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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SIERRA ESTRELLA

ALTERNATE NAMES:
ENID STATION DEPOSIT
POGUE PROSPECT

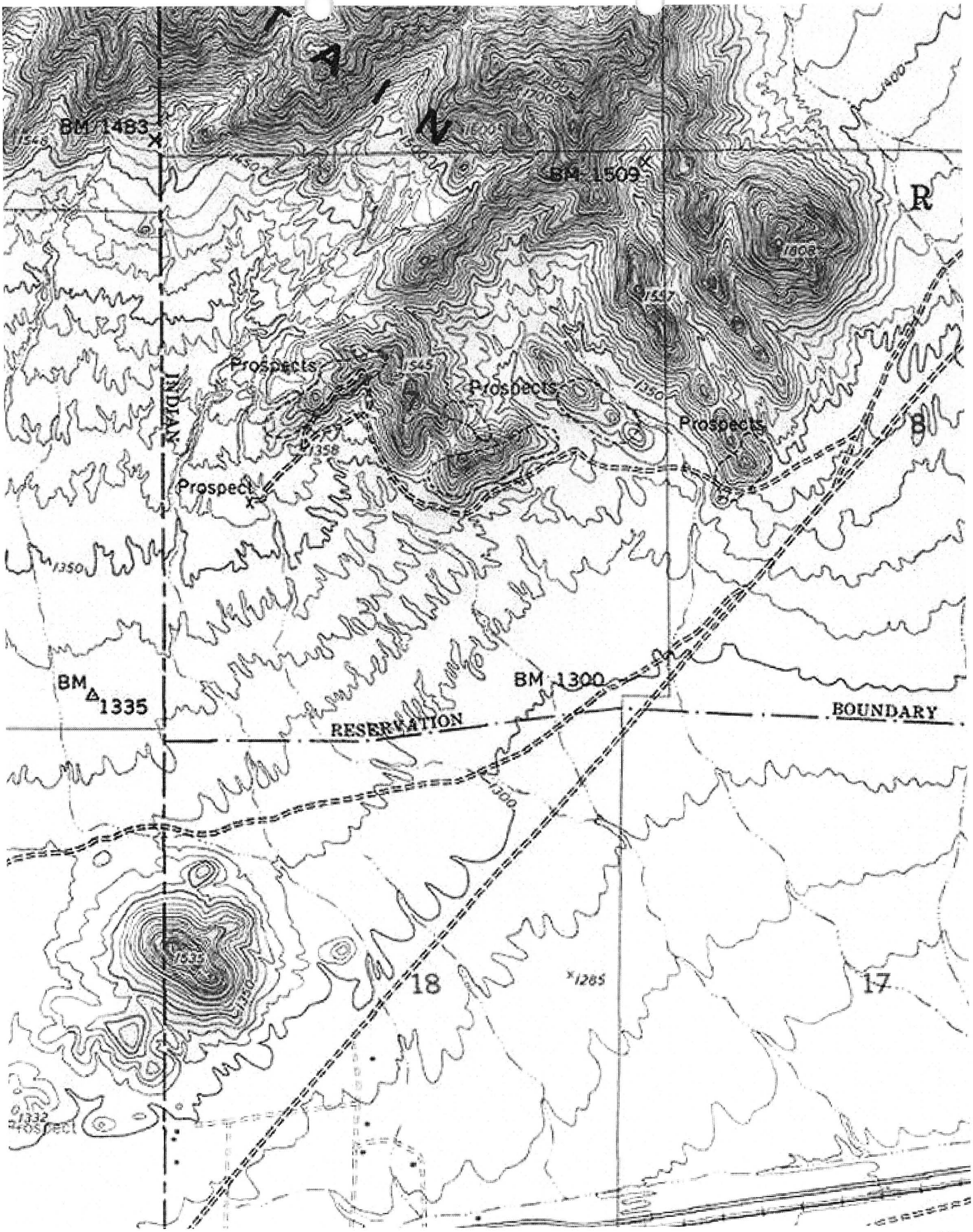
PINAL COUNTY MILS NUMBER: 251

LOCATION: TOWNSHIP 4 S RANGE 2 E SECTION 7 QUARTER SW
LATITUDE: N 33DEG 05MIN 36SEC LONGITUDE: W 112DEG 11MIN 54SEC
TOPO MAP NAME: ENID - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:
FELDSPAR
MICA
SILICON
COPPER
GOLD

BIBLIOGRAPHY:
ELEVATORSKI, E.A., AZ INDUSTRIAL MINERALS,
1980, P. 54
DEPOSIT EXTENDS INTO SEC. 7 & 8
AZBM BULL. 180, P. 400, 402
PHILLIPS, K.A., AZ INDUSTRIAL MINERALS
1987, P.130
ADMMR SIERRA ESTRELLA FILE


BM 1483
BM 1509
Prospects
Prospects
Prospects
Prospect
INDIAN
BM 1335
BM 1300
RESERVATION
BOUNDARY
18
17

ArcGIS -

POGUE PROSPECTS

PALO VERDE MOUNTAINS, PINAL COUNTY

Roy Pogue reported that he had made a bulldozer cut on the east side of his claims. According to him, the cut reached a maximum of 9 feet in depth and that at about 6 feet of depth, he uncovered limonite and some chalcocite. He said that at 6 feet he generally hit strong iron oxide staining. This checks well with the exposure secured in tunnel farther north, where "chalcocite" or "relief" limonite came in at 6 feet below the surface. Pogue said that he planned to make a similar cut on the west side of the claims. He had been contacted by Woodrow Simmons of Miami and a Phelps Dodge geologist for later visits.

Memo - LEWIS A. SMITH - 4-18-63 - Interview with Roy Pogue.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Pogue Prospects — Date March 20, 1963

District (1) Palo Verde Mountains, Pinal Co.
(2) Sierra Estrella " , " " — Engineer Lewis A. Smith

Subject: Mine visit with Roy C. Pogue.

Property: 5 unpatented lode claims.

Location: (1) Sections 15-16, T. 5 S., R. 2 E. (Palo Verde)
(2) " 6-7 , T. 4 S., R. 2 E. (Sierra Estrella)

Owner: Roy C. Pogue, Box 24, Tolleson, Arizona (WE 6-3869).

Access: The Palo Verde mountains prospects were reached by driving on a graded road for 8 miles, parallel to the Southern Pacific R.R., west from Maricopa, thence due south for 6 miles on the Hidden Valley country road. The Sierra Estrella occurrence lies 1 mile north of the railroad and 9 miles west of Maricopa.

Minerals: Mica and copper, with minor gold.

Work: On the southern tip of the Palo Verde Mountains, and 100 to 125 feet above Hidden Valley, a series of trenches were dug. These extend over a length of 100 feet and are 1-5 feet deep and up to 4 feet wide. Over the ridge, 1/4 - 3/8 of a mile, two shallow shafts and a 15 foot adit drift were sunk. The deepest shaft is about 12 feet. The two shafts were on mica occurrences.

Geology: The Palo Verde mountains are essentially composed of fine grained light gray colored granite gneiss, which is overlain by schist "floaters" in numerous small masses, each of which has very limited horizontal area. The gneiss had intruded the schist in a series of ribs disrupting it by tilting, doming, and shattering. The gneiss at the contacts is pegmatitic, sometimes coarsely, but usually the pegmatites are relatively fine grained. The core of the gneiss mass is fine grained, closely foliated, and hard. The foliation lines are marked by fine grained quartz, biotite and orthoclase feldspar, giving the rock a black and light gray ribboned appearance. The coarser border pegmatitic zones contain muscovite-mica books up to 1-2 inches in diameter. These books were mined in places on the northeastern part of the claims. Much of the mica, however, is smaller in size, ranging from 1/8 to 1/2 inches and none appeared suitable for sheets. The pegmatites are roughly zoned, the central zone being composed of variously shaped dense white quartz masses, followed outward by feldspar and mica that are often inter-crystallized. Tongues of pegmatite and fine grained gneiss extend out from the mass of fine grained gneiss into the schist laminae for short distances, some of these tongues are up to 1 foot thick. The schists are of two major types - hornblende schist and quartz-mica schist. The predominant trend of the gneissic intrusives is nearly north, but locally they pinch and swell and vary in trend, and have been offset by the shears and faults. The schist now has no definite trend, its blocks being severely jumbled. The schist-grniss contacts, in places, were mineralized by chrysocolla, garnet and epidote, particularly where E-W or NE-SW shear fractures cut them. The shears and transverse faults were also mineralized to some extent. In some cases, noteably one on the east slope of the mountains, "chalcocite limonite" or "relief limonite"

was found in a two foot gouge zone, along the 15 foot adit. This zone strikes NE-SW and dips 70 degrees N and reached 6 feet below the surface. Weathering has been intense in some places, whipping the copper oxides and limonite completely out for as much as 4-8 feet below the surface. Because of this, it was difficult to evaluate the area, no limonite being evident on or near the surface. The rocks, however, are mostly chemically neutral and would, except very locally, permit free downward and nearly vertical movement of leaching solutions. While the occurrences of copper as chrysocolla, are sporadic and local, the chance that the bulk of the copper may have been leached downward, is present. Superficial examination, such as this was, coupled with the deep outcrop weathering, makes it nearly impossible to conclude anything definite as to the worth of the prospect. Nevertheless the rocks' chemical neutrality, the presence of good limonite at some distance below the surface, coupled with an intimate structural pattern suggests that drilling, or geophysical tests, are in order. These copper showings are fairly sporadically distributed over an area 1/2 mile wide and 3/4 of a mile in length, but appear to be more evident in the zones affected by shears or faults. The maturity of the oxidized capping, where seen in the few workings, would indicate that sulphides, where present, would probably be well below the surface. The range topography in most of the area is precipitous and low angle holes could attain good depth rapidly. On the contrary, however, the rocks are intensely shattered locally, a fact that could cause much difficulty in coring. The drill sites could be had cheaply since the slopes up to the base of the ridge are relatively smooth. The ridge rises very abruptly in places. The topography is to a considerable extent regulated by the transverse faults and shears, most of the gullies having developed along these structures, serrating the range crest. Much of the north 5 miles at the Palo Verde mountain does not appear to be severely broken.

The Sierra Estrella mountains area is quite similar geologically to that of the Palo Verde mountains so will not be described separately. However, the topography here, is much less precipitous.