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SCOSSA MERCURY PROPERTIES

(124)

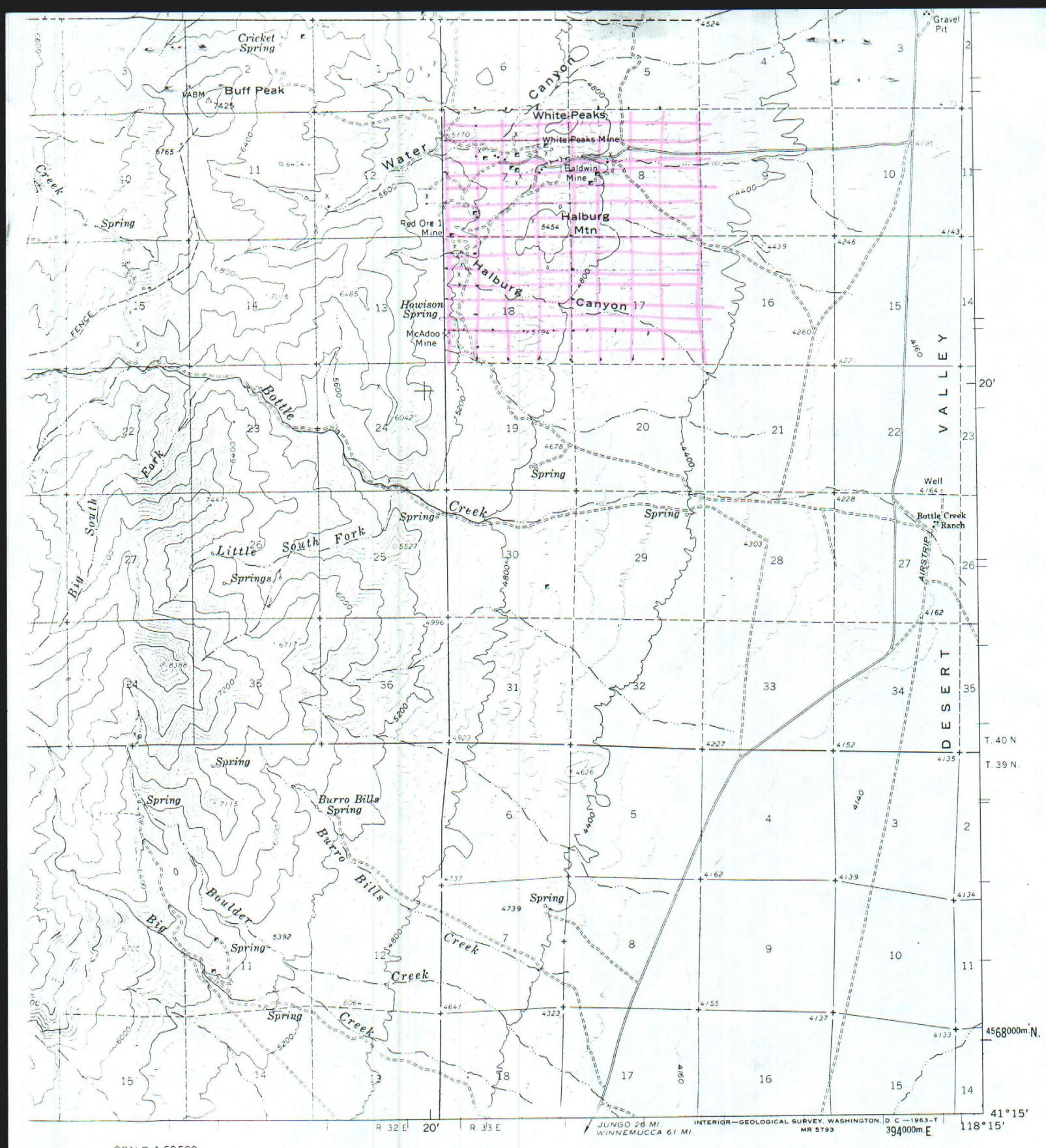
ITEM 23

Bottle Creek District
Humboldt County, Nevada

A RECONNAISSANCE

David LeCount Evans

July 18,1966



SCALE 1:62500

1 2 3 4 MILES

6000 9000 12000 15000 18000 21000 FEET

1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 80 FEET
DOTTED LINES REPPESENT 20-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION

Medium-duty — Light-duty

Unimproved dirt

State Route

NEVADA

QUADRANGLE LOCATION

P COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
OGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
ING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

BRUNDIDGE'S
RENO, NEVADA

BOTTLE CREEK, NEV.
N4115—W11815/15

1961

Scossa Mercury Properties

Bottle Creek District
Humboldt County, Nevada

A RECONNAISSANCE

Foreword:

A reconnaissance of these properties was made on July 10 and 11, 1966, at the request of and in company with Mr. James Scossa, the owner.

Obvious from the beginning was the fact that between Mr. Scossa's mile of trend and the adjoining McAdoo and Blue Can areas on the west, the few days allotted to the study would be inadequate for an appraisal.

It was agreed, therefore, that the field work must be considered only a reconnaissance, with conclusions and recommendations, preliminary, requiring additional field work before full acceptance.

Two days were spent in the field. Three days have been required to assemble and organize material, prepare some preliminary observations for immediate use and complete this report.

Purpose of Report:

Our purposes have been to (1) check the association of intrusive diabase and economic mercury mineralization for the district, (2) consider the future of Mr. Scossa's White Peaks and Red Ore properties, both now inactive, and the possibilities for future exploration, and (3) estimate the cost of future exploration and perhaps production.

Conclusions:

It is concluded that the Bottle Creek District and Scossa properties, on the bases of past performances, a relationship between deep-seated intrusives and ore, and, strength and continuity of pre-mineral structural controls, offers opportunity. Continued exploration and development are merited.

Recommendations:

It is recommended that:

(1) The Scossa properties and the district be geologically mapped in detail, and sampled; immediate emphasis on the Red Ore area would be more than justified.

(2) Future work be backed with extensive sample values, using near surface material and a mercury 'sniffer'; such does the same job as 'panning', but provides specific values for purposes of comparison, rather than a 'tail' of cinnabar which remains an estimate.

(3) Future operators plan inclined diamond drill holes for both the White Peaks and Red Ore structures. The possibilities of the mineralization going to better than average depth should be explored.

DAVID LE COUNT EVANS, CONSULTING GEOLOGIST

DAVID LE COUNT EVANS, CONSULTING GEOLOGIST

Procedures:

Before proceeding to the field, descriptions of the Bottle Creek Mining District were studied in University of Nevada Bulletin, Geology and Mining Series, #41, "Quicksilver Deposits in Nevada", dated December 1944. Sheets for field use, covering the details of the White Peaks Mine, were prepared. The topographic sheet for the immediate area, enlarged to 1" = 1320', provided adequate regional control.

From a measured base line through the center of the White Peaks area, major features were mapped on a scale of 1"=500', using Brunton compass triangulation. By like means control was extended to the Red Ore area and open pit, for inclusion on the same sheet. Elevations are from Brunton per-cent grades and scaled distances.

Values, quoted herein, are approximate. In some areas, using scaled square footage on plats in Bulletin #41, reported average widths of mineralization, and total production figures, tonnages of mineralization and grade were reached; then using a 25% "overbreak" and an estimated 85% recovery (or actual values in mill tailings) gross and net values of ore actually mined were arrived at.

Location:

With reference to Plat A, the Scossa property is located in the Bottle Creek Mining District, Humboldt County, Nevada. Claims lie in section 7 and 18 of Township 40 North and Range 33 East. Distance from Winnemucca is 70 miles. One follows highways 95 and 8a for 60 miles, then turns south on a gravelled road for 7½ miles to a well marked branch to the west and 2½ miles to the Scossa cabin.

General and Limiting Conditions:

Access: From Winnemucca, 60 miles are paved highway and ten miles good gravel road, with gentle grades for the last 2½ miles. Winnemucca is the nearest supply point and rail head.

Power: Power lines reach the property, servicing the Cinnabar Canyon mill, currently innactive.

Water: A well drilled to 350 feet, with pump set at 250 feet, has provided water for a 100 to 150 ton per day milling program. Water is potable without mineral content.

Timber: Desert mountain slopes are without timber.

Labor: Available in the Winnemucca area; wage scales have not been investigated.

Taxes: Not investigated.

Mill Sites: Slopes are adequate, as indicated by their use at the Cinnabar Canyon mill site.

Tailings: have been successfully impounded by the older Red Ore mill; a recent operation has been less successful, because operator was not prepared for the 'flash floods' which do occur.

Climate: The climate is that of Nevada's high desert. Summer days are hot with maxima of 80 to 100 degrees and nights are 40 to 50 degrees lower. Winters are frigid, dropping to zero and lower. Precipitation is light, perhaps 5 to 7 inches in all. Summer flash floods, a contingency, provdie much of the moisture; snows are light, perhaps one good one leaving some accumulation , per winter.

Legal Title:

Noting Plat B, 1.7 miles of trend are covered by the White Peaks and Red Ore claims. Shown by solid lines, the 13 claims are held by Mr. James Scossa (Star Route, Box 62, Winnemucca, Nevada) by location and annual assessment work. Individual claims are not listed, herein, since Plat B appears adequate; proofs of labor have not been checked.

At the time of examination a lease and option agreement, dated July 1964, with Cinnabar Canyon Mines Inc. of Salt Lake City (Mervin Whilte, Salt Lake City Presodent; and O.A.Hoyt of Seattle, Superintendent), had 18 years (to 1984) to go. But it was reported that payments in lieu of production, for June and July, had not been paid, and some lease stipulations had been ignored. The mine and mill were innactive.

History of Scossa Mines and District:

Quoting from Bulletin #41:

"White Peaks: discovered Sept.1936 by James and Arnold Scossa.

"In July 1937 the Fulton Quicksilver Mines Inc. leased these claims and many others in the district. They developed some ore by sinking a shaft to the 112 level and drifting on the 62 foot and 112 foot levels, but although they installed a 20 ton rotary furnace late in the year, apparently no ore was treated. In the following year, after a small production, the lease was dropped, and later in the year some ore was treated by the Scossa brothers. In 1940 Eugene Franke and Anthony Lebechi leased the property and, operating the White Peaks Mining Company, produced 263 flasks without doing much development work. Early in 1942 J.P. Greenan optioned the property and after striking rich ore on the previously little explored footwall side of a dike, received 343 flasks from ore treated in the 20 ton rotary furnace still on the property. Early in 1943 the property was subleased, and by August was idle".

From 1961 to 1964, John Etchart, a Winnemucca dirt contractor, held a lease on the properties and did some work on the 160 level, but his production came from the Red Ore area.

Cinnabar Canyon Mines Inc., in 1964-1966, has robbed some pillars, above and below the 62 level; no effort has been made to proceed with the development of the property.

Total production to the end of 1943 was 776 flasks. 606 flasks of the total are estimated, by the writer, as the product from 6820 mined tons with a net recoverable value of 7.15 pounds and gross value of 8.9 pounds per ton.

Red Ore Mine was discovered in 1937 by the Scossa brothers, following the discovery of the Birthday Mine (about 700 feet south) in October 1936, by O. J. Wootan, which produced 220 flasks to the end of 1943.

Concerning the Red Ore Bulletin #41 reports as follows:

"Little is known of the history and development of this property which was jointly operated with the White Peaks mine by several lessees. In 1937 the Fulton Quicksilver Company did some development work, and in the following year the Scossa Brothers further developed the claims. In 1942 the ground was held by Greenan Quicksilver, Inc., but their activity was confined to the White Peaks group. In August 1943 the property was idle."

In 1961-1962 John Etchart, doing assessment work in the Red Ore area encountered good ore. Leasing the property from 1962 through 1963, Etchart (on the basis of royalty received by James Scossa) grossed $400,000, from the Red Ore pit, which on the basis of $180 per flask represented 168,872 pounds or 2,222 flasks. Ore was treated by flotation in a 70 ton mill, which for the period treated an estimated tonnage of 47,000 tons, recovering 3.6 poundsper ton. Tailings carry good cinnabar, estimated at 3 pounds per ton, which would give a gross value of 6.6 pounds and a recovery of only 54%.

Adjoining properties, consisting of the Blue Can and McAdoo, and shown by dashed lines, were discovered in November 1936 and September 1936, respectively. To the end of 1943 the Blue Can produced 1,728 flasks and the McAdoo, 1,646 flasks from underground workings.

Properties are caved, and tonnages mined are unlisted. An estimate of grade cannot be made.

Geology:

All properties have a dike of diabase associated with cinnabar mineralization. The dikes are intrusive into Tertiary rocks, consisting of "argillized tuffs, sandstones and fine gravels". Bulletin #41 further reports: "unconformably overlying the sediments and the diabase dike are extensive flows of rhyolite".

The relationship checks out in the field and is illustrated by our Plats C through F. The writer using the term "shale" extensively is, probably, referring to Bulletin 41's "argillized tuffs".

Widths of dike vary from the 20 feet at the White Peaks Mine to as much as 300 feet, suggested at the north end of the Red Ore open pit.

Cinnabar ore in seams, fractures and disseminations, favors the contacts between diabase and intruded clastics, with some penetration out into the latter. But best ores, as reported, are from loci of highly fractured diabase.

Some silica in the form of small centers of opaline material, accompanies the cinnabar; calcite, preceeding and following the cinnabar is common. This is not the opaline, hard, brittle, glassy ore, so common to Nevada, and the association with a diabase intrusive, makes the mineralization of special interest, for depth.

DAVID LE COUNT EVANS. CONSULTING GEOLOGIST

Of particular interest is the Red Ore area, where hurried reconnaissance suggests a zone, some 100 feet in width on the under or footwall side of a fresh, diabase dike, which, is heavily altered, crushed and with mineralization throughout. From a tonnage standpoint and future production this appears to be the best "bet", at this initial stage of a needed detailed study.

Also, of real interest is a 20 foot diabase dike, on the hill back of the Cinnabar Canyon mill, more or less in line with the 20 foot dike of the White Peaks Mine, but 1150 feet south. Not only is good diabase continuity suggested for some 1300 feet, but, too, bull-dozed material, adjacent to the diabase dike on the west, pans very well and indicates undeveloped mineralization, associated as usual with diabase, in the Cinnabar Canyon camp area.

Complicating the exploration picture are extensive areas, covered by more recent, and gently bedded, surface rubble, later than the mineralization and concealing critical details. Observed in the Blue Can-McAdoo area, probably in the Red Ore pit, and at the Birthday, are zones of tufa, none of which has been mapped by the writer.

It can be concluded at this time that (1) diabase dikes are the loci for cinnabar ores, (2) contacts remain only partially explored in the White Peaks Mine on the 160 level, (3) there is no good reason why contacts and diabase cannot continued productive with depth at White Peaks and Red Ore, and (4) surface rubble covers other possibilities, but procedures of evaluating covered prospects must be developed.

Development of District:

The table below summarizes major development for the district:

Underground Mines	Total Feet	Shafts	Workings	Mercury Flasks	Pounds	Lbs/Ft (less shafts)
White Peaks	1,280	160	1,120	606*	45,056	74.3
McAdoo	1,407	107	1,300	1,646	125,096	96.2
Blue Can	2,135	135	2,000	1,728	131,328	65.6
Birthday	500	50	450	220	16,720	37.1
Totals	5,322	452	4,870	4,200	318,200	65.5
Open Pits						
Red Ore	———	———	———	2,222	168,872	
Grand Total				6,422	487,072	

Samples:

Sampling was limited to some "panning"; no samples were cut for assay during the course of this reconnaissance. It is believed that until detailed mapping establishes relationships, samples will be meaningless.

Some idea as to value of ores can be had from the 'History of the District, above, and reserve considerations, below.

Reserves:

No underground, mineable, reserves can be estimated.

It is believed that original underground reserves amounted to about 45,000 tons. This is assuming that White Peaks ores are representative, dividing the total production by a factor of 7.15 recoverable pounds per ton (see White Peaks estimate).

Indicated, too, is that 9.2 tons of ore have been developed per foot of horizontal and stoping development.

No reserves can be estimated for the Red Ore pit on the basis of this reconnaissance.

Recovery Methods:

The 4200 flasks (this does not include 170 flasks unintentionally left out of White Peaks totals, probably representing production from leases other than the White Peaks Mine) from 45,000 tons, more or less, of ore, were recovered by direct retorting or furnacing.

Since 1962, Red Ore shipments were treated by a 70 ton, small flotation plant, with concentrates retorted

From June 1965 to February 1966, Cinnabar Canyon has treated tailings from the older Red Ore operation (reputedly 3 pound values) by flotation and retorting. The mill is fed from a 70 ton bin, crushing is by ball mill (in poor repair) in closed circuit with a rake classifier; two reagent tanks control four primary flotation cells, which receive fines from ball mill, and these are followed by two 'cleaner' flotation cells. Concentrates were then unwatered by inadequate units and dried in the sun before going to retort.

Value of the Cinnabar Canyon mill, in very sad repair, is a matter of conjecture. Handling as much as 150 tons per day of tailings, the plant, for normal ores would be rated at 50 tons per day.

A pre-inflation factor of $1,000 per ton of capacity for a perfect, fool-proof, flotation mill has, in the last 20 years climbed to $3,000 per ton of capacity. This mill, constructed from used equipment, is in the pre-inflation category, and new would not be rated at more than $50,000. In its present condition a $15,000 evaluation is considered excessive. Interested parties would be wise to employ the services of a machinery consultant, for a unit by unit evaluation.

Stoping Methods:

Widths of ore varied from 5 to 15 feet in the White Peaks mine and dips of ore were steep. Any of several stoping methods, ie: cut and fill, shrink, underhand, et cetera, might have applied but details are not available.

DAVID LECOUNT EVANS, CONSULTING GEOLOGIST

Estimate of Cost
to Develop.

An estimate of financial requirements to develop an initial working reserve of 10,000 tons, is as follows:

	Program	Cost estimate
A.	Detailed geological mapping and sampling; six weeks	$ 4,000
B.	Diamond drilling to establish continuity of mineralization with depth. Red Ore 1000' White Peaks 1500'	25,000
C.	Underground advance 200 feet shaft $20,000 750 feet horizontal 20,000	40,000
	Total of Estimate	$64,000*

* a very rough estimate, based in part on factors above, and not including the capital investments of a new mill and furnace to treat ores.

* 10,000 tons of 7 pound rock on todays price of $365/flask grosses $3,360,000

The reader must accept the fact that these are raw estimates.

Metal Prices:

Plat I-2 provides a monthly curve of mercury prices since mid 1963. After staying at a low of $335 for a month or so, prices are working back and are currently at $365 to $370 per flask of 76 pounds.

Recapitualtion: Reconnaissance and past history invite continued development. Activity is urged.

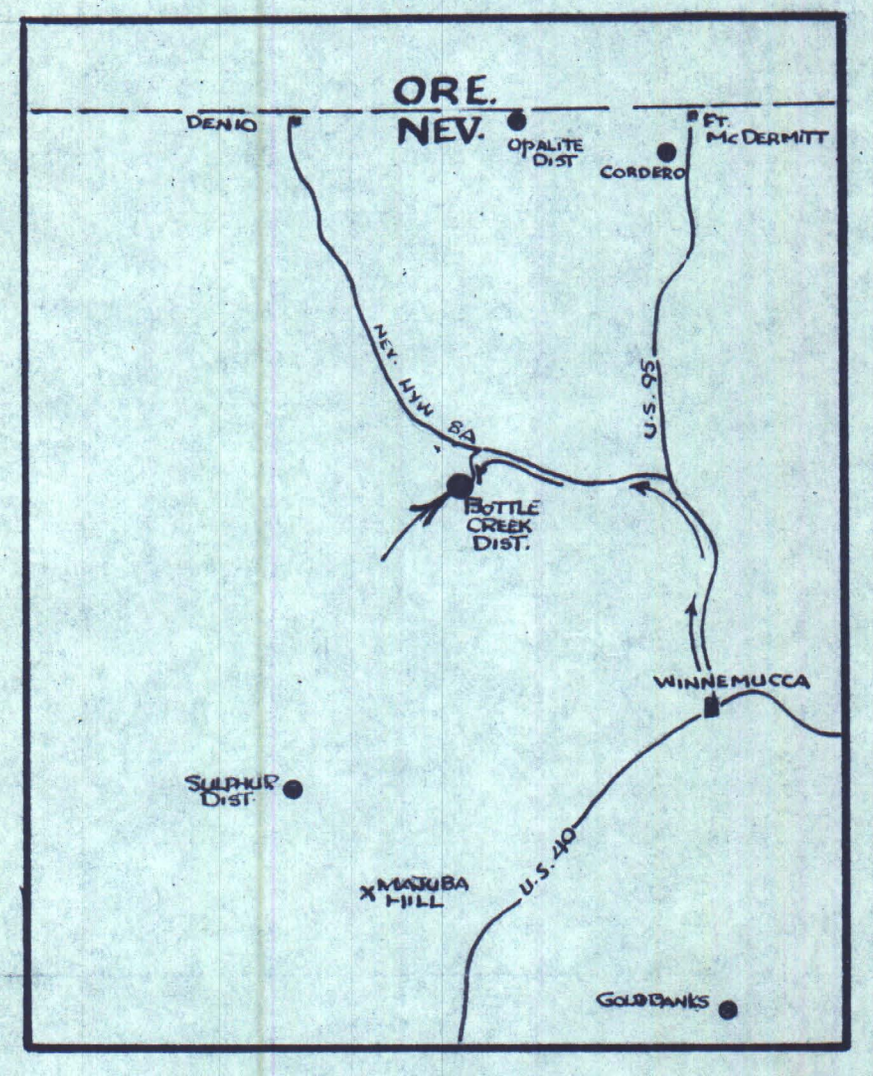
Respectfully submitted,

David Lecount Evans

Consulting Geologist,
1700 Royal Drive,
Reno, Nevada

July 18, 1966

A



SCOSSA MINES
MERCURY
BOTTLE CREEK DISTRICT
HUMBOLDT CO., NEVADA

INDEX MAP
1" = 22 Mi.

DAVID LE COUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST JULY 18, 1966.

B

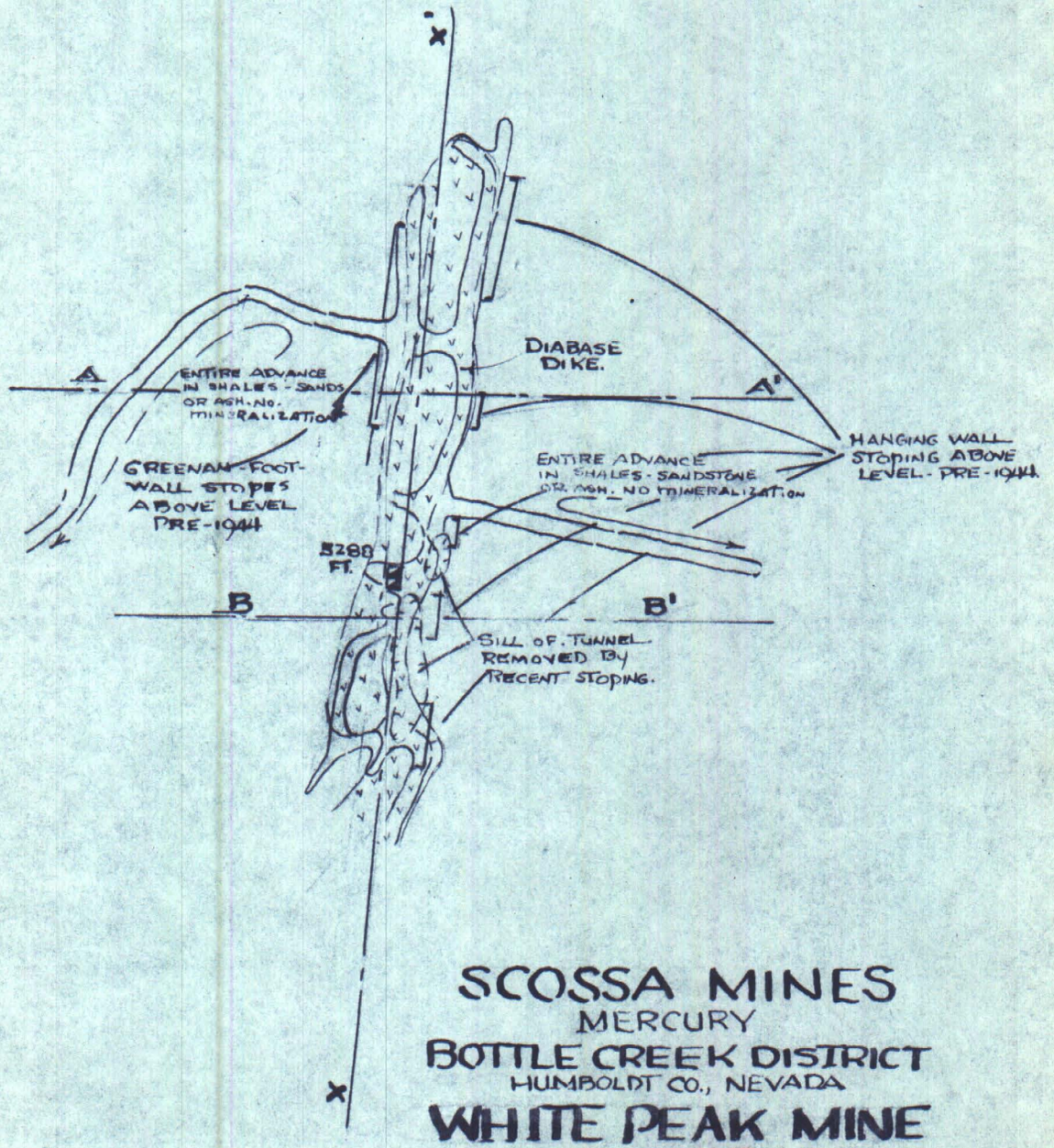
BLUE BIRD No.5
BLUE BIRD No.3
BLUE BIRD No.1
McADOO BLUE CAN MINE
Hqs IN BROKEN DIABASE
McADOO 1046 FLASKS
BLUE CAN 1728 FLASKS
BLUE BIRD FRACTION
WH. PK NO.2
WHITE PEAK NO.1
WHITE PEAK SHAFT.
773 FLASKS
NQS. ALONG DIABASE MARGINS
SCOSSA CABIN
WHITE PEAK NO.3
OLD TAILINGS TO HERE
WELL
CAMP
CINNABAR CANYON MINES
MILL
BLUE BIRD No.4
BLUE BIRD No.2
WHITE PEAK NO.4
RAINBOW FRACT #1
RAINBOW FRAC. #2
BLUE BIRD
ANT HILL
FRACTION
RED ORE NO.4
RED ORE NO.3
WHITE PEAK NO.5
+2200 FLASKS ESTIMATED 1961-1965
NQS in WIDE DIABASE AREA
RED ORE NO. 5.
S.12 S.13 S.7 S.18
C
C'
POINT BY TRIANGULATION
5800'
5800'
Y
Y'
FOLD LINE
WHITE PEAK NO.6
RED ORE NO. 1
RED ORE FRACT. NO.1
RED ORE NO.2
RED ORE FRACT. NO.2
AT 700' FROM X - BIRTHDAY MINE - 220 FLASKS FROM FAULTED DIABASE DIKE 10' WIDE.

SCOSSA MINES
MERCURY
BOTTLE CREEK DISTRICT
HUMBOLDT CO., NEVADA

CLAIM MAP
1" = 500 Ft.

DAVID LeCOUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST
JULY 18, 1966.

C



SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

HUMBOLDT CO., NEVADA

WHITE PEAK MINE

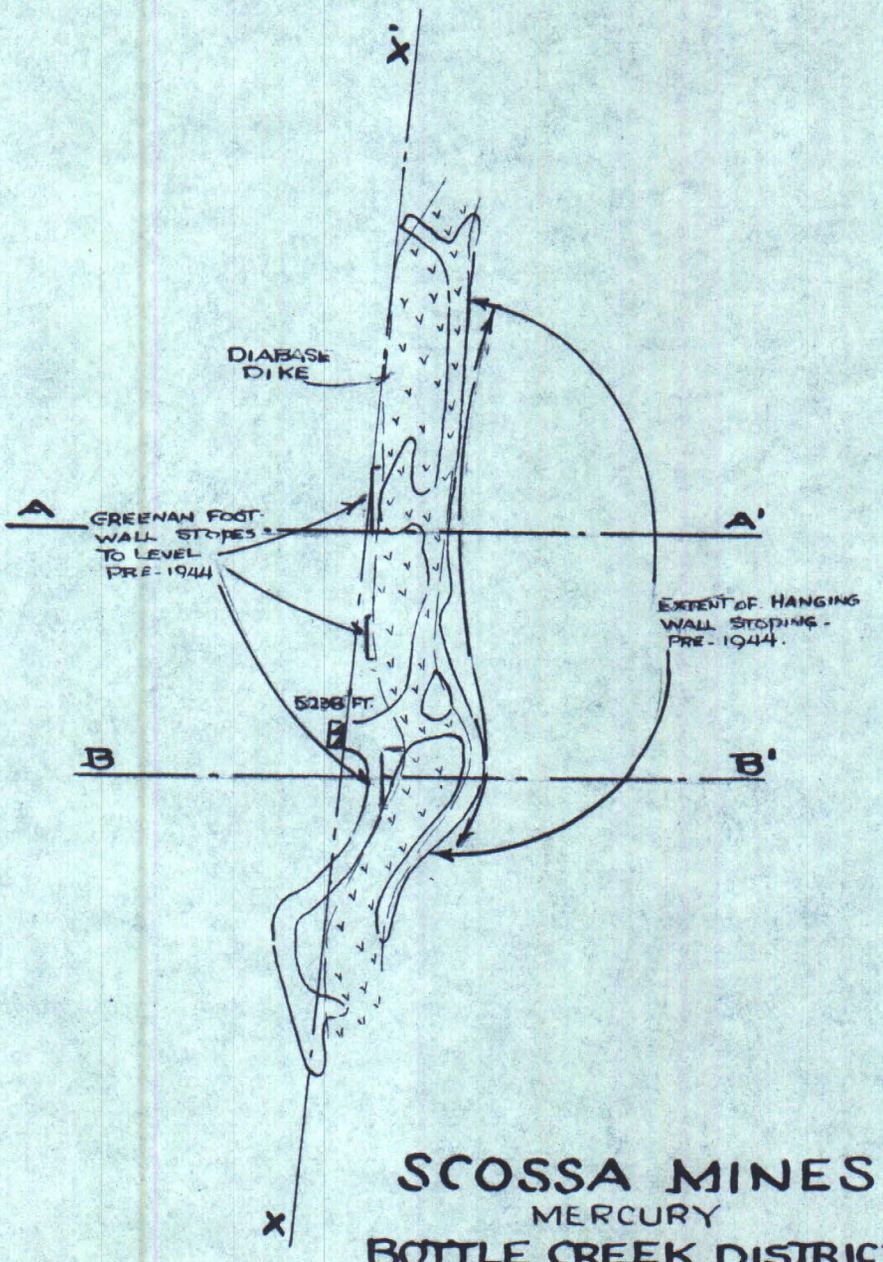
62 LEVEL

1" = 50 FT.

DAVID LECOUNT EVANS, RENO. NEVADA -
CONS. GEOLOGIST

JULY 18, 1966

D



SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

HUMBOLDT CO, NEVADA

WHITE PEAK MINE

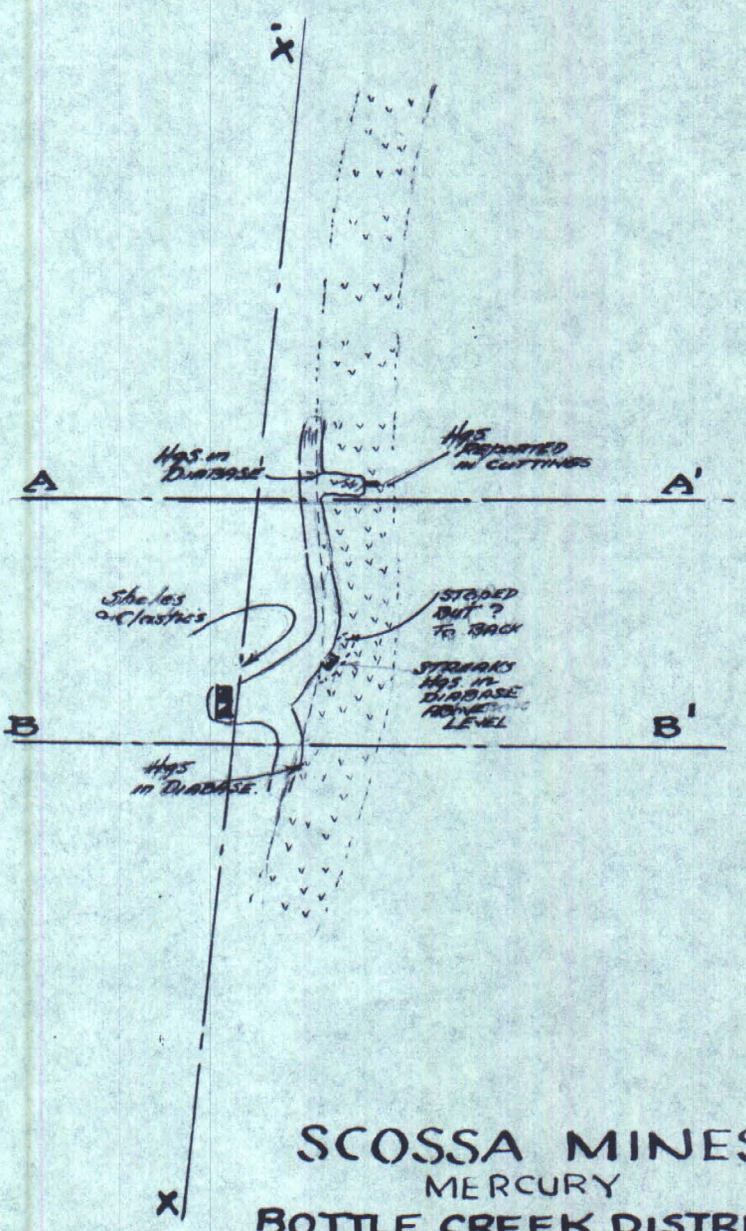
112 LEVEL

1" = 50 FT.

DAVID LECOUNT EVANS; RENO, NEVADA
CONS. GEOLOGIST

JULY 18, 1966.

E



SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

HUMBOLDT CO., NEVADA

WHITE PEAK MINE

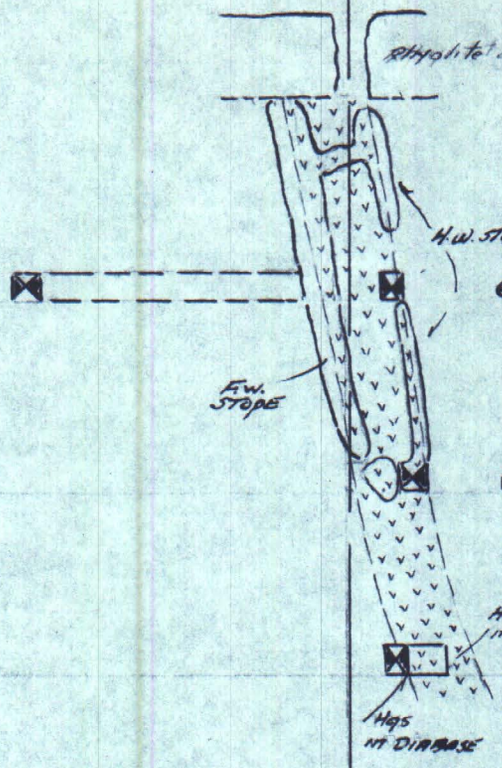
160 LEVEL

1" = 50 FT.

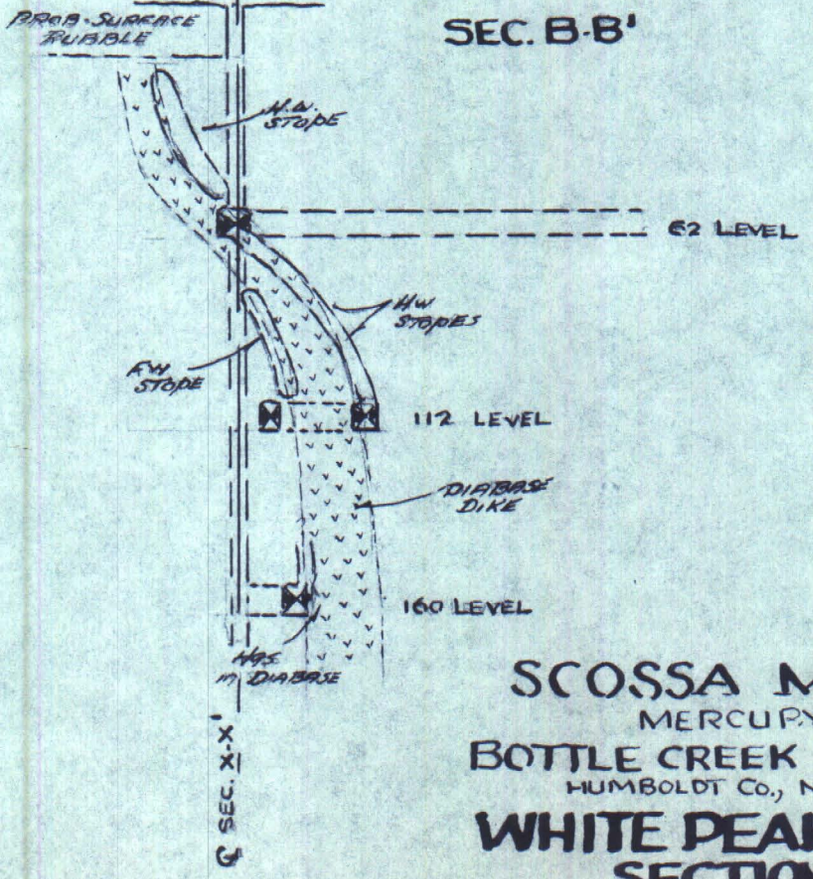
DAVID LECOUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST July 18, 1966

F

SEC. A-A'



SEC. B-B'



SEC. X-X'

SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

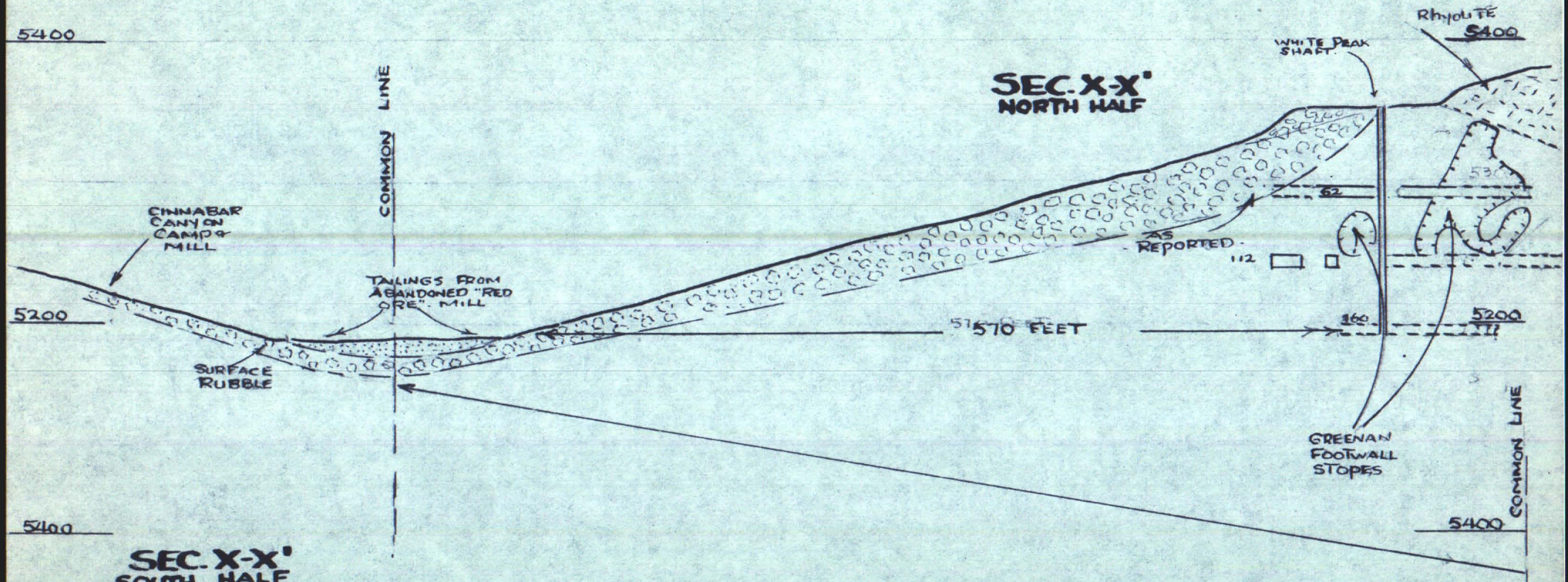
HUMBOLDT CO., NEVADA.

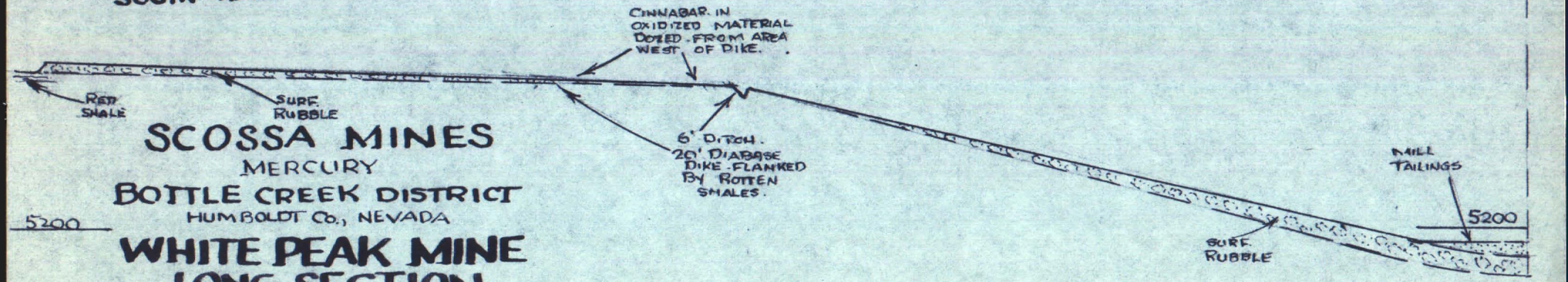
WHITE PEAK MINE SECTIONS

1" = 50 FT.

DAVID LECOUNT EVANS, RENO, NEVADA.
CONS. GEOLOGIST

JULY 18, 1966.





SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

HUMBOLDT Co., NEVADA

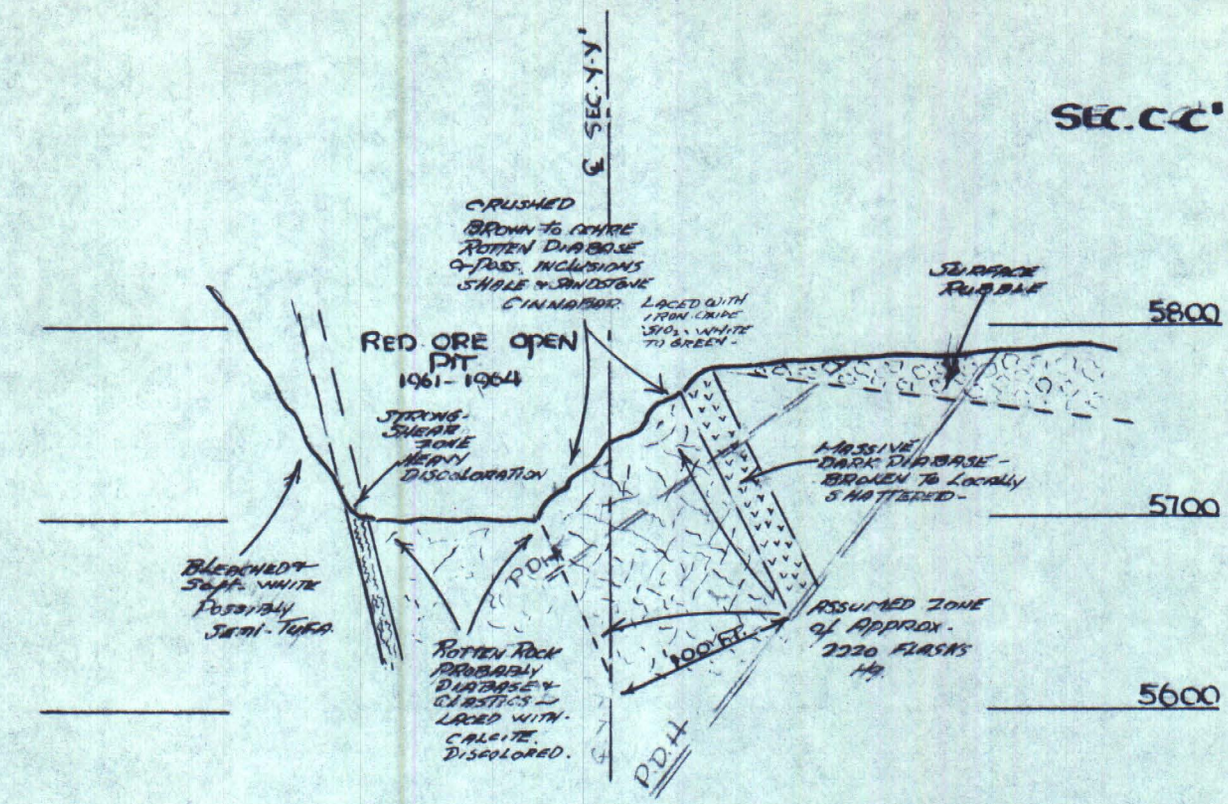
WHITE PEAK MINE LONG SECTION

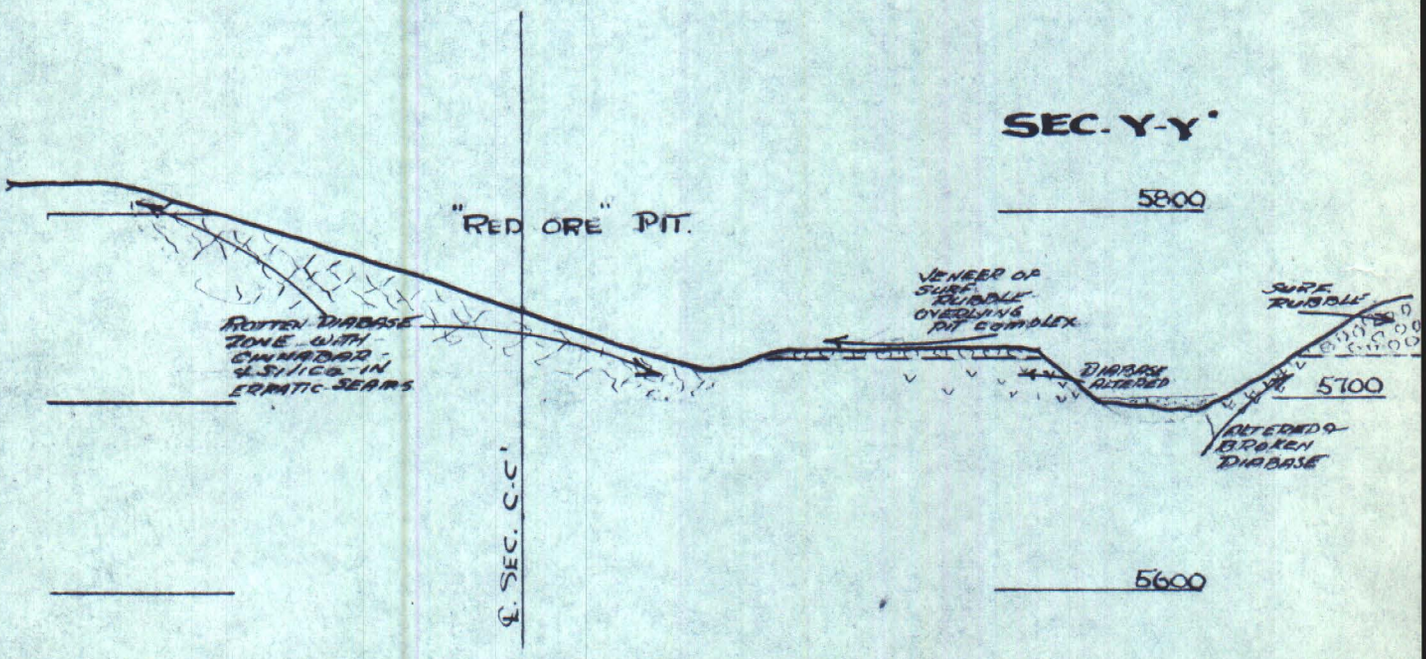
1" = 100'

DAVID LECOUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST JULY 18, 1966

6

H





SCOSSA MINES

MERCURY

BOTTLE CREEK DISTRICT

HUMBOLDT Co, NEVADA

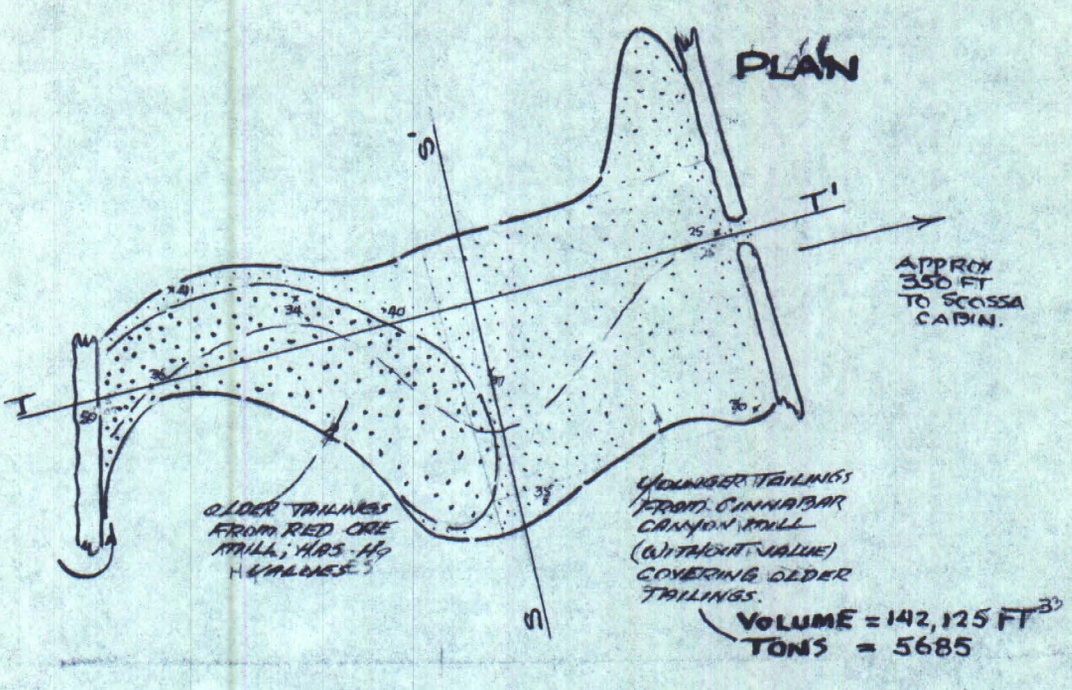
RED ORE MINE SECTIONS

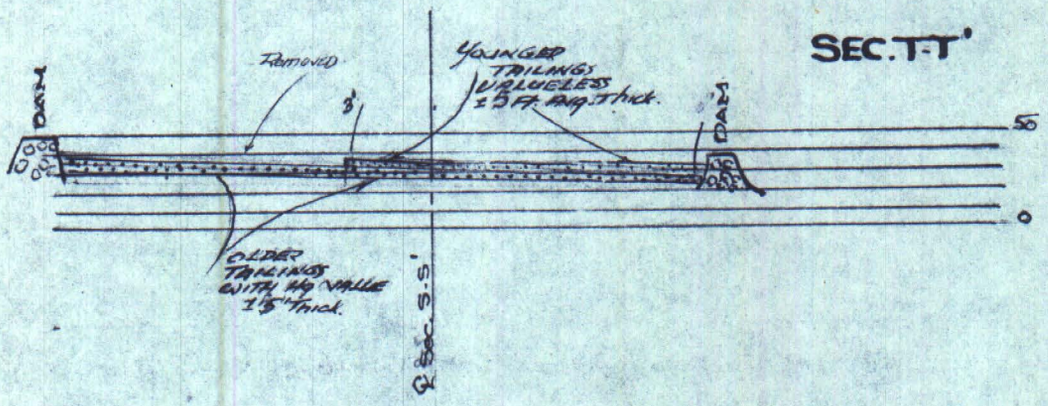
1" = 100 FT.

DAVID LeCOUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST

JULY 18, 1966

I





SCOSSA MINES
MERCURY
BOTTLE CREEK DISTRICT
HUMBOLDT CO., NEVADA

TAILINGS
WHITE PEAK NO. 3
1" = 100'

DAVID LECOUNT EVANS, RENO, NEVADA
CONS. GEOLOGIST
JULY 18, 1966.

FOLD LINE

FOLD LINE

I

MERCURY PRICES
MONTHLY AVERAGES
SOURCE-E.M.J.

TO ACCOMPANY REPORTS BY
DAVID LeCOUNT EVANS
CONSULTING GEOLOGIST
RENO, NEVADA