CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 05/30/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: PINNACLE CLAIMS

ALTERNATE NAMES:

GILA COUNTY MILS NUMBER: 229

LOCATION: TOWNSHIP 4 N RANGE 11 E SECTION 9 QUARTER W2
LATITUDE: N 33DEG 42MIN 05SEC LONGITUDE: W 111DEG 14MIN 42SEC
TOPO MAP NAME: THEODORE ROOSEVELT DAM - 7.5 M

CURRENT STATUS: EXP PROSPECT

COMMODITY:
COPPER

BIBLIOGRAPHY:
ADMMR PINNACLE CLAIMS FILE

05/22/86

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: PINNACLE CLAIMS

ALTERNATE NAMES:

GILA COUNTY MILS NUMBER: 229

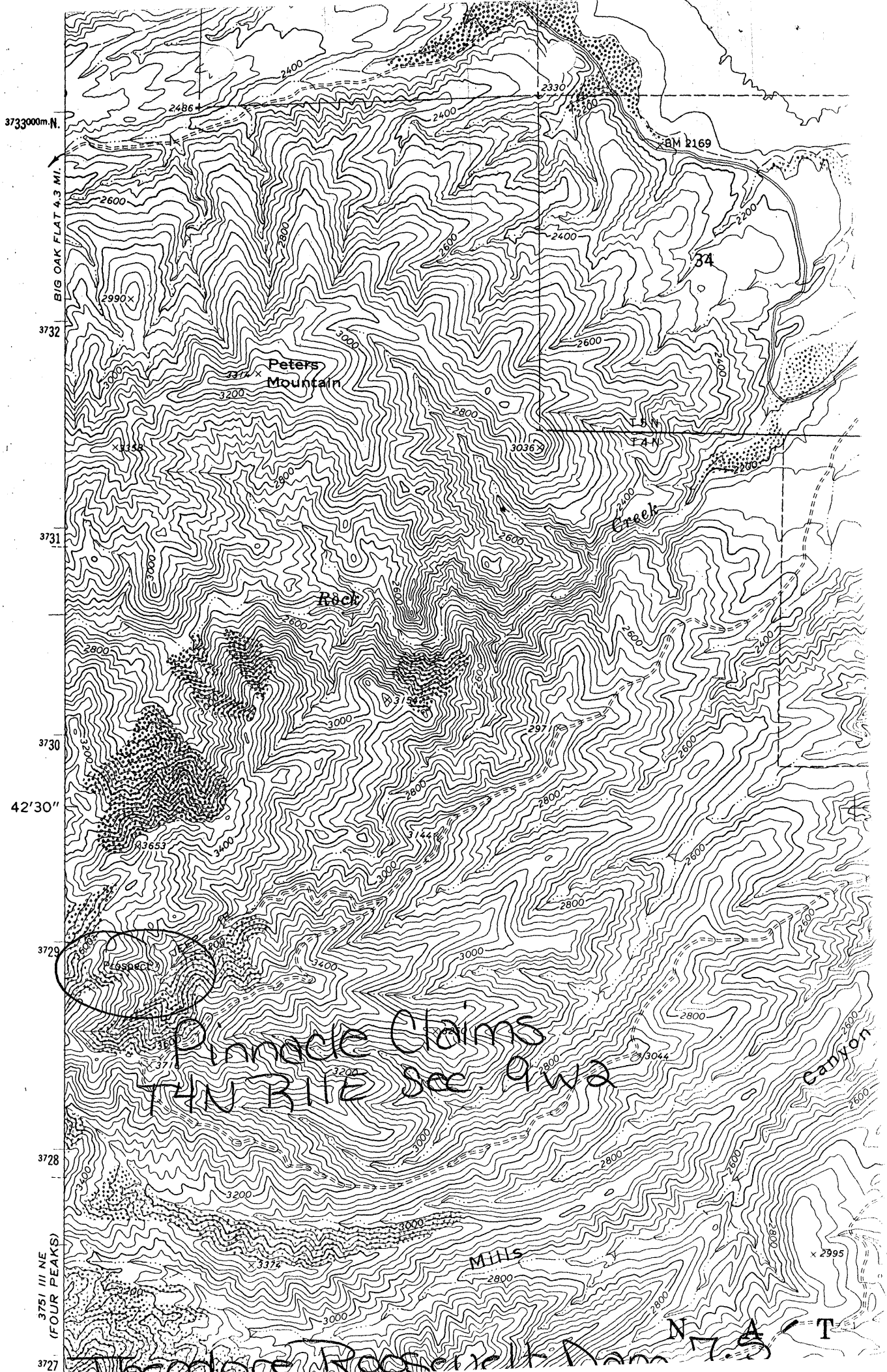
LOCATION: TOWNSHIP 4 N RANGE 11 E SECTION; 9 QUARTER W2
LATITUDE: N 33DEG 42MIN 05SEC LONGITUDE: W 111DEG 14MIN 42SEC
TOPO MAP NAME: T. ROOSEVELT DAM - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
COPPER

BIBLIOGRAPHY:
ADMMR PINNACLE CLAIMS FILE

PAY DIRT for November 24, 1975



3733000m.N.
BIG OAK FLAT 4.3 MI.
3732
3731
3730
42'30"
3729
3728
3727
3751 III NE (FOUR PEAKS)
BM 2169
34
Peters Mountain
T5N
T4N
Creek
Rock
Prospect
Canyon
Mills
N A T
Pinnacle Claims
T4N R11E Sec. 9 W2

Lee says the owner - Mr. Harold Talbott was glad to have him (Lee) put a copy of his report on this ~~xx~~ property of record with this office.

lp 7-7-67

LEE HAMMONS, GEOLOGIST
6243 West Missouri Avenue Glendale, Arizona YE 7-6008

June 15, 1967

Mr. Harold Talbott
1005 Canyon Avenue
Miami, Arizona

Dear Mr. Talbott:

At your request, I have made a geological study of your Pinnacle claims in unsurveyed Section 9, Township 4 North, Range 11 East, Gila County, Arizona.

I found that they contain copper mineralization and several other favorable factors that indicate the possibility that a disseminated copper ore body exists at some depth on the claims. Briefly, they are geological setting, rock types, structures, alteration and coloration.

It is my opinion that the favorable signs are strong enough to warrant further exploration, particularly one or more deep drill holes. Detailed geological mapping should precede any extensive exploration programs.

Very truly yours,

REGISTERED GEOLOGIST
CERTIFICATE EXPIRES
LEE HAMMONS
DEC. 31, 1967
ARIZONA U.S.A.

A GEOLOGICAL REPORT ON THE PINNACLE CLAIMS, MAZATZAL MOUNTAINS, GILA COUNTY, ARIZONA

Purpose and Scope

This report is based upon field work carried out in April, 1967 on the claims and their immediate surroundings. The section on the geology of the claims is based exclusively on the findings of the field investigation.

Information contained in the section on the general geology of the southern half of the Mazatzal Mountains (the regional setting of the claims) was adapted from the literature, chiefly from Wilson and Ransome.

The primary purpose of this work was to determine if enough favorable factors existed to warrant further exploration.

The Claims

The Pinnacle group consists of 6 unpatented mining claims located in unsurveyed Section 9, Township 4 North, Range 11 East, Gila County, Arizona. Access is by State Route 188 approximately 8 miles northwest of the Theodore Roosevelt Dam to mile post 249, thence 3 miles southwest on an unimproved dirt road. Supplies and lodging are available at Roosevelt, 14 miles from the claims.

Average elevation is about 3200 feet above sea level; the climate is semi-arid with several varieties of cacti and creosote bush as the most prominent plants. The claims are about 5 miles

east of Four Peaks and command sweeping views of several mountain ranges and Theodore Roosevelt Lake.

General Geology

The majority of the rocks of the Mazatzal Range are Precambrian in age. The southern half is composed largely of a granite batholith which was intruded near the end of Older Precambrian time. It is younger than the Mazatzal quartzite (Older Precambrian) and older than the Apache group (Younger Precambrian). The geologic setting for the Pinnacle claims is the Mountain Region Physiographic province which is a narrow mountainous belt lying between the Basin and Range province and the Colorado Plateau--an area of great crustal movement. In late Older Precambrian time, the Mazatzal Mountains area was subjected to a series of severe crustal movements which has been named the Mazatzal Revolution.

There were many cycles of uplift and erosion followed by subsidence and deposition, all complicated by igneous intrusions and extrusions. There was not, however, a great deal of deformation after the Mazatzal Revolution until the Basin and Range disturbance occurred in the Tertiary period.

It was during Tertiary time that the present mountain ranges and valleys were created. They are regarded as horsts and grabens formed by faulting.

Over half of the Mazatzal Range is made up of granite, especially the southern portion which extends from Mt. Ord to the Salt River. It was intruded into Older Precambrian rocks during the Mazatzal Revolution, near the end of that period.

Most of the older rocks have been eroded off in the southern half. Younger Apache group formations which were deposited on top of the granite have also been almost completely removed.

The granite is medium to coarse grained and pinkish brown in color. It weathers to a pale yellow-brown, except where it has been mineralized. It is probably equivalent to the Ruin granite in the Globe to Ray area and to the Bradshaw granite. Physical characteristics are almost identical. The feldspars are principally orthoclase and microline.

Geology of the Claims

The claim area is the steep slope of the Mazatzal Range, dissected into almost parallel ridges and canyons. Average topographic relief is about 400 feet. The ridges have narrow crests, largely covered by alluvium. Some of the slopes are covered by heavy growths of brush.

The mountain front is almost certainly a heavily eroded faultline scarp, though no direct field evidence was uncovered. An older system of faults and strong jointing run approximately parallel to each other on a northeast trend. That is the same trend of the canyons and ridges.

Another system of shears and normal faults trend generally North to Northwest, forming crossed fissures that could easily serve as channels for mineralization and spaces for the deposit of minerals.

In addition to such gross structures, there are a multitude of micro-structures in the shattered and laminated rocks. All of the rocks observed on the Pinnacle claims are well fractured, a

large percentage intimately fractured. There can be little doubt that a large volume of openings is present.

The rocks on and near the claims are part of the Precambrian granite batholith which comprises the southern half of the Mazatzal Range. It is obvious from the field work that the term "granite" applies only in the overall, general sense. There are local variations in composition.

They can best be described as granitic, porphyritic, schistose and gneissic in character. Positive classifications were not attempted because of heavy weathering. Instead, attention was given to the practical matter of finding out if there are large volumes of rock having characteristics usually associated with disseminated copper ore bodies.

Good exposures exist at the northeast and southwest ends of the claim group. Most of the outcrops have some favorable characteristics; some look very good. Very little of the visible rock looks unfavorable.

The area between favorable outcrops is roughly 4,000 feet long by 2,000 feet wide. The claims cover the heart of it.

Near the northeast end of the claims, a jeep trail is cut into the mountainside. Along the cut may be seen alternating bands of well fractured granitic and porphyritic rocks with light to heavy alteration; and schistose to gneissic rocks, also well altered and fractured.

To the west along the trail is a shallow water filled shaft in the bottom of the canyon and several cuts in its walls. Light copper mineralization shows on both sides in schistose and

porphyritic rocks. The elevations are between approximately 3100 and 3200 feet as determined from the topographic map (Theodore Roosevelt Dam Quadrangle).

At the southwest end of the claims, several small cuts and pits have been made. One contains a strong showing of copper mineralization. Staining of the rock by iron oxides is stronger here than in other areas, alteration of the feldspars is also strong. There are several small quartz veins and veinlets. The elevation is about 3600 feet.

Feldspar phenocrysts in the granitic and porphyritic rocks are weakly to strongly altered, part by weathering and part by hydrothermal activity.

Iron oxide staining is light to heavy. It tends to increase in depth of color as the claims are approached from the northeast, beginning some half mile from the end of the claims. There is moderate to abundant epidote and chlorite in the rocks, with a tendency to shift from epidote to chlorite as the copper mineralized areas are approached. Staining and mineralization are cut off rather abruptly near the southwest end.

Evaluation

The Central Arizona Mountain region has produced great quantities of copper, gold, silver, lead, zinc and molybdenum from rocks whose structures are related to Precambrian features.

The area of the Pinnacle claims is a short step-out from the rich Miami-Inspiration district. There, too, and at Ray, Precambrian rocks are important. Copper ore occurs in the Pinal schist of Precambrian age.

Main structural trends (faults and joint systems) strike Northeast in the claim area as at Miami-Inspiration. Easterly dips are in the direction of the probable mountain front fault of Tertiary age. At Ray, ore bodies formed in rock cut by many small fractures; also, yellow-brown iron oxide stains formed a color anomaly over the ore. A comparable situation exists on the Pinnacle claims.

Water is available in the canyons on and near the claims, especially in Rock Creek to the north. No detailed evaluation of water resources was made.

Rock types suitable to serve as host rocks for a disseminated copper deposit exist on the claims in sufficient volume. Structures, including faults and shattering are present. Copper mineralization is present. Alteration has occurred in sufficient degree to be encouraging. There is a color anomaly in the surface rocks similar to that of known deposits.

There are enough factors favorable to the existence of a possible disseminated copper ore body present in the prospect area to encourage further exploration. The present heavy demand for copper ores helps to make the Pinnacle claims an attractive prospect.

Recommendations

Additional exploration could take several forms. Aerial color photographs would probably show the size and intensity of the color anomaly. Geophysical and geochemical studies should be made.

However, the strongest recommendation that can be made at this time is to drill a deep hole, under proper technical supervision, approximately 1200 feet from the southwest end of the claims.

The existing road can be used. Additional holes may be desirable, even if the first one is barren.

A detailed geologic mapping program should be carried out if funds are available for a full-scale drilling program. It would also be needed for a geophysical study.

A detailed petrographic study to accurately classify rock types would be highly desirable. If it could be proved that some of the rocks are younger and intrude the Precambrian granitics, that would be very important.

Respectfully submitted,

June 15, 1967

REGISTERED GEOLOGIST
CERTIFICATE EXPIRES
LEE HAMMONS
DEC. 31, 1967
ARIZONA U.S.A.

Lee Hammons