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Hurt. - Arnold  
Cell.REPORT  
ONB & B NEVADA QUICKSILVER MINING COMPANY'S PROPERTY  
NYE COUNTY, NEVADA.

2584

ITEM 30

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This property consists of eleven (11) full sized mining claims of twenty (20) acres each, located in the IONE MINING DISTRICT, Nye County, Nevada (about four (4) miles south of Ione and about ninety (90) miles southeast of Fallon, Nevada, on the Nevada Central Railroad, and thirty (30) miles south of the Lincoln Highway, over very good dirt roads.

DEVELOPMENT: Consists of a large gloryhole or open quarry on the H.G. and the H.G. #1 claims) from which some fifty (50) thousand tons of ore has been taken; about thirty-five (35) thousand tons run through the furnace, about fifteen (15) thousand tons broken down and ready to run.

This gloryhole is connected by two tunnels which are tracked and on grade with the ore bins at the mill. There are also several shafts from ten (10) to sixty (60) feet deep on the H.G. #4 and H.G. #5, all in good milling ore. There are also three (3) more tunnels above the floor of the gloryhole running a distance of one hundred (100) feet or more. There is also several small shafts and tunnels on the other claims all of which are in good ore.

IMPROVEMENTS: These consist of a fifty (50) ton Scott furnace, crushing plant, dryer plant, and a full set of condensers, power plant, consisting of one fifty (50) horsepower gas engine, electric generators and several motors, electric lighting plant for the entire camp. All machinery is run by electricity

There is also a battery of retorts and a fully equipped blacksmith shop. All of the equipment is in A-1 condition.

## CAMP

## EQUIPMENT:

Superintendent's dwelling, large mess hall and seven (7) good cabins for sleeping large enough to house from two (2) to four (4) beds, shower bath and an eight (8) car garage.

## WATER:

There are several springs of very fine water on this property, three (3) of them piped to the mill and living quarters, furnishing, plenty of water for all purposes.

## FUEL:

An abundance of wood is to be had near by on the mountain sides and can be contracted at the mine for \$8.00 per cord delivered.



CLIMATE:

The property is about seventy five hundred (7500) feet above sea level and lays in a cove in the mountains and is workable the year round. Good decomposed granite road direct to the mill and is open the year round for auto travel.

MINERALIZATION:

The formation consists of a massive ore body which seems to underlie the entire property and has but little overburden in many places, none at the gloryhole. The ore body is very consistent, and in the opinion of the writer there is upon the above mentioned claims H.G. and H.G. #1 more than a million tons of good milling ore that will average ten (10) to twenty (20) pounds of mercury to the ton, (leaving out the high grade lenses). The ore in all of the other shafts and tunnels seems to grade about the same as the gloryhole.

GENERAL GEOLOGY:

The ore occurs in a soft rhyolite with small fissures of Diorite and Kaolin, all impregnated with sulphides of mercury through the whole mass. The geological horizon at this point shows the property to be on the same big line and Rhyolite belt running for some ninety (90) miles through the country in a northwesterly-southeasterly direction, and upon which there are several large deposits of Mercury.

Paralleling this property on the easterly side some five hundred (500) feet appears an upthrust of altered granite, dipping at about 40% to the east seeming to form a capping for the Rhyolite ore bodies. This capping is about three hundred (300) feet above the exposed Rhyolite and apparently is the hanging wall.

On the westerly side of the ore horizon there is a quartzite dyke apparently the food wall which dips at about 45%, the entire eleven (11) claims surveyed and taken up to cover the major portion of the rich ore deposits which will average about twelve hundred (1200) feet wide by five thousand (5000) feet in length, the dept of which is unknown, but has been developed at the gloryhole to about one hundred and sixty (160) feet, the ore getting richer at depth.

The gloryhole is connected with the mill by a wide gauge heavy track with good sized ore cars. Hauling distance, quarry to mill, about nine hundred (900) feet. There are thirty thousand (30,000) tons of ore gone through the mill on the tailings dump which will average around five (5) pounds of Mercury to the ton, crushed to two and a half (2½) inches, which was too coarse to get good results or extraction. Over five thousand (5000) flasks of mercury was recovered from this tonnage, but owing to the coarse grinding and over-crowding of the mill with 60 to 70 tons per day caused the loss. Their re-



covery was only about seventy (70) percent of the mercury in the ore. Therefore the loss of five (5) pounds to the ton left in the dump.

About four hundred (400) feet southeast of the mill there is a high grade dump of about six thousand (6000) tons. This was stacked at this point to run through a Gould or rotary furnace because it is too fine for the Scott furnace. This dump should run better than seventeen (17) pounds to the ton.

#### FUEL

CONSUMPTION: Wood, pine and mountain magogany. It takes about three cords per day to run the furnace and dryers; cost delivered at the mill, eight (\$8.00) dollars per cord.

#### COST OF MINING

ANY MILLING: Mining and hauling to mill	\$ .75 per ton
Milling and furnace treatment	4.00 "
Overhead (camp)	.25 "
Overhead (office)	.50 "
Insurance (buildings)	.25 "
Insurance (compensation)	.25 "
Depreciation and repairs	.50 "
Taxes and roads	.25 "
(Estimated) Total	<u>\$6.75 "</u>

#### RESERVE:

Ore on mill dump thirty thousand (30,000) tons, five (5) pounds per ton at the present price of mercury of \$120.00 per flask shows this dump to contain about \$225,000.00 in mercury.

Ore on dump not milled, six thousand (6000) tons at seventeen (17) pounds to the ton, contains about \$155,000.00 in mercury, (loss in mining these dumps not deducted), but should exceed ten (10% percent. Ore on dumps at gloryhole (estimated) about ten thousand (10,000) tons containing about eight (8) pounds of mercury to the ton. This ore is in large chunks mostly and easy to handle, value \$100,000.00.

I have taken over four hundred (400) samples all over the property which will average better than twenty (20) pounds of mercury per ton of ore.

Attached maps and photographs show the contours and equipment also development upon this big deposit which I consider the one best property in the country. It is my opinion that this property has hardly been scratched and that further development will disclose even richer ore than has so far been found.

Running the plant on ten (10) pound ore, fifty (50) tons per day would at present prices gross \$750.00



per day, charging off six seventy five (\$6.75)  
per ton leaves \$412.50 net per day on the fifty  
(50) tons through the furnace now on the property.

RECOMMENDATIONS: Owing to the fact that sulphide of mercury (cinnabar) seems to impregnate the whole mass (including overburden). I would think it advisable to core drill the property. This could be done at some future date however. It is an ideal formation to drill and would be the cheapest way to pre-determine the quality and quantity of the ore bodies.

However I would go right on quarrying the gloryhole and milling of the ore from this point. H.G.#4 is well worthy of consideration and exploration, as the ore at the sixty (60) foot shaft (which is in the center of the claim) has a very high grade showing, as has also the several open cuts on this claim.

The rhyolite seems to be altered at this point to a shattered opalite. Large samples taken in the sixty (60) foot shaft runs ten (10) per cent mercury per ton.

A twenty-five (25) ton should or rotary furnace should be installed to take care of the ore too fine for the big Scott furnace now on the property. This can be done at some future date however. There should be also installed a portable air compressor complete with jack hammers. This would cut the cost of breaking down the ore at the quarry.

Also a fifty (50) ton concentrating plant should be built below the furnace tailings dump to recover the sulphides of mercury that was not recovered in the big Scott furnace owing to the fact that the ore was crushed too coarse and the over crowding of the furnace. At the present price of quicksilver the dump should net \$150,000.00.

The present big Scott furnace, condenser, and grinding plant is ready to run, and should be fired at least twenty-five (25) days before starting to run ore through it. This furnace is already loaded with mercury, so production starts when the furnace is charged with ore.

The cost of putting this property on a paying basis should not exceed seven thousand five hundred (\$7500.00) dollars.

IN CONCLUSION I wish to state that with proper management this property should become a very big producer and show a handsome profit on the investment.



Following is an estimate of the value of the property with its improvements, ore reserved, ore mined and on dumps.

Scott furnace	\$ 100,000.00
Ore in sight 1,000,000 tons	10,000,000.00
Ore on mill dump	225,000.00
Ore on dumps not milled	155,000.00
Ore on dumps at quarry	100,000.00
Camp equipment	<u>6,000.00</u>

Estimated total \$10,586,000.00

These figures are all based on ground area not to exceed twenty (20) acres or one (1) claim, and there is no doubt several times these ore values on this property.

(Signed) Lewis I. Buck, Geologist  
744 Mountain View Ave.,  
Monrovia, California.

1929-1938