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ITEM 58

March 28, 1967

Mr. Charles P. Knaebel,
Utah Construction and Mining Company,
70 Linden Street,
Reno, Nevada.

Re: Roberts Mountains Promise;
Reconnaissance Notes for
Period, March 20-24, 1967.

Dear Mr. Knaebel:

The following, in memorandum form, summarizes recent reconnaissance studies in the Carlin-Cortez areas of Eureka and Lander Counties, Nevada.

Purposes:

Instructions of March 17 requested a list of companies, currently active in the Roberts Mountains Thrust-fault 'play'; and, if possible, information regarding specific areas of interest on a per-company basis.

The subsequent search for details, which proved fruitless, did develop information concerning properties, theory, and possible future opportunity.

Believing that such may assist current and future thinking, all are listed.

Results:

Active Companies:

Companies, active in this 'snowballing' gold search, are legion. Neumont, Homestake, Freeport Sulphur, American Exploration, Union Pacific Railroad and Duval, it has been reported, have located large blocks in the area, within the last six months.

Areas of Activity:

It has been impossible to pin-point such blocks in the over-all area. Naturally, no property maps exist for general use but, undoubtedly, some company files could provide the picture.

Normal procedures, for filing claims at County court-houses, are not specific. A "Mining District" is

meaningless without section, township and range detail. Court house research will not provide the answers. Only by locating and plotting locations in the field can one complete a reliable property map.

Other Results:

Five days of field reconnaissance did provide details concerning:

1. The positions of "windows" as recognized by the U.S.G.S., on the basis of work to about 1965.
2. Previously unreported characteristics of mined or being-mined "window" areas.
3. Pros and Cons of the Roberts Mountains hypothesis.

Procedures:

The "play" was discussed with contractors in Elko and Battle Mountain. The general picture was explored with reliable individuals in the American Exploration Company, Neumont Mining Company, London Extension Mining Company (of Gold Acres) and the Gold Acres Company.

Rapid field reconnaissance was made of

1. The Gold Acres pit (a theoretical "window")
2. The recently publicized Cortez Joint Effort (American Exploration as operator), at the mouth of Cortez Canyon. Reference is made to attached index maps. Observations were made from a distant vantage point, since entry was not permitted.
3. The Roberts Mountains supposed-thrust, as exposed in Cortez Canyon.
4. The area from Carlin to the Lynn Creek-Neumont pits, by car.
5. Access to "windows" west of the highway from Battle Mountain to Austin.

The Bootstrap prospect, west of Lynn Creek, could not be reached because of impassable roads.

Personal Initial Reactions:

On the basis of the above it has been concluded that:

- A. The complacent acceptance of the Roberts Premise necessitates the covering of any and all "windows" with claims.

The expense of this procedure is obvious.

B. Features, common to Gold Acres and Lynn Creek (50 miles apart), suggest that lithologic sequence, ie: a porous, calcareous ore-bed, overlying a black carbonaceous dolomite (both with values), could be of real importance.

C. Submitted sketches postulate the possible significance of $N34^{\circ}W$ regional-structural trending; the writer's reaction at Gold Acres that an area of subsidence might be involved and the reported reaction of another major company that Gold Acres indicated a large, circular domal area (without closure on one end) are possibly with merit. All suggest that promising areas might be located without the help of complicated overthrusting.

D. Continued Utah Construction and Mining interest should be regional in nature. Strict adherence to the Roberts Mountains overthrust premise would not be advised. The "old-fashioned" appreciation of lithologic sequence, zones of porosity and permeability, regional structural trends and locally circular to elliptical areas of alteration on such trends, remain reliable field tools.

E. The Roberts Mountains approach remains a still-to-be-proved premise, to the writer, and should not eliminate other sound thinking. The area of current, intense activity, as well as the possibilities of extension, north, south and west, continue to merit exploration.

Specific Property Details

Possibly Available

1. Gold Acres

Ownership: London Extension Mining Company, Harry Bishop, Sect., 195 W. 2nd, Battle Mountain. Major coverage.

Gold Acres Company; Wm. P. Maloney, President, Thompson Bldg., Marion, Ohio. Minor coverage; underground workings.

History: London Extension

400 ton mill active, 1941 to 1961; open pit mining from 1600 feet of pit length. 2,500,000 tons of approx. \$5 rock treated, profitably through 1959.

Gold Acres Co. Same period; 50,000 tons of \$6 development ore.

Geology:

The USGS classifies this as a "window" area with, it is supposed, brecciation the product of the Roberts Mountains Thrust.

However: A 90' lime bed, dipping 17° to the SW, is underlain by a 20' bed of black, carbonaceous dolomite; both are heavily brecciated where they enter the pit area, terminated by a fault on the southwest periphery. The ore bed thickens to 140 feet beyond the fault.

The gradual curve of the brecciated zone and pit, where mined, suggests the possibility of a collapse area to DLE, or a dome to Bear Creek.

Contingencies: The underlying black dolomitic and carbonaceous member was not amenable to established metallurgical treatment.

No mining would be possible from pit area; future activity would require considerable stripping; amount not determined.

Reserves; as Reported London Ext. 5,000,000 tons @ \$5, using a \$2 cut-off. *

Gold Acres 500,000 tons @ \$6*

*Reported that Bear Creek estimated 15,000,000 tons at \$3.50, using a lower cut-off.

Exploration

Possibilities: (a) drilling to establish pipe-possibilities; considerable drilling exists that might be evaluated.

(b) 140 feet of thickness south of fault.

Current Position:

(a) AMEX is currently evaluating records.

(b) Union Pacific Railroad has first-refusal, after study of property and same records.

After (a) and (b), property would be available for consideration.

Not Available

2. Carlin Mine (Lynn Creek)

Ownership Neumont Mining Company.

History: 1961: First evaluation and checking.

1966: Mill in operation; treating 3000 tons per day @ \$11/Ton

Geology: Reported that geology is similar in many respects to Gold Acres; heavily brecciated, possibly an original lime member (with thickness somewhere between 50 and 90 feet), underlain by a black, carbonaceous dolomite, which is now presenting metallurgical problems

Reserves Minimum reserves of 11,000,000 tons of approximately \$11 per ton reported in mid 1966.

3. Bootstrap Mine

Ownership Harry Bishop reports that L and S Ranch Company has taken over property after a damage suit against recent operators. However, surface rights do not include mineral rights (owned by State of Nevada) and such must be purchased from State before end of year. Trewick (Chief Chemist at Lynn Creek) discusses property as if he has mineral rights, and Neumont has option.

History: Under development since early 60's; A range-fire in summer of 1966, for which operator was responsible, caused considerable damage. Such was the basis of recent legal action.

Geology: 40 feet of mineralized bed had been opened up by Trewick and associates, by a series of pits. It has been reported that the geology is similar to Lynn Creek, except that gold is coarser. Suggested to Trewick is a circular area with some 800 feet of diameter.

Reserves: Under development.

4. Bootstrap to Lynn Creek

The area between properties has been and continues to be drilled. Kerr-McGee had some success, with one hole reported having 60 feet of mineralization assaying \$30 per ton. Neumont is currently drilling, using Amerson tools out of Carlin.

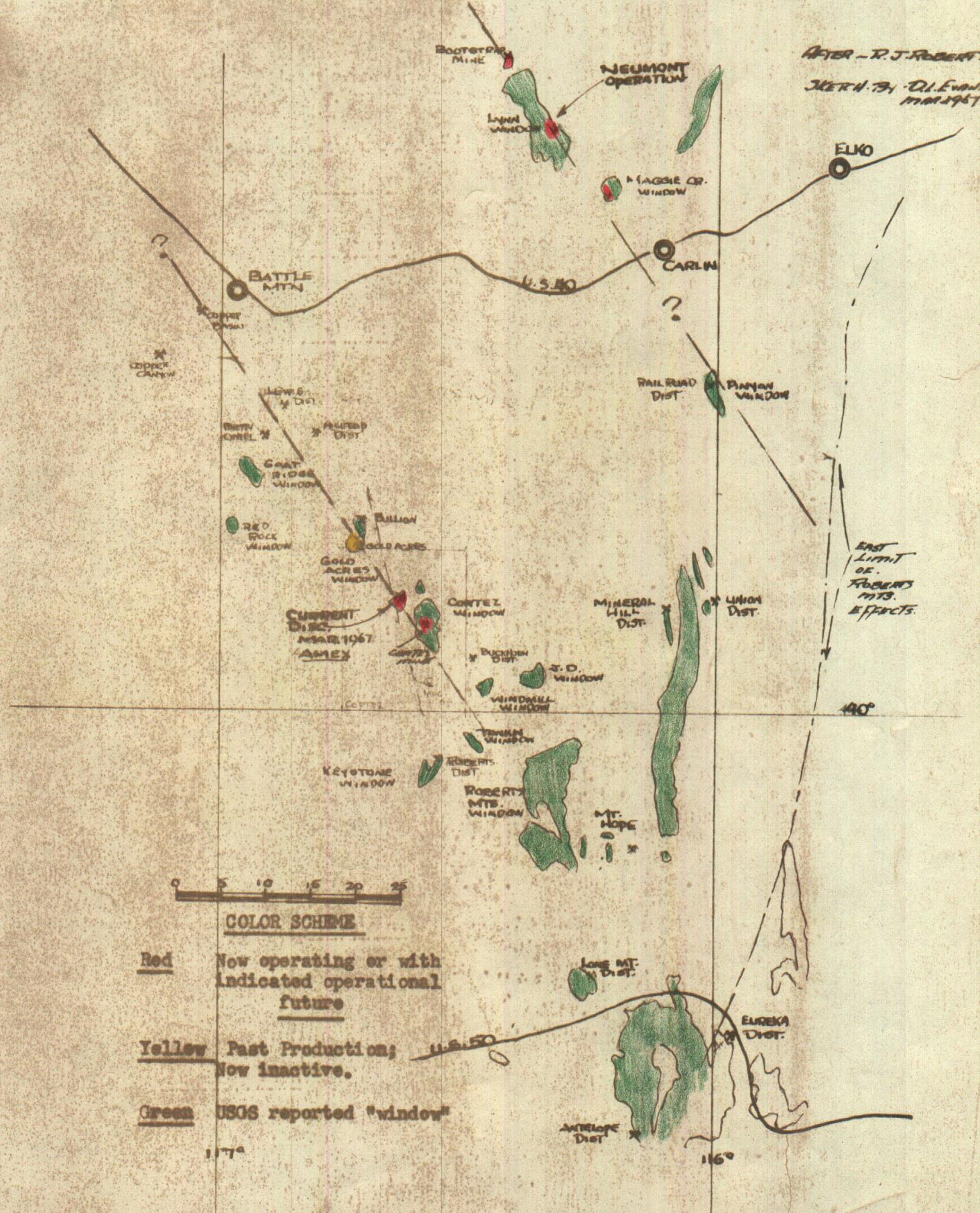
5. Cortez Joint Venture:

<u>Ownership</u>	American Exploration, Bunker Hill and minor Colorado interests.
<u>Location:</u>	East of mouth of Cortez Canyon, in approximately sections 24 and 25, Township 27 North, Range 47 East.
<u>History:</u>	Recognition of gold in cuttings from area by USGS in early 1966, prompted field work starting in May 1966. Results were released by the USGS in late 1966. Cortez Joint Venture which had been active in the area with GM assistance at the old Cortez Mine was drilling on the prospect on Dec. 27 when the writer was in the area.
	A press release of March 17, 1967, reported 2,000,000 tons of developed reserve averaging 0.3 ounces gold
<u>Geology:</u>	Considered significant is the fact that the occurrence is directly in line with the trend of the Gold Acres deposit. True nature of the deposit could not be determined since the property is closed to interested parties.
	From the road, about 3/4 miles from area being drilled, an estimate of area drilled on the basis of access roads (750' x 500') would indicate 66 feet of ore thickness, for the 2,000,000 tons claimed.
<u>Reserves:</u>	About 10% of the possibilities seem to have been covered by recent drilling. However, drilling appears to cover ^{most} of better values indicated by USGS studies. Future totals would be, therefore, only a guess.
<u>Recapitulation:</u>	In the event of continued interest, the Pinyon Window, in line with the Bootstrap to Maggie Creek trend, and those several windows and districts adjacent to the Gold Acres-Cortez trend might justify continued study.

ROBERTS PREMISE

"WINDOW"
AREAS
1965

After - D. J. Roberts
Sketch by D. Evans
Mar 1967.



**ROBERTS
PREMISE**

**REGIONAL
POSITION**

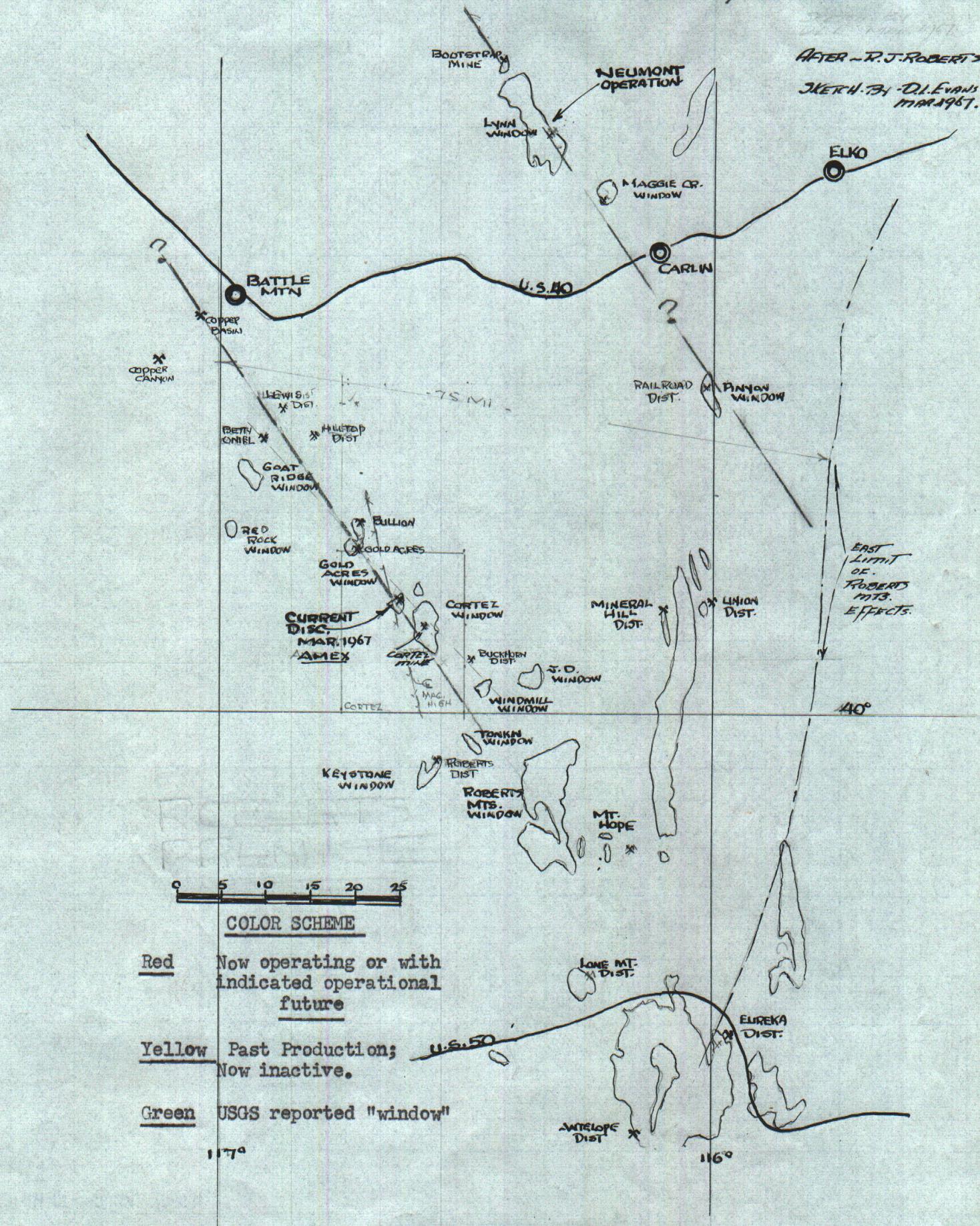


ROBERTS PREMISE

"WINDOW" AREAS
1965

1965

AFTER - R.J. ROBERTS
SKETCH BY D.L. EVANS
MAR 1967.



ROBERT'S PREMISE

REGIONAL POSITION

© МТН-
С.ТУ

~~EAST LIMIT
OF ROBERTS
MTNS. UPPR
PLATE.~~

R. EVANS.
MARCH - 1967.

DO LAS VEGAS

AREA —

COUNTY

— COUNTY SEAT

1 LYNN —

Eureka

Eureka

2 MAGEE CREEK'

"

"

3 — GOAT RIDGE —

LANDER

AUSTIN

4 Red Rock.

"

"

5 Gold Adel.

"

"

6 CORTEZ -

" ?

"

7 Keystone

Eureka.

Eureka

8. J.-D. Window -

Eureka

"

9. Punyan -

Elko

Elko

July 15-1966 -

HARRIS DRILLING CO (S.L.C. & G.C. & F.) contract drilling
for Phillips Petroleum - Mining & Milling Division - on
GOLD-SILVER- Properties - Above Tuscarora, ELKO County -
Nevada. TUSCARORA - was 3rd largest producer of
Metal value in ELKO Co - amounting to \$11,600,000 - (1859-1949)

Sept 15-1966 -

Carter Joint venture exploration was continuing -
on Gold. Geochemical anomaly announced in USGS -
Circ. 534

Oct. 15 -

Homestake mining filed a number of claims in
Rock Hill Canyon of the East Humboldt Range in
Eastern Pershing County - after a 3 month
exploratory program - based on a report by Dr. Robert
Mallory USGS - which outlined faults
stemming from the Walker Valley faults in an
adjacent area

Oct 15 - ALLADIN - Sweepstakes Min. Inc. mining Co -
under John Whittle & Reid is constructing
a mill at the old Alladin Mine Site at
Bullion, Nevada - 15 miles south of Carlin;
to work old Silver-lead-mercury copper deposits.

Thurs. Mar. 23

R. Wm - 42474 - 8:30 A

= 1 - Mako-Richardson-Type-Reg. X Section -
20 x 1 - Nest - enlargement - Phae Crabs

28.55 - Turn left - up Macque C.Rd.

39.7 - Left on paved road

47.35 Mill - N.W. area

47.8 - Turn from Pavement - west to Boat Slips.

$$X \times \frac{850 \times 500}{12} = 2,000,000$$

$$X = 70,000 \sqrt{2,000,000}$$

$$35000 / \sqrt{2,000,000} = 60$$

60' thick

Goat Hill - Meadow -
Red Rock

may be measured by Classen -
?

Crucible Records

Difficult to get very precise information.
re: - who has what & where!

The only answer is in the Nest area - looking
for miners -

42338 - B.M.

42392.05-

$$\{ 2.0 = 2.2$$

$$\{ 94.05$$

$$\{ 49.9.$$

$$\{ 1.0$$

$$02.3$$

A - Carter road @ 21 Hwy

A + B:

Photo - Carter - area - Pitt

3 15

Roads indicate
data - has about
about 10% of production

- width of Rev. 3 m
 $\pm \frac{750 \text{ to } 1000}{\text{area } 750 \text{ or } 800}$

approx. slope is 5°

05.6 - Carter mine area. Turn around

$$17.5 \times 2100$$

$$8$$

$$\begin{array}{r} 1710 \\ 625 \\ \hline 8550 \\ 8520 \\ \hline 3460 \\ 1028 \\ \hline 1068750 \end{array}$$

$$\begin{array}{r} 19 \\ \hline 1068750 \\ 1068750 \\ \hline 931250 \end{array}$$

$$\begin{array}{r} 17.5 \\ 2100 \\ \hline 17500 \\ 17500 \\ \hline 350 \\ 307500 \end{array}$$

$$\begin{array}{r} 17.5 \\ 16800.0 \\ 1575 \\ \hline 1050 \\ 1050 \\ \hline 1000 \end{array}$$

$$1050$$

$$2100$$

$$\begin{array}{r} 2.2 \\ 4700 \\ 4700 \\ \hline 46200 \end{array}$$

$$2.2$$

$$9.8$$

$$\begin{array}{r} 9.8 \\ 2000 \\ 9800 \\ \hline 9800 \end{array}$$

$$196$$

$$205800$$

$$2.2 \times 205800$$

$$995$$

$$198$$

$$78$$

$$66$$

$$170$$

$$960$$

$$935$$

$$1895$$

$$947$$

~~A. Tax Tate - Pandemic~~. MAR 20 1967

- 1. - Anticipating considerable activity for Spring & Summer
 - 2. - Located - claims for hornet take - last year - + hopes for more with weather improvement
 - 3. - Newmont - surveying + excavating pit - since - he was approached re: - "drumming" and other "unwritten rules" in Lynn Creek area
 - 4. - Newmont - has recently been taking claims in the cutty area - But where? He didn't know
 - 5. - Quest - drilling in - in fact - due west large rock - rock pit - cut - left. - By few feet - Eskimo - Carlton & contractor - 7th + cedar

~~B.~~ - Bettie hutn - Mar. 20 - 1967 - Pm .

- ## - 1. As Reputed - By -

@ Joe Trees (Box 66c) - mining in open pit - Copper Basin
Dick Carr " " " " " Copper Canyon.

$$= \text{Copper Basin} - \frac{(5,32)}{\text{We, looking Bm}} \left\{ \begin{array}{l} -0.7\% \text{ Cu} \\ 0.103 \text{ Au} \end{array} \right\} = \frac{5}{8} / \text{Ton}$$

Copper Canyon - 0.3% Cu ± 5.7% from
0.7% Au est

- (b) Winter species. 13 days out of 14 - here kees keeped away
to 10 out of 14 -; - Reason for slow
down not given.

Chances are that next step may
be completed - operation now
granted to null capacity.

- (c). This was issued by Roy Sherman - working
on Maintenance for Deval - -

Sherman - Built well for
Matthews. at Payette and
also has narrow 18" seas -
at Salmon Idaho - running
 ± 64 /ton.

(2)

1. - Took Oberholser. Answer -

Trewick & Co
Box 5 - Review -

- Goldacer Mine Co -

$$1500 \times 600 \times \frac{60}{15}$$

600
600

B.mtn 47190

C.Vally 42237
Cliffs

See sheet
3

47.75 - C. Valley Rd., ~~6000 ft~~, Comin.

49.15 Colville

\$4.35 - Turn left - N route.

55.75 - Century Turn

~~58.84~~ - Turn left to Little Gold
ocean

1. - Work - done to date on Crescent - Study - considered in
its entirety - being needed by Survey out Minto Park.
with Roberts - in Chg. Jones - ± 50 diam. centered in
Crescent Valley

2. The area - then divided into smaller districts - under
Subnd. Geologists - ; asserted by Mobil lubrications
Setup - to grow 1 fm. streaks in Au-Hg-As - etc
in field

3. Answer - has 4 mgs going on Century Au - property -

- all. Tailing type size - $2 \frac{1}{2} \text{ ft}$ - wet rock
Wt - an 8 ft - getting 100% recover. - & as much
as 200 feet per day - using - local contractor (TKlin).

4. Goldacer - drilled 1963 - by Kerr McGee -

.. Dated by - new man - inferred
 $\frac{1}{2}$ - 5 - holes.

5. Bootlegger Mine - also by Kerr McGee

{ Trewick - of earlier &
Harry Bishop (Metallurgist) Battle Mtn.
on Bootlegger

" " also in Goldacer:

~~58.4 to 63.4 — Took gravel road - armed
Base ~~✓~~ Goedacker. to 63.4
Then returned to paved road.~~

$$58.4 = 68.5$$

~~70.2 T. Left — to Little Goedacker @ 71.8.~~

$$70.2 = 73.45$$

~~74.25 Pavement Grd.~~

~~75.0 Center of open pasture on D.R.~~

Harry Bishop - MARCH 23-1967 - 8:45 - 10:45 AM

Sect - London Extension Mining Co -
Gold acres - operation

- GOLD ACRES -

1. Property Developed in late 30's - mill into operation -
1941 - + closed - 1961; milled 2,500,000 Tons @ $\frac{\$5}{t}$.

Cut off - in Pit was $\frac{S}{2}$. Values were decreasing rate
bottom of Pit - best success in Calcarenous - dolomitic carbon
Shale - made mill results poor - Profitable until
last two years - when operating at a loss

2. Property details -

- Bed developed for 1600' on strike in pit. Thickness in
Pit was 90'. dip on west side was 17° with
a steep fault - at south edge of pit, offset about 90'
by fault & drill holes - indicate continuing to
shift w. same dip - thickness $\frac{140 \text{ feet}}$

at NW - end - Pit hole - Beyond pit - had good
values - Best underneath - explanation seems like gravel.
On further thought there was a potential gravity
glac - in area - & Bishop admitted that gravel
might have been introduced from surface -

I suggested the possibility - of a cavernous area
collapse - a "pope". We agreed with this
theater - saying that Kennecott had succeeded
just as a cavernous "Dome" - Best conceivable -
in NW - edge - in pit area.

We both presumed that his \$,000,000 Tons remaining
5 reserve - could not be handled economically
by dredge and mining - Kennecott - had estimated
about 15,000,000 Tons at $\pm 3.5\%$

- 3. Their company - Shell expects - no in Lect. - most
 claims patented --
 all major aspects now in other hands.
 Being replaced -- Annex has 1st call.
 St. Un. Pacific RR - next in line. —

-4. my conclusions - one that all info. shared &
 (the need for pipe - like possibilities - with thought
 of drilling - the duck (2 mi - claim)

-5. He will keep me advised.

-6. - Some 6 claims on east end - west 50,000 ft.
 & underground mining in 6 places - College Little
 Goed Coors - belong to Wm. P. MALONEY -
Bootstrap. - Thompson - DLDG (Caretaker in
 Marion, Ohio (Caesar - ?))

Has been taken we say L & S Ranch Company - Beet -
 Federal license do not carry the mineral rights -
 retained by State of Nevada - need such must
 be bought without the option - rather to date
 has not been done -

Area Between Bootstrap & Lynn Creek area
 has been drilled - say Kerr McGee? - & believe
 up to 60' to 30' good - found.

Free at Seelye's

It was recently - taken out a large block of acreage -
 in Cerico Lake Valley area - probably an
 Wimberly possibility - although Roberts - well.
 Not a great it is a seadow -

Mrs Mrs Trewick - March 23 -

Re: - Lynn Creek Property:

- 1. ore zone - identical with that at Gold Acre -
- a crested - sl. calc. mass some oxidation - with
1. fine gold throughout & thickness of 50 to 90 feet? -
Overlying a black very carbonaceous bed - which cannot
be treated with any success - despite - sooty gold.
This carbon bed is becoming a problem with depth.
- 2. Some mercury being recovered -

Bootstrap -

Development account of several pits - 40' of section
has been opened up - tendency to hematite.
Golds peculiar - & values unpredictable.

Central area - suggested - perhaps a collapse
area - with axis of about 800 feet -

Interval between

John Anderson (Carlin Diller) currently drilling
~~at~~ about half way between

- road impassable except 2 miles out
- except to high elevation - 4 to 6 miles out

Re: Gold Acre -

Same carbonaceous bed was causing most alluvial
deposition - at end -

Lower Gold Acre - 50,000 T of development ore
+ reserves about 500,000 Tons
of 6 ore remaining -

- same reserves - fraction are reported by Bishop

Gold Acre Company -

Lower Gold Acre - - Gold Acres (Inc)

Upper " " - { London Extension Mining Co. }
} Gold Acres Operation -

- 8th + Bush - Treweek Reservoir
Creek

- To Reach Bootstrap - go in by way of Dunphy

Index:

A Foreword -

B Purpose of investigation.

C Results -

D Some questions:

E Procedures -

F Current Regional Reasoning.

(1) Chronological Development -

(2) Economic Results ^{Economic cause} to date -

- New discoveries -

Old - Production which "fits".

(3) Stimulus to Effect ^{on} -
Field methods -

(4) Environment Promoted -

(5) - Summary & Take-home
Geological findings.

G - The Roberts mtn.-outcrop - Play -

(1) Favorable Features.

(a) Has found new production - with fresh -
approach - to regional reasoning.

(b) Well suited to stimulate exploration -
+ ~~such~~ such should add to & improve
the basic process.

(c) Has brought into play - field usage
of soil ~~or~~ ^{or} mineral analyses
technique - now an established tool.

(2) Unfavorable Components.

(a) - The haste required to become part
of a snowballing "play" - makes - Breaker
process - ~~all~~ of "Welders" - or possible
"Welders" - a must - certainly not all
welders - will be mineral processing.

(b) - Low - fishing requirements - loose location
descriptions w/ "unknown name, structure" - unaccompanied
by plots - picks - any regional map - Shallow
wells for outcrops - blocks - plan only ~~be~~ - detected -
by breaking out - located & noted - in the
field - Count holes research - varied provide
no results.

- (1) Complete investigation on the one area -
- (2) All basic work has been done - by - government
bureaucracy - equipped - with the very best
of passive equipment. The program will be continued
the number - meet great success no fault factor.
Industry - to date - has depended on Survey
Results of this - is the due release of new information
to be fairly released?

- H - Community movement -

- (1) - Plots - presented herein - are on the most personnel
file material - with material - dated about 1965.
Efforts should be made - to bring - material to date.
- (2) - Material to date - should be placed precisely -
in 1:250,000 - scale - Plots of Western United States.

Regional Cross Sections (x20 vertical exaggeration) would
be advised - for the Roberts area - aligned at
right angles to the Thrust - & at 2 mile
intervals (Carl B. Richardson. Technique).

Such might - guide one to new "anomalies"
- a head of U.S.G.S. efforts.

- (3) - Cross sections - regional Thrusts - remain a
probable requirement -
- (4) - Preparation of ownership map - is advised -
- (5) - Steady Sampling of likely areas - especially
 - (a) undercutting - Subsidary control problems
 - (b) suggesting - Broad areas of Precipitation -
+ collapse.
 - (c) - the same lithologic sequence -
Clastic material - associated with oxidation
of calcite - & adjoining carbonaceous - Black
claystones - source to consider.

I Recuperation:

Without such a program - there would be
little chance of - benefiting from the play.

- Appendix - Misc. Information -
gated March 18 - March 24.

Comments

Ramsey Saint Venetian

Neemut:

(151)
ITEM 58

0830 0053

08300053

$$1'' = 115 \text{ mi}$$

