PILOT CONE MERCURY PROSPECT

L & L Mining Company
Mineral County, Nevada

AN APPRAISAL

David LeCount Evans October 18, 1967

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Foreword:

The Pilot Cone prospect was examined throughout the first week of October 1967. October 2, 3 and 6 were spent in the field and travel. One day has been required to coordinate observations.

Five plats accompany this description. Use of the attached plan maps and sections is urged, when following the written text.

Purpose of Report:

Our purpose has been, first, by employing reconnaissance-type mapping, to establish the geological picture, the relationships of mineralization to petrographic and structural control, and cut samples accordingly; and, second, to arrive at true values, using the services of an expert custom assayer.

Had values indicated commercial possibilities, continued effort, using detailed geological mapping with more precise control, would have been continued.

The very low values, listed below under 'Sample Results', have not justified further effort.

Procedures:

With reference to Plan Map B, representing the north expression of the 3500 foot trend, details have been located by taped-Brunton compass survey, except for numbered holes which were paced from winze and pit.

Considering our Plat E, the south mineralized sector, (samples 4615-4617 area) was tied to the north area of Plat B, using Brunton intersection from points in the north area, as well as pacing with Brunton control. By pacing back the full distance, south to north, error was established. The overall map was adjusted to compensate for error. Plat E is definitely the product of rapid reconnaissance and subject to some change.

Believing that the north expression offered the only immediate tonnage possibility, and with a drill at the property, shallow

holes were drilled along sections, normal or more or less normal to the indicated trend of mineralisation. Material from holes was examined under binoculars, the sections broken down into units (as shown on sections), and samples prepared on the basis of subdivisions. Observations from holes were supplemented by material, taken in bulk, from winze and pit, penetrating the mineralized section.

Impressed with the similarity of mineralisation, outcropping in the south area, three samples of representative material were cut from exposures, two of which had some cinnabar showing in sulphates or "opal".

Samples were shipped to Metallurgical Laboratories of San Francisco on October 7. Assay returns were received on October 16. Met Lab, at 1142 Howard Street, is headed by Mr. Martin Quist, former Chief Chemist for Abbot A. Hanks and, before that, Chief Assayer for the New Idria Quicksilver Company. The firm has an excellent reputation.

Conclusions:

Pilot Cone is a typical very low-grade, Nevada-type, "Opalite" occurrence. Cinnabar, limited to very thin coatings, called "paint", because of the red color in contrast to the white of the "opal" or chert, presents an attractive picture.

However, with cinnabar limited to paint and not in crystal form, ultimate assay values can be disappointing. Precise, accurate assaying is a Must.

It is concluded that this occurrence as "paint" and the fact that shows are limited to thin surfaces (with very little penetration of the rock) and to occasional openings between rock fragments (not large enough to bring up the grade in bulk samples), is responsible for the low grade of our results.

Recommendations:

The property is not recommended; nor is further work advised.

Location:

With reference to Plat A, note that the prospect lies in sections 2 and 11, of Township 13 North, Range 31½ East, in northern Mineral County, nevada, 3.2 miles west of the old gold camp of Rawhide.

The property is reached by following U.S.Highway 95, 24 miles south from U.S.Highway 50, at Fallon, Nevada; thence east by gravel road, 17½ miles to a south turnoff, 0.3 miles from the east line of the Walker Indian Reservation; and, finally, from this turnoff, south 4½ miles, over a small but adequate "stream-bed" road to the property. Distance from Fallon is 46 miles, requiring 1½ hours of travel by car.

DAVID LECOUNT EVANS, CONSULTING GEOLOGIST

General and Limiting Conditions:

Access, power supply, water supply, labor, weather, mill sites, tailings disposal, et cetera are all factors known to interested parties. In view of our negative conclusions and recommendations, details per item are not considered. Suffice it to say that, for the most part, all are favorable. Those not ideal are not insurmountable.

Legal Title:

Owners' names are not included herein. Both are residents of Fallon, Nevada.

Seven claims, comprising the Pilot Cone group, cover the north area and bulk of the property. Two claims, the Judy 1 and Judy 2 , covering the south extremity, have separate ownership.

Claims appeared to be well staked in compliance with requirements.

History of Property and District:

Our Plat A shows the Cinnabar Hill Mine, 13 miles northwest of the Pilot C one Prospect; the Stockton mercury property one mile west, and the Rawhide camp 3.2 miles to the east.

Stockton Property:

Discovered in 1929, the property was developed for a short time by the Bob O. Lee Mining Company of San Francisco. According to "Quicksilver Deposits of Nevada" (Nevada Bureau of Mines), spotty opplite occurred in horisontal beds of rhyolitic tuff.

A 70 foot tunnel, starting in spotty opalite, ended in fresh tuff. At the portal some of the ore averaged a few pounds of mercury. The deposit was spotty and without attraction.

Cinnabar Hill Mine:

A short 70 foot tunnel and a 65 foot inclined shaft, and a few pits, explored volcanic andesites and rhyolites, without commercial success in 1937. Weak cinnabar mineralization followed a flat dipping fault in the volcanics.

Rawhide:

Discovered in 1906, Rawhide had passed its peak of production by 1912. Production from 1908 to 1920 grossed out at $1,418,680. From 68,933 tons the camp had produced $993,888 in gold, 696,673 ounces in silver, 24,895 pounds of copper, and 1,472 pounds of lead.

Rawhide:

Production was from veins cutting rhyolitic volcanics; no cinnabar is mentioned.

Pilot Cone Prospect:

The development is of recent date.

Geology:

General:

Dark colored andesitic flows (of unmeasured thickness) are underlain by light-gray, rhyolitic flows, breccias and possibly tuffs, in the area of concern. Strike or trend of flows is N 17° E and dips average about 24° to the northwest.

The areasof volcanic outcrops are flanked on slopes and in shallow valleys by talus or rubble, consisting dominantly of fresh andesite boulders and (adjacent to opalized outcrops) opalite boulders. Both outcrops and flanking talus share the results of later, hot spring mineralization.

Petrography:

As summarized above, dark, andesitic volcanic flows, with bedding as shown on Plat E, make up the mass of an outstanding hill, dominating the heart of the prospect.

The contact between andesite and underlying rhyolite is sharp and significantly parallels the bedding of the andesite.

No intrusive rocks were observed.

Structure:

No veining or faulting were observed throughout the area during this study.

The allignment of the opalization (or chertification) for the south and southeast portion of the property, with the contact between rhyolite and andesite is considered significant. It is believed that this contact between volcanic units is a mineralization control.

Mineralization:

Mineralization is limited to (1) initial massive cherts, white to buff to brown in color (locally called 'opalite') accompanied by thin coatings, along fractures, of the red mercuric sulphide, cinnabar, and black disseminations of probable iron oxide, and (2) later, white, powdery material,

either a sulphate or a chloride, also accompanied by weak cinnabar, believed to be the product of hot spring activity.

The latter is considered of very recent origin, since it occurs in the openings between boulders of both andesite and chert in the flanking talus accumulation.

Development:

Original development consists of a 15 foot winze and a few scattered pits and trenches in the north area (see Plat B), as well as a 30 foot tunnel and cuts at the south end.

To these have been added a series of vertical holes, drilled from 10 to 50 feet of depth at the north occurrence. Nine holes are shown on Plat B. The three open circles were drilled prior to our examination and not studied in any detail/ The six filled holes, numbered 1 through 6, represent those holes drilled during the period of examination.

Sample Results:

Sixteen samples accompany this analysis. Five of the group were cut from exposures; the remaining eleven were selected from cuttings, blown from holes 1 through 6, and divided on the basis of variations and changes, determined by microscopic study. Details are noted on Sections A-A', B-B' and X-X', and by description, below.

Considering those cut from exposures, four were 'chip' samples, cut across measured widths from massive outcrops or pit walls; and a fifth (#4618) represents better than 100 pounds of material, from two vertical cuts, down the bottom 10 feet of the fifteen foot winze. The 100 pounds was mixed and quartered three times, to reach the final six pound sample.

Sample Results are tabulated as follows:

Samp	Where	From	To	Lbs. Hg/Ton
4615	Surface	0	20	0.14
4616	Surface	0	20	0.04
4617	Surface	0	20	0.04
4618	15' Winze	5	15	0.10
4619	5' Pit	0	5	0.10
4620	D.H.#1	0	15	Trace
4621	D.H.#1	15	30	Trace
4622	D.H.#1	30	35	Trace

Samp.	Where	From	To	Lbs. Hg/Ton
4623	D.H.#2	0	15	Trace
4624	D.H.#2	15	25	Trace
4625	D.H.#3	0	30	Trace
4626	D.H.#6	0	15	Trace
4627	D.H.#4	0	5	Trace
4630	D.H.#4	5	15	0.14
4628	D. H.#5	0	10	Trace
4629	D.H.#5	10	18	0.10

Samples tabulated above are described as follows:

Samp:

4615 From Judy 2 claim at south end; composite sample of white, sulphatic, powdery material with some scattered cinnabar shows, from several small cuts across 20 feet of width.

4616 From Judy 2 claim at south end; down slope from 4615; chip sample across 20 feet of massive chert with a few light shows of cinnabar and much black dissemination.

4617 From Judy 1 claim in south area; 400 feet NE of 4616, just above 30 foot tunnel; chip sample across 20 feet of massive chert with no HgS indications.

4618 North area; bottom 10 feet of 15 foot winze; two cuts through positive talus, consisting of andesite and opalite boulders, with white, powdery material working between fragments; HgS in both opalite and sulphate in probably thin coatings.

4619 North area; chip sample from 5 foot pit, 115 feet southeast of winze, in massive white opalite with scattered cinnabar as coating.

4620 0 to 15 feet in D.H.#1; mixed chert (white tan and yellow; andesite fragments; white sulphate but no apparent cinnabar.

4621 Same hole, 15 to 30 feet; 70% mixed andesite and opalite and about 30% sulphate; very minor cinnabar.

4622	Same hole, 30 to 35 feet; mostly sulphatic cuttings with about 20% chert; some cinnabar vut very minor.
4623	0 to 15 in D.H.#2; mixed white, tan and brown cherts and about 40% andesite fragments, part - ially altered; very minor cinnabar.
4624	Same hole, 15 to 25 feet; 20% cherts, remainder white powdery alteration; no apparent cinn- abar.
4625	0 to 30 feet in D.H. #3; All very rotten andesite.
4626	0 to 15 feet in D.H.#6; traces of chert with minor cinnabar at top, with remainder all rotten and- esite.
4627	0 to 5 in D.H. #4; massive white opaque chert with traces of cinnabar.
4630	5 to 15 in D.H.#4; massive white to buff to tan to brown chert with persistent fine cinnabar. Best of any cinnabar show in drilled section.
4628	0 to 10 feet in D.H.#5; massive white chert, and some tan chert; faint cinnabar.
4629	10 to 18 feet in D.H.#5; massive white and tan chert with a slight increase in cinnabar.

Recapitulation:

On the basis of adequate exposures over 3500 feet of extent and surface samples from outcrops, carrying 'color' but which show discouraging values, we contend that this is representative material from a very low grade deposit.

No good reasons exist for believing that any improvement can be expected, down dip following the andesite-rhyolite contact.

The deposit is very much in line with and similar to the neighboring Stockton property, as it has been described.

The reader is again referred to the conclusions and recommendations of page 2.

Respectfully submitted

Reno, Nevada
October 18, 1967

David LeCount Evans.

A

FALLON

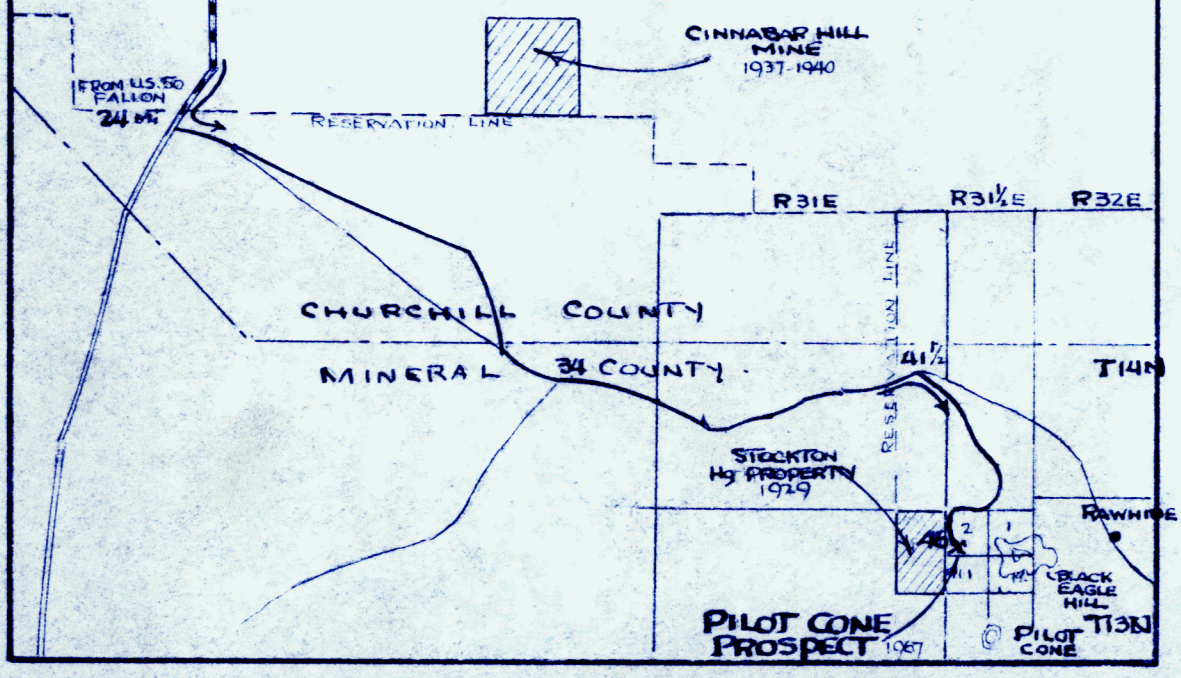
PILOT CONE MERCURY PROSPECT

Mineral County, Nevada

INDEX MAP

1 inch = 4 miles

David LeCount Evans Oct. 18, 1967
Consulting Geologist Reno, Nevada



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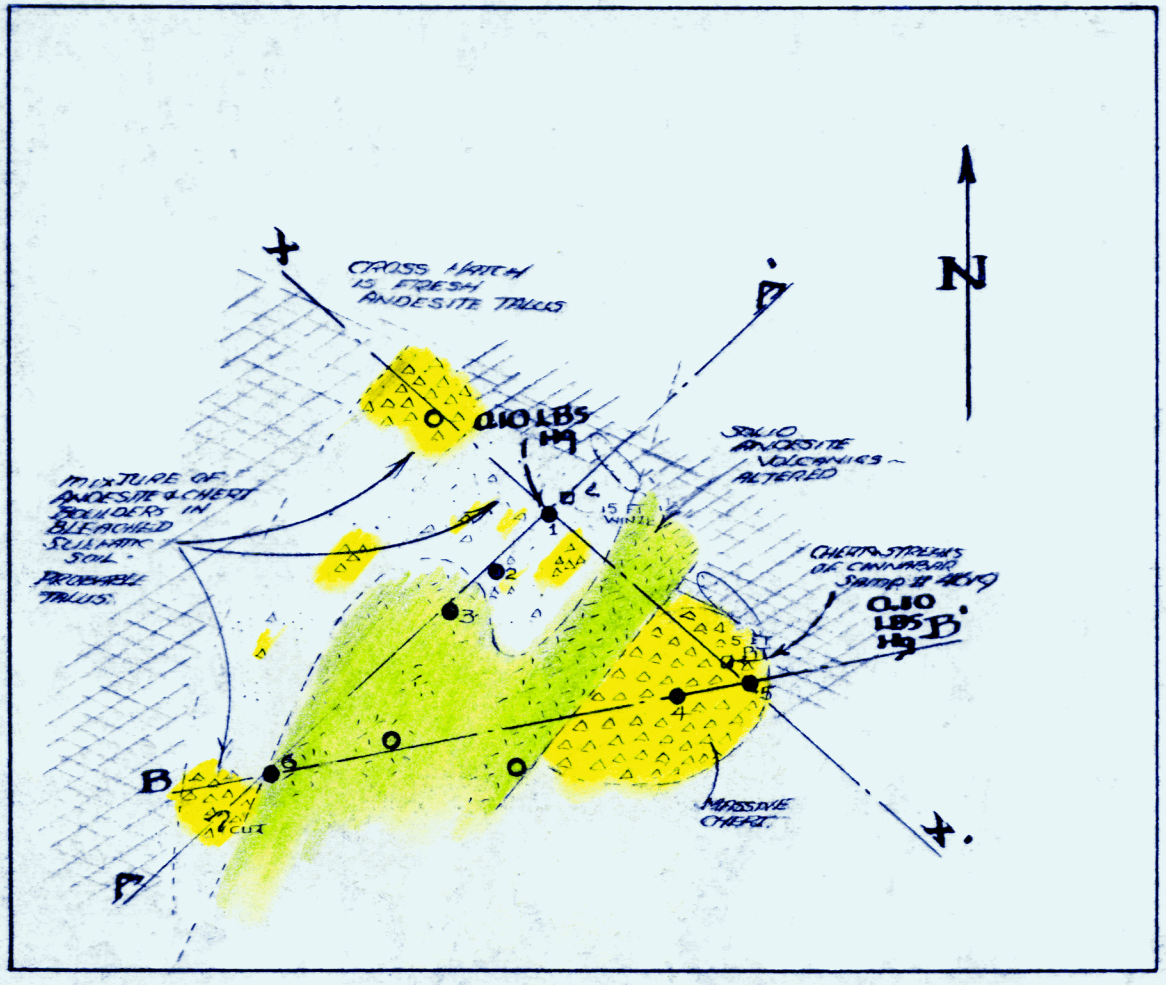


PILOT CONE MERCURY PROSPECT

Mineral County, Nevada

SURFACE DETAIL

NORTH AREA

1 in. = 100 Ft.

David LeCount Evans — Consulting Geologist

Oct. 18, 1967 — Reno, Nevada

PILOT CONE MERCURY PROSPECT

Mineral County, Nevada

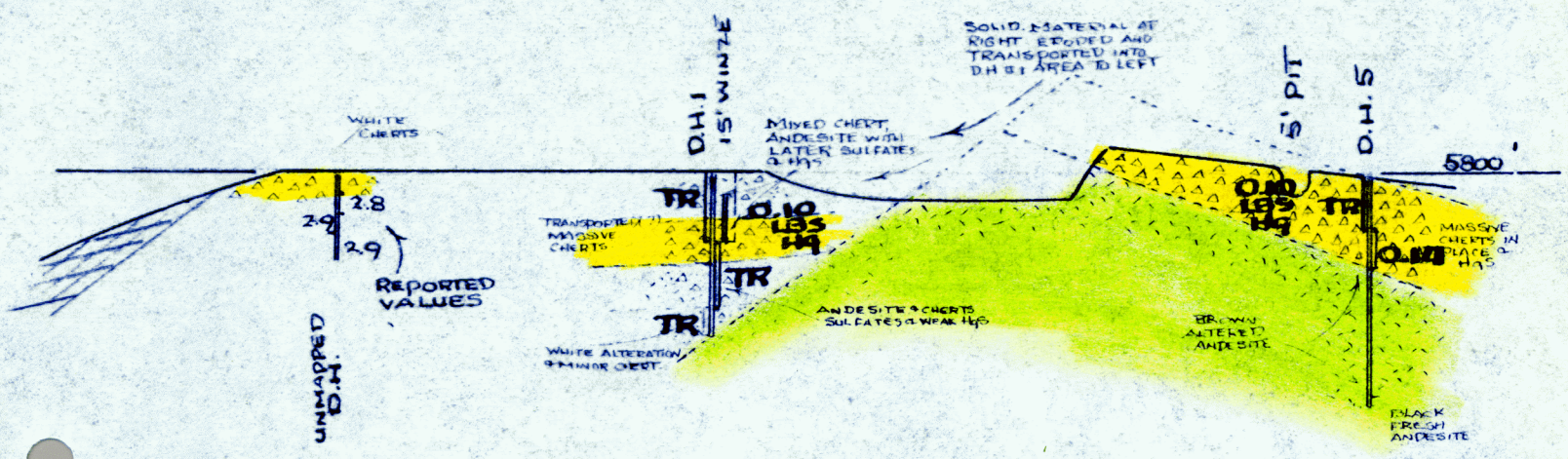
CROSS SECTIONS

1 in. = 40 Ft.

David LeCount Evans
Consulting Geologist

Oct. 18, 1967
Reno, Nevada

D



X-X'

PILOT CONE MERCURY PROSPECT

Mineral County, Nevada

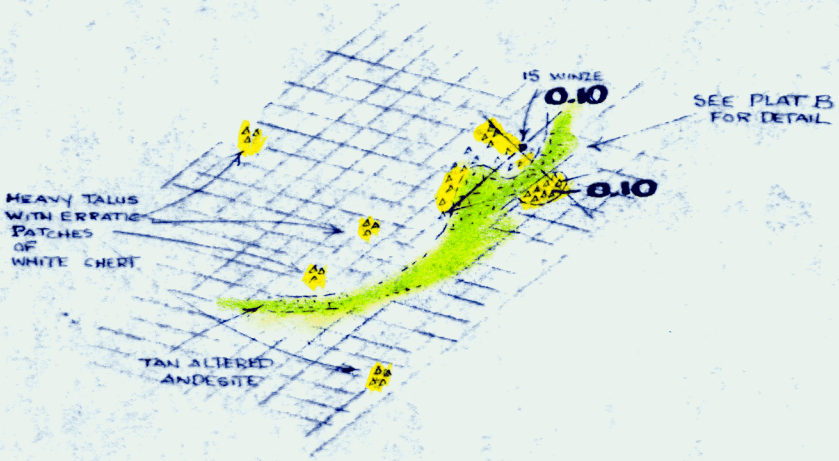
CROSS SECTIONS

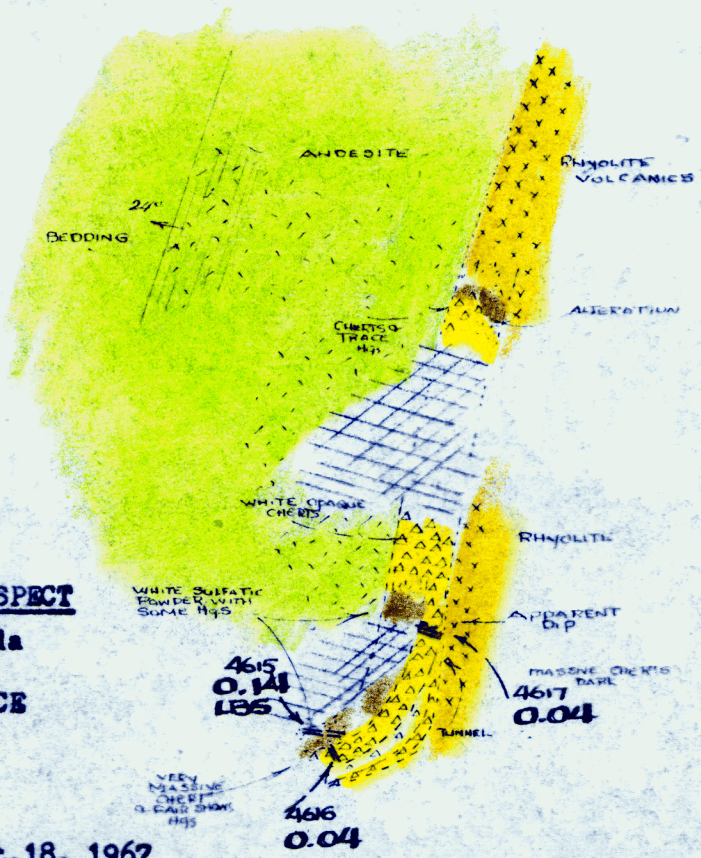
1 in. = 40 Ft.

David LeCount Evans Oct. 18, 1967
Consulting Geologist Reno, Nevada

TR. = TRACE OF Hg

E





PILOT CONE MERCURY PROSPECT

Mineral County, Nevada

SURFACE RECONNAISSANCE
TOTAL AREA

1 in. = 500 Ft

David LeCount Evans
Consulting Geologist

Oct. 18, 1967
Reno, Nevada

MINERAL COUNTY

Rawhide District

The Rawhide District is in the northeastern part of Mineral County, bordering Churchill County. The district was first located in 1906, and from 1908 to 1929 it produced very notable amounts of silver, gold and other metals. Although the presence of cinnabar was known as early as 1908, no attempt was made to mine this mineral until 1929.

Stockton Property

Location: Secs 3 and 10, T13N, R31E.

Ownership: W. W. Stockton

Discovery 1929

Production: None

Geologic Type: Opalite

The Stockton Property is on Black Eagle Hill about 400 yards west of the Black Eagle Mine and about four miles west of Rawhide. Reportedly, soon after its discovery in 1929 the property was developed for a short time by the Bob O. Lee Mining Company of San Francisco. Since then little work has been done and in 1943 the property was idle.

Development work was consists of a single 165 foot adit trendingf S30E into the hill.

The rocks in the immediate vicinity consist of horizontal beds of Tertiary rhyolitic tuff which over several acres are spottily altered to opalite. The adit was begun in hard but rubbily opalite, but after70 feet it passed into fresh ashy tuff which contained only small isolated patches of opalite.

Near the portal of the adit some of the ore contains enough disseminated cinnabar to average a few pounds of quicksilver to the ton. Near the face cinnabar forms two narrow veinlets and clots in the fresh tuff, but not enough of the low grade material is present to be commercial.

CHURCHILL COUNTY

Holy Cross District:

The Holy Cross District lies about 25 miles south-southeast of Fallon; Manganese ore has been the principal product from the district in the past, but in 1940 a small amount of quicksilver was produxed.

Cinnabar Hill Mine

Former Name: Robinson Quicksilver

Location: Secs 15,16,21, and 22, T 15N, R30E

Ownership: A. L. Robinson, A. K. Dalby, C. M. Smith, H. C. Smith and Mrs. Elsie Pierce of Fallon, and B. P. Hartman of Grass Valley, California.

Discovery 1937 by A. L. Robinson

Production: Very small

Geological Type Volcanic.

The Cinnabar Hill Mine is developed by an adit and crosscut with a total length of about 70 feet, and by a 65-foot inclined shaft with crosscuts on two levels. A few other pits are scattered over six claims.

The rocks of the area are Tertiary volcanic flows and pyroclastics of andesitic and rhyolitic composition overlain by Pleistocene basalt flows. Granite of Jurrassic Age forms prominent peaks east of the mine, but it bears no genetic relation to the ore.

The workings explore altered andesite along a fault zone which strikes N80W and dips 40 degrees north. The zone contains an irregular vein of calcite which locally attains a width of a foot. Cinnabar, pyrite, barite, gypsum, jarosite and clays form narrow veinlets in places along the sheared footwall of the vein.