

every corner & along

BUENA VISTA MINE (quicksilver)

TILLER-DREW DISTRICT

~~see also~~ (Umpqua Mine, Tiller Development Co.)

Owners: (Chester E. McCarty, Yeon Bldg., Portland, Oreg., attorney for the Tiller Development Co. is handling all Company details.

The outfit is, and has been, in receivership. The Company, originally known as the Umpqua Mining Co., consisted of some 200 shareholders, and when things were not going well they gave authority to a smaller group of shareholders to operate as the Tiller Development Co. The secy-treas. is L. B. Bramhall, Reedville, Oregon, a grocer, who is reported to have a personal bond up for the company. President is Geo. E. Atkinson, Gresham, Oregon, a grocer.)

Location: SW $\frac{1}{4}$ sec. 27, NE $\frac{1}{4}$ sec. 33, NW $\frac{1}{4}$ sec. 34, T. 29 S., R. 2 W., on

Deadman Creek. The mine is reached from Tiller, and up the

South Umpqua road 0.6 miles; then up Salt Creek by the Dead-

man Road, $\frac{3}{4}$ miles of Forest Service truck trail. *The road is narrow rough and has deep ruts. It is impossible to grade.*

Area: 14 claims, as shown on claim map.

History: Wells & Waters report as follows: 1/

"The Buena Vista mine consists of eight claims in sec. 34, T. 29 S R. 2 W. The discovery claim was staked by W. S. Webb in 1918. At present the property is owned by H. E. Rogers, Guy Crodon, and H. A. Jensen. A few flasks of quicksilver have been produced. The mine contains about 850 feet of workings, which have opened the vein for a maximum distance of 230 feet along the strike and for a vertical distance of 89 feet."

"On the main level porphyritic andesite occurs as a narrow strip about 17 feet wide, bounded on the south by volcanic breccia and on the north by a fault that brings it into juxtaposition with conglomerate. The porphyritic andesite here appears to be a fault block dropped into its present position. Volcanic breccia is also present in the sublevel, but only andesite is exposed on the top level. The fault, which has gouge about 1 foot thick, is normal and pre-mineral, but some post-mineral movement has taken place."

"Ore occurs in a shear zone in the porphyritic andesite, which strikes N. 88° E., and is either vertical or dips at high angles toward the south. The ore occupies many closely spaced veinlets that are roughly parallel, though converging and branching in places, and also isolated short-gash veinlets. The veinlets range in width from a quarter of an inch, the usual width, to 6 inches and contain cinnabar, calcite, marcasite, and a little pyrite. Some radial fibrous chalcidony has also been seen. Some veinlets are composed entirely of one mineral, either cinnabar, calcite, or marcasite, but most of them contain two or more minerals and commonly show banding and crustification. Some of the larger veinlets consist of small angular fragments of andesite cemented by cinnabar, calcite, and a little marcasite. Scattered specks of cinnabar occur in the wall rock. The tenor of the

HISTORY: (continued)

ore diminishes gradually from the vein into the wall rock, and therefore the boundaries of the ore body are indefinite and must be determined by assay. At present the stoping width averages about 5 feet. The reported results obtained from retorting the ore in 1929 and 1930, together with amounts of cinnabar that are visible, indicate that parts of the lode as much as 5 feet wide may average from 1 to 2 percent of quicksilver. There is no indication that the end of the ore has been reached, and mining at greater depth as well as to the west along the fault should develop more ore."

(Schmette did not visit this property in 1937)

Development: Development as stated in the above quotation from Wells & Waters, and as shown on their sketch map. Since then, some 400 tons of ore were pulled to run the retort for about a month. Some stoping was done above the portal of the top level.

Equipment: ^M General mine and mill equipment, ^{includes a} Sullivan air compressor, and tool sharpener; Atlas Imperial 30 h.p. Diesel driving a 50,000 watt, 125 volt ^{DC} generator; ^{drill sharpener} blacksmith shop, mess hall, bunkhouse, bathhouse, etc., for a 20-man camp. Cars, track, etc.

Mill equipment ^{includes} 50-ton ore bin, ^{discharging} to a revolving grizzly having 1 inch spaces; ^{to} an Acme Road Machinery crusher, 9-3/4 x 14, run by a 20 h.p. motor; ^A 30-ton fine-ore bin that discharges to a Gould Furnace, 30 inches x 42 feet, ~~that is~~ operated by a 5 h.p. motor. Waste goes to the dump via conveyor. ~~Pume~~ ^{gas} from the Gould Furnace goes to a locally-made dust collector, then to a baffle ~~box~~ ^{iron pipe} box, then to ~~10~~ ⁷⁰ tube condensers, ~~that are~~ 12 inches in diameter and 16 ft. long, then to another baffle ~~box~~, and finally to ^{tile pipe condenser} stacks constructed of ~~all~~ vitrified pipe.

The mill equipment is reported to have cost approximately \$20,000 and the Diesel about \$10,000. Other equipment will bring the total to about \$50,000, it is reported.

Mining Facilities: The 8½ miles from the mine to the South Umpqua road is by road that crosses the divide between the South Umpqua and Deadman Cr. at this point. The road is precipitous and grades of 15 percent are common. It is impassable except during the summer months. It is then 27 miles from Tiller to Canyonville and then about 6 miles to Riddle, the nearest railroad shipping point.

Water, and timber, are plentiful. Communication is by Forest Service telephone line, subject to the restrictions of the U. S. Forest Service.

Geology: The account by Wells and Waters ~~is~~ is the most authoritative geologic account available.

General: The property was not being operated at the time of the visit, August 2nd, 1940, and was in charge of a watchman. It is rumored that some outside Company is attempting to secure control of this property, the adjoining Maud S., and some more adjoining claims, and work all three, - retorting the cinnabar at the Buena Vista plant.

Informant: JEM & RCT

Report by: RCT, Aug. 3, 1940.

Reference: 1/ Wells, F. G., & ~~Waters~~ Waters, A. C., "Quicksilver Deposits of Southwestern Oregon": U. S. Geological Survey Bull. 850, pp. 43-45, one map, 1934.

Informant: R. C. Weather

Reference: Wells and Waters 34

BUENA VISTA MINE (quicksilver)

TILLER-DREW DISTRICT

CONFIDENTIAL

The property, at present, is a re-telling of the old, old story; - all the money is spent in erecting a mill to treat probable ore, and insufficient funds are available for mining ore to serve the mill. The Company, presumably known as the Umpqua Mining Company, was financed by grocers and "small" business men. When they were unable to operate the property profitably, they ~~grants~~ granted permission to a small group of shareholders to operate as the Tiller Development Co. This outfit also has failed to operate the mine.

The mill and retort appear to be in good condition, to be well constructed, and ready to operate. The plant is reported to be "saturated". The Diesel plant, blacksmith shop, etc., have been kept in good shape so that the investment in mine and mill plant is still good.

The watchman showed me a letter from L. B. Bramhall, Reedville, Oregon, to the effect that there is some sort of meeting scheduled for August 5th, 1940, at which time some definite action will be taken as to future actions by the Company. He reported that "some outfit" is considering taking the Buena Vista, Maud S., and adjoining claims, and operating all three. The ore will be trammed to the Buena Vista retort.

Chester E. McCarty, Yeon Bldg., Portland, Oregon, is attorney for the Company, and has all the files and records of the Company. I would like to suggest that he be contacted and full particulars on mine and mill plant, and development, with maps, assay records, reports, be secured and copied for the Department files (and a copy forwarded to the Grants Pass laboratory for our files)

Schnette did not visit the plant during his investigation, as he was unable to get into the property. If some outfit "takes over" I should like to re-visit the property when they start operations, and then keep in touch with their developments.

Ray C. Treasher,
August 3rd, 1940.

BLANK B—ANNUAL REPORT

This report must be properly executed and filed with the Corporation Commissioner on or before July 1, 1933, in order to entitle a corporation mining for any of the precious metals, coal, or prospecting or operating for oil, or operating an oil well, to pay a license fee of only \$10. If not so filed, such corporation must pay the same license fees as are required to be paid by other corporations for gain.—Section 25-244, Oregon Code 1930.

ANNUAL REPORT TO THE CORPORATION DEPARTMENT

FOR THE YEAR ENDING JUNE 30, ~~1933~~ 1935

Of OMPQUA MINING CO. (Give legal name in full)

a corporation organized and existing under and pursuant to the laws of the State of Oregon.

The location of its principal office is at No. 625 Board of Trade Bldg. Street, in the city of Portland, in the state of Oregon

The names and addresses of principal officers, with the postoffice address of each are as follows:

| NAMES | OFFICE | BUSINESS ADDRESS |
|--------------|-----------|-----------------------------|
| O.G.Graham | President | 2539 S.E.Market St Portland |
| W.S.Copeland | Secretary | 5714 N.Williams Ave. do |
| do | Treasurer | do |

The date of the annual election of officers is 2d Tuesday in January

The date of the annual election of directors is do

| | Common With Par Value | Common No Par Value | Preferred |
|--|-----------------------|---------------------|-------------|
| Amount of authorized capital stock | \$ 300,000 | Shares | \$ |
| Number of shares of authorized capital stock | 30,000 | | |
| Par value of each share | \$ 10.00 | x x x x x x | \$ |
| Amount of capital stock subscribed | \$ 200,000 | Shares | \$ |
| Amount of capital stock issued | \$ 200,000 | Shares | \$ |
| Amount of capital stock paid up | \$ 200,000 | Shares | \$ |
| Price at which no par value stock issued | x x x x x x | \$ | x x x x x x |

State amount of capital, represented by stock of no par value, with which the corporation began business \$

Total amount of its properties in Oregon (name of claims, lodes, or placers)

Elsie, J.C., Lucky Strike, Bonanza, East Extension, Uncle Billy, Orbie, Uncle Billy S.W., Queen, Queen S.W., Granada S.W., Granada S.W.2, Last Chance, Granada.

The location of its properties The NW 1/4 of SW 1/4, Sec. 27, T.30 S., R.2 W., V.M., 34 A. Mineral rights of entire 40 A., Douglas County, Oregon

The amount of work done thereon and improvements made thereon since the time of filing last report Assessment work on 12 claims and installed mercury reduction plant

The amount of output or products of the mines or wells of such corporation from January 1, 1932, to December 31, 1932, inclusive, none

The value of output or products of the mines or wells of such corporation from January 1, 1932, to December 31, 1932, \$ none

IN WITNESS WHEREOF, I, W.S.Copeland, Secretary of said corporation, have signed this report, this

[CORPORATE SEAL] 28th day of June, A. D. 1935. (signed) W. S. Copeland

STATE OF OREGON, }
County of _____ } ss.

I, _____ of the foregoing corporation; being first duly sworn, depose and say, upon oath, that I am _____ of the foregoing corporation; is not engaged in or transacting any other business except that of locating, prospecting,

BUENA VISTA MINE (quicksilver)
(Umpqua Mine, Tiller Development Co.)

Tiller-Draw District

Owners: Tiller Development Co., Geo. E. Atkinson, pres., Gresham, Oregon; sec. L. B. Bramhall, Reedville, Oregon; Chester E. McCarty, Yeon Bldg., Portland, Oregon is attorney for the Company.

Location: SW $\frac{1}{4}$ sec. 27, NE $\frac{1}{4}$ sec. 33, NW $\frac{1}{4}$ sec. 34, T. 29S., R. 2 W., on Deadman Creek. The mine is reached from Tiller, and up the South Umpqua road 0.6 miles; then up Salt Creek by the Deadman Road, 8 $\frac{1}{2}$ miles of Forest Service road. The road is narrow, rough, and has steep grades. It is impassible in winter.

Area: 14 claims

History: It is reported that the property is in receivership, but that an arrangement has been made so that the mine may be worked. In August, 1940, the property was inactive. Total production has been a few flasks.

Wells & Waters (34) describe the deposit as follows:

"On the main level porphyritic andesite occurs as a narrow strip about 17 feet wide, bounded on the south by volcanic breccia and on the north by a fault that brings it into juxtaposition with conglomerate. The porphyritic andesite here appears to be a fault block dropped into its present position. Volcanic breccia is also present in the sublevel, but only andesite is exposed on the top level. The fault, which has gouge about 1 foot thick, is normal and pre-mineral, but some post-mineral movement has taken place."

"Ore occurs in a shear zone in the porphyritic andesite, which strikes N. 81° E., and is either vertical or dips at high angles toward the south. The ore occupies many closely spaced veinlets that are roughly parallel, though converging and branching in places, and also isolated short-gash veinlets. The veinlets range in width from a quarter of an inch, the usual width, to 6 inches and contain cinnabar, calcite, marcasite, and a little pyrite. Some radial fibrous chalcedony has also been seen. Some veinlets are composed entirely of one mineral, either cinnabar, calcite, or marcasite, but most of them contain two or more minerals and commonly show banding and crustification. Some of the larger veinlets consist of small angular fragments of andesite cemented by cinnabar, calcite, and a little marcasite. Scattered specks of cinnabar occur in the wall rock. The tenor of the ore diminished gradually from the vein into the wall rock, and therefore the boundaries of the orebody are indefinite and must be determined by assay. At present the stoping width averages about 5 feet. The reported results obtained from retorting the ore in 1929 and 1990, together with amounts of cinnabar that are visible, indicate that parts of the lode as much as 5 feet wide may average from 1 to 2 percent of quicksilver. There is no indication that the end of the ore has been reached, and mining at greater depth as well as to the west along the fault should develop more ore."

Since the Wells and Waters report, some 400 tons of ore were stoped on the upper level and run through the furnace.

Equipment: Mine and mill equipment includes a Sullivan air compressor, and tool sharpener; Atlas Imperial 30 h.p. Diesel driving a 50,000 watt, 125 volt DC generator; blacksmith shop, drill sharpener, air hammer drills, mess hall, bunkhouse, bathhouse, etc., for a 20-man camp. Cars, track, etc.

Mill equipment includes a 50-ton ore bin; a revolving grizzly having 1 inch spaces; an Acme Road Machinery crusher, 9-3/4 x 14, run by a 20 h.p. motor; a 30-ton fine-ore bin that discharges to a Gould Furnace, 30 inches x 42 feet operated by a 5 h.p. motor. Waste goes to the dump via conveyor. Gases from the dust collector go to a baffle box, then to ironpipe condensers, 12 inches in diameter and 20 ft. long, then to another baffle box, and finally to tile pipe condenser and stacks.

Informant: R. C. Treasher
Reference: Wells and Waters (34)

STATE GOVERNING BOARD

W. H. STRAYER, CHAIRMAN, BAKER
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 E. B. MACNAUGHTON PORTLAND

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LESLIE L. MOTZ
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 PORTLAND, OREGON

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 FIELD GEOLOGIST

ALBERT A. LEWIS
 ASSAYER

2102 COURT ST., BAKER

HUGH K. LANCASTER
 FIELD ENGINEER

WILLIAM T. BURNS
 ASSAYER

- BUENA VISTA MINE (quicksilver) Tiller-Drew District
 (Umpqua Mine, Tiller Development Co.)

Owners: (Chester E. McCarty, Yeon Bldg., Portland, Oregon, attorney for the Tiller Development Co. is handling all Company details. The outfit is, and has been, in receivership. The Company, originally known as the Umpqua Mining Co., consisted of some 200 share-holders, and when things were not going well they gave authority to a smaller group of share-holders to operate as the Tiller Development Co. The secry-treas. is L. B. Bramhall, Reedville, Oregon, a grocer, who is reported to have a personal bond up for the company. President is Geo. E. Atkinson, Gresham, Oregon, a grocer)

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Area: 14 claims, as shown on claim map.

History: Wells & Waters report as follows: 1/

"The Buena Vista mine consists of eight claims in sec. 34, T. 29 S., R. 2 W. The discovery claim was staked by W. S. Webb in 1918. At present the property is owned by H. E. Rogers, Guy Crodon, and H. A. Jensen. A few flasks of quicksilver have been produced. The mine contains about 850 feet of workings, which have opened the vein for a maximum distance of 220 feet along the strike and for a vertical distance of 89 feet."

"On the main level porphyritic andesite occurs as a narrow strip about 17 feet wide, bounded on the south by volcanic breccia and on the north by a fault that brings it into juxtaposition with conglomerate. The porphyritic andesite here appears to be a fault block dropped into its present position. Volcanic breccia is also present in the sublevel, but only andesite is exposed on the top level. The fault, which has gouge about 1 foot thick, is normal and pre-mineral, but some post-mineral movement has taken place."

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Development: Development as stated in the above quotation from Wells & Waters, and as shown on their sketch map. Since then, some 400 tons of ore were pulled to run the furnace for about a month. Some stoping was done above the portal of the top level.

Equipment: Mine and mill equipment includes a Sullivan air compressor and tool sharpener; Atlas Imperial 80 h.p. diesel driving a 50,000 watt, 125 volt D.C. generator; blacksmith shop, drill sharpener, air hammer drills, mess hall, bunkhouse, bathhouse, etc. for a 20-man camp. Cars, track etc. Mill equipment includes a 50-ton ore bin; a revolving grizzly having 1 inch spaces; an Acme Road machinery crusher, 9-3/4x14, run by a 20 h.p. motor; a 30-ton fine-ore bin that discharges to a Gould Furnace, 30 inches x 42 feet, operated by a 5 h.p. motor. Waste goes to the dump via conveyor. Gases from the dust collector go to a baffle box, then to iron pipe condensers, 12 inches in diameter and 20 ft. long, then to another baffle box, and finally to tile pipe condenser and stacks. The mill equipment is reported to have cost approximately \$20,000 and the Diesel about \$10,000. Other equipment will bring the total to about \$50,000, it is reported.

Mining Facilities: The 3 1/2 miles from the mine to the South Umpqua road is by road that crosses the divide between the South Umpqua and Deadman Creek at this point. The road is precipitous and grades of 15 percent are common. It is impassable except during the summer months. It is then 27 miles from Tiller To Canyonville and then about 6 miles to Riddle, the nearest railroad shipping point.

Water and timber are plentiful. Communication is by Forest Service telephone line, subject to the restrictions of the U. S. Forest Service.

Geology: The account by Wells and Waters is the most authoritative geologic account available.

Informant: R. C. Treasher
Reference: 1/ Wells and Waters '34 *8/3/1940/*

Buena Vista Mine

July 31, 1940

Jerry Aresmus (washed fine.)
Jerry Hill (watchman).

Equipment

Atlas - Injural diesel, 75 HP. or 100.

power compressor Sullivan, Acyl. horiz. (12 x 7 1/2 x 10)

generator: 125 V. Westinghouse D.C. (200 amp.?)

Sullivan jackhammers 3 + cages

Cus 2?

power drills

Forge

bit sharpeners.

Tools.

Plant: 100 t. coarse ore bin to rotary (2' x 10') grizzly powered
by Westinghouse DC motor to Dodge type 24" jaw
crushers. Fine ore bins, sliding bottom automatic apron
feeder to sliding tube feeder (10") ^{washed by tappet} to Gould Rotary
furnace (4' x 40') with ^{Rais} oil burner and blower.

~~Process~~
Cyclone dust collector to condenser system. Tank and
exhaust blower. ^{or motor} Electric thermometers, pressure gauges, etc.

Primary condensers: 3 wire columns. 20'. Outside water spray.
Sec. " " 34 tile " 25'.

Howes Tunnel:

S 25°W - 115'

due S - 220'

S 70°E - 20' caved

S 15°E - 5' raise.

" - 100' face ^(draft)

S 25°W - 25'

S 70°W - 20' chute on L.

S 45°W - 25' crosscut 20' L.

" 55'

S 20°W - 15'

S 75°W - 10' chute on R,
and raise, slope

S 45°W - 50' face.

vertical wall on L.

Face dips 60° NW.

4804 N.E. Davis
Portland, Oregon
June 23, 1936

Mr. E. D. Ferrin
2527 S.E. Market
Portland, Oregon

Dear Sir:

In compliance with your recent request for a complete report on the possibilities of the Buena Vista cinnabar property, I am submitting the following:

REPORT ON THE BUENA VISTA MINE, TILLER, OREGON

LOCATION AND ACCESSIBILITY: The Buena Vista Mine is located in Douglas County, 9 miles north of Tiller in the Umpqua National Forest and lies in the southwestern Oregon quicksilver belt. Tiller is 23 miles east of Canyonville which is on the main Pacific Highway (U.S. 99) 230 miles south of Portland. The roads leading to Tiller (1000 ft. elevation) are easily traveled but the last 8 miles stretch to the mine is in very poor condition. Riddle, the nearest railroad station is 28 miles west of Tiller. See Figure 1. showing the general location of the property.

CLAIMS: The property consists of 14 adjoining lode mining claims which form a continuous 290 acre area. The major portion of the claims lie diagonally in Section 34, T. 29 S., R. 2 W. with minor areas in Section 33, 27, 35 and 26. Figure 2 is a surveyed map showing the positions and extent of the 14 claims.

TOPOGRAPHY, DRAINAGE, AND CLIMATE: The present underground workings lie at an elevation approximately 1800 feet in a small ravine well up the South slope of upper Deadman Creek, a tributary of the South Umpqua River which flows past Tiller and Canyonville. The region, formerly a high plateau, has been thoroughly dissected by numerous streams into a rugged system of deep V valleys and high narrow ridges. Figure 2 B. shows the approximate elevation along the lode line which strikes N 70° E and illustrates the extent of the ore "backs". Figure 3 shows the approximate elevation perpendicular to the lode line and general geologic formation. A short distance south of the mine and the hills rise to 3200 ft. elevation and to the north the slope descends to approximately 1200 ft. elevation down Deadman Creek. A small creek flows down the ravine close to the mine and supplies domestic water which is stored in a concrete reservoir. Stanley Creek

occupies the next valley toward the West and supplies the plant with condenser water.

In general, the climate is ideal and all operations can be carried on at any time of the year without hindrance. In fact, this region has exceptional natural facilities which should greatly assist in the efficient mining and metallurgy of mercury.

GEOLOGY AND MINERALOGY: The claims lie near the junction of the Klamath mountains and the Cascade Range at the western edge of recent Cascade lava flows. Perpendicular to the strike of the main vein for many miles north, homoclinal sedimentary beds are found consisting of alternate beds of conglomerate, sandstones and shale probably belonging to the Umpqua formation of Eocene Age. The end of this sedimentary bed forms the hanging wall of the mine and unconformably overlies the older Jurassic rocks consisting of the schists, slates, greenstone, serpentinite and quartz diorite. Refer to Figures 3, illustrating geologic formation. On the upper slopes above the mine recent Cascade basalt flows edge close to the strike of the vein and it is possible that these lavas formed an impermeable capping which favored the deposition of large ore bodies. This, however, is difficult to determine because exposures are few and geologic details are hidden from view by heavy brush, timber and 20 ft. of top soil. The older rocks southeast of the contact have been thoroughly cut by intrusive dikes of porphyritic andesite and rhyolite resulting in considerable fracturing, faulting and displacement.

The dip of the sedimentary bed several miles north of the property is 25° SE and it is important to note that this dip becomes steeper as the contact is approached where it dips 80° S.E. The lower adit is cut through 400 ft. of this sedimentary hanging wall there is a layer of 6 to 14 inches thick of impermeable fault gauge. Next is a 17 foot vein of cinnabar bearing altered porphyritic andesite which has been highly crushed and altered. In the next 90 ft. South there are layers of volcanic breccia interstratified with the andesite flows. Considering the above mentioned change in dip at the hanging wall and the absence of conglomerate south of the contact it appears that the altered andesite is an intrusive body which flowed along a line of weakness between strata, cooled and later was subjected to normal fault movement of small throw along the present lode strike. This movement was mostly premineral but there are indications of post mineral action. Intense crushing and brecciation took place allowing the free flow of mercury bearing solutions which gradually cemented the fault breccia consisting of andesite fragments with calcite, silica, pyrite, marcasite, and cinnabar thus forming the present ore.

Along the strike of the vein considerable evidence of volcanic activity can be found such as lava flows, scrap lava debris, volcanic breccia, petrified wood and areas of highly altered rock. This altered rock appears to have been a porphyritic andesite which had been softened and bleached yellow white through hydrothermal alteration and crusted with the characteristic redbrown iron oxide so common to most mercury outcrops. The original rock constituents have been partly replaced and chemical analysis shows great increase in calcium carbonate content.

In the top soil float is found well scattered along the strike. Several shallow cuts, see Figure 2 A, have been made along the strike in this altered rock and panned samples yield cinnabar particles. Approximately 250 feet perpendicular to the strike and above the upper adit there is an outcrop of coarse "talc" which appears to be a secondary vein. See Figure 2 A. Samples taken here show excellent cinnabar residue when panned. From present underground development it is difficult to determine the exact relation between this vein and the main vein but it may be a cross fissure vein or another secondary vein, running parallel to the original vein which strikes N 70° E.

PRESENT STATUS OF DEVELOPMENT WORK: See Figure 2B. The mine contains about 1300 ft. of underground workings which are distributed between 3 levels, 5 raises and 3 crosscuts. There are portals at both upper and lower levels which allow free circulation of fresh air through the workings. The vein has been opened for a distance of 350 ft. along the strike, 104 ft. on the vertical and 90 ft. in crosscutting. Considerable high grade ore has been removed from the old workings from a five foot vein in the porphyritic andesite just south of the hanging wall. Both vein filling and chambered disseminated types of ore deposits were found. Included is a log kept by the foreman (1929) when drifting east and west on the lower level:

PARTIAL LOG OR RECORD OF NE & SW DRIFTS, LOWER (NO. 2) LEVEL
KEPT BY THE FOREMAN IN CHARGE, 1929

"Ore looks very good where we cross cut the vein, which measures 11' from wall to wall.

East drift at 18' shows good ore.

West drift at 28' shows 12" of ore running from top to bottom of drift, that is very good, balance shows slight specks.

East drift at 26' shows fair ore; west drift at 35' shows fair ore and shows a vein width of 42". East drift shows a possible width of vein at 26' of not less than 16 feet.

West drift at 39' shows vein 30" wide, showing little cinnabar.

East drift at 28' shows fair ore scattered across face.

West drift at 42' shows 42" vein, 12" talc, with some ore in top of drift.

The East drift at 34' (starting at 30" in center of drift) is a strip about 3' in width, running east with tunnel, a nice body of ore. This ore is scattered all through the rock, as if peppered in. There is also ore in the quartz in face of tunnel. Need a raise for prospecting.

West drift at 42'6"; in bottom of drift is good ore, and shows good ore from top to bottom, and from talc to foot wall. One black strip of ore across tunnel, 3" wide, contains very high grade ore. This dips to west.

West drift at 47', ore shows up good, main vein has widened at this point. Ore is of good grade, and should run about one per cent. It is in seams or veinlets, and some quartz mixed in rock is a grey color.

East drift at 38' shows ore each side of drift, possibly 2% cinnabar.

Drilled 4' hole in south wall of tunnel, and panned tailings. Found particles of cinnabar. This hole proved width of vein at this point, to be over 10'.

West drift at 51' shows width of 7' between walls, with 5' of good ore, possibly 1%.

East drift at 41', few specks of cinnabar can be seen in face. West drift at 54', indications point to good ore in south side of tunnel. East drift at 44', shows good ore in the N. wall of tunnel, and some in the upper south corner. Drilled five foot hole in N. wall of tunnel; this panned colors, and proves vein over 15' wide at this point. West drift at 53' shows good ore in face. East drift at 47' shows some lean ore, and some very good. East drift at 50' is turning too sharp; shows lean ore. West drift at 65' looks fine. When rock is mortared, it shows rich ore, possibly $1\frac{1}{2}\%$, and vein has widened. West drift at 69' shows very good ore. Indications of better ore to south ore is very good. East drift at 56' has good ore just above where 5' test hole was drilled. East drift at 60' has a very high grade veinlet of ore, lean in south wall. West drift at 82', two feet tale and 3' vein in face, no cinnabar showing. On S. wall of drift, there is good ore which probably would assay $1\frac{1}{2}\%$ at least. East drift at 78', vein matter in bottom of drift. East drift at 76', tale and hard rock 4' wide, then 3' of good ore, possibly not less than $1\frac{1}{2}\%$. Recommend raise here, also cross cut to south wall. West drift at 92' some ore showing, possibly $\frac{1}{2}\%$. Indications of better ore in S. wall of tunnel. East drift across face at 86' shows ore in small quantity. West drift across face at 101' shows small specks of cinnabar."

RECENT ENGINEERING REPORTS: Several mining engineers and geologists have visited the property within the last 8 years and have written reports. Significant excerpts from these reports are included in order to summarize the opinions of others regarding the merits of this property.

J. M. Price, M. E. of San Francisco, California, reports:

"The vein can be traced throughout the property 4500 ft. by the occasional outcroppings of the ore."
"The grade and tonnage of ore that has been developed with the present footage of work is very satisfactory, and there is every assurance that a large tonnage of ore can be made available with no great expenditure. The formation of the vein and ore is such that a very low cost mining operation can be assured and the ore can be placed at the reduction plant at a very low figure." "----and it is quite apparent that the Buena Vista property has exceptional merit. By a systematic campaign of development at the present workings and on the favorable outcrops of the vein, there will be extensive ore bodies made available of economic grade, and by judicious management, a large and profitable operation is assured."

J. Cleveland Haas, Oregon Reg. Engineer, 1489, reports:

"While I was at the property about 250 lbs. of ore was shot down in a little raise from the intermediate level, and treated in the furnace on the ground. This yielded 8½ lbs. of mercury, equal to 3/4% of the ore treated."

"There are many evidences about the property that warrant my belief that it can be developed into a mercury mine that will yield a large tonnage of profitable ore."

F. E. Hobson, Oregon Reg. Eng. 1472, reports:

"The new claims located by the survey cover much more ground in area and volume than did the original seven claims and much more than double the ore probabilities for the reason that they cover contiguous ground to the original claims at a higher elevation above the present workings and that the surface showings in many places on the new claims are of greater areas and of better formation for ore bodies than are shown on the original group."

USGS Bulletin #350 (1934), Page 45, by F. C. Wells and A. C. Waters report favorably on the mine:

"At present, the stoping width averages about 5 ft. The reported results obtained from retorting the ore in 1929 and 1930, together with the amounts of cinnabar that are visible, indicate that parts of the lode as much as 5 ft. wide may average from 1 to 2% of quicksilver. There is no indication that the end of the ore has been reached, and mining at a greater depth as well as to the west along the fault should develop more ore."

SUGGESTED RECOMMENDATIONS AND CONCLUSIONS: It is quite evident that this property has sufficient merit to warrant an intensive development program of suitable magnitude which will properly take advantage of this natural resource. The development work to date has barely touched the potential possibilities of the property. Due to the unusual length of the strike with its favorable ore outcrops, the large areas of highly altered rock, the presence of secondary outcrops parallel to the main vein and cinnabar pannings upstream from the main vein the writer suggests the intelligent use of a prospect drill to aid in the search for concentrated ore deposits. It is also important to determine the nature of the intrusive bodies and to determine whether or not ore trapping sills are present. This type of prospecting should be effective and economical because the rocks have been thoroughly softened by the hydrothermal action which originally deposited the ore. The Cascade basalt flows, edging near

the vein, should be carefully investigated to determine whether or not a cap rock was formed which favored the concentration of ore bodies. Deep drilling should also be carried on in the lower level to determine how ore value continues with depth. If a good grade ore is found, a winze could be sunk with occasional drifts at various levels to prove whether a lower adit should be run from a slight elevation above Deadman Creek Level. If ore findings warranted further depth, a 500 ft. winze could be sunk below the Creek level with the corresponding development of enormous ore reserves due to the high ore "backs" existing along the strike. Figure 3 illustrates the great depth possible with such a program. It also shows the relative positions of the proposed 2 winzes and low level adit. While machine prospecting is in progress, the present lower East and West drifts along with the East and West raises can be worked as well as the main cross cut. From all geologic evidence it is reasonable to assume that conditions were favorable for the deposition of cinnabar ore and that good ore bodies can be uncovered by drifting East and West along the strike deep under the high hills and continuing the cross cut into a possible secondary vein system. The geologic and topographic characteristics of the Buena Vista property are exceptional from the standpoint of large potential ore reserves and consequent large scale mining operation.

ROAD: See Figure 1. The last 8 miles of mountainous road is narrow, steep, winding and poorly surfaced making transportation difficult in summer and almost impossible in winter. This road passes over high peaks through heavy timber which grows on a thick mantle of top soil rich in organic matter making road maintenance difficult and expensive. From Tiller at 1000 ft. altitude, the road climbs to 3200 feet and drops to the mine which is approximately 1800 ft. making an unnecessary climb of 1400 ft. each way. It is fortunate that a good grade can be surveyed down Deadman Creek which would require a climb of only 800 ft. in a total distance of 5½ miles. In order to facilitate more efficient transportation and haulage of supplies, it is suggested that a good road be built in the near future up Deadman Creek. In all fairness to the resident employees at the mine such a road is necessary in case of accident and sickness emergencies. On most of the distance a bulldozer can be used which can later be used on maintenance work. It is possible that some financial assistance in road building may be obtained from the U. S. Forest Service and the Government on a mine to market road.

PLANT: The plant consists of a complete forty ton rotary furnace fired by a RAY heavy fuel oil burner. A conveyor removes the roast ore from a large brick chamber under the lower end of the furnace. A blower located at the head end of the furnace draws the mercury laden gases through an end box and flows through a dust cyclone, dust

settling tank, water cooled cast iron condensers, wooden collecting box and up the stacks. Close temperature values are maintained in the cyclone and entrance to the condenser. Also oxygen determinations are made to insure optimum chemical reaction conditions in the furnace atmosphere. The ore is fed from the mine by gravity through the furnace down to the waste ore box making the handling of large tonnage economical. Test runs on the plant show very high thermal and mercury efficiencies when running it full capacity. Electricity is generated by Diesel power on the premise and an adequate supply of condenser water as well as camp water is available.

E. W. Neubauer
Engineer

"The Buena Vista Mine consists of eight claims in sec. 34, T. 29 S., R. 2 W. The discovery claim was staked by W. S. Webb in 1918. At present the property is owned by H. E. Rogers, Guy Crodon, and H. A. Jensen. A few flasks of quicksilver have been produced. The mine contains about 850 feet of workings, which have opened the vein for a maximum distance of 220 feet along the strike and for a vertical distance of 89 feet. (~~See fig. 3.~~)

"On the main level porphyritic andesite occurs as a narrow strip about 17 feet wide, bounded on the south by volcanic breccia and on the north by a fault that brings it into juxtaposition with conglomerate. The porphyritic andesite here appears to be a fault block dropped into its present position. Volcanic breccia is also present in the sublevel, but only andesite is exposed on the top level. The fault, which has gouge about 1 foot thick, is normal and pre-mineral, but some postmineral movement has taken place.

"Ore occurs in a shear zone in the porphyritic andesite, which strikes N. 81° E. and is either vertical or dips at high angles toward the south. The ore occupies many closely spaced veinlets that are roughly parallel, though converging and branching in places, and also isolated short-gash veinlets range in width from a quarter of an inch, the usual width, to 6 inches and contain cinnabar, calcite, marcasite, and a little pyrite. Some radial fibrous chalcedony has also been seen. Some veinlets are composed

BUENA VISTA MINE (cont)

~~Gold Hill District~~

entirely of one mineral, either cinnabar, calcite, or marcasite, but most of them contain two or more minerals and commonly show banding and crustification. Some of the larger veinlets consist of small angular fragments of andesite cemented by cinnabar, calcite, and a little marcasite. (~~See pl. 19, A.~~) Scattered specks of cinnabar occur in the wall rock. The tenor of the ore diminishes gradually from the vein into the wall rock, and therefore the boundaries of the ore body are indefinite and must be determined by assay. At present the stoping width averages about 5 feet. The reported results obtained from retorting the ore in 1929 and 1930, together with the amounts of cinnabar that are visible, indicate that parts of the lode as much as 5 feet wide may average from 1 to 2 percent of quicksilver. There is no indication that the end of the ore has been reached, and mining at greater depth as well as to the west along the fault should develop more ore."

Gold Hill
~~X~~

Ref: *Wells and Waters 34:43 (quartz)*

Buena Vista mine
Unqua Mining Co.,
Geo Atkinson receiver.
Chester E McCarty Att.
14 claims.

Frank Hobson Eng.

Sec 26, 27 33 & 34
T 29 S R 2 W.

C. L. Hartley watchman

5000 10.

7.46

62

T 7.60

James R. Prospect (Hg)

Sept. 10, 1940

Wrote to R. A. Shircliff on Sept. 6th that I would call Sept. 10. Arrived at trail to his place at 11¹⁵ - changed clothes + hiked 1/2 mile to his cabin. No one home. "Halled" till I was hoarse + got nothing but an echo. returned to car at 2¹⁵, left Shircliff a note + left the place.

Log. from Canyonville as follows.

| Station | anemoid | anemoid corrected | Distance | Distance corrected |
|--|---------|-------------------|------------|--------------------|
| sign says 1 mi. to Grand S. 1 1/2 " to Shyges Mine. | | | | |
| Trail 1/2 mi. S.E. from road to sh. | 2680 | 2520 | | |
| Turn in to Shircliffs | 2890 | 2730 | 16.7 | 7.4 |
| start downhill | 3360 | 3200 | 15.8 | 6.4 |
| Cabin, east of road | | | 15.54 | |
| Whitcomb Way + Rardean Way 9 S.E. 1/4, 3162 at 1 P.M. | 3320 | 3160 | 15.5 | 6.05 |
| at 14.9 cross section line, 190' from W. cor of sec 9+16, T. 30 S., R. 2 W. | | | 14.9 | 5.4 |
| Whitcomb Trail at Marshall place | 3300 | 3140 | 14.8 | 5.3 |
| | 3200 | 3040 | 13.6 | 3.9 |
| | 3050 | 2890 | 13.1 | 3.4 |
| Deedman Road above Piller | 1290 | 1130 | 10.1 | 24.6 |
| Canyonville at 10 ³⁰ A.M. | 940 | 767 | 22 28.1 | |





Ampara mine.
So face 200' south
of main cross cut
3.5#

No drift face 250'
No off Cuts .5#

No drift shale 200'
north of crosscut .5#

same 700' .6#

~~cross cut to ft~~
Cross cut from foot wall
ten east .5#
10 to center (20') .6#

Center of Ven to 10' of hang
wall .6#
10' to hanging wall
.4#

RECORD IDENTIFICATION

RECORD NO..... M055876
RECORD TYPE..... XIR
COUNTRY/ORGANIZATION. USGS
INFORMATION SOURCE... BAILEY, E. H.
MAP CODE NO. OF REC..

REPORTER

NAME..... PETERSON, JOCELYN A.
DATE..... 76 08
UPDATED..... 81 03
BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... BUENA VISTA
SYNONYM NAME..... UMPQUA

MINING DISTRICT/AREA/SUBDIST. TILLER

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... DOUGLAS
DRAINAGE AREA..... 17100302 PACIFIC NORTHWEST
PHYSIOGRAPHIC PRDV..... 13 COAST RANGE
LAND CLASSIFICATION..... 41

QUAD SCALE QUAD NO OR NAME
1: 62500 RED BUTTE

LATITUDE LONGITUDE
43-01-03N 122-55-55W

UTM NORTHING UTM EASTING UTM ZONE NO
4762550.0 505550.0 +10

TWP..... 029S
RANGE..... 002W
SECTION.. 34
MERIDIAN. WILLAMETTE

LOCATION COMMENTS: N CENTRAL PART SEC 34

ORE MATERIALS (MINERALS, ROCKS, ETC.):
CINNABAR

EXPLORATION AND DEVELOPMENT

STATUS OF EXPLOR. OR DEV. 6
PROPERTY IS INACTIVE
YEAR OF DISCOVERY..... 1918
BY WHOM..... W. S. WEBB
PRESENT/LAST OWNER..... STEVE COOPER AND BERNARD YOUNG, 1960

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

MINERALIZED FAULT ZONE
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL
STRIKE OF OREBODY..... N 65 E
DIP OF OREBODY..... 80 N

DESCRIPTION OF WORKINGS

DEPTH OF WORKINGS BELOW SURFACE. 65 FT
LENGTH OF WORKINGS..... 510 FT

COMMENTS (DESCRIP. OF WORKINGS):
FLOODED AND CAVED

PRODUCTION

YES
SMALL PRODUCTION

CUMULATIVE PRODUCTION (ORE, COMMOD., CONC., OVERBUR.)

| ITEM | ACC | AMOUNT | THOUS. UNITS | YEAR | GRADE, REMARKS |
|-------|-----|----------|--------------|---------|----------------|
| 15 HG | EST | 0000.009 | FL | TO 1963 | 1 LB/TON |

PRODUCTION YEARS..... 1928 - 1930, 1934, 1943

SOURCE OF INFORMATION (PRODUCTION).. BROOKS

COMMENTS (RESERVES).. NO VISIBLE RESERVES

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... EQ
HOST ROCK TYPES..... ANDESITE FLOWS AND TUFF BRECCIA

AGE OF MINERALIZATION..... UPPER TER

PERTINENT MINERALOGY..... CALCITE, CHALCEDONY , CLAY MINERALS, PYRITE, LIMONITE

IMPORTANT DRE CONTROL/LOCUS.. FAULT ZONE TRENDING N65-70E

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

1) NAME: COLESTIN-FISHER

AGE: EO

SIGNIFICANT ALTERATION:

HOST ROCKS ARE PARTLY ALTERED TO CLAY AND CALCITE AND IMPREGNATED WITH CALCITE AND CHALCEDONY VEINLETS

GEOLOGICAL PROCESSES OF CONCENTRATION OR ENRICHMENT:

HYDROTHERMAL SOLUTIONS

COMMENTS (GEOLOGY AND MINERALOGY):

DRE ZONE IS IN VOLCANIC ROCKS ADJACENT TO FAULT CONTACT WITH EARLIER TERT SEDIMENTARY ROCKS