3350 0022

133

ITEM 24

UNION PACIFIC RAILROAD COMPANY

NATURAL RESOURCES DIVISION

One East First St.
Reno, Nevada 89501
30 July 1968

Mr. S. S. Arentz
312 Kearns Blvd.
Salt Lake City, Utah
84101

Dear Mr. Arentz:

I have finished reviewing the data on your Buckskin Peak Mercury deposit. Although it seems that you are in the process of developing a very promising small mercury mine, I do not believe it offers Union Pacific the tonnage-grade potential we require. Therefore, we would not be interested in conducting any further examination of the property.

Thank you for the opportunity to examine this property, and for the courtesies both you and Mr. Smith extended to me during my visit.

Good luck in your further exploration and development of the property.

Sincerely,

NATURAL RESOURCES DIVISION
Union Pacific Railroad

J. V. Tingley
Geologist - Mining

JVT:cm
CC: C. E. Melbye - Los Angeles
P. A. Meyer - Salt Lake City
R. J. Anctil - Reno ←
File

BUCKSKIN PEAK MERCURY PROSPECT
NATIONAL MINING DISTRICT
HUMBOLDT COUNTY, NEVADA

by

J. V. Tingley

Distribution:
Los Angeles - 2
Salt Lake City - 2
Reno - 3

Reno, Nevada

July 30, 1968

SUMMARY

The Buckskin Peak Mercury Deposit is located at the top of Buckskin Peak in northern Humboldt County, Nevada.

Cinnabar occurs in thin opalite bands within a flat-lying siliceous sinter deposit which caps the northern portion of the peak. These bands, as seen in the present pit, are 1-2 feet in thickness and assay as high as 20 lbs Hg/ton. The opalite and clay making up the major portion of the sinter deposit is largely barren of mercury. Previous work on the deposit indicates the bands are discontinuous and widely spaced within the sinter mass.

The property has potential for supporting a small-scale operation with perhaps a 50-ton/day output. However, it is felt the overall grade of the deposit would be much too low to support a large-tonnage open-pit operation.

Therefore, it is recommended that Union Pacific express no further interest in the property.

CONCLUSIONS AND RECOMMENDATIONS

Samples taken in the area being mined, in surrounding "low-grade" areas, and from low-grade stockpiles indicate that although there is some very good mercury ore present, the overall grade of the deposit would not be high enough to support a large-tonnage operation.

Since this deposit is a typical opalite occurrence, with the cinnabar dispersed as a colloid within the opalite, the ore is not amenable to grinding and upgrading, but must be furnaced. It is felt the average grade of the entire deposit would be much too low to be furnaced profitably.

It is possible that Mr. Arentz could block out enough +10 lb. Hg/ton ore to justify a retort or small rotary furnace on the property. If so, this could turn into a profitable small operation, but the potential is thought to be too small to interest Union Pacific. Mr. Arentz should, therefore, be notified that we have no further interest in his property.

INTRODUCTION

Early in July, 1968, Mr. S. S. Arentz, current operator of the Buckskin Prospect, requested that Union Pacific make an examination of the property, and consider a possible joint venture. Mr. Arentz, and his associate, Mr. J. Smith, feel the property has the potential of developing into a large open-pit mine.

On July 16, 1968, a preliminary examination of the property was made. Both Mr. Arentz and Mr. Smith were present during this examination.

LOCATION

The Buckskin Peak Mercury Deposit is in the southern part of the National Mining District, in Section 11, T. 45 N., R. 39 E., Humboldt County, Nevada. The deposit is at the summit of Buckskin Peak which has an altitide of 8,700', in the northern part of the Santa Rosa Range.

GEOLOGY AND MINERALIZATION

Buckskin Peak is composed of a thick sequence of volcanic flows. A rhyolite mass estimated to be about

900' thick[1/] forms the upper part of the Peak. A cinnabar-bearing siliceous sinter caps the rhyolite on the summit of the Peak. This rock forms a blanket that has a maximum length of 1,370 feet, a maximum width of 770 feet, and covers an area of about 652,000 square feet. Its maximum thickness is unknown, but probably does not exceed 125 feet. (These figures are from U.S.G.S. Bulletin 922-E, but they are thought to describe the deposit accurately.) Over most of the area the bedding of the sinter strikes northwest, and dips 5^{o} to 20^{o} northeast.

Cinnabar occurs in thin opalite bands within the sinter deposit. The bands do not seem to be continuous, and the majority of the opalite breccia, sinter, and clay between these bands does not contain cinnabar. The "ore" band seen was not over 1' thick.

1/ Roberts, R. J., 1940, Quicksilver Deposit at Buckskin Peak, National Mining District, Humboldt County, Nevada: A Preliminary Report, U.S.G.S. Bulletin 922-E.

PRESENT OPERATIONS

Mining is presently being done by stripping "low-grade" material from the opalite pods, then hand-breaking and sorting the opalite. The high-grade is trucked to stockpiles for later shipment to the nearby Cordero furnace plant. The low-grade is pushed aside for possible future use. Samples taken show the high-grade to run over 20 lbs. Hg/ton, but the low-grade ran less than 1 lb. Hg/ton.

J. V. Tingley

JVT:cm

METALLURGICAL LABORATORIES, INC. CHEMISTS • ASSAYERS • SPECTROGRAPHERS

1142 HOWARD STREET • SAN FRANCISCO, CALIFORNIA 94103 • AREA CODE 415 863-8575

REPORT OF ANALYSIS

Submitted by Union Pacific Railroad Company
Natural Resources Division
One East First Street, Suite 801
Reno, Nevada 89501

Date July 22, 1968

Sample of Minerals

P. O. No.

Lab. No. 2388

SAMPLE MARK	PERCENTAGES	
	Mercury %	Lbs. per Ton
R-2084	Trace	-
R-2085	Trace	-
R-2086	0.024	0.48
R-2087	0.010	0.20
R-2088	0.010	0.20
R-2089	1.245	24.90
R-2090	0.024	0.48
R-2091	0.019	0.38
R-2092	0.022	0.44
R-2093	0.010	0.20
R-2094	0.038	0.76

Ps

METALLURGICAL LABORATORIES, INC.

By Mark P. Hurst

MET LAB FORM 13