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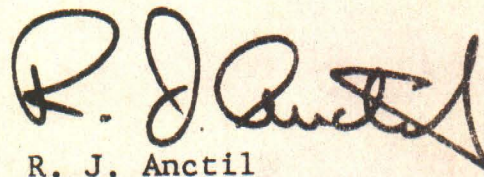
Reno, Nevada - August 7, 1968

Mr. P. A. Meyer - Salt Lake City

Re: Buckskin Peak Mercury Prospect  
Humboldt County, Nevada

Attached hereto is a report prepared by J. V. Tingley relating to an examination of the Buckskin Peak Mercury Prospect, Humboldt County, Nevada.

Since his findings indicate that the low overall grade of the deposit precludes a large-tonnage operation, I concur with Mr. Tingley's views that we do no further work on this property.

  
R. J. Anctil

RJA:cm

CC: C. E. Melbye - Los Angeles  
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



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## APPENDIX

SAMPLE DATA SHEET

REPORT OF ANALYSIS - Metallurgical Laboratories, Inc.

GEOLOGIC MAP AND SECTIONS OF BUCKSKIN PEAK, In  
HUMBOLDT COUNTY, NEVADA..... Pocket



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 altitude 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 <sup>1/</sup> 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  $5^{\circ}$  to  $20^{\circ}$  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.

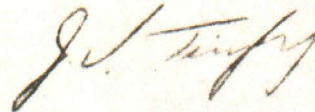
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<sup>1/</sup>  
Roberts, R. J., 1940, Quicksilver Deposit at Buckskin Peak, National Mining District, Humboldt County, Nevada: A Preliminary Report, U.S.G.S. Bulletin 922-E.



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



APPENDIX



### SAMPLE DATA SHEET

SL-FORM

Collector JH Area Buckskin Mtn Map - Date 7/16/68

[illegible]



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	
	<u>Mercury %</u>	<u>Lbs. per Ton</u>
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

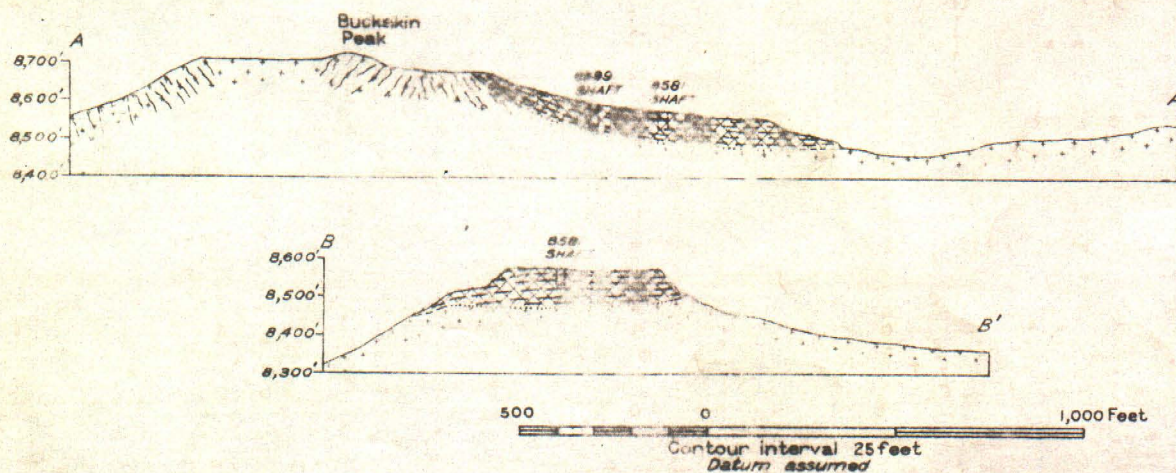
METALLURGICAL LABORATORIES, INC.

By *Michael P. Rust*





Geology and topography by Ralph J. Roberts  
and A.E. Granger



EXPLANATION	
	16° Strike and dip of bedding
	40° Strike and dip of flow structure
	Strike of vertical contorted flow structure
	Open cut
	Pit
	Siliceous sinter
	Obsidian
	Rhyolite
	Cinnabar-bearing sinter outcrop

500 0 1,000 Feet  
Contour interval 25 feet  
Datum assumed

GEOLOGIC MAP AND SECTIONS OF BUCKSKIN PEAK, HUMBOLDT COUNTY, NEVADA  
1940

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Item 17  
Plate 1 of 1