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The following file is part of the

James Doyle Sell Mining Collection

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AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5795, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

January 8, 1971

Mr. Harmon E. Keyes  
544 East Culver Street  
Phoenix, Arizona 85004

Dear Sir:

Thank you for sending the information on the Daisy May mining claims. I am returning the copy to you. As reported verbally to you over the telephone, ASARCO has investigated the area and would consider a re-examination when additional work has been accomplished to open up further exposures.

Sincerely,

James D. Sell

JDS:mw

Enc.

**HARMON E. KEYES & ASSOCIATES**  
**CHEMICAL AND METALLURGICAL ENGINEERS**

Temporary:

544 E. Culver St.  
Apt. 5

544

~~508~~ EAST CULVER STREET

TELEPHONE ~~ALPINE 3-5700~~

PHOENIX, ARIZONA

254-3944

85004

December 17, 1970

Mr. James D. Sell  
American Smelting & Refining Co.  
Exploration Department  
P.O. Box 5795  
Tucson, Arizona 85703

Dear Mr. Sell:

It was a pleasure to see you again at the A.I.M.E. meeting December 7, and to review briefly our correspondence on copper properties of possible merit.

Specifically, my letter of November 9, 1970, to Mr. W.E. Saegart and marked to your attention, gave location of 35 claims, known as the Pearce Group, in Cochise County; as well as the Malachite Group of 18 claims in Yuma County.

In addition, your attention is invited to the Daisy May property in Pinal County, consisting of about 35 claims, which I have visited and conducted some sampling and leaching tests. Paul Cook has authorized me to loan you a copy of geological report by Dr. John N. Faick dated May 15, 1967. This gives some general information, prior to my visits there, and shows location of the property. Please return this report when you have finished with it. There is now available considerable subsequent information on this property, and which Paul Cook will be glad to show you if your interest warrants.

Trusting to hear from you soon, and with Seasons Greetings,  
I remain,

Sincerely,

*Harmon E. Keyes*  
Harmon E. Keyes

CC- Paul E. Cook

To Mr. Sell or Mr. Saggart

Date DEC 7, 1970 Time \_\_\_\_\_

**WHILE YOU WERE OUT**

Mr. Harmon Keyes

of Re: additional property

Phone Vehol Hills 75 mi SW  
of Phoenix

- |  |  |
|--|--|
| <input type="checkbox"/> TELEPHONED        | <input type="checkbox"/> PLEASE CALL HIM |
| <input type="checkbox"/> CALLED TO SEE YOU | <input type="checkbox"/> WILL CALL AGAIN |
| <input type="checkbox"/> WANTS TO SEE YOU  | <input type="checkbox"/> RUSH            |

Rest of month

Message: 544 E. Culver St.

apt. 5

Phoenix 85004

Phone 254-3944

Will be in Pioneer Hotel Operator

(Mr. Wm. Elsing) Dept. Mr. Res.

Molly

→ 721 E Mitchell Dr.  
Phx.

Daisy May Property  
Paul Cook & Wm. Elsing

30-40 claims

75 mi SW of Phoenix

Near Vekol mine

H.E. Keyes

Temp. 544 E Culver St

Apt. 5 Phx 85004

254-3944

PAUL E. COOK  
721 E MITCHELL DR  
PHX AZ 85014  
214-3331

REPORT ON DAISY MAE MINING CLAIMS  
CASA GRANDE MINING DISTRICT  
PINAL COUNTY, ARIZONA

by

JOHN NICHOLAS FAICK, Ph.D  
Registered Geologist  
2238 E. Grant Road  
Tucson, Arizona 85719  
May 15, 1967

T85 R2E  
between Table Top  
& Antelope Peak

This letter will constitute my preliminary report of examination of the Daisy Mae and Dolly groups of unpatented lode claims examined on your behalf; first in your company on May 7 and again on May 14 when I was accompanied over part of the property by Mr. Paul Cook. This property, which is jointly owned by Paul E. Cook and O. C. Williams, is situated near the old Vekol Ranch about 20 miles southwest of Casa Grande, Arizona in an unsurveyed area a couple of miles south of Antelope Peak, as shown on the Antelope Peak quadrangle. One claim notice found on the ground indicated it was located March 5, 1956 by Wallace W. Clark, Paul E. Cook and Ira W. Wagon and was named the Copper Butte No. 13 claim. Presumably all the claims were located under similar circumstances but it is my understanding that they are now owned by Paul E. Cook and O. C. Williams and are recorded as the Daisy Mae and Dolly claims.

The area in which the Cook and Williams property is located is underlain by dark gray micaceous schist in which biotite, feldspar and quartz are abundant rock-forming constituents and the schist also contains abundant small lenses and pods of white quartz. Apparently these quartz inclusions are indigenous to the schistose rock and are the same age, which probably is Precambrian. The schistose rocks are intensely deformed and in most places are characterized by abundant minor flexures and folds and by stretched and broken quartz inclusions. Structural deformation is on a relatively large scale but I have not seen its limits.

Please return to -  
H. E. Keyes  
599 E. Coker St.  
Phoenix, Ariz. 85014

Inspection of the property indicates that it covers a large area in which considerable secondary copper is exposed in several small shallow cuts and prospect pits and at least one locality where minor amounts of secondary copper is exposed in a shallow arroyo. The copper seems to lie in a belt that may be several hundred feet wide and at least 3 or 4 thousand feet long, but these dimensions are no more than estimates as copper minerals are not seen except in cuts which penetrate a couple of feet below the surface. Here and there, at irregular intervals along the mineralized zone, a pale brownish yellow soil seems to have developed like a slight gossan. Another characteristic of the zone, and possibly the most important aspect, is the pronounced structural deformation referred to above.

The observed copper minerals are principally chrysocolla with traces of malachite, which form thin veinlets and films on foliation planes and fractures in the schist. Iron oxides commonly occur with the copper minerals and simple field tests indicate that some of this iron oxide contains copper in an unidentified form, but presumably it is cupric oxide or cuprite. No other important metallic minerals or sulfide minerals were found and the deposit seems to consist entirely of secondary minerals. In a few places very narrow, irregular quartz veinlets are associated with the copper minerals and I believe this relationship is significant. It suggests that quartz veinlets and copper were introduced into the schist after deformation, thus forming a low grade ore body of which only the weathered and leached surface is exposed. Some pink feldspar of a pegmatitic nature was observed and this seems to be closely related to the quartz veinlets. The host rocks are not intensely altered to clay and sericite as is often the case near mineral deposits. Veins and blotches of a black mineral thought to be tourmaline occur in some places but the relationship of this mineral to the copper was not apparent during this short examination.

The Cook-Williams claims have been slightly explored by several small prospect pits and by a small cut from which copper-stained building stone has been mined on a small scale for several years. Near this cut two holes were drilled to depths of about 60 feet.

Numerous samples have been cut out and assayed but the records were destroyed in a fire so there is little information available at present to indicate the grade of the ore. Mr. Cook reports that most samples ranged from 1 to 4½ percent copper and that the two drill holes averaged 2 percent copper. He reports that all of the samples would average about 2.6 percent copper. A few samples for which records exist are as follows:

<u>Claim</u>	<u>Description</u>	<u>Assays</u>		
DM 5	A 20 ft. wide cut across face of building stone pit.	Gold	0.05 oz./ton	
		Silver	0.18 "	"
		Copper	4.90 percent	
		Silica	68.44 "	
DM 5	Grab sample of dump	Copper	2.60	"
"	" " " "	"	2.10	"
"	" " " "	"	3.50	"
DM 2	Grab sample of red soil from dump.	Gold	0.08 oz./ton	
		Copper	0.90 percent	
DM 18	Grab sample of dump	Copper	3.90	"
DM 7	" " " "	Copper	2.90	2

A leach test was made by Paul E. Cook on ore containing 2.5 percent copper. From this ore Mr. Cook extracted 65 lbs. of copper with 100 lbs. of acid and he precipitated 64 lbs. of copper with 60 lbs. of iron. These results compare very favorably with any leaching practice with which I am familiar:

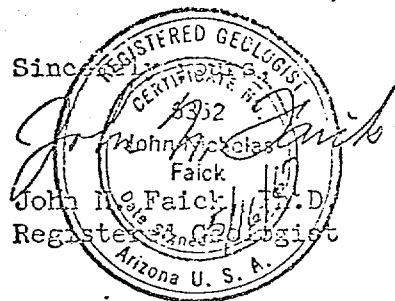
It should be noted in the above table of assays that the ore contains significant amounts of gold and minor amounts of silver. A few samples are also reported to contain from 0.02 to 0.07 percent molybdenum. During our inspection of the property Mr. Cook quoted from memory the approximate assays of samples from seven pits for which the records were destroyed



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The mineralized area is relatively large but it is not possible to estimate the amount of ore available because of the lack of adequate information. If continuity of ore could be established between the various shallow pits then the reserves would amount to several million tons. There is a definite possibility that the mineralized area is much larger than that which I examined. Without doubt the mineralized zone is large enough and contains enough copper to justify an intensive exploration program. The mineral deposit could easily be developed for open pit mining and the ore seems to be amenable to leaching; therefore a large, low-cost operation is a likely possibility. The known ore is relatively high-grade and premium prices usually are obtained for copper precipitate; therefore the chance of being successful outweighs the risk of failure. Every effort should be made to explore the property and to find suitable methods to develop it.

I strongly recommend that further exploration work be done on the Daisy Mae and Dolly group of claims.



FILE  
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PLAT DAISY MAY MINING CLAIMS OF RECORD.

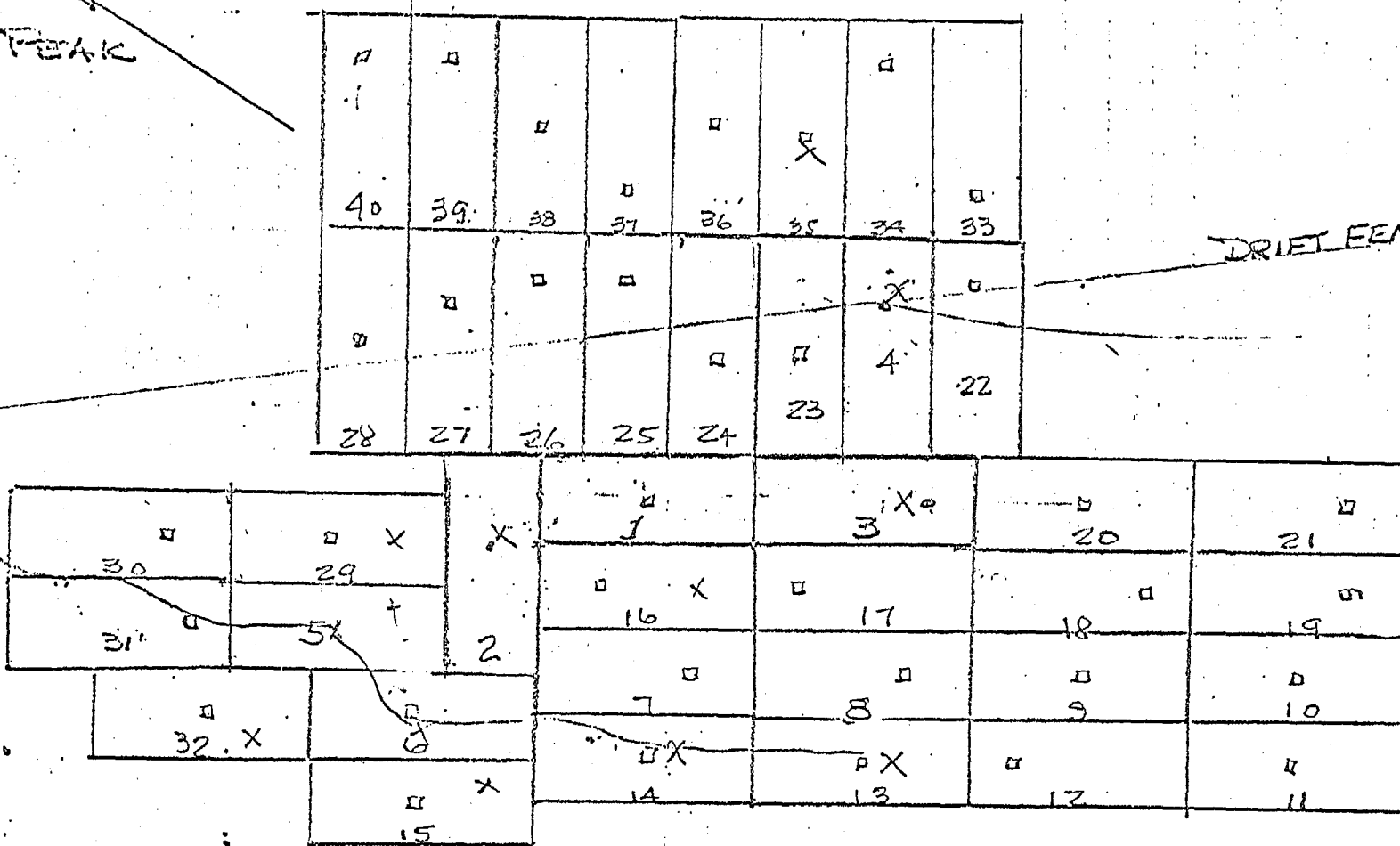
CASA GRANDE MINING DIST. PINAL CO. ARIZ. UNSURVEYED AREA TWP S-12 2E

X COPPER ORE SHOWINGS?

ANTELOPE  
PEAK

ROAD TO U.S. 84

DRIET FENCE



SCALE 1/4" = 300'

P.E. & D.M. COOK, OWNERS  
721 MITCHELL DR PHOENIX ARIZ 85014

5-20-67

PAUL E. COOK  
721 E MITCHELL DR  
PHX AZ 85014  
274-3331

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CASA GRANDE MINING DISTRICT  
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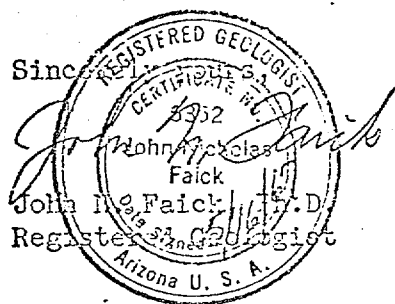
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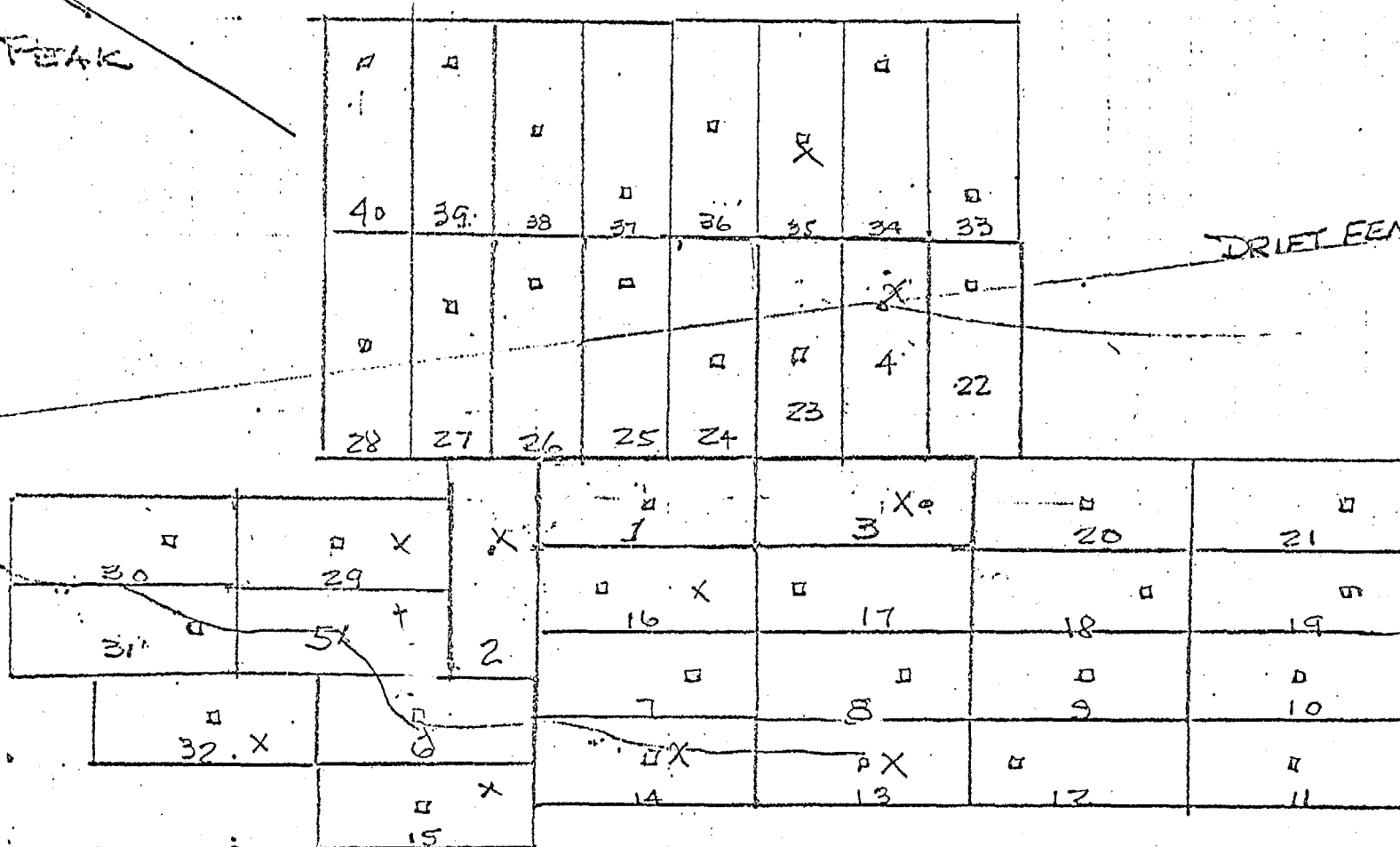
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ANTelope

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