

Monumental

Portland Reduction & Mining Co

Gold

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

4/46

T8S	R36E	Sec. 19
T	R	S

..... Grant COUNTY

..... Granite AREA

..... 6000 ELEVATION

..... ROAD OR HIGHWAY

..... about 20 mi. Sumpter .. DISTANCE TO SHIPPING POINT

PUBLISHED REFERENCES

Oregon Metal Mines Handbook 14B:56
 Lindgren 01:685
 Swartley 14:139
 Pardee & Hewett 14:108
 Parks & Swartley 16:154
 Hewett 31,10,16,23,35,36
 Lorain 38:18

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) *J.B. Kiasell*

Address *Sumpter, Ore.*

OPERATOR

Name of claims	Area	Pat.	Unpat.
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6 lode claims			x
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Name of claims	Area	Pat.	Unpat.
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EQUIPMENT ON PROPERTY

REPORTS	Portland Reduction & Mining Co. Mine Monumental -- by Ira L. Hoffman, Dep. U.S. Min Surveyor	6/6/1902		X
	Report on Portland Reduction & Mining Co's Mine (Monumental)	J.I. Allen --- Early 1900		X
SHIPMENT AND ASSAY RECORDS				
MAPS	Claims Ira Hoffman 1902			X
	Section & Geology			X
	Plan & Geology			X
	See also Granite Creek map			X

(Maidens mine)

MINERAL (gold)

Granite Dist

Owners: W. W. Blackwell and J. B. Kissell, Dumpter, Oregon

History:

~~xxxx~~ Mine was located in 1870 and has been operated intermittently until 1928.

Area: 6 unpatented lode claims.

Miscellaneous: Water is ample; power can be purchased from the Eastern Oregon Light & Power Company nearby; timber on the claims.

Equipment: Equipped with a 10-stamp mill, capacity 50 tons per day, shop, ore cars, compressor, air pipe, and other mining tools, and a 150 hp motor.

GRANITE

BALD Mt. -

ELKHORN R.

~~GRANODIORITE~~

VEINS IN GRANODIORITE

The Cougar, Independence, Magnolia, Buffalo-Monitor, Blue Ribbon and La Belleview, and various others not described, are in argillite on the general western border of the intrusion. Another series of veins in argillite are found upon the southern and eastern border, while upon the surface of the granodiorite itself, where it has been stripped of its cover of older rocks, is a large number of veins having the same general strike to the northeast as all the veins in the argillite.

Most of these veins are in Cable Cove mining district on the divide which separates the north fork of the John Day from that of Silver creek, one of the sources of Burnt river.

In Cable Cove district proper, there are an almost innumerable number of veins and doubtless upon much of the exposed surface of the granodiorite elsewhere, especially away from the central mass and nearer its border, are also many veins. West of Cable Cove, on the northwestern ^{flank} of Bald mountain, is the Monumental mine, and in the northern part of Cracker creek district are other veins in granodiorite. Far to the north, near the head waters of the Grand Ronde river, on the northern part of this great intrusion, is Camp Carson, where quartz veins in granodiorite and large placer deposits are found.

The Monumental mine, located on the northwestern slope of Bald mountain, is one of the oldest producing quartz locations in eastern Oregon, it having shipped some 14 tons of ore to San Francisco in 1874. Very little work has been done upon the property in the last years.

The country rock is granodiorite and the principal vein strikes N.-NE. It consists of shattered granodiorite in various stages of alteration. Light-colored gouge and lenses of quartz containing pyrite, arsenopyrite, zinc blende, tetrahedrite and galena, together with some silver minerals in the richer ore, constitute the vein. The shattering and alteration of the granodiorite may be as much as 4 or 5 feet wide, but the lenses of ore have a maximum width of only 18 inches and stope lengths of less than 100 feet.

The production to date is reported to be approximately \$100,000. Lindgren states that the gold values increase in depth.

Monumental.

(THE KISSELL MINE)

Granite Dist.

~~GRANODIORITE~~ Mine is

DISTRICT: Is 24 miles from shipping point, Sumpter, on the Sumpter Valley Railway and consists of a group of 5 unpatented lode claims, recorded in Canyon City, Grant County, Oregon. Located in a high mountain area; country rock is granite and argillite, with hanging walls of slate, and granite foot; vein strata bearing northeast and southwest; width 2-1/2 feet, length 3000 feet. Mineral is gold, assays at \$30. Water is ample; power can be purchased from the Eastern Oregon Light & Power Company; timber on claims. Mine is idle. No surface equipment on the property. Developed by 400 feet of tunnels. Owners are W. W. Blackwell, J. B. Kissell, and others, Sumpter, Oregon. (Prescott----6/1/37).

Development: Developed by 6000 feet of tunnels, incline shaft 200 feet, five raises, 250 feet.

Informant: Prescott (6/1/37)

According to Hewett (31:16,23) " there are two tunnels and shaft, totaling about 4000 feet; attaining 700 feet below outcrop. There are several veins in quartz diorite. Strike N. to N. 20° E., dip 65°. There has been no milling recorded. Ratio of gold to silver is 1:20 or more. Production has been estimated at \$100,000.

"The workings of the monumental mine have encountered not less than 12 veins, but most of the work has been done on 4. All of these are rather simple, single strands of quartz, largely from 2 to 15 inches wide, and although other sulphides were common in the upper workings, arsenopyrite is the most abundant on the lower levels, about 700 feet below the outcrop. An examination of polished and thin sections shows that an early simple quartz vein was finely crushed and recemented by pyrite, arsenopyrite, and quartz. Later, calcite veins were deposited, in part by replacing quartz. "

Parks and Swartley (16:154) say: " This mine is located on the northwestern slope of Bald Mountain in sec. 19, T. 8 S., R. 36 E. about 9 miles by wagon road from Granite. It is one of the oldest producing quartz locations in eastern Oregon having shipped some 14 tons of ore to San Francisco in 1874. Very little work has been done upon the property in the last 20 years.

"The outcrop has not been extensively prospected. The developments are 2 crosscut tunnels 215 and 1400 feet long respectively, attaining a maximum depth of about 600 feet below the outcrop. The longer tunnel intersects 6 well-defined parallel veins on which more or less work has been done, and ore has been stoped from three, though the inner or southeastern appears to have been the more important.

"The country rock is granodiorite and the principal vein strikes N.-NE. The latter consists of shattered granodiorite in various stages of alteration.

" Light-colored gouge and lenses of quartz containing pyrite, arsenopyrite,

zone blende, tetrahedrite, and galena, together with some silver minerals in the richer ore, constitute the vein. The shattering and alteration of the granodiorite may be as much as 4 or 5 feet wide, but the lenses of ore have a maximum width of only 18 inches and stope lengths of less than 100 feet.

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- References: Lindgren, 01:685 Parks & Swartley, 16:154 (quoted)
- Swartley, 14:139 Hewett, 31:10,16,23,35,36 (quoted)
- Pardee & Hewett, 14:108 Lorain, 38:18

NEW YORK (gold)

Granite District

Owners: ~~Charles Maxwell, Bellingham, Washington; Albert Anderson and F. Hancock, Granite, the latter two are the operators.~~

Now leased To

Location: NE corner of sec. 27, T. 8 S., R. 35 E.; just south of the old Independence mill on the east side of the creek.

History: First discovered by Johnson 40 years ago; owned by Graham until 1932. Present owners are F. J. Barker and Wisdom of New York. Leased in 1936 and 105 tons of \$27 ore were shipped. New Lease with Hancock and Maxwell last summer. All development work has been done since July 12, 1937.

Equipment: Several hundred feet of track and cars. The mill flow sheet is as follows: 1 ^{Replaced} grinder; 5 x 7" crusher; 6 x 8' cyanide supply tank; 2 1/2 hp motor for 2 x 16' Dorr classifier; 3 x 3' 15-ton ^{capacity} drum ball mill with a 10hp motor; 8 x 8' Dorr agitator; 8 x 16' thickener; 3 x 4' Oliver filter; 4 x 4' clarifier and settler; 4 x 4' gold tank; 2 x 10' 7-cell precipitator; 8 x 12' sump tank; air, vacuum, and solution pumps; and ~~an~~ 3 x 3' furnace smelter. The process is the counter-current decantation cyanide method.

Geology: The country rock is a typical gray argillite. The ore zone runs nearly due north, dipping an average of 80° to 85° to the east; in places the strike ranges from N. 35° W. to N. 4° E. The ore varies in width from 3 to 7' and consists of a soft red muck containing some fragments of altered

Notes: Head 2 tons
Granite
letter 11/1/40

Plantmen: in sec 1

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

ASSAY REPORT

Office Number 54-7-8

Grants Pass, Oregon
Baker, Oregon

July 8, 1938

Sample submitted by Allen (New York mine)

Sample description _____

The assay results given below are made without charge as provided by Chapter 176, Section 10, Oregon Laws 1937, the sender having complied with the provisions thereof.

NOTICE: The assay results given below are from a sample furnished by the above named person. This department had no part in the taking of the sample and assumes no responsibility, other than the accuracy of the assay of the material as furnished it by the sender.

Sample Number	GOLD		SILVER		Percent	Value	Percent	Value	Total Value
	Ounces per ton	Value	Ounces per ton	Value					
	.07	\$2.45	Nil	---					\$2.45

Market Quotations:

State Assay Laboratory

Gold \$ per oz.
Silver \$ per oz.
 \$ per lb.
 \$ per lb.

Assayer

1391 East 21st St.

Eugene, Ore.
Oct. 26, 1938.

Mr Daniel J. Fry,

Salem, Ore.

Dear Mr Fry:

I have examined the New York Mine near Granite, Ore., as you requested and will write a summary of my findings. The samples taken have not been assayed yet, but I will assume that Mr Hancock's figures on the value of the probable ore are correct. He has mint returns to show sale of over \$5000.00 worth of bullion, and, if his tonnage estimates are correct, the ore milled assayed \$11.03, with an extraction of 83%. Tonnages are usually estimated too high when no accurate check is made. This means that the recovered value per ton might be a little higher than calculated by Mr Hancock.

The mine and mill are located three miles north of Granite on a good road. There is plenty of mill water in Granite Creek which runs within a few feet of the mill. There is room for tailings. I can see no unfavorable economic conditions, except that heavy snow may make it necessary to build a snow shed over the long trestle from the mine to the mill. Eastern Oregon snow at high altitudes is usually quite dry and it may blow off the track as the trestle is several feet from the ground most of the way.

From my observations while on the property, and from conversations with the men while there, I think Mr Hancock and Mr Albert Anderson, one of his partners; are quite capable and experienced. Mr Anderson looks after the mine while Mr Hancock supervises the mill and does the assaying. With very little money they have built a mill and opened up the mine in a very commendable manner. Mr Hancock has been able to get good equipment without

W. R. Moore

much money by using his credit and by making very good buys of second hand machinery.

All the present workings of the mine are on the New York vein although a parallel vein a little over 300 feet east looks good and will probably produce considerable ore. The existence of ore has been proved along the course of the vein for 1000 feet. Three levels have been driven on the vein 170, 180 and 140 feet. The lower and shortest drift, if extended, will have a maximum back of 176 feet, but the backs will be over 150 feet most of the way. The ore is very soft and contains very little quartz and no sulphides in the upper levels. The country rock is argillite. The vein is nearly perpendicular with good walls. All these factors make low mining costs. The average width of twenty samples is 39.3 inches. Widths of some surface-cut samples were not used in making this average as the cuts were shallow and the drag of the surface rock on the hillside has tipped the vein over and given an apparent width much greater than the real width. There is also some dilution in these cuts so the samples taken from them will assay lower than they should.

The face of the upper level is in a pinch, the face of the intermediate level is low grade and narrow, and the face of the lower level has very little value and shows considerable pyrite. A study of the map will show that the faces of these levels are all at different points along the vein. Good ore shows in the floor of the intermediate, and an extension of the lower level will likely come into ore again, but it may be base for a few feet above the drift. The intermediate level is only 30½ feet above the lower. The pinch at the face of the upper level shows on the surface, but the surface also shows that the vein widens again in a few feet. Extension of the intermediate level will soon put it under some

very good ore in the bottom of the upper level.

The mill is of good design. More tanks are needed so more ore can be treated. Mr Hancock intends to install a Merrill press and use zinc dust, which will improve the recovery. The ball mill is only 3x3, which would be altogether too small if it were not that the ore is so soft. Mr Hancock's mill sheets show that the mill has been grinding about .3 of a ton per hour. He thinks that by feeding more it will handle up to .83 of a ton per hour, or twenty tons per day. I am of the opinion that he is over optimistic on this point. The ore is very easily ground, but I question if a 3x3 ball mill can grind twenty tons of any ore from $1\frac{1}{2}$ inch to minus 100 mesh in one day.

You ask me to ascertain how much a one-fourth interest was worth. ~~According to~~ Mr Hancock's figures it will take \$6000.00 to put the mine on a self-sustaining basis. Most of this will go for debts, the balance for mill improvements. There will still be some debts which will have to be paid from the first profits. It would not be wise for him to take any less money, and it may be that a little more will be needed. You should be prepared to back up your investment with another \$2000.00 if needed. Of course, if this emergency arose you could demand a greater interest. I do not think it will be necessary as the chief creditors seem very well satisfied.

I will now try to determine whether \$6000.00 for a one-fourth interest is a good investment. Until I get the assays from the samples taken I shall assume a head of \$11.00 and a recovery of \$10.00 per ton, using Mr Hancock's figures but assuming a better extraction with the proposed mill changes made.

Mr Hancock gave me the following estimated costs on a twenty ton per day basis.

Mine	total	per ton
Labor - 4 men @ \$4.00	\$18.00	\$.90
Supplies- powder, fuse, caps	5.00	.25
- timber 60' @ 3¢	1.80	.09
Power	4.00	.20
Drill bits, etc.	2.28	.11
Superintendence, assaying, overhead	5.00	.25
Development	20.00	1.00
	<u>\$56.13</u>	<u>\$.80</u>
Mill		
Labor - 3 operators @ \$4.00, 1 gen help \$4.00	\$17.00	\$.88
Power	6.00	.30
Supplies - 30 lbs cyanide @ 16¢	4.80	.24
- 200 lbs lime @ 2¢	4.00	.20
- 20 lbs Balls @ 2½¢	.50	.02
- 30 lbs Zinc @ 20¢	6.00	.30
Misc. supplies, oil, etc.	2.00	.10
Heating wood	2.00	.10
Sup't, assaying, etc.	6.00	.30
	<u>\$48.80</u>	<u>\$.44</u>
	<u>\$104.95</u>	<u>\$5.24</u>

I don't think Mr Hancock has allowed enough for assay supplies and other unexpected expenses in his mine cost, but I feel he has his development cost too high as most of it will be in ore. He has allowed \$4.00 per day for mine power, but the only mine power used will be for development as most stoping can be done with an auger and pick.

The mill costs are OK if twenty tons can be milled. If fifteen tons are milled, which figure I shall use for safety, the mine costs per ton will not be changed except for Superintendence, and the mill costs will not be changed except for labor, power, heating and Superintendence. Fifteen tons per day basis will increase the total costs about 61 cents per ton.

We now have a total cost of \$5.85 per ton with a recovered value of \$10.00 per ton, or \$4.15 profit. Fifteen tons per day and a 30 day month shows a monthly profit of \$1867.50. It will take a few months for the profit to pay off the remaining debts as there will be adjustments to make, and it will take at least two weeks to make the mill changes. One-fourth of \$1867.50 is \$466.875 per month profit to you or \$5502.50 per year, or almost 100% on your investment.

However, amortization is an important item in mine investments when the length of life of the mine is not assured.

Mr Hancock figures 30,000 tons of probable ore, using the following figures: length 1000 feet, width 3 feet, depth 150 feet, and 15 cu ft per ton. He has made no allowance for the barren areas he has found to exist and which do exist in nearly all mines. I feel 150 feet of depth is too much to assume, as most of the mines in the district have complex ore and he has found sulfide ore in the lower tunnel already.

I shall use 1000 feet in length, 3 feet width, 100 feet depth, 14 cu ft per ton, and then discount 25% for barren areas. $(1000 \times 3 \times 100) \div 14 \text{ less } 25\% = 16,071 \text{ tons}$, which would run the mill 1071 days or almost 3 years.

It must be understood that even this tonnage is not positive but indications are favorable. The partnership also have an option on 3 adjoining claims on this and a parallel vein, so there is a chance to get a much greater tonnage. Mr Hancock's assays from the shaft 634 feet ahead of the portal of the lower tunnel indicate a high grade ore-shoot which, if it has any extent, will increase the profit per ton for a time.

If the assay results of my samples still indicate a \$11.00, or better, average ore I suggest that you make a proposition to the partnership as follows: You to put up the \$6000.00 and take all the profits until your investment is returned. Thereafter you to have one-fourth of all profits. If they accept this offer the ore is almost certain to last until you get your money back. If the mine proves to be as good as they anticipate your investment will be returned soon and they will make a handsome profit.

Respectfully submitted,

Kenneth O. Watkins

MAGNOLIA MINE

BALD MT -
ELKHORN R
GRANITE
DISTRICT

The Magnolia.—The Magnolia, also in argillite, has the same strike and dip as the Independence, and is located on the eastern side of Granite creek, about five miles away from the town of Granite.

There has been but little development since 1900, which has been done in extending the drift on the vein in the lower tunnel. The vein exhibits some small faults. Several shoots of short stope length are shown in the mine workings. The vein material is altered and silicified argillite with pyrite and arsenopyrite in the argillite fragments. The width of the ore does not often exceed 5 feet, and is ordinarily no more than 3 to 4 feet. Near the surface the vein shows a great quantity of chalcedonic quartz.

There is a mill upon this property containing plates and concentrators, but in the quantity of ore milled only a small percentage of the assay value was saved. The ore is not high grade; the average value is under \$10.

Drifting in the fall of 1914 is said to have proven the existence of another shoot of ore of good width and fair value.

Visited 6/29/30
Fall.

WETHERELL PLACERS

BALD MT -
ELKHORN
REGION D.

THE GRANITE DISTRICT

The Granite district comprises the placer mines of Granite and Bull Run creeks to the north and east of Granite, and those on the north fork of the John Day river.

PLACER MINES

The several branches of Granite creek have been extensively placer mined, and if the depth to bedrock is sufficient there are considerable areas from Lawton to upper Bull Run creek which possibly might be successfully dredged.

During the summer of 1914, a specially designed light-weight dipper dredge was constructed on what is known as the Wetherell placers, in the upper part of Bull Run creek, but it so far has failed to handle much yardage. The machine is not properly designed for the work and is entirely too light for such heavy duty as gold dredging demands.

The north fork of John Day has several placer deposits of which the Trail creek, Klopp and Crane creek placers are examples. One of these deposits located on Crane creek had a dredge installed on it by Albert Burch and associates, but this dredge has been idle for some years. These placer deposits were not visited.