Partot

September 19, 1967

Nevada Indian Agency Bureau of Indian Affairs Stewart, Nevada 89437

Attention: Mr. Rlaph M. Glaser

Re: Pyramid Lake Reservation Walk-on Permit No. 308

Dear Mr. Glaser:

In response to your reminder of September 15th we have requested Mr. David L. Evans, the consultant who has handled our exploration activities on the Pyramid Lake Reservation, to prepare for you an outline and file of data pertaining to this investigation. This will be adequately descriptive of our findings and will be forwarded to you as soon as completed.

Yours very truly,

C. P. Knaebel District Geologist

CPK: rt

ec: Mr. D. L. Evens

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#### SURVET OF PYRAMID LAKE INDIAN RESERVATION

1967

Utah Construction & Mining Co.

A SUMMARY OF PROCEEDURES & RESULTS

## Foreword t

In accordance with a prospecting permit, dated April 7, 1967, granted by the Pyramid Lake Paiute Tribe to the Utah Construction and Mining Company, the Pyramid Lake Reservation area, north of Township line T23M, was examined for minerals or mineral possibilities, throughout the 120 days of the agreement.

The following summarizes results. Reference is made to the attached Index map, and references A-1 through F, thereon, which mark the areas of possible interest, encountered during the reconnaissance.

### Proceedurest

The area is topographically rough, but sufficiently serviced by roads to assure fair access, using four wheeled-drive vehicles.

Flows, tuffs and other extrusive rocks dominate the reservation. Areas of possible interest were selected on the bases of:

- (1) places where color changes in the volcanics indicated the possibilities of alteration (which would accompany mineralization);
- (2) locations where regularity of volcanic layering was disrupted by post-volcanic action;
- (3) centers of bleaching, suggesting the possible existence of acid intrusive rocks which could have fostered mineralizations
- (4) loci, roflecting sharper erosion, indicating better than normal hardness, perhaps from silicification;
- and (5) the projection into the reservation of structural trends, recognized outside of reservation borders.

# Results

No possibilities of sufficient size and progise to be of interest to the Utah Construction and Mining Company were found. Using the thinking, outlined above, six areas were encountered. Each is summarized as follows, with area noted on the Index Map.

# A. North Pyramid Areas

Pre-volcanic intrusives, encountered at A=1 and A=2 in Township 28 North, Ranges 21 and 22 East, merited investigation. Intrusives consisted of granite at A=2 and granite, grandiorte and diorite at A=1.

M. neralization for the trend appeared limited to the Packard Mine. in sections 22 and 27. Township 28 North, Range 21 East, reputedly a small silver-lead producer. It is our understanding that the property is being operated in a small way, under lease arrangement from the Paiute Tribe.

Mapping indicates that the vein, with six feet of width, has been developed along 500 feet of S73E structural trend, from a tunnel with 170 feet of back.

Because of the indicated small ore reserve, with any other possibilities of equally small size, the property was of no interest and no samples were cut from vein.

## B. Red Light District Extension:

With reference to the northeast quarter of section 21. Township 26 North, Range 21 East, a strip of brecciation and iron oxide mineralization occurs on trend with a structural zone, to the northwest, and outside of the reservation.

The zone, in section 21, can be traced for 1500 feet on trend and has an average width of about 200 feet. Volcanic rhyelite has been brecciated and subsequently mineralized with silica and probably the iron bisulphide, pyrite. The latter has since been oxidized to hematite and limonite.

Our sample \$1400, picked from outcrops along the trend, indicated 850 perts per million in mercury, 25 parts per million arsenie and one part per million in silver. These traces were considered to be without attraction, and recommendations for continued effort could not be made.

## C. Lake Range Area:

It is our understanding that this area has had some small silver-lead production from a six foot vein cutting through the regional volcanics. It has also been brought to our attention that a small, eliptical acid-intrusive without value occurs as shown on the Index Map at 'C'.

Size of prospect indicated it to be too small to interest the Utah Company. No detailed study was made during the course of this examination.

### D. South East Acid Intrusive:

Apparent from vantage points on both the west and east shores of Fyramid Lake is this light gray area in section 18. Township 24 North, Range 23 East. A jeep road provides access to within one mile of the outcrop.

The prospect consists of a mass of white, rhyolite porphyry, with finely crystalline ground mass and medium to coarse quartz phehocrysts. With a general northwest-southeast trend, the mass has a long axis of about 3000 feet and average short axis close to 500 feet. Vertical extent amounts to 200 to 300 feet.

An attractive prospet from a distance, the intrusive, as well as contact areas, is a complete, mineralogical \*blank\*. It is fresh and clean without any encouraging suggestions. The intrusive appears to favor an anticlinal axis. This is based on the very evident reverse dips in the most recent volcanics.

No samples were taken and no further interest was re-

#### B. Idmestone Area!

Reportedly under lease to other parties, this massive limestone area was not examined.

#### F. Southwest Intrusive Areas

On the strength of sharp outcrops, studies were started in the southwest quarter of section 24. Township 23 North, Range 22 East, and continued southwesterly to the east line of section 27, in the same township and range.

Granite and granchiorite characterize a S67% trend, traceable for about 8000 feet. Average width of acid intrusive approaches 3300 feet. Freshness of intrusive characterizes the mass. One area of silicification is accompanied by iron oxide. A few random grab samples were without gold or silver value; run for trace elements molybienum varied from 6 to 180 parts per million.

The investigation uncovered no other possibilities.

Respectfully submitted,

David LeCount Byans

September 28, 1967

