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Richard E. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

September 14, 1974

LETTER OF CERTIFICATION

I, Richard E. Mieritz of 1634 W. Hazelwood Street, #2, Phoenix, Maricopa County, Arizona does hereby certify that:

(1) I am a mining engineer, graduated from the University of Wisconsin with the degree of Bachelor of Science in 1939.

(2) I have practised my profession continuously since then, receiving my Arizona State Registration as a Mining Engineer in 1956 and my Arizona State Registration as a Geologist in 1970, being a member in good standing.

(3) The report to which this letter is attached and part of, has been prepared on the basis of personal observation on and of the property, on the writers general knowledge of the area and the review and study of available factual data.

(4) I have no direct nor indirect interest, nor do I expect to receive any interest in the property.

(5) I have no direct nor indirect interest, nor do I expect to receive any interest, direct or indirect in the properties or the securities of any corporation or its affiliates who may explore the property as a result of the included report.

Respectfully submitted,

R. E. Mieritz,
Mining Consultant,
Phoenix, Arizona.

A

GEOLOGIC and EXPLORATION

REPORT

on the

SACATON COPPER PROPERTY
(J. Sullivan & Company)

within the

GILA RIVER INDIAN RESERVATION

Pinal County, Arizona

by

Richard E. Mieritz
Mining Consultant
Phoenix, Arizona

September 14, 1974

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INCLUDED EXHIBITS:

Map No. 1 - Index Map, Southwest Arizona.
Map No. 2 - General Geologic Map, Portion of Pinal County, Arizona.
Map No. 3 - Property Map, Sacaton Copper Property.
Map No. 4 - Geology Map, Sacaton Copper Property
Map No. 5 - Geo-Chem - Drill Hole Map, Sacaton Copper Property.

INTRODUCTION:

At the request of and authorization by James Simpson, Vancouver, B. C., Canada, the writer briefly field examined the Sacaton Copper property within the Gila River Indian Reservation in Pinal County, Arizona which is a leased property from the Indian Tribe by J. Sullivan & Company, Scottsdale, Arizona.

This report has been prepared by the writer and is based on his field examination on August 28, 1974, on the writers general geologic knowledge of the area and on the review and study of available information supplied by J. Sullivan & Company, Inc. Such information included assay logs of drill holes, mapped results of geo-chemical surveys of copper, molybdenum, lead, zinco, gold and silver, mapped results of geophysical surveys (I.P. and Mag.), surface alteration and surface geology mapping. Physical drilling exploration included percussion, rotary and diamond core. Time permitted the writer to very briefly examine a few boxes of diamond core to physically and visually check the rock type, mineralization and copper contents as reported in the available data.

For the purpose of this report the writer has condensed much of the available information. The detailed information would be open to inspection by those authorized to review same.

PROPERTY, LOCATION and ACCESSIBILITY:

J. Sullivan & Company, Inc. has leased from the Gila River Indian Reservation 16 Sections totalling approximately 13,500 acres, however, only a portion of this acreage has been optioned from J. Sullivan & Company which is legally discribed as Sections 5, 6, 7 & 8, T. 5 S., R. 6 E., G. & S. R. B. & M., Pinal County, Arizona. Section 7 & 8 are the normal one mile wide (east-west) width but these sections are approximately 1.256 miles long (north-sout), thus totalling approximately 160 acres more than the normal 640 acres for a square mile. See Map No. 3. The optioned acreage is about 2,990.

The property of concern is approximately 10 airline miles north-northwest of Casa Grande, Arizona, a small city on the Southern Pacific Railroad. It is also approximately 2 miles northeasterly of ASARCOs' Sacaton copper deposit, now in production.

Access to the property from Phoenix utilizes southward travel on I-10 towards Tucson and is possible using passenger car vehicles. Using the Base Line Road--I-10 intersection as a starting pont, travel southward for 30.2 miles to off ramp and 0.4 miles on offramp to Junction of State Highways 387, 187 and old 93. Turn right at stop sign onto Highway 187 & 93 (to Casa Grande) and travel 0.4 miles south to Junction and make a sharp (U turn) to the right onto old Highway 93--back to the northwest. After 1.4 miles travel on this road is a gravel road Junction on the left which when followed will lead to the "Borrow Pit" shown on Map No. 4 in the NE/4 of Section 7. Travel is possible with passenger car on most of the desert roads within the area.

HISTORY, DEVELOPMENT and PRODUCTION:

Sixteen sections have been leased from the Gila River Indian Reservation by J. Sullivan & Company, Inc. for the past several years.

During this time, through the efforts of Mr. J. Sullivan, Scottsdale, Arizona, much exploration work has been done by J. Sullivan & Company, by Parnasse Company, a French corporation and by California Exploration Corporation. Between these three participants the following ground work and exploration has been completed.

1 - A topographic map with contours in meters and metric horizontal scale from aerial survey.
2 - Geologic surface mapping (outcrop map) and surface rock alteration mapping.
3 - Geo-chemical surveys of copper, molybdenum, lead, zinc, gold and silver by utilizing a drill to intersect the first two feet of bedrock - on a grid pattern, thus a rock geo-chem program.
4 - Geophysical surveys (I.P. and Magnetometer) with resulting anomalies.
5 - Percussion and/or rotary drilling on a grid pattern as well as some "wildcat" holes of shallow to moderate depths.
6 - Diamond core drilling at "selected" sites in the grid pattern as well as some "wildcat" locations, all of moderate to deep depths.

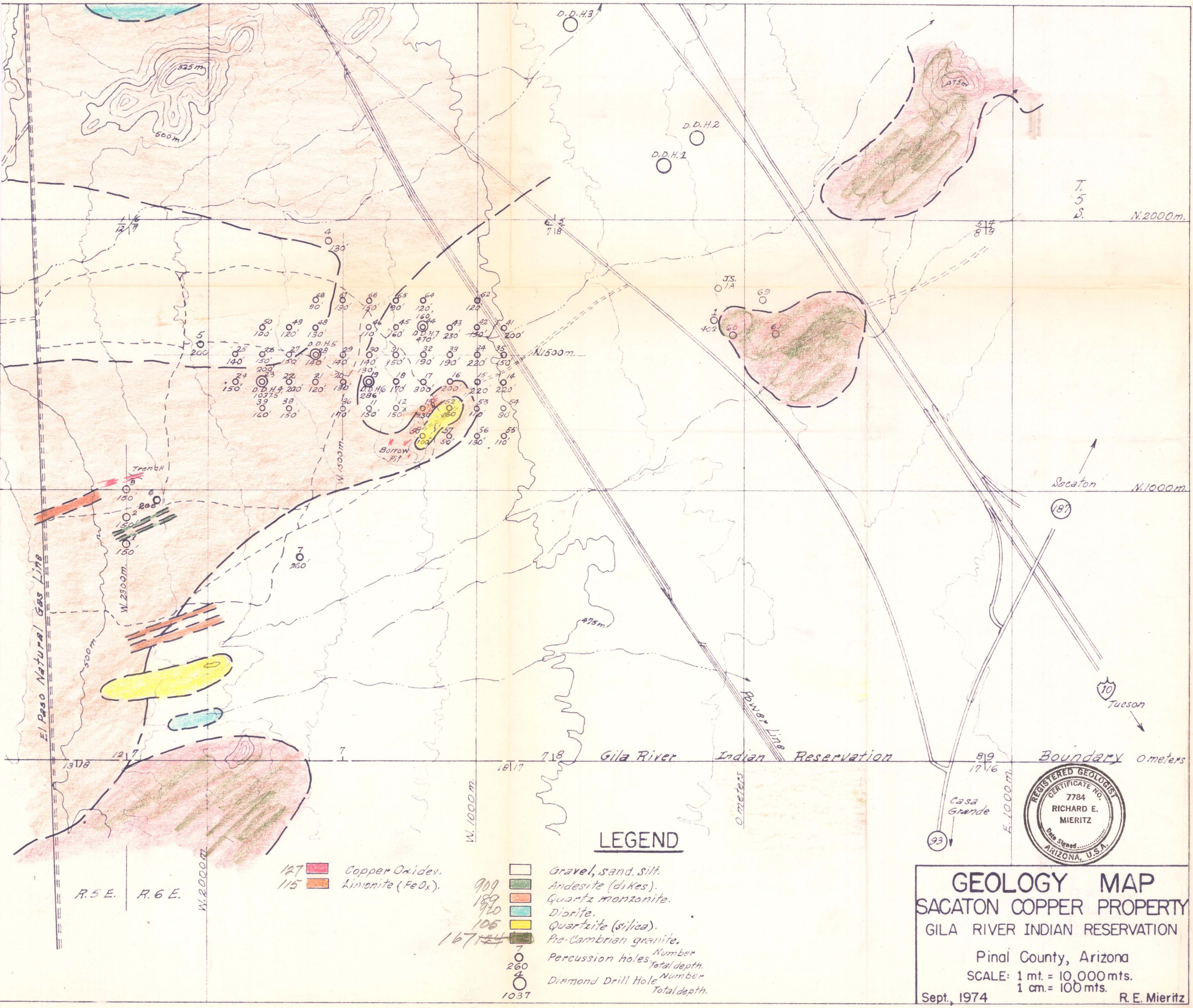
No production has originated from the property.

GENERAL GEOLOGY and MINERALIZATION:

Geology of the area consists of Pre-Cambrian granite, Pre-Cambrian diorite and what the U. S. G. S. has termed a quartz monzonite. Andesite dikes, silica dikes (perhaps pegmatic in character) and quartz monzonite dikes, all of northeast trends, have intruded the quartz monzonite. See Map No. 4.

In general, the surface is somewhat bland but occasionally scattered occurances of copper oxides (mostly malachite) are visible. In the area of the "Borrow Pit" in the drilled area (Map No. 4) a shallow shaft exposes an east-west trending shear zone with a north-south fracture pattern. Both features appear to have a vertical or nearly so dip. Copper oxides are also visible in the quartzite (silica) exposure here. A similar type structure can be observed in the area of D. H. 3 where a shallow bull-dozer trench, about 15 inches deep, exposes copper oxides (malachite). In this area the writer did observe a few specks of copper sulphides - pyrite and chalcopyrite. None were observed in the shallow shaft area.

The andesite dikes, where exposed, appear to be barren of copper mineralization.



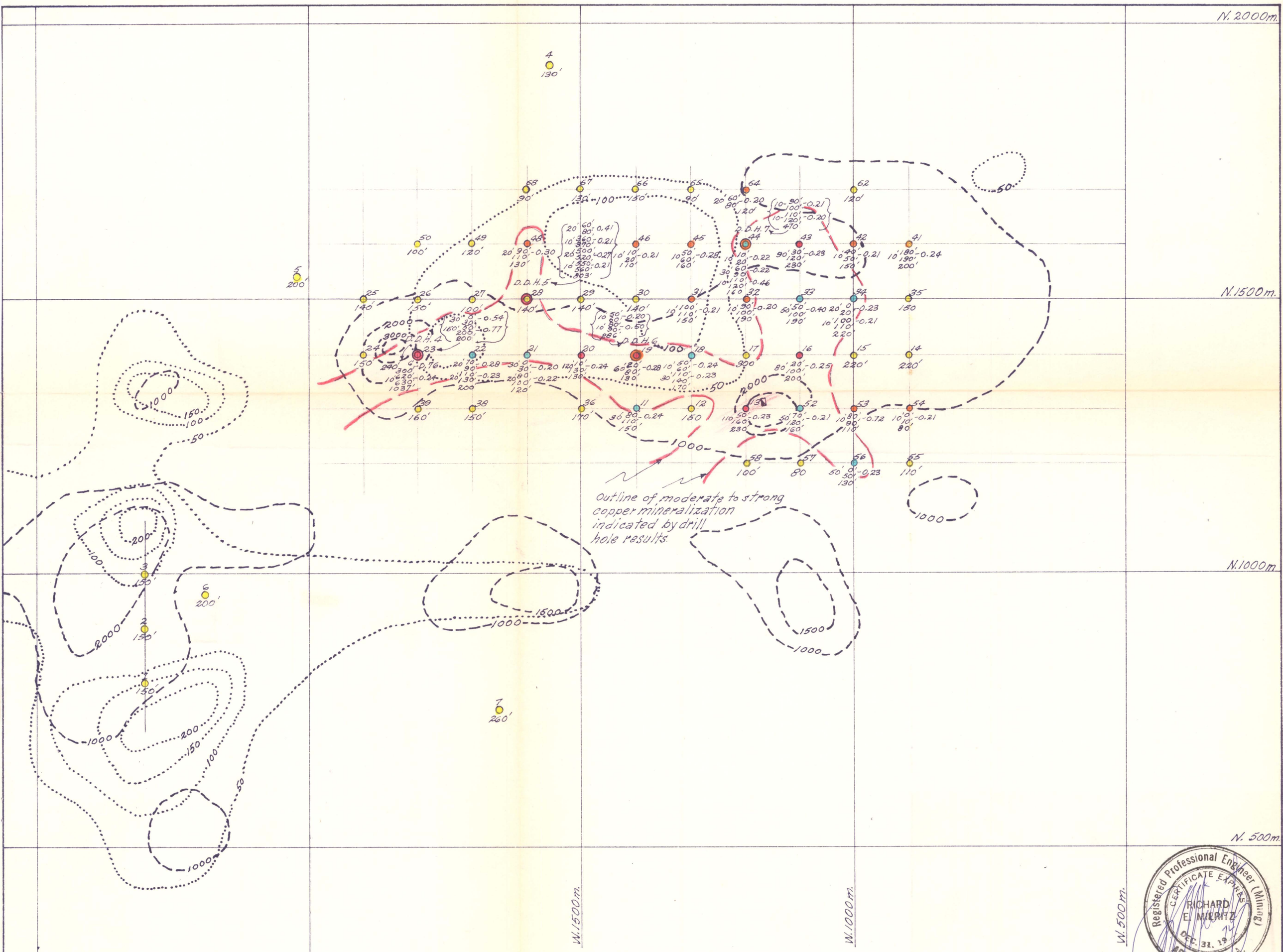
GEOLOGY MAP
SACATON COPPER PROPERTY
GILA RIVER INDIAN RESERVATION

Pinal County, Arizona

SCALE: 1 mt. = 10,000 mts.
1 cm. = 100 mts.

Sept., 1974 R. E. Mieritz

MAP Nº 4



Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES DEC. 31, 19
RICHARD E. MIERITZ
ARIZONA, U.S.A.

LEGEND

Classification of Mineralized Intercepts

- No values above 0.20% Cu.
- Less than 30 ft. of 0.20% Cu.
- 30 to 50 ft of 0.20% Cu.
- More than 50 ft of 0.20% Cu.

Copper Contours in PPM.

Molybdenum Contours in PPM.

7 / 50' 60' 110' 0.27 / 260' — Percussion drill hole, top figure is Hole number. Other figures mineralization intercepts using 0.20% Cu. cutoff. Left to right - thickness, depths of intercept, & average % copper. Bottom figure is Total Depth.

4 / 1037 — Diamond Drill hole. - as for Percussion hole.

GEO-CHEM - DRILL HOLE MAP

SACATON COPPER PROPERTY

GILA RIVER INDIAN RESERVATION

Pinal County, Arizona

Scale: 1 mt. = 5,000 mts.

Sept., 1974

R.E. Mieritz

MAP Nº 5

areas to the west and southwest of D. D. H. 4 suggests to the writer that D. D. H. 4 could well be located on the eastern fringe of a potential orebody beneath the copper and molybdenum geo-chem anomalies.

Most secondary enriched copper deposits have a leached capping containing copper oxides ranging from 0.01 to 0.05%. The shallow holes drilled west and southwest of D. D. H. 4 have lower copper values than most of the "fringe" holes in the drilled area.

POTENTIAL TARGET:

The indicated target is that area west and southwest of D. D. H. 4 which should be drilled to depths of approximately 900 to 1000 feet to test the anomalous areas so indicated on Map No. 5. The area here is approximately 1000 meters long in a southwest-northeast direction and approximately 600 meters wide in a northwest-southeast direction.

Prior to drilling this area, the cores of D. D. H.s 4, 5, 6 and 7 should be logged geologically in great detail so as to provide advace geologic knowledge of the area at depth.

ORE RESERVES:

The seemingly unrelated, reasonably unconnectable zonal horizons of moderate to strong copper mineralization in the drilled area prohibits an "ore reserve" estimate at this time, due to lack of detailed sections in both directions of the drilled area. As a rough estimate, the irregular outlined area can be considered as averaging 180 meters wide, 800 meters long and 15 meters thick for a volume of 2,160,000 cubic meters. Using 2.9 tons to a cubic meter, there could be 6,200,000 tons of mineralized rock averaging 0.25% copper based on a 0.20% cutoff.

EXPLORATION REQUIREMENTS - COSTS:

The "defined" target area should be diamond drilled with 3 to 4 holes up to 1000 feet deep. Except for geological logging of D. D. Hs. 4 through 7, no other work need be done. The surface terrain is such that no drill sites or roads need be constucted.

The estimated exploration costs for a Phase 1 program are as follows:

3500 feet diamond drilling including sampling, assaying and field expenses of personnel @ $20.-/ft.	$ 70,000.-
Project Supervision including Fees, travel expenses, etc., 2½ months	$ 7,500.-
Total Phase I	$ 77,500.-

If the Phase I program is successful in demonstrating the existance

of a potential orebody, then continue drilling. A phase II program budget could require $150,000.- or more.

ACKNOWLEDGEMENTS:

Mr. J. Sullivan has given the writer permission to utilize the factual data which hasbeen used and incorporated in this report and the basis of the writers analysis as to potential targets.

Respectfully submitted,

R. E. Mieritz,
Mining Consultant
Phoenix, Arizona.

September 14, 1974

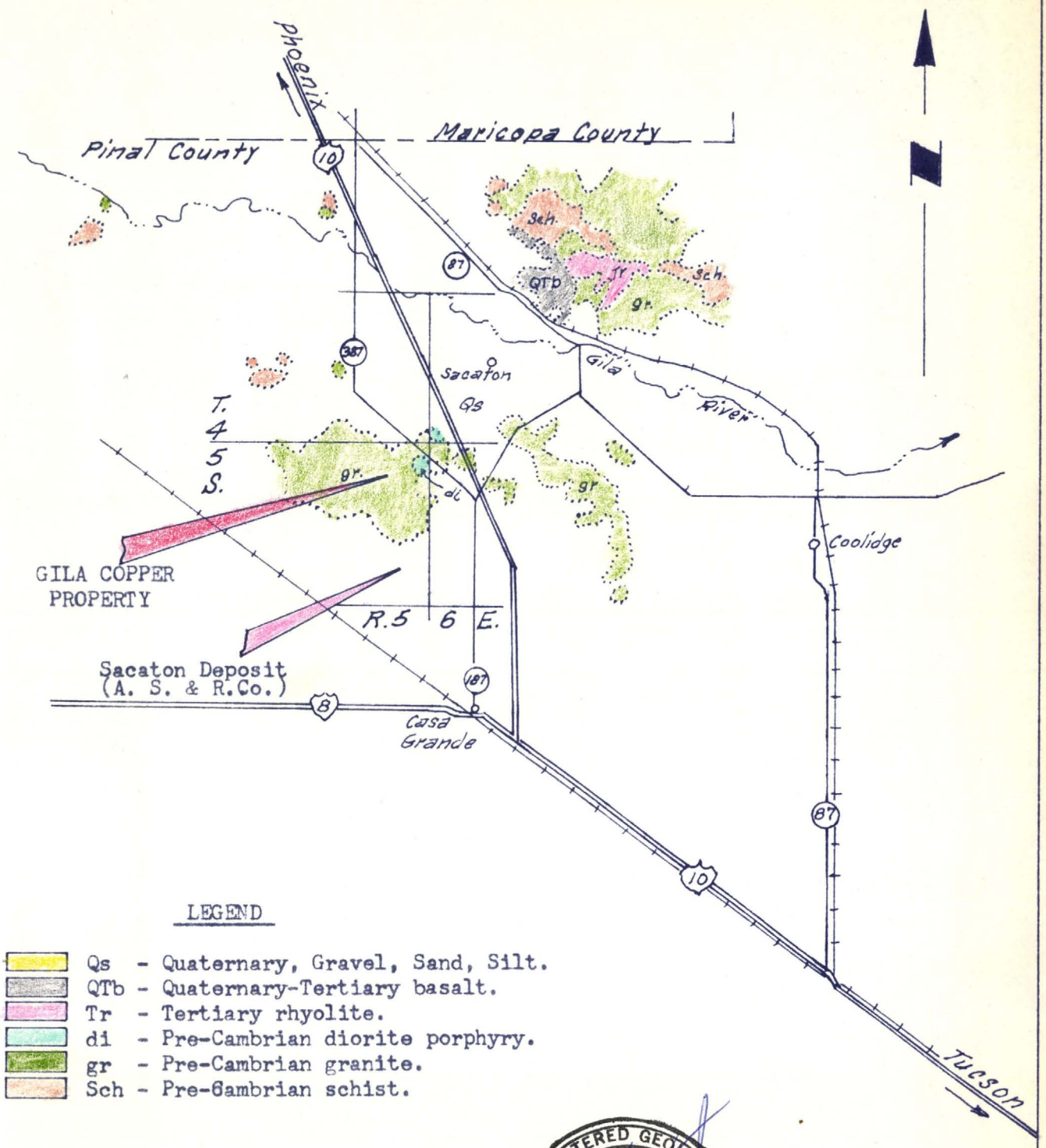
INDEX MAP
SOUTHWEST ARIZONA

SCALE: 1" = 27.5 MILES

JAN., 1962

R. E. MIERITZ, P.E. PHX, ARIZ.

MAP Nº 1



LEGEND

107	Qs	- Quaternary, Gravel, Sand, Silt.
197	QTb	- Quaternary-Tertiary basalt.
743½	Tr	- Tertiary rhyolite.
909	di	- Pre-Cambrian diorite porphyry.
167	gr	- Pre-Cambrian granite.
189	Sch	- Pre-Cambrian schist.

REGISTERED GEOLOGIST
CERTIFICATE NO.
7784
RICHARD E.
MIERITZ
Date Signed
ARIZONA, U.S.A.

GENERAL GEOLOGIC MAP

Portion of

PINAL COUNTY, ARIZONA

SCALE: 1"= 6 Miles

Sept., 1974 R. E. Mieritz

MAP No 2