



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: 09/05/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: TURQUOISE PROJECT

ALTERNATE NAMES:

STAR HILL

RAT CANYON

COCHISE COUNTY MILS NUMBER: 928

LOCATION: TOWNSHIP 19 S RANGE 25 E SECTION 28 QUARTER N2

LATITUDE: N 31DEG 45MIN 15SEC LONGITUDE: W 109DEG 48MIN 10SEC

TOPO MAP NAME: TURQUOISE MTN. - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:

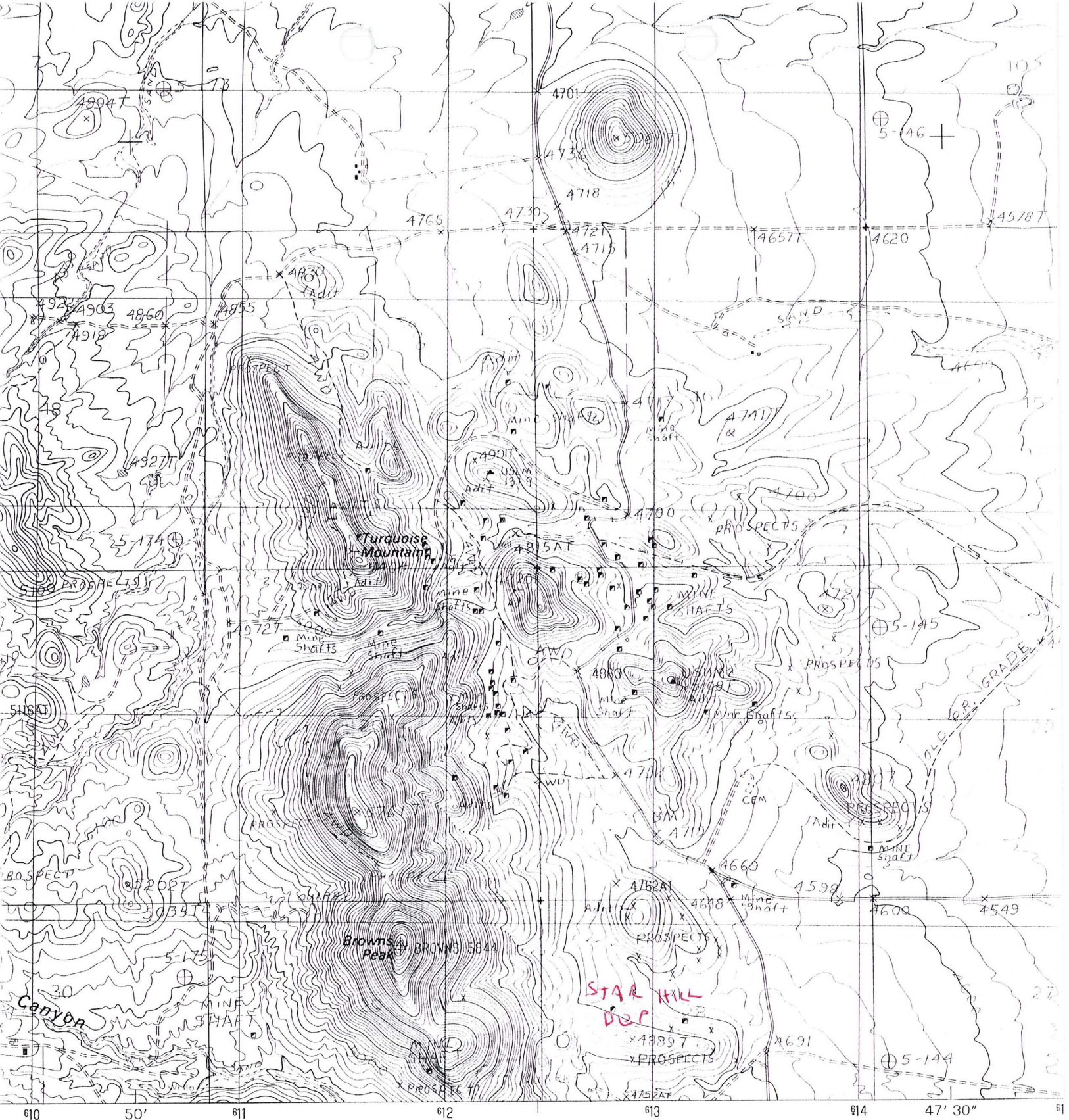
COPPER SULFIDE

GOLD

BIBLIOGRAPHY:

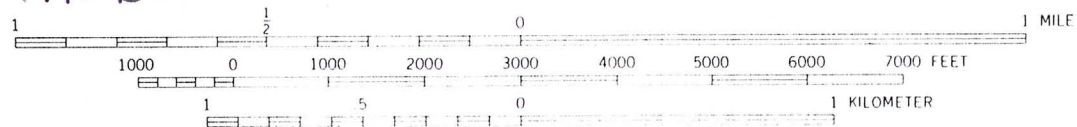
ADMMR TURQUOISE PROJECT FILE

EXPLORATION TARGETS EXTEND TO SECS 29 & 30



TI95 R252

SCALE 1:24 000

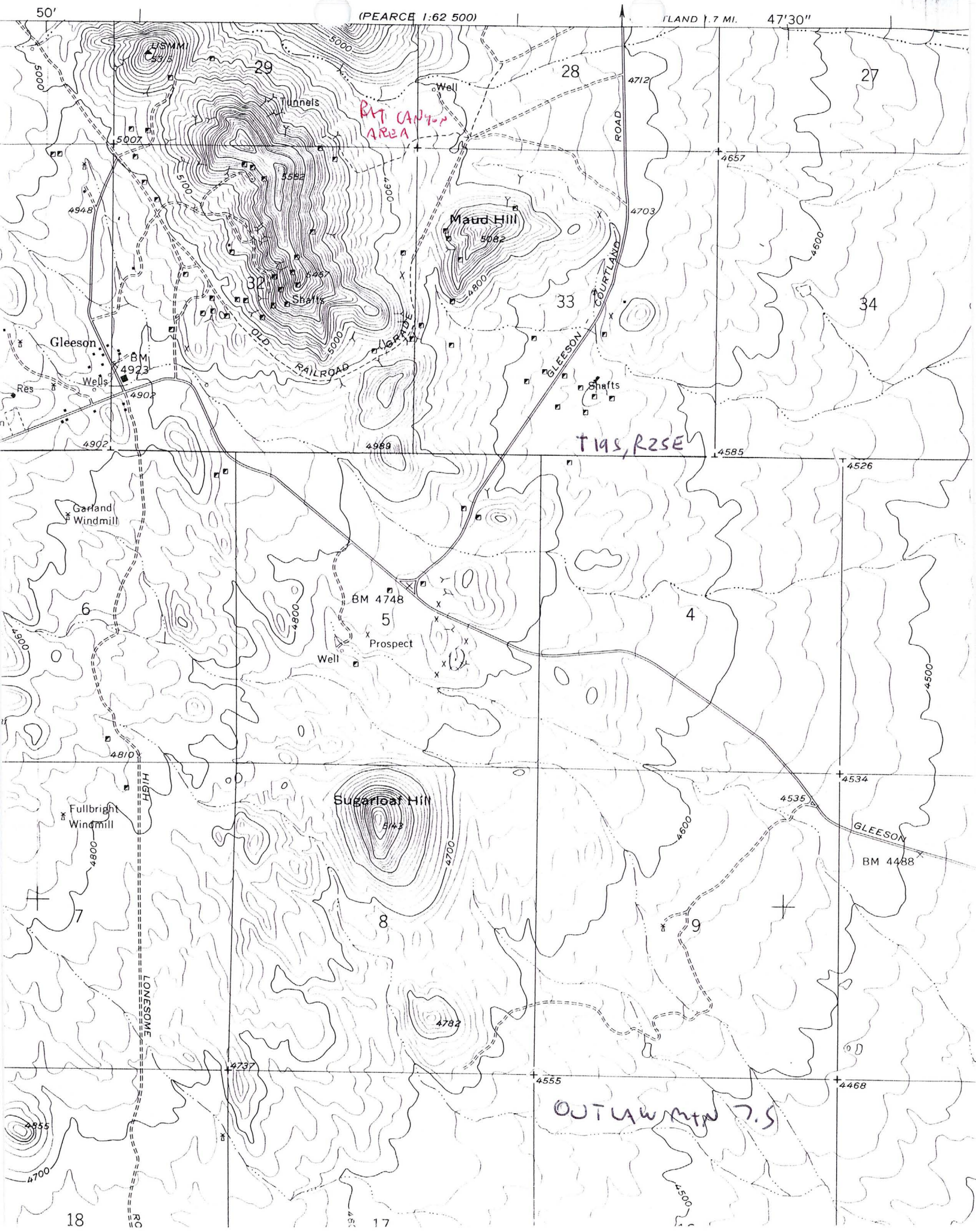


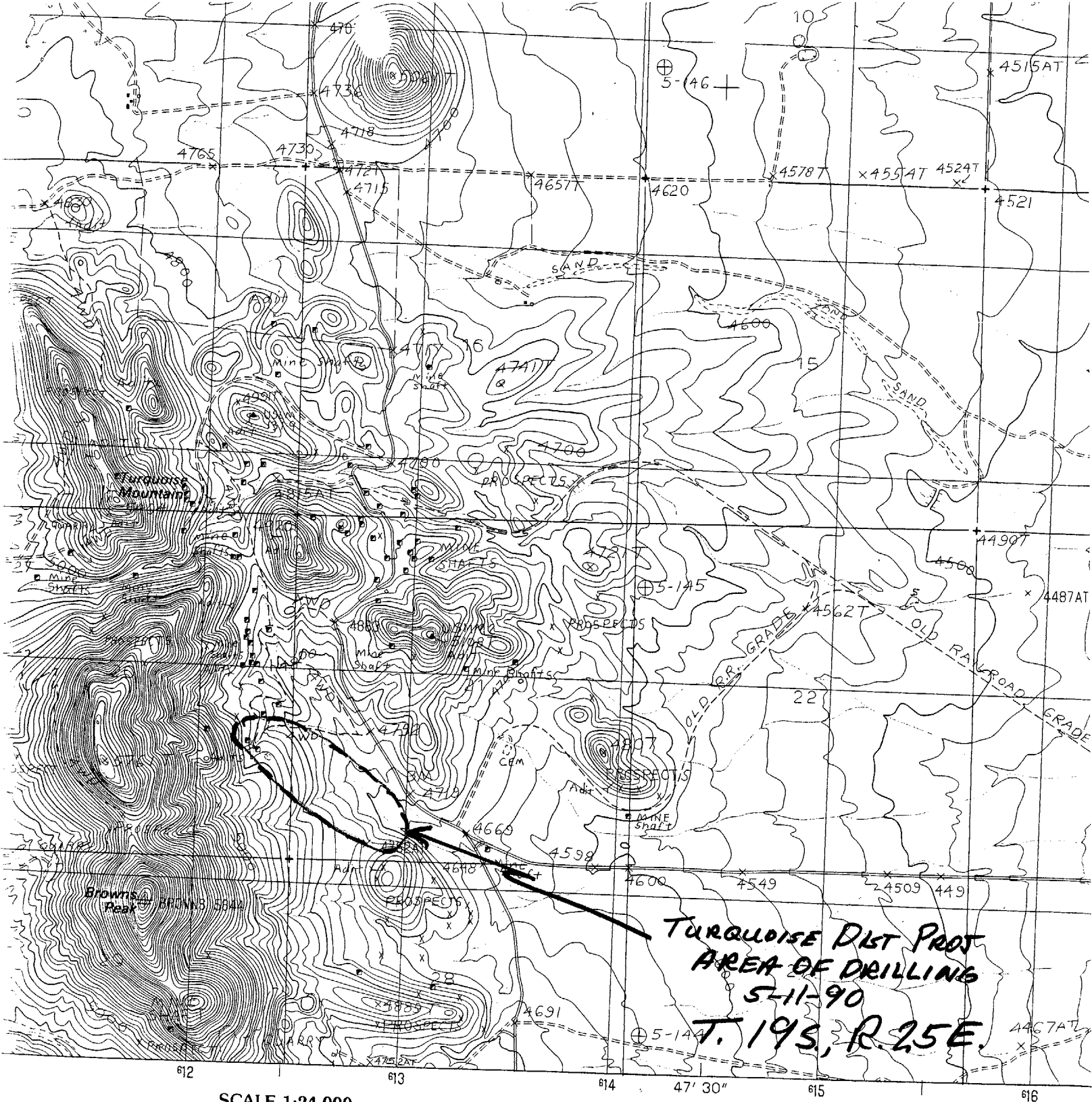
CONTOUR INTERVAL 20 FEET

TURQUOISE MTN. 7.5

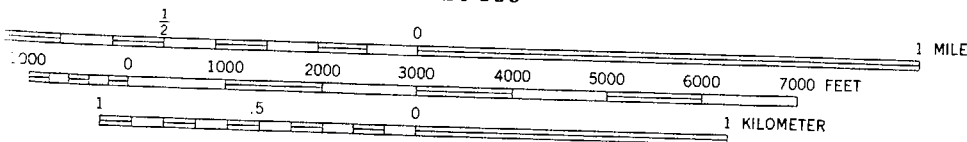
AL MAP
original
ings. Infor-
s of date of

1
4

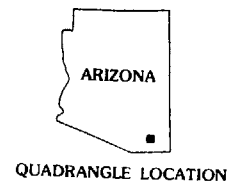




SCALE 1:24 000



CONTOUR INTERVAL 20 FEET

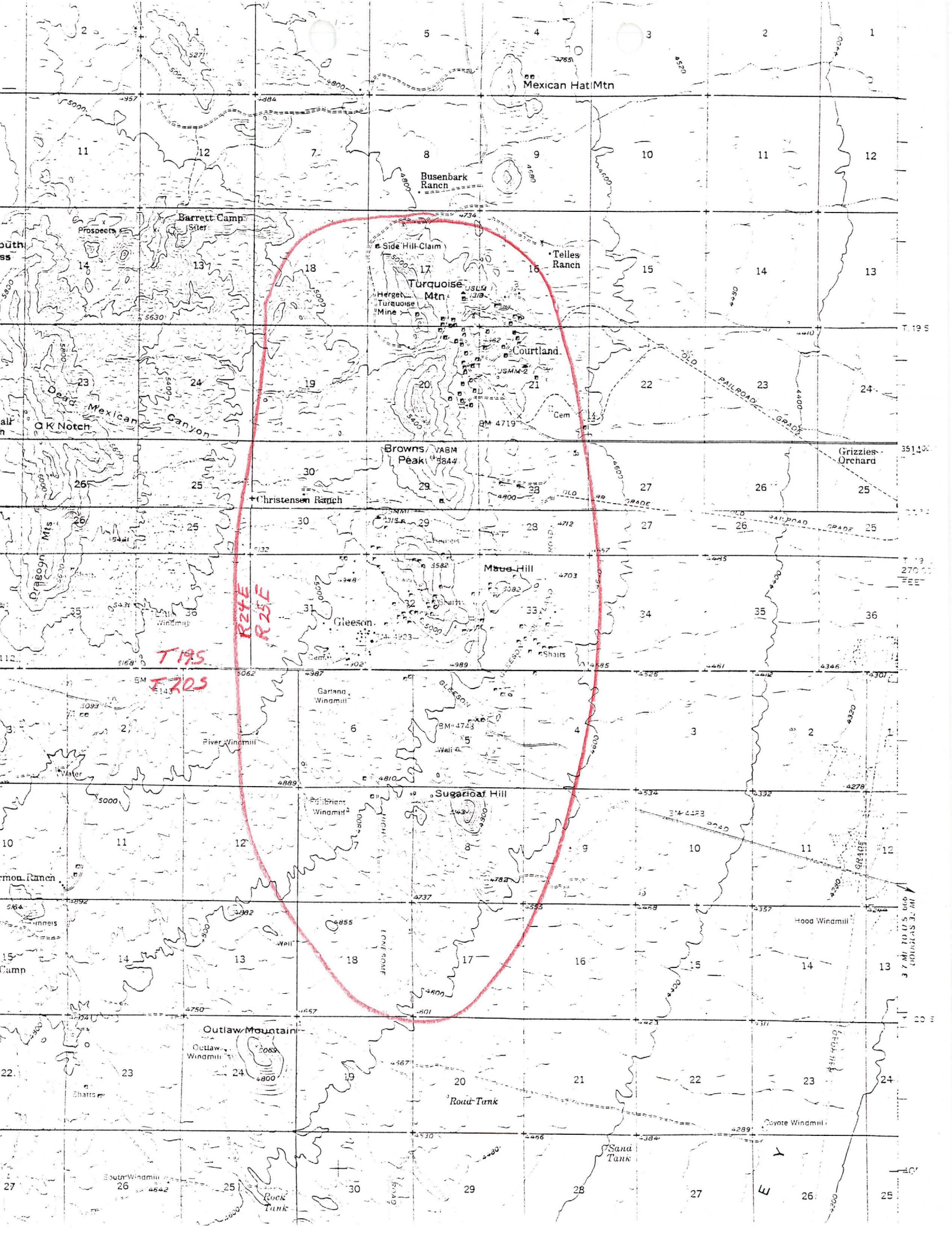


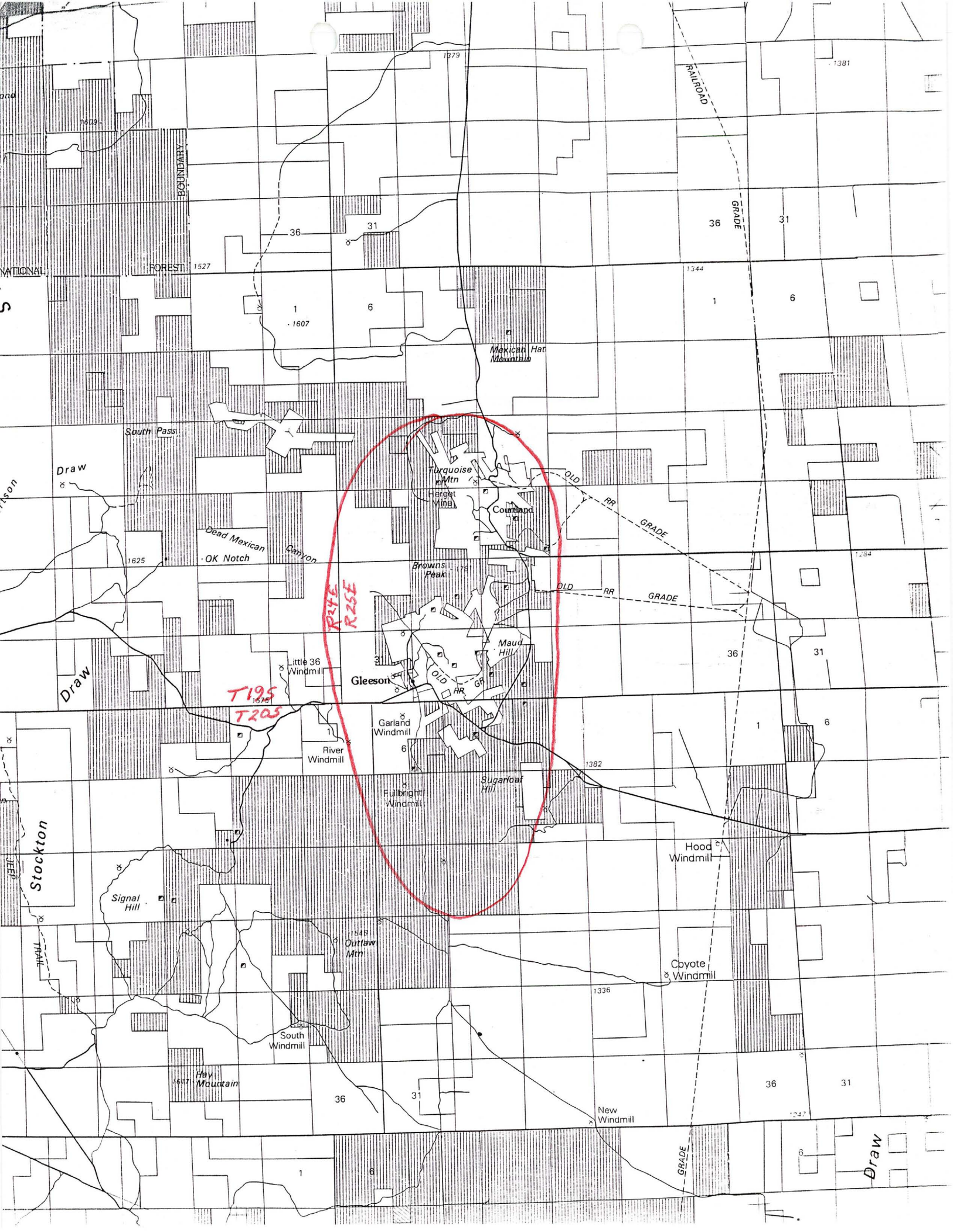
QUADRANGLE LOCATION

TURQUOISE Mtn
ARIZ 7 1/2'

1	2	3	1 Cochise Stronghold
			2 Pearce
			3 Sulphur Hills
4		5	4 Black Diamond Peak
			5 Squarctop Hills West
			6 Hay Mountain
			7 Outlaw Mountain
6	7	8	8 Elfrida

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY DENVER COLORADO 80295





TURQUOISE DISTRICT EXPLORATION PROJECT

COCHISE COUNTY

Minerals Exploration Company continued drilling at Courtland Gleeson, the three holes during this period on claims extending from west of the Grizzle orchard to the road intersection between Gleeson and Courtland. GWI QR 12/68

Minerals Exploration gave up their option on the Mame Mine at Courtland. It is reported that Harry Lehman of the now defunct Arivaca Mining Co. is planning on a leaching operation.

Minerals Exploration drilled three holes between Grizzles Orchard and the Courtland Gleeson-Webb road intersection, they pulled off of the project during this period and are evaluating the results. GWI QR 3/69

Minerals Exploration Co. retains ground east of Gleeson to the Grizzle orchard. Present work is geophysical and mapping. GWI QR 9/69

Minerals Exploration is evaluating the results of their drilling between the Nancy Group and Grizzle orchard east of Gleeson. GWI QR 2/27/70

Apparently no change in the holdings of the Minerals Exploration Co. GWI QE 4-1-71

MG WR 7/19/85: The Turquoise (Cochise Co) oxide-copper deposit has been covered by the Tat and Thorn Pasture claim groups owned by Molycorp Inc. The company may have dropped its interest in the property, however, since its last annual assessment was filed for 1983. The deposit appears to be centered on Sec. 28, T19S, R25E. They call the claims Turquoise Deposit.

Arizona Copper Reserves and Resources

Compiled by the
Arizona Department of Mines and Mineral Resources

Property:

TURQUOISE PROJECT

Also known as - Star Hill

Operator and/or Owner:

Western Gold Resources
2700 E. Executive Dr
Tucson, AZ 85749
520-889-2040
hrshipes@businessspan.com

Location:

Township 19 S Range 25 E Section 28
County - Cochise AZMILS - 928
Description - Courtland, 35 miles NW of Douglas

Mineralization type and reserve/resource:

Acid Soluble - 15 Million tons at .5% ASCu
Mixed - .65 Million tons at 3.1% TCu

Reserve Info.: Mixed resource contains .12 oz/ton gold. Additional resource probable.

Sources:

Santa Fe joint venture property synopsis 2-1992.

Comments:

Western Gold (H.R. Shipes) is seeking a joint venture partner to continue exploration and begin development.

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

Field Visit

1. Information from: Field visit by Nyal Niemuth and Ken Phyllips
2. Address:
3. Phone:
4. Mine or property name:
5. ADMMR Mine File: Turquoise Dist. Exploration Project
6. County: Cochise
7. MILS Number: Not assigned - Project not site specific
8. Operational Status: Active drilling
9. Summary of information received, comments, etc.:

Observed five active drilling sights in area shown on map. Drilling appears to be on a 24 hour/log schedule. Photographs were taken.

WAS ~~Believed to be~~ by Sante Fe Minerals

Date: May 11, 1989

Ken A. Phillips

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Mine file: TURQUOISE EXPLORATION PROJECT
2. Mine name if different from above:
3. County: Cochise
4. Information from: Az Geological Society Field Trip

Company:

Address: P.O. Box 40952

Tucson, AZ 85717

Phone:

5. Summary of information received, comments, etc.:

Although field trip leaders were short of details about exploration targets and no stop was made, a drill rig and water truck on contract to Santa Fe Pacific Mining were pointed out to the west of the main road just south of the ruins of Courtland.

Date: October 22, 1988

Nyal J. Niemuth, Mining Engineer

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Not for publication

Mine Turquoise District Exploration Project

Date Dec. 5, 1957

District Turquoise District ----- Cochise Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Mr. Metler, Walter Heinrichs, Jr. by tel. & Personal Visit.

References None.

Location From 1/4 to 3/4 miles south of the Highland Mine, near Courtland.

Number of Claims About 12 claims (unpatented) in that immediate area, plus a number of outlying claims some distance away. Claims located recently by present owners.

Owners Minerals Exploration Co. (a subsidiary of Union Oil Co.), 808 W. Grant Road, Box 5671, Tucson, Ariz.

Walter Heinrichs, Jr., Geologist and geophysicist.

Principal Minerals Company is exploring for a copper ore body.

Present Mining Activity Geological reconnaissance work, geophysical work, and diamond drilling. 6 men from Mineral Exploration Co. working, plus diamond drill contract.

Milling & Marketing Facilities None.

Past History & Production New project. No past history or production.

Mine Workings No mine workings on the property, except location shafts.

Present Operations

(1) Geological reconnaissance by the geologists for the Minerals Exploration Co.
(2) Geophysical work by Minerals Exploration Co. under direction of Mr. Heinrichs.
(3) Diamond drilling under contract by Metler Bros Drilling Co, 509 E Pastime Rd., Tucson, Ariz. The second hole is now being drilled. The first hole is reported as having been drilled to a depth of 600 ft. Mr. Heinrichs reports some difficulty with the diamond drilling work, and thinks, perhaps, that churn drilling might have produced better results.



COURTLAND-GLEESON
Cu, Au (Pb, Zn, Ag)
Map Reference #13

AVAILABLE LEASE PURCHASE/JV
COCHISE COUNTY, AZ
NH-12-03-01

SUMMARY *Paleozoic-age Abrigo limestone hosts massive gold-copper carbonate replacement deposits (CRD) that are of Jurassic (Bisbee) age. The Star Hill deposit contains an estimated 650,000 tons grading 3.1% Cu and 0.12 opt Au. Several areas remain untested that could substantially expand this resource base.*

PROPERTY *Santa Fe Pacific Gold (SFPG) controls approximately five square miles of this historic mining district through leases of patented and unpatented claims, company held claims, and two Arizona state prospecting permits. The area is located 15 miles due east of Tombstone, approximately 80 miles southeast of Tucson, Arizona.*

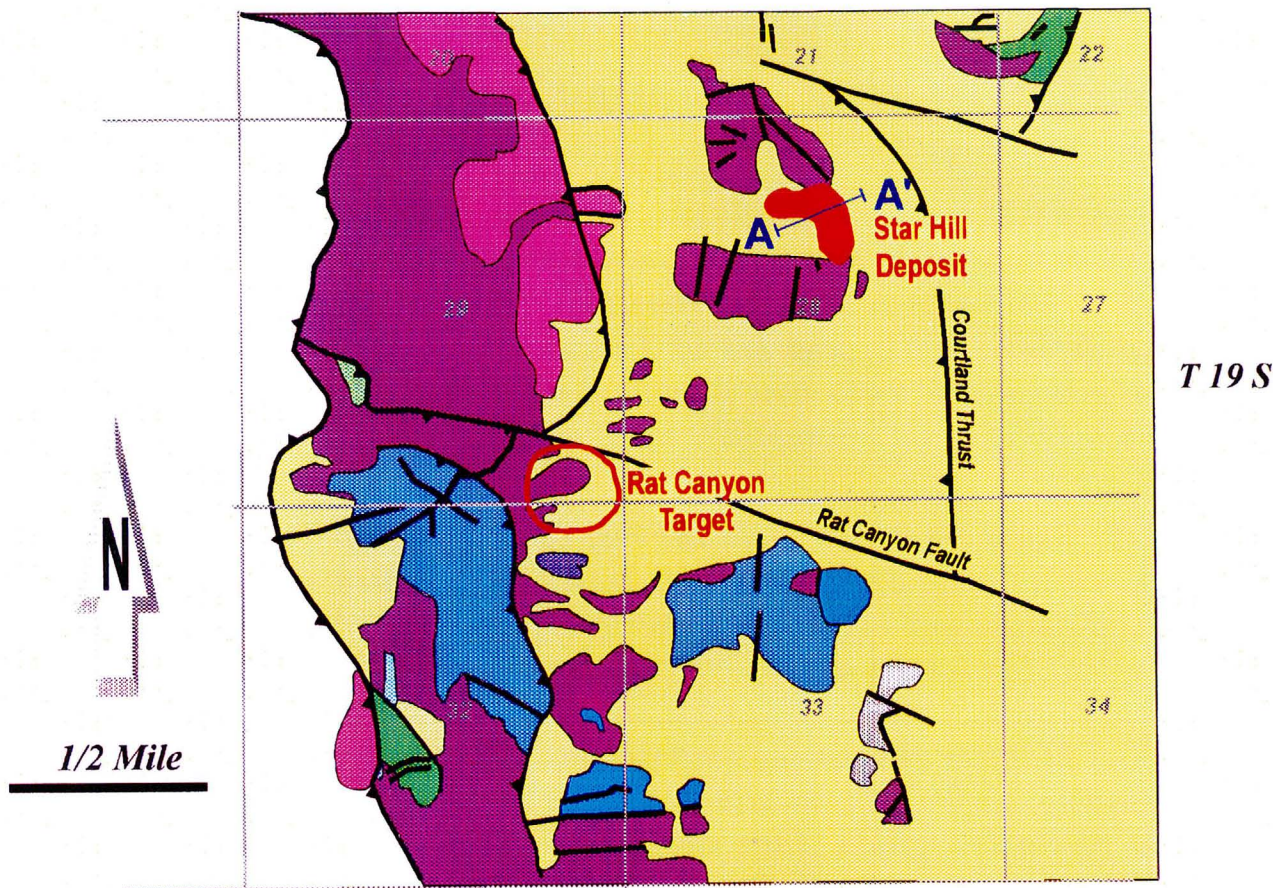
GEOLOGY *Multiple Jurassic-age monzonites intrude the lower Paleozoic carbonate section including Abrigo, Martin and Escabrosa limestones. Associated mineralization is an early Pb-Zn low grade skarn stage followed by Cu-Au carbonate replacement, upon which is superimposed a Tertiary-age gold event. Massive pyritic replacements are 10's to 100's of feet thick with margins further replaced by chalcopyrite/gold mineralization. The Star Hill deposit appears to be a preserved section of Abrigo limestone in a recumbent overturned fold, thrust over barren Cretaceous Bisbee formation. North-south and east-west structural intersections likely influence mineralization and the emplacement of multi-phased intrusion breccias which act as conduits to the carbonate replacements. (See map and cross section on back.)*

PREVIOUS EXPLORATION *The area has been widely explored by major mining companies since the mid-1960's. Union Oil partially delineated a chalcocite resource in intrusives, which in turn caused deeper exploration to be conducted by SFPG, resulting in the Star Hill discovery. SFPG has drilled 44 core holes through the deposit and the lower thrust surface on approximately 200' centers. In addition, IP/resistivity, ground magnetic surveys, as well as wide spaced drill holes in outlying areas, have defined other blind targets.*

EXPLORATION TARGET *Closer spaced surface drilling followed by a phased underground exploration program from a shaft or decline could likely triple the current resource estimate at Star Hill. Other near-surface drill targets at Maud Hill, Rat Canyon, the Flux Pit and the Northwest Extension of Star Hill offer additional opportunities to expand the resource base.*

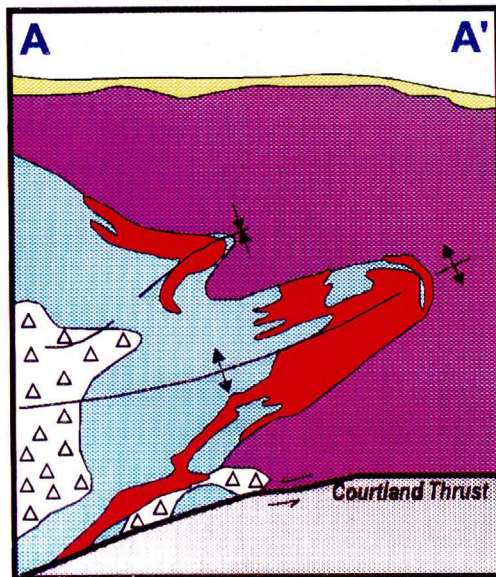
GENERALIZED GEOLOGY

T 25 E



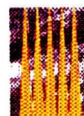
CROSS SECTION STAR HILL DEPOSIT

1/2 Mile



Explanation

Alluvium	Abrigo Limestone
Bisbee Formation	Bolsa Quartzite
Horquilla Limestone	Jurassic Intrusive Complex
Escabrosa Limestone	Breccia Phases
Martin Limestone	Au/Cu Replacement



SANTA FE PACIFIC
GOLD CORPORATION

**Courtland/
Gleeson**