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ITEM

A MINERAL EVALUATION

PERSONAL
Copy -

ROSE CREEK UNIT
Rose Creek Land Sales, Inc.

Pershing County, Nevada

David LeC_ount Evans

July 28, 1968

July 29, 1968.

Rose Creek Land Sales, Inc.,
Attention: Mr. Al Landry,
335 Moraine Way,
Reno, Nevada.

Gentlemen:

Please find attached our evaluation of the mineral possibilities of your Rose Creek Unit, Pershing County, Nevada.

An original and four copies are submitted. Assay sheets are attached to the original and first copy.

The report follows our standard format for property evaluation, and we hope that written text and supporting illustrations will adequately present our conclusions and reasoning.

Be assured that if clarity is lacking we are anxious to discuss matters with additional detail.

With reference to our request for a lead-zinc assay on a composite sample of the black calcite unit, assay returns should be at hand, not later than August 12.

This opportunity to be of service has been greatly appreciated.

Yours very truly,


David LeCount Evans

i n d e x

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A MINERAL EVALUATION

ROSE CREEK UNIT
Rose Creek Land Sales, Inc.

T34N---R36E
Pershing County, Nevada

Foreword:

At the request of the Rose Creek Land Sales Corporation, properties were examined on July 8, 9, and 10, 1968. With samples shipped for assay on the night of July 10, drafting and major preparation was completed by July 13. Our San Francisco assayer, however, received samples at the peak of a 'back-log', caused by the construction of a new furnace, and assay returns were not received until July 24.

The delay of some five days has been regretted.

Our report is accompanied by five plats. They should clarify the written text and their use is urged.

Conclusions:

It is concluded that:

- 1- Possibilities are limited to one mile of mineralized trend, running from the NE/4 SE/4 of section 5, through the NW/4 NW/4 of section 4, and fingering out in the SW/4 of section 33.
- 2- Samples out from two distinct mineral units, along the trend, are too low grade to be of interest.
- 3- There are no reasons to believe that values will improve with depth.

Recommendations:

To further explore the mineralization at surface with trenching, or at depth by diamond drilling is not recommended.

Procedures:

Three mappable units, i.e.: Jurassic slates, silicified breccia, and a massive black-calcite zone, were first established at the south end of the trend; the No. 1 Shaft area was mapped (see Plates B, C, and D) with tape and Brunton compass, on a scale of 1 inch = forty feet. Mapping involved surface observations, studies of shallow surface cuts, and the No. 1 Shaft and its two principal levels.

This was followed by extending the trend to the northeast and southwest limits, by rough Brunton-pacing control, on a scale of 1 inch = 400 feet.

From relationships on maps and in section, sample locations were chosen that would (a) crosscut the structure and (b) fairly test both silica-breccia and black calcite units.

Field studies were concluded by a rapid reconnaissance through the south half of the southwest quarter of section 33, an area characterized by slates and narrowing, silicified bands, none of which indicated promising mineralization.

Location:

Mineralization occurs at the line of Humboldt and Pershing Counties, Nevada, in sections 5 and 4, Township 34 North, Range 36 East, and the S/2 SW/4, Section 33, Township 35 North, Range 36 East.

Area lies 13 miles southwest of Winnemucca, Nevada, via U. S. Highway 80. It is reached by turning east at 3.45 miles southwest of the Rose Creek Overpass.

Driving time from Reno, Nevada is about 2½ hours over excellent highway.

General and Limiting Conditions:

Access:

Access is excellent with U.S. Highway, paved and currently being dualled, passing through the center of the property, which consists of sections 33, 5 and 7. From highway the 0.7 miles of approach to the shaft area is over good desert road.

Power:

A power line passes within 900 feet of the No. 1 Shaft area.

Climate:

Climate is dry with rainfall not exceeding 7 inches per annum. Summers are hot with peaks reaching 105° and then dropping as much as 60 degrees at night. Winters are cold, and snowfall light and infrequent. A year-round operation would be assured.

Terrain:

Mineralization follows the northeast-southwest trend of gentle, northwesterly sloping hills. Relief across outcrops varies from 4475 to 4600 feet. Except for the mineralized area, surface west of mineralization resembles a slightly tilted plain.

Water Supply:

No surface supply exists. With reference to Plat B, however, note the spring just north of section 33; water is brackish.

As in the case of most of Nevada's inter-mountain valleys, it is believed that good and abundant water could be had by drilling deeply into valley wash and gravels.

Timber Supply:

The property and area is without trees, except for a few scrubby cedars in section 33.

Labor Supply:

Winnemucca, a mining-minded town in an active mining district provides some skilled mine labor.

Mill Sites:

Sites are available and the disposal of tailings presents no problem.

Local Title:

Rose Creek Land Sales, Inc. holds in fee sections 35 in Humboldt County and sections 5 and 7 in Pershing County, as shown on Plat B.

Had mineral possibilities been viewed favorably, that portion of the trend crossing the northwest quarter of section 4 would have required standard mining claims. Considering Plat E, claims X, Y and Z, shown by dashed line, have been placed thereon, in anticipation of such a possibility.

History of Property and District:

The date of earliest activity could not be determined. Evidence in the shaft area, however, indicates that the area was being worked as early as 1927. Claims located in 1965 attest to continued interest of recent date. The possibility that these were railroad sections, prior to present ownership, suggests that exploration was being done on ground not open to entry at the time.

A stockpile at the No. 1 Shaft site indicates that small shipments might have been made. But in view of the barren nature of the oxide material (see sample #3944) one shipment would not have justified a second.

The active period saw the driving of an 80 foot shaft and the completion of levels and cuts as totalled below. Indications exist that miners followed very thin seams, as best they could, which might have had better than average values.

Rose Creek Land Sales' mineral interest dates from the time

the corporation acquired the property. It is our understanding that the 1920 acres were purchased for their land potential, and that the existence of earlier mining activity came as a surprise, representing a possible 'extra dividend'.

Mr. Alberto Landry of the organization carefully prospected the property. Samples, well chosen, serving to show the existence of wide-spread, low grade mineralization, were persistent enough to justify a more detailed type of examination. Mr. Landry's success in cleaning out old workings, replacing worn out ladders, et cetera, and his knowledge and guidance, made a rapid survey possible. Much time was saved through his earlier efforts.

Geology:

Summary: Brecciation of Jurassic slates, following an average N20°E trend (probably a regional fault) was cemented by quartz mineralization, carrying very minor values in gold and silver.

Post-quartz movement along the same line brecciated the western margin and south and north noses of the quartz mass which, in turn, was cemented by black calcite, carrying no base or precious metal.

The probability of a third period is suggested by one occurrence of weak cinnabar on the north end.

Rock Types (Petrography)

Jurassic-Triassic Slates:

This unit lies to the east of the mineralized zone.

Contact with the adjacent and later silicified breccia unit is sharp. Material is dark in color (weathering rusty red) vitrified and hard. Slates are thinly bedded.

Igneous Intrusive Rock:

Narrow dikes of intrusive rock were observed, in and paralleling the mineralized trend. Occurrences were few and isolated. Material is dioritic to granodioritic in appearance, and possibly associated with mineralization. The few occurrences were not mapped and have not been shown on plats.

Structure:

Except for the sharp contact between mineralization and slates the area is without structural suggestion. Slates, striking N23E in the shaft area and swinging to N53E in section 32, dip steeply to the northwest.

West of the solid slate, slate occurs brecciated and fragments are cemented with massive, white, finely crystalline quartz; and west of the brecciated slate cemented with silica, the silica, in turn, has been brecciated, with fragments of silica beyond the contact cemented with black calcite. The sequence suggests re-occurring movement along the same general line of weakness. Our study proposes that mineralization followed a fault.

Mineralization:

Silica-Breccia Unit:

We repeat that the mineralized mass, adjacent to steeply dipping slates, consists of brecciated slate, cemented by massive, finely crystalline quartz. The habit of following thin seams during early mining suggests that values occurred in very narrow fractures lined with brown iron oxides. Except for such seams the quartz mass seems relatively barren, as indicated, especially, by samples 3943, 3931 and 3930.

The unit has a true thickness of 33 feet and an apparent thickness of 40 feet (measured across surface). Traceable for about 3500 feet, it becomes mixed with black calcite at both the north and south ends; however, narrow, 6 foot, veins of silica occur, feathering out to the northeast, in section 33, beyond the area of mixing.

Black Calcite Unit:

With early mining interest confined to thin seams in the silica-breccia unit, and because of "low grade" appearance, as well as lack of success in early mining, the unit appeared to be without promise. The property's potential, therefore, depended on the Black Calcite unit.

Traced for 6000 feet on the strike, with an indicated minimum thickness of 85 feet and mineable by open pit if it carried values, the unit suggested possibilities.

Crystalline throughout, dominantly jet black in color, but, locally, changing to gray, the volume of the black calcite is exceptional.

Until early 1966, black calcite was a "dirty" calcite (calcium carbonate) without economic possibilities. In 1966 we were advised of laboratory experiments by the U. S. Bureau of Mines, indicating that black calcites could contain sufficient silver impurities to be economic. D. F. Hewett and A. S. Radtke (USGS) writing in "Economic Geology", January 1967, summarized the situation, as transcribed on the following page:

"The name black calcite has been applied from time to time to a dark gray to black variety of calcite or aragonite in metalliferous deposits in the Western States. Most of the material shows curved, roughly rhombic cleavage. The color is due to dispersed minute grains of one or more oxides of manganese, so dispersed that they rarely show any relation to cleavage surfaces or outward crystal forms.

"Recent study shows that the black calcite from numerous metalliferous deposits in the Western States contains small amounts of several metals, especially zinc, lead and silver; in places the crude black calcite contains as much as one percent silver and the black residue remaining after solution of the calcite as much as 1500 ounces of silver to the ton. Black calcite is recognized in some deposits of late Cretaceous to early Tertiary age where the host rock is a Paleozoic carbonate; thus far the, this variety contains the larger amounts of silver. It is also present in some vein deposits where the host is generally volcanic rocks of middle Tertiary age; these are known in many districts in the southwest and even though the lead and zinc content is noteworthy, the silver content rarely exceeds one ounce to the ton."

Neither our original source of information, nor the 1967 release, promised that all black calcite would be silver bearing.

Nor were clues given as to what might determine the argentiferous from the non-argentiferous.

Aware of the circumstances that the black calcite might carry unsuspected silver values, sampling of the unit, with silver in mind, appeared imperative.

With reference to the sample summary, below, it is apparent that black calcite results have been negative. And, ironically, the best looking and cleanest black calcite produced the most discouraging results.

Other Mineralization:

With reference to P₁ at B, in section 33, and just

above the south line, note the reference to HgS. Very low grade cinnabar (less than one pound) colors a soft, very porous, talcy, four foot width, apparently following a flat fracture, which dips to the west. Mercury sulphide occurs as light pink "paint". H_2O crystals were observed. The zone is without continuity, the occurrence is thin and the grade very low.

Development:

Total development amounts to 396 feet. 80 feet represents vertical advance, and the remaining 316 feet is all horizontal, divided between 264 feet of drifts and crosscuts, and 52 feet of trenching.

Development is itemized as follows:

Vertical

<u>Workings</u>	<u>Level or Place</u>	<u>Feet</u>	<u>Total Feet</u>
Shaft	No. 1 Shaft	80	80

Horizontal

From Shaft	No. 1 Level (Tun. 3)	91	
	No. 2 Level	20	
	No. 3 Level	90	
	No. 4 Level	5	
	No. 5 Level	10	
Trench	Tunnel 1	15	
Tunnel	Tunnel 2	48	
Tunnel	Tunnel 3 (#1 Level)		
Trench	Tunnel 4	37	
		<u>316</u>	<u>316</u>
	<u>Total Advance</u>		396 feet

All workings are open for study. However, bad air was encountered, in the stub at the base of the 80 foot shaft, and caution is advised.

Samples:

Sixteen samples were cut during the course of examination. Ten of the total represent the black calcite zone, four test the silica breccia, one is from the slate at the bottom of the shaft, and one tried out the small stockpile.

Samples are the product of orthodox fire-assaying, except for two, assayed for zinc and mercury by wet methods.

Metallurgical Laboratories, 1142 Howard Street, San Francisco, made all determinations. Headed by Mr. Martin Quist, a very reputable chemist, Metallurgical enjoys an excellent reputation.

Mr. Quist was advised regarding nature of materials, i.e.: calcareous or siliceous, to assist in the proper determination of flux.

Samples are summarized as follows, and grouped according to category:

Silica Breccia

<u>Samp #</u>	<u>Place</u>	<u>From</u>	<u>To</u>	<u>Thick</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>Comments</u>
3930	# 4 Lev	Face		4"	0.005	0.03	
3932	# 1 Lev	Face	10°NW	10"	0.005	0.11	
3941	Out			8"	Trace	Trace	950°SSW No. 1 Sh
3943	# 3 Lev	0	18°E	18"	0.05	0.03	Shaft to contact

Slate:

3931	# 5 Lev	Grab		0.015	Trace	Bottom of Shaft
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Stockpile

3944	Surface	Grab		0.03	0.16	Source ?
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Black Calcite:

<u>Samp #</u>	<u>Place</u>	<u>From</u>	<u>To</u>	<u>Thick</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>Comments.</u>
3933	# 1 Lev	13	30E	17	0.005	0.02	From Center of Access Tunnel
3934	# 1 Lev	0	13E	13	0.010	0.02	dto
3935	Tun # 2	0	8½E	8½	Trace	Trace	Black Calc. Pure From Portal
3936	Tun # 2	8½	17½	9	Trace	Trace	Black Calc. Weathered
3937	Tun # 2	17½	32½	15	0.005	0.02	Weathered black calcite; traces quartz veinlets
3938	Tun # 2	32½	48½	16	0.02	0.02	Dto
3939	Tun # 2	@ Face			0.02	0.02	Across shear
3940	Tun # 4	Face	18'	18	Trace	Trace	Pure black calc.
3942	Cut			3'	0.02	0.01	950' SSW #1 Sh.
3945	Tun # 1	@ Face	Grab		0.005	0.03	Broken calcite Black.

Comments:

Oz. Au and Oz. Ag represent ounces of gold per ton and ounces of silver per ton.

Note that all values are from "trace", through "thousandths of an ounce" to 16 hundredths of an ounce (stockpile silver) the highest value.

#3930, representative silica breccia carried 0.02% zinc and a trace of mercury.

#3931, the one slate sample, showed 0.01% zinc and a trace of mercury.

And, finally, in view of the fact that black calcite could carry lead and/or zinc, a sample composite, made up of the ten samples taken from the black calcite, will be run for lead and zinc. Such is being requested and results will be reported by letter.

Gross Values

Using arithmetic averages, and a value of \$35 per ounce for gold and \$2.50 per ounce for silver, categories average out as follows:

Black Calcite	\$ 0.31 per ton
Silica Breccia	\$ 0.87 per ton
Slate *	\$ 0.53 per ton
Stockpile	\$ 1.41 per ton
Sample 3943 **	\$ 1.83 per ton

* only one sample and not typical since it is adjacent to silica mineralization

** good crosscutting sample across 18 feet of a total width of 33 feet.

The purpose of listing these values is that dollars can be more readily pictured than fractions of ounces.

Ore Reserves:

The property is without ore reserves. No possibilities exist that reserves can be developed.

Treatment Methods:
Equipment:
Estimated Costs:
Metal Prices:
Financial Requirements:
Profit or Loss:

Considering the negative conclusions of this analysis, these major headings are not considered.

Recapitulation:

Material mapped and sampled is without value.

Possibilities with depth are not just "shrugged off". The absolute lack of any indications except quartz and calcite appears significant. Material is low temperature and carries with it none of the copper stain, lead or zinc oxides, molybdenum oxides, or other indications that base metals might accompany silica and calcite, which might increase with depth.

Slight improvement in gold and silver values might be anticipated at slightly greater depth and just above the water table through secondary enrichment; but values would still be tied to thin fractures, and the overall mass should remain low. Below the water table values would be primary, unenriched, and even lower.

Concerning the one "show" of cinnabar, we repeat that the "show" is small; but, too, we admit that it might have significance. Without urging a concentrated program and more expense, it is suggested that owners cut a sample from this lone exposure for assay, and, if returns are encouraging, that the immediate area be rereviewed liesurely by owners for other similar occurrences.

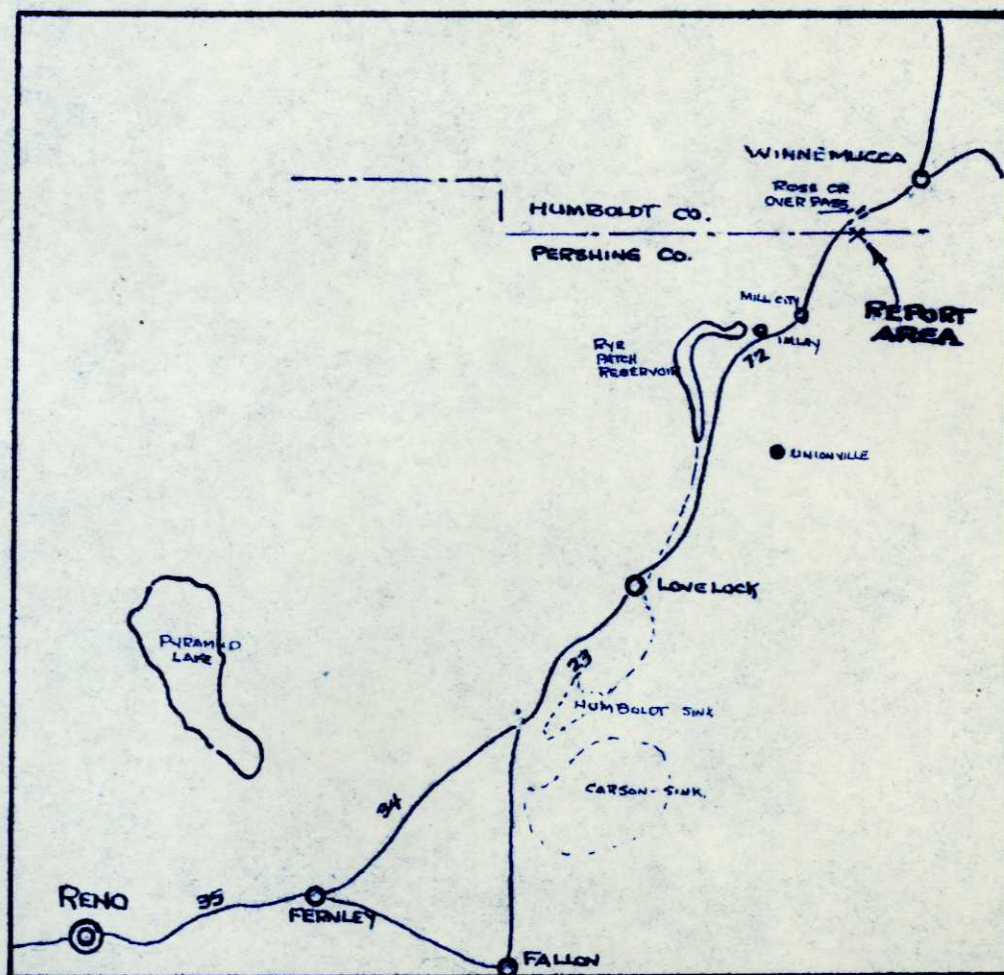
As reported under "comments" on page 11, black calcite will be further tested for lead and/or zinc.

Respectfully submitted,


David LeCount Evans

Reno, Nevada

July 28, 1968.



ROSE CREEK UNIT
ROSE CREEK LAND SALES INC.

ROSE CREEK LAND SALES INC.

T34.35N, R36E. NEVADA

REGIONAL INDEX MAP

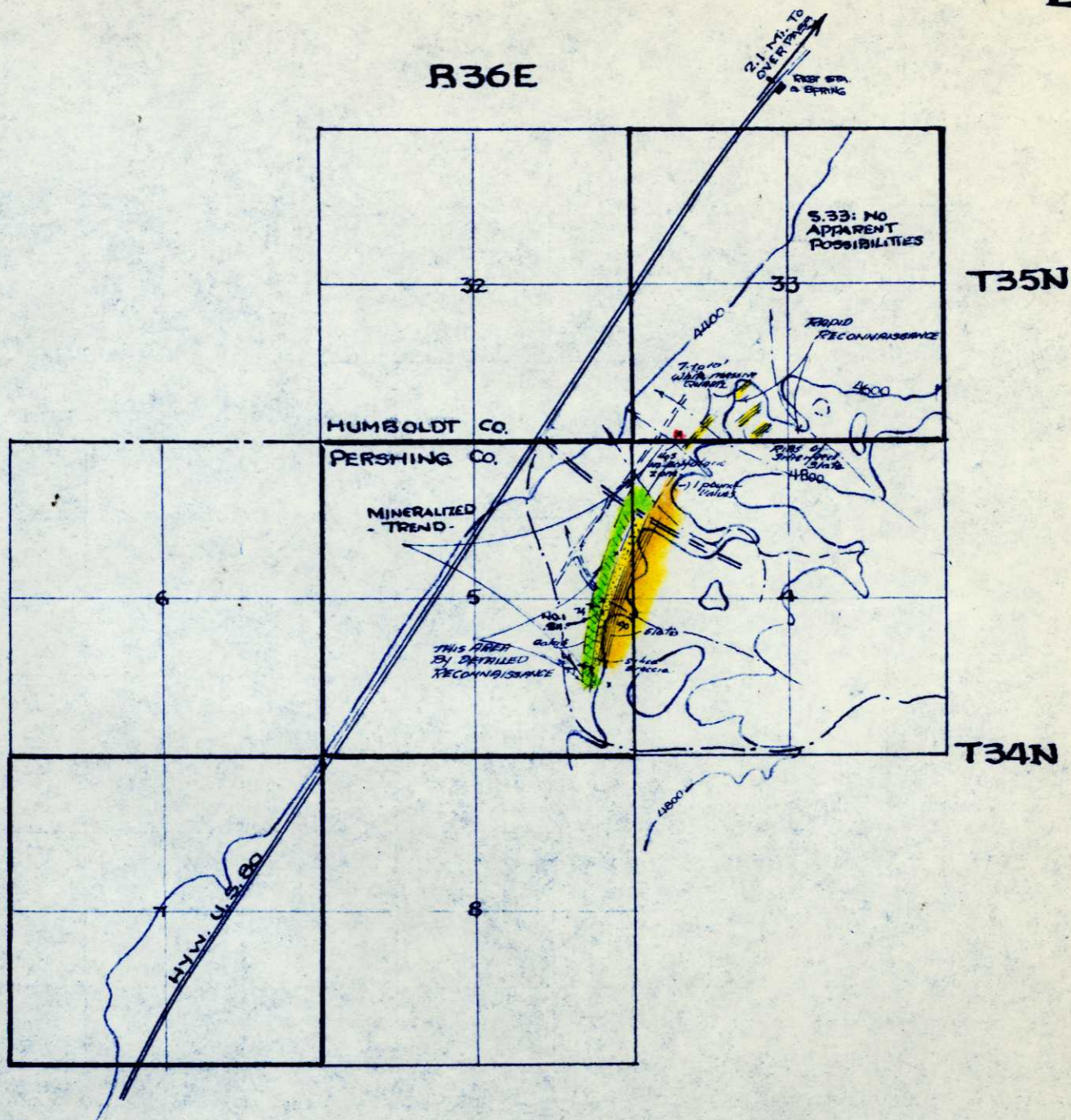
INDEX MAP

1 IN = 26 MILES

DAVID L. COUNT EVANS
CONS. GEOLOGIST

RENO, NEVADA
JULY 19, 1968

B



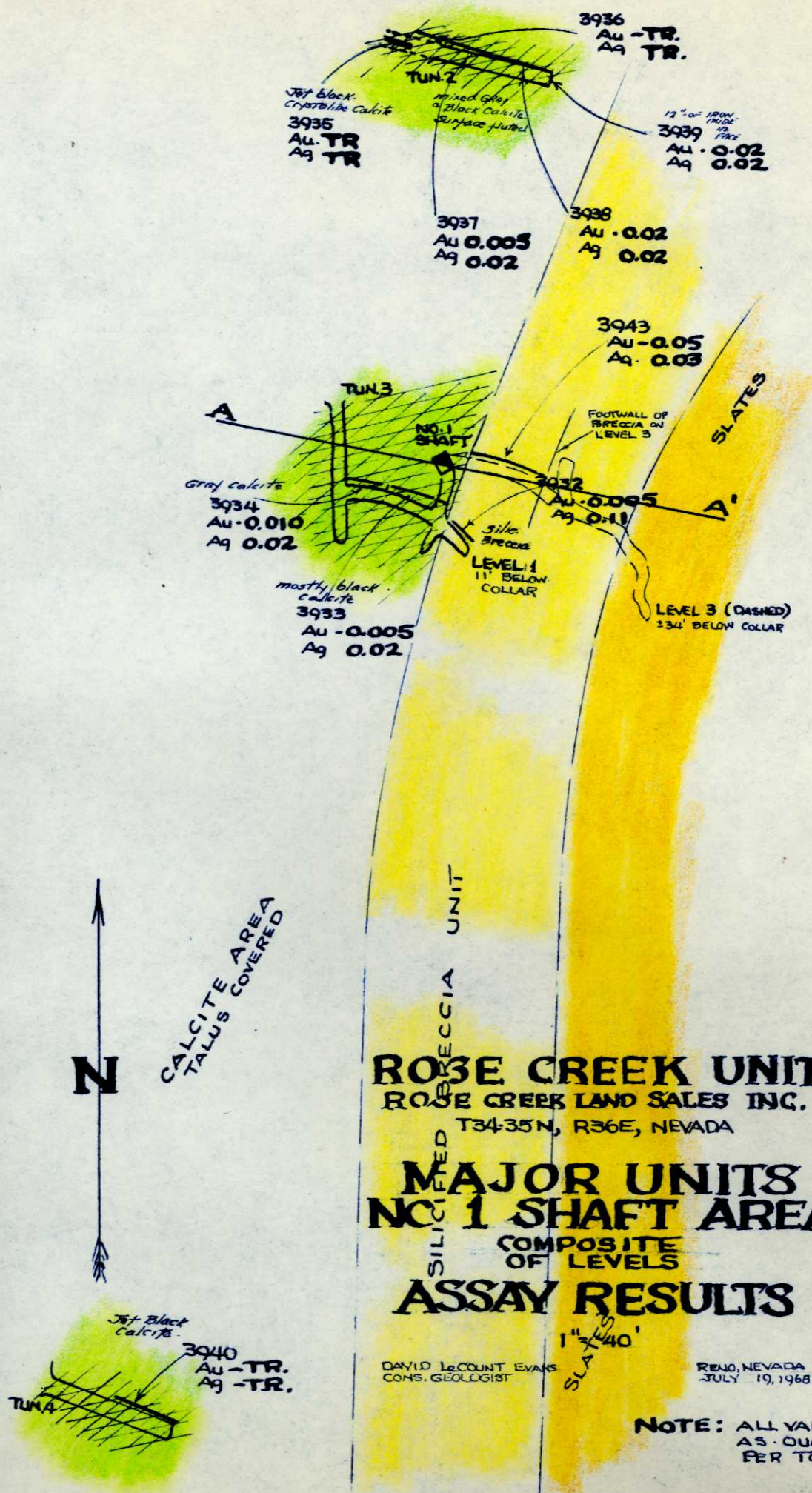
ROSE CREEK UNIT
ROSE CREEK LAND SALES INC.
 T34-35N, R36E, NEVADA

**PROPERTY
 INDEX MAP**
 1 IN. = 0.5 MILES

DAVID LECOUNT EVANS
 CONS. GEOLOGIST

RENO, NEVADA
 JULY 19, 1968

C



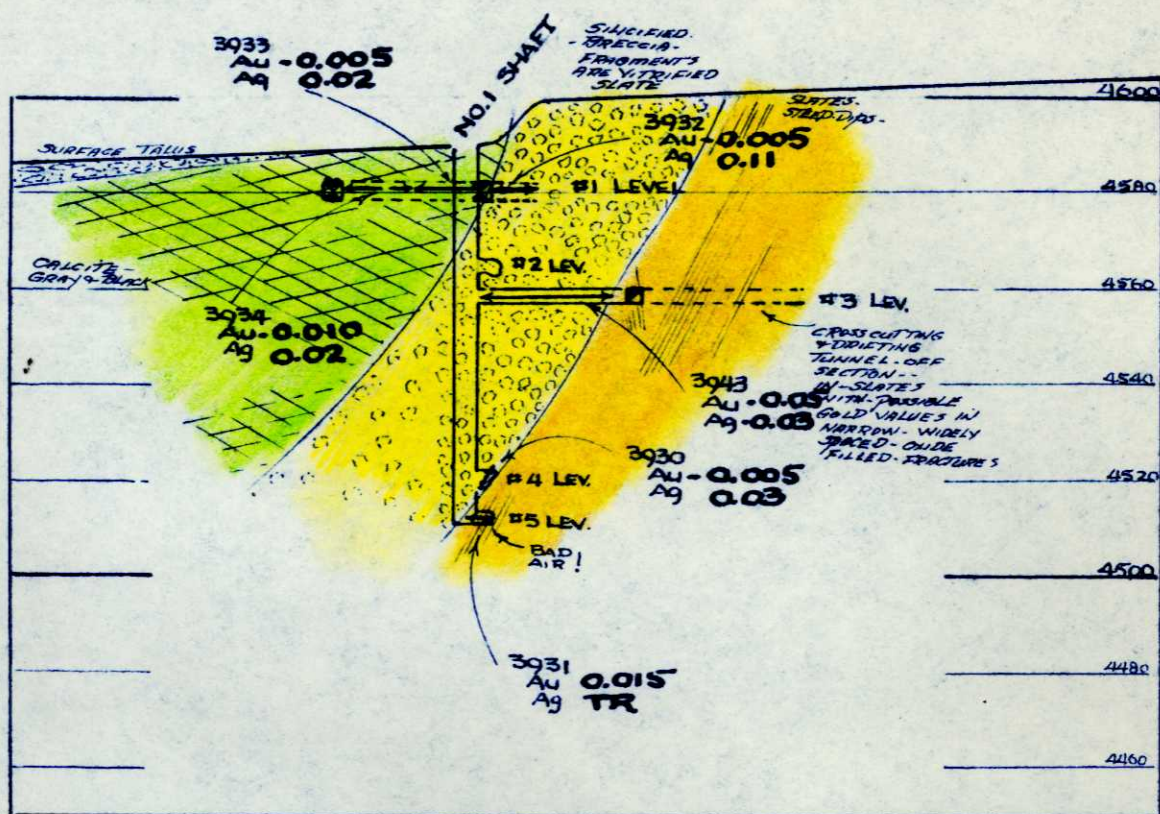
ROSE CREEK UNIT
ROSE CREEK LAND SALES INC.
T34-35N, R36E, NEVADA

MAJOR UNITS
NO. 1 SHAFT AREA
COMPOSITE OF LEVELS
ASSAY RESULTS

DAVID LeCOURT EVANS
CONS. GEOLOGIST

RENO, NEVADA
JULY 10, 1968

**NOTE: ALL VALUES
AS OUNCES
PER TON**



ROSE CREEK UNIT

ROSE CREEK LAND SALES INC.

T34-35N. R36E, NEVADA

SECTION A-A

1"=40'

DAVID LEICHT EVANS
CONS. GEOLOGIST

RENO, NEVADA
JULY 19, 1968.

NOTE:- ALL VALUES
AS OUNCES
PER TON!

R36E

E

To
U.S. 80GRADED
ROAD

X

Z

POWER
LINEALL CALCITE - MIXED
WITH MINOR QUARTZ
AND SOME MONZONITE
DIKES.X, Y & Z =
CLAIMS TO BE
LOCATED
ONLY
IF SAMPLES
SO JUSTIFY.NE/4
SEC. 5NW/4
SEC. 4THIS PART OF
TREND FROM
TOPO SHEET WITH
OBSERVATIONS
ROUGHLY TRANSCRIBED

T34N

N

TUN. 1
BLACK
CALCITE
3945
AU - 0.005
Ag 0.03MOSTLY SILIC.
BRECCIA - CUT
THROUGHOUT BY
CALCITEFROM SOUTH
LIMIT NORTH
TO HERE USING
PACING - TRAVEL
CONTROL.

1/4 COR.

3150'
FT.SEE PLATS
C & D FOR
SAMPLE
DETAILSTUN. 2
DOMINANT
BLACK
CALCITESTOCK
PILE
3944
AU - 0.03
Ag - 0.16JET BLACK
CALCITETUN. 3
3940
AU TR
Ag TRSE/4
SEC. 53942
AU - 0.02
Ag 0.01BLACK & GRAY
CALCITE3941
AU - TR
Ag TRMIXED
BRECCIA
AND LATER
CALCITE

ROSE CREEK UNIT

ROSE CREEK LAND SALES INC.

T34.35N. R36E NEVADA

MINERAL TRENDS
SECTIONS 5 AND 4

1 IN = 400 FT.

DAVID LECOUNT EVANS
CONS. GEOLOGISTRENO, NEVADA
JULY 19, 1968NOTE: ALL VALUES
AS OUNCES
PER TON.

July 29, 1968.

Mr. Martin Quist,
Metallurgical Laboratories, Inc.
1142 Howard Street,
San Francisco,
California.

Dear Martin:

The most recent batch of samples, my numbers 3930 through 3945 have been duly received and the results noted. Appreciated have been the timing and the results.

Hayatt and Radtke's discussion in the January 1967 issue of ECONOMIC GEOLOGY did not promise silver for all black calcites, and it is apparent that in this case, a mass of black calcite is not argentiferous.

However, they have also attributed the discoloration to lead and zinc. All such impurities are associated with manganese, and they use the broad term manganate.

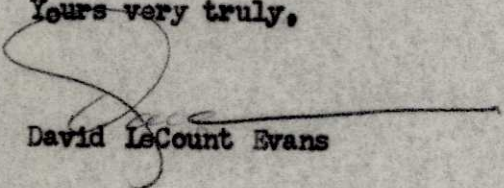
To close the door completely, I feel that clients are entitled to a try on lead and zinc. This is very much like a forward pass in the last quarter, but unless I give it a try I won't be happy.

This, therefore, is to ask that from the pulps, which I trust are still at hand, of the calcite samples, a composite be made, with the composite sample assayed for lead and zinc.

The ten sample numbers are: 3933, 3934, 3935, 3936, 3937, 3938, 3939, 3940, 3942 and 3945.

With best regards, I am,

Yours very truly,



David LeCount Evans

August 8, 1968

Rose Creek Land Sales Inc.,
Attention: Mr. Al Landry,
335 Moraine Way,
Reno, Nevada.

Gentlemen:

With reference to our report of July 29th, on the mineral potential of the Rose Creek Unit, Metallurgical Laboratories of San Francisco was requested to make a composite sample of the ten samples of black calcite and assay the composite for lead and zinc.

Yesterday's mail brought the results, of which I enclose the original and copy. The reported 'trace' for both lead and zinc speaks for itself.

I ask that the assay sheet be attached to the report and copies.

Yours very truly,

David LeCount Evans

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

REPORT OF ANALYSIS

Submitted by **Mr. David Le Count Evans**
1700 Royal Drive
Reno, Nevada 89503

Date **August 1, 1968**Sample of **Mineral Composite**

P. O. No.

Lab. No. **2361-17**

SAMPLE MARK

PERCENTAGES

3933-3945 etc.**Lead****Trace****Zinc****Trace**

METALLURGICAL LABORATORIES, INC.

By 