Copy without "notes" to Anderson. Nev. Hist. Soc. 5/82

(133)

3350 0023

BUCKSKIN QUICKSILVER MINE

NEVADA.

(Hg) ITEM 25

Memorandum of notes taken in field accompanied by L. W. Whitney on November 13, 1939.

LOCATION:

Located on crest of Buckskin Mountain - elevation 8600 ft., Santa Rosa Range in Humboldt National Forest Reservation, Paradise Quadrangle, Humboldt County, Nevada, - 80 miles from Winnemucca, 1½ miles from Buckskin National Mine. Town of McDermitt, on Oregon line, is about 30 miles distant, northwest.

PROPERTY AND TITLE:

1 - Eighteen (18) full claims and two fractions located by McCormack and two others and now held by possessory Right.

2 - Property is under option (since Oct. 1, 1939) to C. H. Hall, Engineer for U. S. Vanadium Corporation, who pays McCormack an advance royalty of $200.00 a month until August 1, 1940, when a mill is to be in operation; capacity commensurate with size and character of deposit.

DEPOSIT:

1 - Typical Opalite deposit lying above rhyolite. Similar to Bradley's deposit at Opalite Nevada (see Schutte Paper)

2 - One-third area of deposit has depth 50 - 100 ft; remainder appears to have depth 100 - 150 ft.

3 - Deposit slopes 10 - 12° to Northeast.

4 - Enrichment in shallower area is found under 5 ft. hard barren opalite bed (on flat beyond clifts there is 5 ft. of soil in

places) and enrichment extends to depth of 20 ft. The ore occurs in flat lying seams which seem to approximate the dip of the bedding plane of the opalite. Impregnation of the opalite extends in all directions from these enriched seams. There is evidence that the opalite has been crushed and recemented and that sometime after the crushing cinnabar enrichment took place. Indications are that there is a lean zone of 12-15 ft. and then another enriched zone, possibly 8-12 feet.

The deeper area has received little prospecting, but Morse (Hall's foreman) and McCormack state that sampling of boulders broken from northwest clifts (estimated 40,000 tons) indicate six pounds of quicksilver in the mass. There is a definite stratum in clift about 15 ft. thick which has appearance of ore similar to 4-6# ore seen in prospected area. On part of the flat in this area many boulders can be seen, which have strong showing of cinnabar. "Many ran 1% mercury".

There was no definite information about faults and dikes; however, I do not believe there will be fault problems of any consequence. Occasional small rhyolite dikes may be found intruding the opalite mass. Sulphur will not interfere with treatment.

DEVELOPMENT:

All of development work except one shaft has been done by McCormack and consists mostly of tunnels driven in on richer beds. There are five tunnels - one 200 ft. long, the others less than 50 ft. There is one small open cut and there are two shafts; one sunk by McCormack 58 ft. deep and one by Bradleys 45 ft. deep.

The attached sketch will give some idea of shape of the deposit and location of development work.

SAMPLING:

Bradley interest sampled the shallower area by channel cuts in face of clifts. A great many samples were taken, quartered and assayed on the property. Vance Udel was in charge. This was just after Mr. Dennis (Bradley engineer) passed away; 1930, I believe. Morse told me the average of there samples was 3 to 4 pounds. It is interesting to note that Bradleys estimated 6,000,000 tons of opalite in the deposit (not 6,000,000 tons of ore). Morse stated that Roy Hardy estimated there are 450,000 tons of 4 to 5 pound ore in the prospected area. This contrasts with Hall's 6 pound statement - letter October 15th.

Hall has confined his sampling to fresh exposures such as McCormack's tunnels, open cuts - the shafts and doing some channeling between portals. Hall estimates (according to Morse, that by his sampling he has 75,000 to 100,000 tons fairly well proven that will yield (not assay) 5.2 pounds of mercury per ton of ore. Morse said calcined product (furnace reject) panned about one pound of mercury a ton. Note:- furnace is cracked and strong odor of mercury vapor prevalent

TRANSPORTATION and FREIGHT:

Highway No. 8 (paved) - sometimes called the I.O.N. Highway (Idaho Oregon and Nevada) starts at Winnemucca and extends north passing thru McDermitt on the Oregon line. Sixty-three miles north from Winnemucca a Forest Service road extends east; sixteen miles distant it passes within one mile of the Buckskin Quicksilver Mine. The last mile is passable; probably $500. expended on this last mile of road would make it similar to the Forest Service Road.

Freight rates, according to McCormack, will be about $6.00 a ton Winnemucca to the mine and should not exceed $7.00 a ton. Probably on a guarantee tonnage contract (fuel haul) a more favorable rate could be obtained.

WATER SUPPLY:

Water can be obtained from Springs on the west slope of Buckskin Peak.

300 ft. below camp level and 2500 ft. south horizontally from camp there is a spring that will fill an inch and a half pipe - a flow of probably 35 to 40 gallons a minute.

600 ft. below camp level and 3500 ft. south horizontally is a spring that will supply twice the amount of water of the spring above. This information was given to me by McCormack.

MILL SITE:

The choice of mill site depends somewhat on the capacity of the mill selected. Personally I do not believe a mill of less than 100-tons per day capacity would be at all suitable.

The Bradley interest contemplated the installation of a 600 ton plant to be located 4,000 ft. down the southwest slope of the peak 1200 ft. below the opalite body, because of larger supply of water. The plan was to tunnel under the opalite from the southwest and receive the ore from a glory hole, pass it thru the tunnel and then deliver the ore to the mill below by aerial tram.

Because of snow drifts to the northeast care must be taken in the selection of a mill site on the northeast slope where the topography is most suitable. Considering the possibility of the installation of a plant to treat 100 tons per day, planned to be enlarged to

treat 200 tons per day, I believe a suitable site can be found on the east slope that will allow for the shortest move of the ore.

SEASONS:

Because of the altitude - 8,600 ft. - severe winter conditions generally obtain from December first to April first. It will be necessary to erect substantial storm proof buildings. McCormack stated that it rarely got colder than 10° below zero at camp, but that strong winds were frequent. In the valley below temperatures as low as 30° below zero are experienced. However, I believe that with proper equipment and management, the road out can be kept open. More information on this point should be obtained.

DISCUSSION:

Mr. Hall apparently contemplates, or has hopes, that a plant (100 ton capacity) will be installed this winter (it is winter now at Buckskin). I was told that he favored the installation of the 50-ton Gould units, and suggests that three 50-ton units be installed, so that two units could be kept in continuous operation regardless of shut-down to refine, etc.

I do not recommend that such a program be considered at all. Because of Mr. Hall's experience with quicksilver and his connection with the U. S. Vanadium Corporation, I am not moved to question data given me by Mr. Morse and others more or less quoting Mr. Hall, but strangers will necessarily have to satisfy themselves by some checking of data submitted, and before a decision can be reached, finances arranged and plans made I believe weather conditions will be too severe.

I favor a plan of prospecting and development work this

winter if any activity is to be considered and would suggest the extending of the 200 ft. tunnel, raising up thru the opalite at definite intervals and the driving of cross-cuts from the main drift. This need not be an extensive program but in any event I do believe some such work should be done before the erection of a 100-ton plant. I may modify this after further study of my observations and notes taken on Hall's work. Nevertheless, I do not believe it practical for a new group to consider the installation of a mill this fall, for even if all equipment were now available to be shipped, installation would be delayed because of necessity

To develop water

To excavate for mill site and set proper foundations.

To build substantial storm proof buildings

To improve the last mile of road

To provide fuel storage tanks

To organize operating staff and select crew; and

Most important, the mine has not been prepared for the extraction of ore during winter.

This brings up the matter of mining methods. Because of the severe winter conditions, two methods may be considered and probably a combination of the two is what will be adopted.

The deposit is such that open cut mining is the most practical and probably such a method would be used for eight, possibly nine months of the year. During this period ore probably could be stock piled near the mill so that the mill could be operated thrucut the year.

On the other hand it may be considered advisable to work

underground from December first to April first and extract ore from flat stopes located in areas of better than average enrichment.

N O T E S:

Mr. Thompson advised Mr. Whitney and me yesterday, when driving us from Winnemucca to Reno, that Mr. Henry Gould had visited Mr. Morse at the property twice during the week November 5 - November 11.

Mr. Morse (Mr. Hall's foreman) has worked in quicksilver properties since a boy fourteen years old - mostly in California. Would say he is about thirty-three years old. Mr. Hall evidently told him to be free with all information and assist all possible.

There were no maps or carefully prepared data available at the mine. Mr. Morse used a crude sketch showing openings and had retort results marked on it. This contrasted a bit with what I might expect of Mr. Hall.

Mr. Thompson, about same age as Morse, has leased mine dumps and mines, and I would say that he is a contact man or scout, - intelligent and probably good trader. Is a fast driver - 95 - 100 miles an hour and not always careful.

Mr. McCormack is son of superintendent of a ranch which is located not far from the mine and which is owned by Utah Construction Company. I would take McCormack to be about forty-two years old. He located the Buckskin Group in 1929. My impression of Mr. McCormack is that he may be stubborn and a bit difficult to negotiate with. I did not learn what royalty Mr. Hall agreed to pay Mr. McCormack. It is quite necessary to find out the royalty as soon as possible; it has a direct and important bearing on arriving at a decision.

This is not a report - this memoranda is confidential, is

subject to correction and is not to be released. It is assembled for the exclusive use of Messrs. St. John Whitney, E. W. Balcomb and L. W. Whitney.

W. C. Hammon

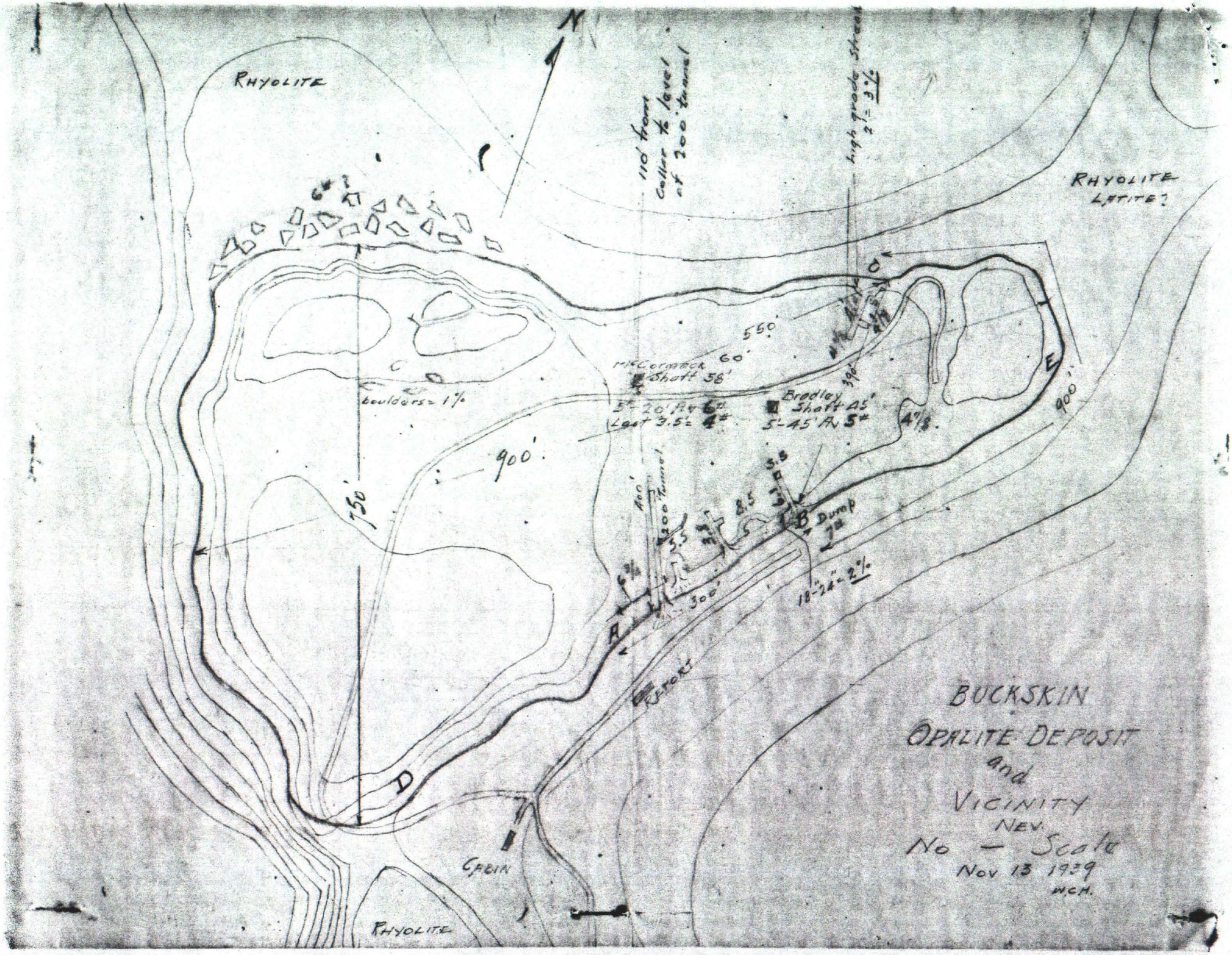
San Francisco, California,
November 15, 1939.

NEW YORK QUOTED PRICE FOR MERCURY

YEAR	PER FLASK	YEAR	PER FLASK
1916	$125.49	1928	$123.51
1917	106.30	1929	122.15
1918	123.47	1930	115.01
1919	92.15	1931	87.35
1920	81.12	1932	57.93
1921	45.46	1933	59.23
1922	58.95	1934	73.87
1923	66.50	1935	71.99
1924	69.76	1936	79.92
1925	83.13	1937	90.18
1926	91.90	1938	75.75
1927	118.16		

Average for 23 years 1916-1938 - $87.79 per flask.

Average for years when price was less than $90 per flask - $70.07 per flask.
(13 years or more than one-half period 1916-1938)



RHYOLITE
N
110' from Collar to level of 200' tunnel
high grade Streak 2' = 3%
RHYOLITE LATITE?
6#?
550'
McCormack Shaft 58'
60'
390'
Bradley Shaft 45'
5'-20' Av 6#
Last 3.5' = 4#
5'-45' Av 5#
4 7/8
900'
900'
750'
400'
200' Tunnel
3.5
8.5
3.5
B
Dump 7#
18"-24" = 2%
300'
A
6 3/4
RETORT
D
CABIN
RHYOLITE
BUCKSKIN
OPALITE DEPOSIT
and
VICINITY
NEV.
No — Scale
Nov 13 1939
W.C.H.