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June 1, 1971

Mrs. Rena LaPorte
1524 Argyle
West Vancouver, B. C.
Canada

Re: Geologic examination and recommended geophysical program on a prospect near Dateland, Yuma County, Arizona

COPY

Dear Mrs. La Porte:

At the request of Mr. Wilbert Geminder of Las Vegas, Nevada on behalf of himself and partner, Mr. Fred Sanft, a brief one day geologic examination was made of a prospect in the Palomas Mountains, Yuma County, Arizona. This letter describes this inspection and, for the sake of convenience, includes our recommendations as to follow-up work in a proposal contract letter form for your approval and signature if it is acceptable.

This prospect consists of 75 claims in the south central portion of the Palomas Mountains about 14 miles north of Dateland, Arizona. These claims are mostly located within Sections 15, 16, 21 and 22 of T. 5 S., R. 13 W., G. & S. R. B. L. & M. to cover and protect a mineralized fracture or shear zone trending NW-SE diagonally across this square block of four sections.

Little published geologic data is available covering this area. Very brief comment is made of this prospect in the University of Arizona Bulletin # 134, "Geology and Mineral Deposits of Southern Yuma County, Arizona" by Eldred D. Wilson, 1933 (Arizona Bureau of Mines). His comment is "In the south-central portion of the Palomas Mountains, several narrow, silicified, brecciated fault zones in the granite locally contain abundant limonite together with minor amounts of Chrysocola and malachite. In places, this limonite is pseudomorphic after pyrite".

"Workings on these mineralized zones include, besides several short tunnels, two thirty-foot shafts on the Charles Engles claims, and two shafts, 50 and 100 feet deep, on the Henry Adams group".

These workings together with several more recent workings and considerable bulldozer trenching by Mr. Geminder were inspected on May 19, 1971 by Mr. Chris S. Ludwig, Senior Geophysicist of Heinrichs GEOEXploration Company in the company of Mr. Geminder. A major fracture of fault shear zone is evident through the entire two miles or so of strike length inspected. This zone parallels and is directly southwest of a hidden contact (buried by valley fill) between Quaternary volcanics to the northeast and the Mesozoic granite to quartz diorite rocks to the southwest. It is considered possible that recent movement on this same fault zone has down dropped the block of volcanics to the northeast perhaps with some rotation, forming the relatively narrow (about 1,500 ft. wide) valley. This valley may also simply be the erosional reflection of weaker material within the fault zone. Nowhere along the inspected strike was this inferred contact seen, even in the trenching. The valley fill covering the granite gradually thickens to the northeast, where exposed in the trenching, until it becomes too deep (30 to 50 feet) to effectively bulldoze.

However, mineralized fracturing is apparent as far northeast as the granite is exposed or uncovered, making the inferred volcanic-granite contact an interesting exploration target if shearing becomes more intense towards the contact or if the contact area was somehow involved as a mineralizing channel.

The exposed width of the fracture zone may be as much as 1,000 feet. Numerous steeply dipping basic to intermediate composition northwest trending dikes ranging from a few inches to one hundred feet or so in width are within and parallel the fracture zone and are likely related to the same zone of weakness.

The individual mineralized fractures range in width from a fraction of an inch to ten or twenty feet in width. Several of the wider mineralized fractures can be traced more or less continuously for about one mile. Copper oxide mineralization is locally exposed in the wider zones and in some of the narrow fractures, generally in the more silicified fractures.

Most of the copper observed is in fractures striking about due northwest and dipping steeper than 60°. Other mineralized fracture directions are evident throughout the area inspected but are usually less than an inch in width and show mainly iron staining and little or no copper. The aggregate width of mineralized fractures relative to the entire fracture zone width is difficult to estimate, but is sufficient that if most of the iron stained fractures develop appreciable copper at depth and if the exposed copper bearing zones persist in grade at depth, this may

be a potentially economic copper deposit. And, of course, the portion of the area covered by valley fill may be hiding unknown mineralization perhaps even of a different character.

The observed copper mineralization is in the form of malachite and chrysocolla and some copper pitch. In places, these oxidized copper minerals are obviously the result of exidation of chalcopyrite as some pseudomorphs after chalcopyrite were found. The copper is often intimately associated with specularite and other limonite iron oxides, some pseudomorphic after pyrite. A little fresh pyrite was observed on a dump in granite brought up from a shaft about 100 feet in depth.

The observed copper is within the mineralized fractures or intimately related to the fractures. No significant disseminations of copper away from the fractures are evident. Therefore, unless conditions change at depth, the copper bearing fractures will have to be abundant enough and high enough in copper content to make the barren granite host, in bulk, high enough in grade to be economically mineable. Alteration of the granite was noted and is strongest near the larger mineralized fractures but no pervasive alteration is evident across the entire fracture zone.

No obvious preferable drill targets are present along strike at this stage of prospecting and any drilling would be of a semi-wildcat nature mostly to gain additional geologic information as to persistence of mineralization at depth, oxidation depth and location of the volcanic-granite contact, etc. Intersection of an economically important portion of the strike length, if present, would be most fortuitous, based only on geology.

Prior to drilling, we strongly recommend an induced polarization (I.P.) program be carried out to help locate any significantly concentrated sulfide zones at depth along and across the fracture zone. The type of mineralization and apparent copper to iron ratio is such as to make an ideal I. P. application. If there is an economic zone of copper mineralization present, it would likely be in a sulfide form and would be concentrated enough to give an anomalous I. P. response. Any anomalism detected would therefore be a reasonable drill target. The I. P. would give some information as to depth to sulfides, probable concentration of total sulfide (pyrite and chalcopyrite, etc.), width of total mineralized zone and dip. Also, the I. P. would likely define the volcanic-granite contact and determine if any significant quantities of sulfide are related thereto.

An initial reconnaissance I. P. spacing of from 300 to 500 feet is recommended and would typically give resolvable penetration within the zone from about 100 feet to 700 or 800 feet in depth. Four short lines taking advantage of the topography to

gain additional depth and easier access across the fracture zone and one long line along the zone are recommended. The crosslines would be on 300 foot spacings and the long line on a 500 foot spacing. The attached sketch shows this suggested coverage. If any interesting response is located, some detailed follow-up would be desirable to best define drill targets.

About eight field days would be involved in obtaining the initial five lines. Another eight field days maximum should be allowed for in case interesting response is seen in the initial work and follow-up detail needed.

A three man crew plus necessary equipment to obtain this I. P. coverage would be charged at $250.00 per field day plus expenses. Expenses include $15.00 per day plus $0.15 per mile per vehicle and one four wheel drive vehicle would suffice. Living expenses will be charged at $42.00 per crew day. Other miscellaneous direct job related expenses will be billed at invoice cost plus 10%.

Our normal work schedule is based on a five day week and an eight hour field day plus up to two hours travel time to and from the project area per day. Overtime hours past this schedule, only when requested by the client in writing and agreed to by the crew chief, will be charged at $37.50 per overtime hour plus expenses as above for the three man crew.

Malfunction of our equipment in excess of one hour per day will be made up or not charged. Mobilization and demobilization between Tucson and Dateland and any standby time due to inclement weather or client request will be charged at half the daily rate plus expenses as above.

Final data computation, compilation and drafting will be charged at $10.00 per hour. Final interpretation and report will be charged at $150.00 per staff day.

Assuming only the initially proposed five lines are run, we estimate about $3,000.00 total billing which includes the report. If the detail work is needed, another $3,000.00 should be allowed for.

Our crew availability at this time is such that upon notice, we could probably start in a week or two.

All property permits, brushing and trespass-liability and related costs which are incurred on behalf of the client will be chargeable to the client. Charges for extra equipment and personnel employed, if mutually desired, are extra.

GEOEX will save the client harmless from all Workmen's Compensation, public liability and property damage liability incurred by GEOEX employees.

Payments are due on presentation. Billings may be submitted periodically with final payment due on presentation of final report.

Your understanding and approval of the above may be indicated by signing as provided below on the attached copy of this letter and returning it to us together with a $1,000.00 advance on account for definite crew commitment.

In summary, we feel that this prospect is of potential economic interest and should be examined further to determine how to best evaluate this potential. Perhaps the most straightforward approach is an induced polarization survey followed by drilling if any targets are geophysically located. Some drilling could be considered even if the I. P. work is negative because of the slight possibility of economic leachable oxide copper zones near surface. Oxide copper is, of course, undetectible by the I. P. technique. The I. P. will likely help define the volcanic-granite contact, also, and this contact would be an interesting target even if no sulfides were indicated by the I. P. work.

Respectfully submitted,
Heinrichs GEOEXploration Company

by: [signature] Jr. Pres.
for: Chris S. Ludwig
Senior Geophysicist

CSL:jh
Encl: Extra cc and sketch.
cc: Mr. Geminder w/sketch

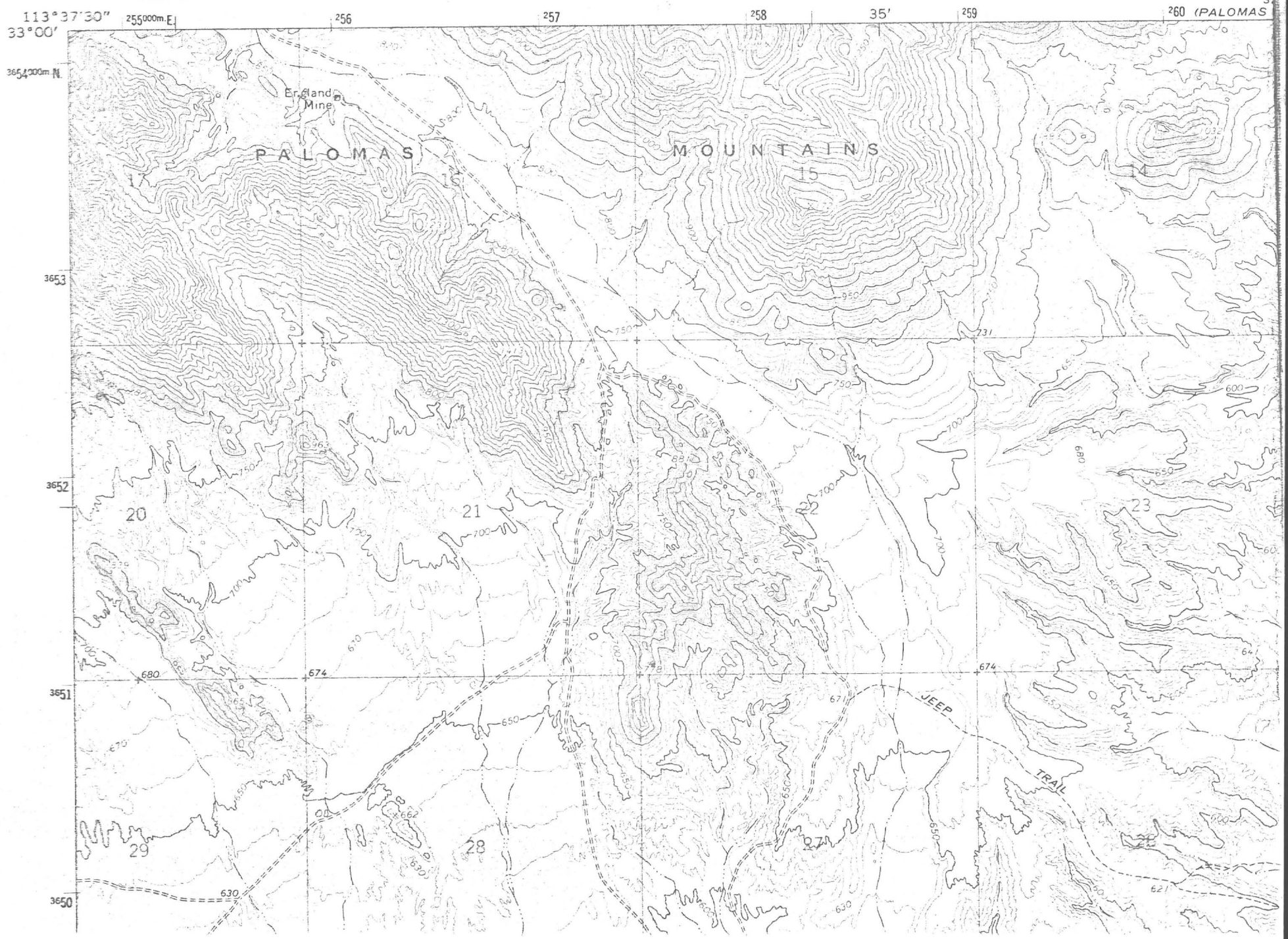
Date: _____

Accepted by: _____

Title: _____

3250 II
(PALOMAS MTS.)
1:62 500

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HORN QUADRANGLE
ARIZONA–YUMA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 STOVAL 15' QUADRANGLE

(PALOMAS MTS.) 3250 II 1:62 500

(BARAGAN MTN.) 3250 III SW

113°37'30" 255000m E. 256 257 258 35' 259 260 3250 II (PALOMAS MTS. 1:62 500) R. 13 W. 262 32'30" R. 12 W. 263 264 570 000 FEET 265 266 113°30'

33°00' 3654000m N.

PALOMAS MOUNTAINS
England Mine
Wash
Hoodoo
Water Tank
Well 532
JEEP TRAIL
LANDING STRIP
Gravel Pit
Well
Horn
Substation
PACIFIC SOUTHERN
HYDER 9.9 MI.
Horn Cotton Gin
BM 440
Gravel Pits
Fort Horn Monument
BM 556
BM 545
BM 536 AP
BM 494 AP
BM 435
BM 423
BM 400
Siphon
Wells
Storage Bins
Gila River
San Cristobal Valley
KOFA 16 MI.
3249 I NW (KOFA)
(AZTEC NW) 3349 IV NW
(TEXAS HILL) 3249 I SW
(AZTEC HILLS) 3350 IV SW
(DATELAND) 3249 I SE
DATELAND (INTERSTATE 8) 5.4 MI.

T. 5 S.
T. 6 S.

3653 3652 3651 3650 57'30" 3649 3648 3647 3646 3645 55' 3644 3643 690 000 FEET 3642 3641 3641000m N.

720 000 FEET

32°52'30" 113°37'30" 540 000 FEET 32°52'30" 113°30'

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1966

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1962 and 1963. Field checked 1965

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

Fine red dashed lines indicate selected fence lines

GN MN
1°24' 25 MILS
14° 249 MILS
UTM GRID AND 1965 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Light-duty ——— Unimproved dirt - - - - -

ARIZONA
QUADRANGLE LOCATION

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

HORN, ARIZ.
NE/4 STOVAL 15' QUADRANGLE
N3252.5—W11330/7.5

1965

AMS 3249 I NE—SERIES V898