



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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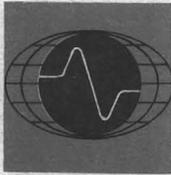
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HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD, TUCSON, ARIZONA, 85703. P.O. BOX 5671. PHONE: (AREA CODE 602) 623-0578

18 July 1969

Mr. Al Lintner
4600 Asbury Circle
Denver, Colorado 80200

Re: Geologic Examination of
the Princess Elena Claims

Dear Mr. Lintner:

At your request, I visited the Princess Elena Claims with Mr. J. P. Marcus, the claim owner, on 16 July 1969. The claims are located mostly in Sections 16, 20, and 21, T. 3 S., R. 11 E. on the Mineral Mountain, Arizona, U.S. Geological Survey 7 1/2 minute quadrangle sheet. The claims are approximately 15 miles northeast of Florence, Arizona and are accessible by a fairly good dirt road, a few miles north of the Gila River.

Two types of mineralization are present on these claims: epithermal fissure veins associated with the Mineral Mountain intrusives and copper oxides that show up in the southern area and may be related to a monzonite intrusion of indeterminate age.

The epithermal veins occupy fissures within the Pinal schist, the Tertiary intrusives and along the northern border of the monzonite intrusion. These siliceous veins show typical colloform banding and other than quartz contain manganese oxides, some specular hematite, fluorite and in places galena which often carries silver values. Elsewhere in this district, these veins have been mined for their lead and silver content in favorable areas. The economic potential of these veins is good but locating sufficient concentrations of minerals along these veins is not easy.

The area is sufficiently well mineralized that the possibility of economic concentrations being present is good and a moderate investment in looking for these localized concentrations is warranted. At this time, a few Induced Polarization lines (two - four) with 250 dipole in the area south of Mineral Mountain seems advisable.

Mr. Al Lintner

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18 July 1969

The oxide copper shows along the southern border of the claim group may or may not be economic but are evidence of possible copper mineralization somewhat deeper. This intrusion is probably present beneath the Pinal Schist in at least part of the area and a couple of miles to the east is reported to be highly pyritized and interesting enough that several holes have been drilled. This is worth examining with several (four) reconnaissance I.P. lines of 750 feet dipoles, but probably will be mostly off the claim area as presently outlined.

These claims are exceptionally well marked but the location work for the claims appears to be inadequate. If the exploration program is carried out and if any interest is indicated, a crew should immediately be sent to properly complete the location work as well as surveying the claim group to avoid any gaps, or at least the perimeter. Both operations can be held in abeyance until the I.P. results are available.

Photographs of this area are available from the U.S.G.S. and should be purchased at a scale of approximately 1" = 1,000 feet or larger for more detailed geology in interesting areas and to record I.P. locations as well as for photogeologic evaluation.

If this work can be scheduled after September 1, the costs can be applied as annual labor for the 1970 assesment year.

Very truly yours,

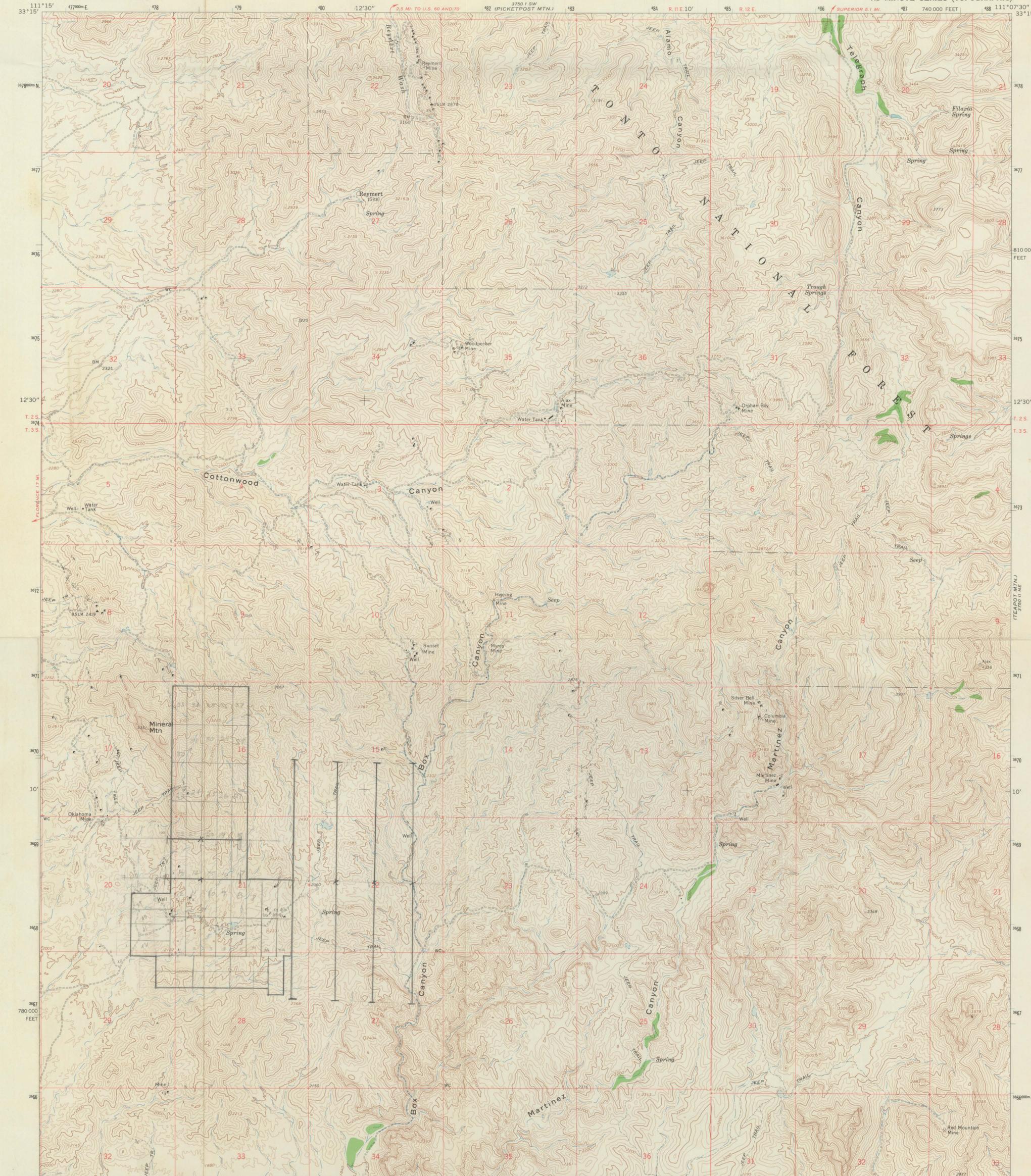
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Donald B Cooley
Donald B. Cooley, Geologist

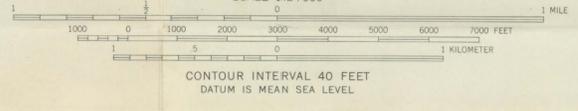
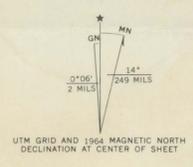
DBC/plp

Flight Crew

3780 1/2 E.
(SUPERIOR)



Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial
photographs taken 1962. Field checked 1964
Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks,
zone 12, shown in blue



ROAD CLASSIFICATION
Unimproved dirt - - - - -

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

MINERAL MTN., ARIZ.
N3307.5-W11107.5/7.5

1964

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*Box
Dunn
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