion to a greater extent than the unaltered rock, and consequently stand out as topographic ridges. They are nearly always bounded on both sides by well-defined fault planes. In places two dikes intersect of join, or a major dike splits.

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Development on the Oronogo property consists of five short tunnels, driven to and along altered zones, one 35 foot shaft, and numerous small open cuts.

The accompanying map gives the distribution of these workings, and the trends of the main fractures from which the silicifying and mineralizing solutions derived. The country rock in most of the tunnels is fresh dark grey finely porphyritic andesite, and the majority of the fractures have only thin coatings or narrow lenses of calcite with lesser amounts of quartz. In the westernmost tunnel there has been a slight amount of oxidation along some of the fractures, and cinnabar paint appears on some of the faces. In the shaft and in the next opencut to the southeast of the shaft the rock for several inches adjacent to rather closely spaced northwest trending faults has been hydrothermally altered with the development of fine cinnabar. Most of the ore retorted seems to have come from this latter cut. Limonite and cherty silica are the predominating minerals. The individual bands are from 1 to 5 inches wide, and the main zone is from 1 to 3 feet wide. Leisegang banding is well developed in the altered rock, with some manganese oxide florescence. .

Structurally, the most important set of joints are those striking N. 200 W. and dipping from 55 to 750 E. Most mineralization appears to have been on this set. There are other faults with varying strikes, but nearly all of them dip to the east. The altered outcrops are indicated on the map by stippling, and it can be seen that the ridge strikes about N. 300 W. It is suggested that the main set of faults are offset to the west by subsidiary faults as one progresses northwards.

Miscellaneous: The climate is semi-arid. Juniper trees are fairly abundant. Relief is moderate; perhaps only 100 to 200 feet.

Water is taken from a small spring.

April 18, 1941 John Eliot Allen 1. Name of property: ORONOGO MERCURY MINES, INC.
Location: Sign is 2.7 miles south of Crooked River road on Bear Cr. road,
and the mine is 1 mile W. of the sign.

Property not visited. 11/26/39.

by Ray C. Treasher.

Oronogo mercury anines he, trick from Bear to road (met), and light is 2.7 miles 5. of larobed R. road on Bear Rr. road, and the mine is I mile W. of the sign. Project with visited. 1/24/09.

## CONFIDENTIAL

The ore bodies that have been worked out in the north workings are extremely irregular and discontinuous. Progrably they are so small that they are uneconomic, in relation to the amount of work done to reach them; especially as they do not seem to have been of very high grade.

south

Ore from the **lawar** workings seems to have been of low grad e with only minor exceptions. For the amount of work done here, the results have been negligible. Further geologic work should be done here.

It was recommended that the following would be the best way to develope (if further work is to be done, which is of doubtful worth):

- 16 Continue winze in drift in # 8. Ore shows here, and ore has been taken out of fair grade. It is possible that further ore may be developed on this proven shoot.
- 2. An ore shoot extending below water-level appears in the south workings. Ore has been stoped above this level, but little has been done below.

In other works, follow the ore! Mostly down!

I have yet to see anything very encouraging in the Bear Creek District. Further more detailed geologic work on the Platner might be of value, but so far indications are not encouraging.

JEA

- 1. Name of Property: ORONOGO MERCURY MINES, INC.
- 2. Location: Sign is 2.7 miles south of Crooked River road on Bear Cr. Road, and the mine is 1 mile W. of the sign.

Property not visited 11/26/39

By Rey C. Treesher

Bear Creek Dist. Cruok County Oronogo Mercury Minils : Now Oregon Mining Co. Ownes! Deruham Prod. 11-12 flasks? April 18, 1941 Manage: R.E. Combs Sec. 31, T.795, R.19E. Bill Roy, Burns -Sold by Danham To: 11 Dunganis boy surveyed graned. Has notes. Tunnel Due E. 50' Face in dock gray perphyrile and esite 580°E - 15' gute tresh, jointing fairly cowse; cut S60°E - 35'. by numerous calcute venilets, movement along some of them, Munalization otherwise absent. ( E-W-150 N. Flatters out - followed in, Up to 2" Thick XIIne Ca CO3. Mouth of Tunel 12 due W 60; N300M - 100. mouth of Turnel 12. N750E-20" stope: A'down, 5'S, 10' N. N20°W-60°E. Circular slong one small joint in faint. Andesite Month of Turnel #1 due E 280' To Top of vidge \$570°W To month T.#1. S200E-45'. Pit 10' long + course, 6' deep. Seam in E. end S25°E, 70°E: curreber colars, SADOE - 85 (a) Shaft on top of vidac. Very N35°W, 25°E. about 35' deep. Old shaft 30'deep 10' 70 NW. S 45° E - 85' 10' travel 2' deep " -105', Open aut (5) To underhand stope 10' deep, N250W - V. N55 E-20' atout general Trend. Albred zone 1-3' wide, in gray sough anderthe. District bands 1-5" wide

next to slips. Lessegarg banding, No unueba

wanter in rut,

Lawyer Brown in Princockle settlerig prisety-Dunkans is teceiver. Reverted to Dunkami; bought by Oregon Minney Go.; Lee Williams, manage - W. T. Ray. V. A. Harpo W. D. Ray

Quicksilver + tin.

W.T. Ray ran 100 assays; oute Beede lab. Thembous blanks; then heavy brittons. Buttons 85-97% Tim. When get.

Quickselve: 5 claims and 2000 acres. Started # August, 1936, Overrigo, Walla Wall corps. Combs neigh.

Climate avid, junipe tavly schudant velet moderate.
Water from spring. 27 m. from Princelle; Am. from
forts of Bear & Crothed R.

Red Tuff on W. Eide of N-S tributory to Bear Ck. Dips of pecito be No

From #3- N30°W. Some minzTn | Scale 50'=1 For 325' to pit; altied ander to, calcul venis. There S55W- 45' to 20' cut on 2 faults N20°W-V. There S15°W-65' Cut on fault N10°W-55E. Thence 525W-200' to 2a. N65°E - 20' mouth of tunel "6. -35' face. Faults No5E-608 in 1st & last 10' of Tunels movement voted. N20°E - 351 along open out to write 20 deep; turnel N35°W-30: Flat fault N30°W-20°W N50 1 - 65' 2 outs along fault NZOWa allred zone in ditte. Is they delie offset to W. as (3) Q one gres N?