

1940 0002

STATE OF NEVADA

JAY A. CARPENTER, DIRECTOR

## Bureau of Mines



BOX C, UNIVERSITY STATION

MACKAY SCHOOL OF MINES  
RENO, NEVADA

January 4, 1947

*Overton*

Jay A. Carpenter, Director  
Nevada State Bureau of Mines  
Mackay School of Mines  
Reno, Nevada

Dear Jay;

*Acme Group  
Garfield Mining District*

In compliance with your verbal instructions I accompanied Messers Louis J. Lundgren and Harold B. Swanson to Babbitt, Nevada, December 13th, for the purpose of examining their mining property. The following findings are submitted for your information.

Both gentlemen are employed by the E.S. Navy in the Hawthorne Ammunition Depot. Mr. Swanson works in the rework department, and Mr. Lundgren holds either a clerical or accounting job as a civilian administration assistant. They are enthusiastic prospectors, using their spare time and annual leave for this avocation. Both admittedly lack technical training for mining, however Mr. Swanson attended one of Mr. D. C. Camerons Vocational Prospector's classes. Swanson and Lundgren both expressed their appreciation for your assistance in extending to them the facilities of the Bureau.

The property examined Saturday December 14th, 1946, consists of four mining claims known as the Acme group, situated in the Garfield Mining district of Mineral County. More specifically they are situated about 18 miles, by road, southeast of Hawthorne and about four miles northwest from the Mabel and Garfield mines, at an approximate elevation of 5,500 feet above sea level.

The property is an old one now held by relocation. The present locators have not shipped ore from the property, but they have about ten ton of medium grade oxidized lead-silver ore segregated on the dump of No. 2 shaft, Acme No. One claim. Former operators apparently recovered some ore from the oldest shaft, now known as No. three shaft. On the fifty foot level 34 feet from the shaft in the east drift, a thirty foot winze appears. The winze is in a circular pipe of mineral controlled by the intersection of two faults with the east-trending calcite vein. Remnants of the mineral in this winze show lead carbonate, wulfenite, zinc silicates and extensive hematite staining of the silicified limestone walls. Between 50 and 60 tons of mineral were removed from the winze and presumably shipped as no trace of this character of material appears on the dump.

JAY A. CARPENTER, DIRECTOR

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J. A. C. Re: Acme group, Mineral Coy, 1/4/47 Page 2

Limited possibilities for developing additional ore appear to be in exploring geological structural occurrence similar to the ones in the winze and in shaft No. two. Namely where northtrending faults intersect the eastward striking calcite veins.

These possibilities were described to Messers Lundgren and Swanson verbally while I was on the ground with them and in the enclosed reconnaissance report in which is included a block diagram to guide them in exploring the property.

The mineralized area seems to parallel the axis of an anti-clinical flexure in the traissic sediments, principally light colored limestones, which plunges down to the west. Flanking the limestone block on the north and in fault contact with the lime is a diorite formation. From the hasty megasopic examination of the rocks it is not certian whether the altered dark rock is a diorite or possibly a meta-andesite. North and east of the property the basement rocks are covered by andesitic tuffs and flow rocks. South of the claims a wide wash filled with alluvium obscures the underlying formations and beyond the wash Tertiary flow rocks reappear.

If the suggested exploration work is followed and uncovers some ore the claims are worthy of a more formal examination.

Enclosed is a copy of the reconnaissance report and sketches made of the Acme ground.

Respectfully yours,

A handwritten signature in dark ink, appearing to read "T.D. Overton", is written over the typed name.

T.D. Overton  
Engineer or the Bureau

STATE OF NEVADA

JAY A. CARPENTER, DIRECTOR  
B. F. COUCH, SECRETARY

Bureau of Mines



Box C, UNIVERSITY STATION

MACKAY SCHOOL OF MINES

RENO, NEVADA

December 30th, 1946

Reconnaissance Report of:

Aene 1, 2, 3 and 4 mineral lease claims, Garfield District,  
Mineral County, Nevada.

Situated approximately 18 miles southeast of Hawthorne and about 2½ miles south of Kinkaid siding on the Mina branch of the Southern Pacific Railroad. The claims are 5,400 feet above sea level and accessible through out the year, with the exception of a few days after occasional winter storms, by a fair desert road, which intercepts the highway 8 miles east of Hawthorne.

**Abstract:** The claims parallel an anticlinal flexure in light-colored Triassic limestone, probably "Sunrise Formation", (1), flanked on the north by a block of diorite orthogneiss in fault contact with the sediments. North and east of the claims Tertiary andesitic tuffs and flow rocks overlie the basement rocks and an alluvial wash obscures them south of the claims.

Mineralization occurs along an east-trending calcite vein where cross faults intersect this vein to create more favorable solution channels. Small amounts of argentiferous galena are scattered along the vein, but the potential ore deposits seem to be confined in crushed areas or pipes at the intersection of faults with the vein. The mineral exposed in these areas are completely oxidized, showing lead carbonate, zinc silicates, wulfenite and extensive hematite staining on the limestone walls. The gangue is principally quartz, calcite and barite.

Approximately fifty tons of mineral has been removed from a winze sunk below the east-80-foot-level from the No. 3 shaft by former operators. This 'pipe' appears typical of the structural control of mineralization, occurring as it does, at the intersection of two faults with the calcite vein.

With the above occurrence as a guide the following recommendations are proposed to explore your property for possible remaining ore.

1/ Simon Wm. Miller and Henry G. Ferguson, 1939; Geological Society of America Vol. 50, pp. 1573-1624.

**Recommendations:**

1- Drive west through the fault from the south end of cross cut, shaft No.1, and raise toward the mineral in the bottom of shaft No.2. Test for both lead and zinc minerals, as this faulted area is a likely place for secondary minerals to accumulate.

2- Sink the winze on the east-50-drift from shaft No.3, through the fault and test for zinc silicates. Zinc is likely to migrate more readily than lead during secondary leaching and oxidization, and is therefore often found below oxidized lead deposits. Unfortunately zinc silicates are difficult to recognize due to their similarity to oxidized siliceous vein matter. They often occur with heavy iron and manganese oxide staining which imparts various colors to the zinc silicate. It readily forms a gelatinous precipitate when the powdered mineral is boiled in hydrochloric acid. This test will help you to sort out any zinc silicates that may be present in your ore.

3- Prospect for the upward extension of the mineral pipe, which may occur on the surface 45 to 60 feet east of No. 3 shaft and along the strike of the vein. If the fault continues to the surface its presence may be obscured by soil slumping into the crushed area. Trench across the vein in several places and particularly in depressions, also pan or test the rock from the bottom of these trenches.

4- The fault zone between the limestone and the diorite may have occurred later than the mineralization but from the silicified matter found in the fault zone just north of the northwest corner of Acme No.4 it is worthy of prospecting. Trace this fault northeastward into the canyon, which is north of your claims, to a point north of the saddle where the northeast-trending fault would be intersected by the fault from the saddle.

5- In a similar manner trace the faults exposed in your surface test pits north and northeast of the blacksmith shop eastward to a point of intersection with the south extension of the saddle fault, traversing the east end of Acme No.4 claim.

**Geology:** The oldest rocks associated with your property are Mesozoic sediments composed of marine limestones, dolomite and endurated shales or hornfels. Intruded into the area and faulted up and exposed by erosion is a dark igneous rock, probably a diorite or diabase. This formation may or may not be responsible for the mineralization as it does not show an igneous contact with the sediments on the property. Overlying these basement rocks is a series of hornblende andesite tuffs and lavas, which occur on the north edge of Acme No.4 and east of the property in the canyon.

Acme reconnaissance report, E/30/46, page three.

The andesite is likely Tertiary in age and the basalt exposed west of the claims is still younger than the andesite.

The major structural features include the anticlinal flexure of the limestone and dolomite beds and the north-east trending faults that dislocate the sediments. The anticline plunges west and disappears under the alluvium of the wash.

Observation of the development work demonstrates that the best mineral showing occurs where cross faults intersect the eastward trending veins. The calcite veins roughly parallel the axis of the anticlinal fold in the sediments. With this in mind it is logical to prospect for similar or parallel conditions of structural control, as previously enumerated under the recommendations.

Sampling: The few check samples taken at the time of the reconnaissance examination did not yield very encouraging results, but they do show mineralization that will help to guide continued prospecting. See block diagram for sample positions.

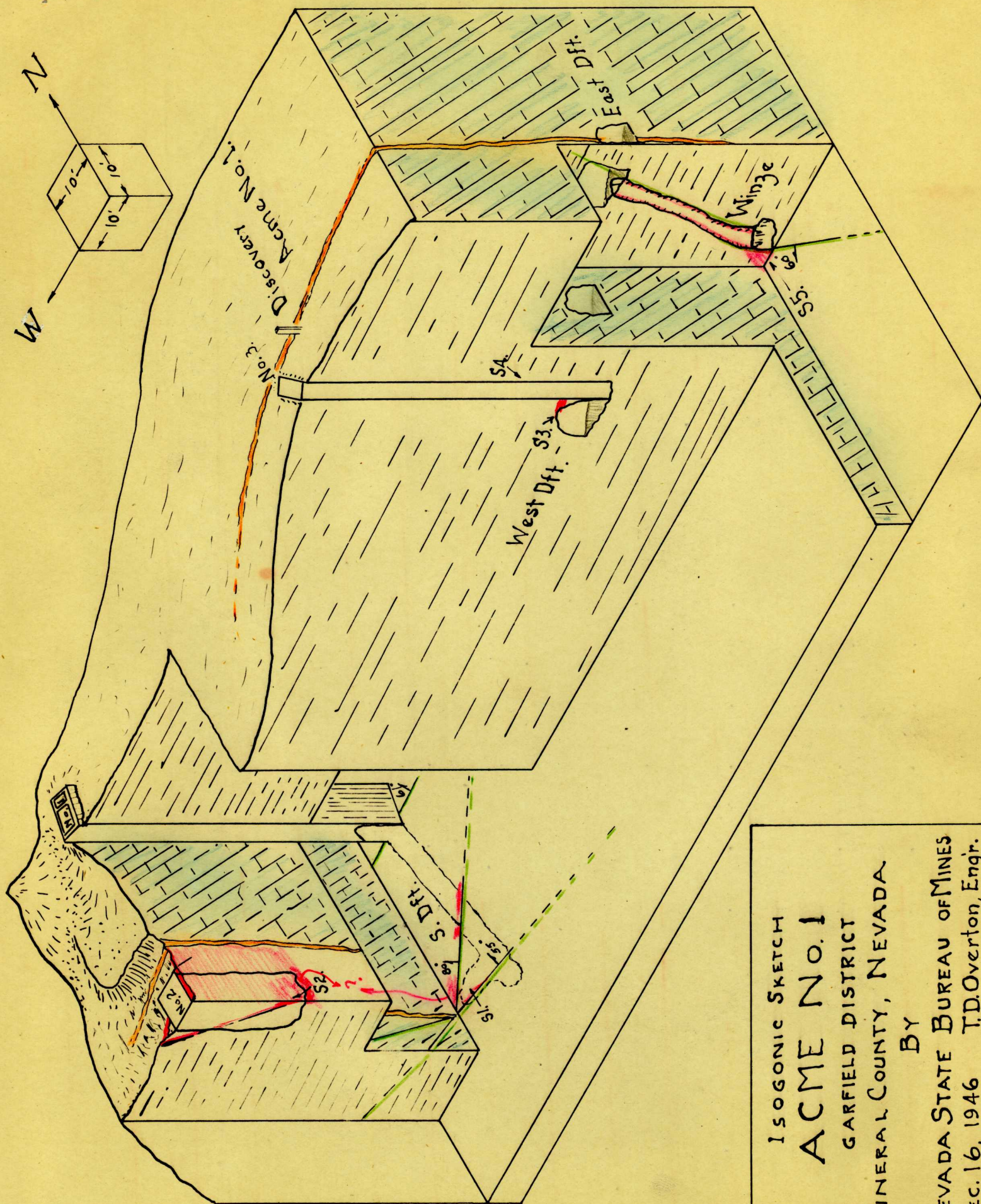
No.	Width(inches)	Description---	Oz.Gold-	Oz.Silver-	%Lead-	%Zinc.
S-1	30	--26ft. out, west side, S. crosscut; Shaft-1.	none	0.98	tr.	2.9
S-2	18	SE cor. Shaft No. 2 14 ft. below collar.	none	8.60	4.7	11.0
S-3	6	West-50-Dft., 3 ft. from shaft No. 3.	tr.	14.84	13.8	14.8
S-4	10	Streak 6 ft. out in N. 1-cut, Sh. 3. (barite gangue)	none	2.38	0.4	1.9
S-5	48	W. wall, bottom of winze, 34 ft., E.-50-Dft. Shaft No. 3.	none	2.00	tr.	2.0

The isogonic block sketch is inclosed to assist in visualizing the position of the three shafts and the relationship of faulting to the mineralization.

Respectfully yours,

T.D. Overton,  
Engineer for the Bureau  
No. 276.





ISOGONIC SKETCH

ACME No. 1

GARFIELD DISTRICT

MINERAL COUNTY, NEVADA

BY

NEVADA STATE BUREAU OF MINES

DEC. 16, 1946 T.D. Overton, Engr.