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SUMMARY REPORT  
NEAR-SURFACE COPPER-MOLYBDENUM  
SULFIDE MINERALIZATION AT COPPER CREEK  
including  
Mineral Reserve Calculations

A.J. Perry  
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March, 1975



## CONTENTS

	<u>Page</u>
Purpose.....	1
Summary and Conclusions.....	1
Recommendation.....	1
Location.....	2
Background.....	2
Recent Shallow Rotary-Percussion Drilling.....	2
Character of Mineralization and Alteration.....	4
Chalcocite Mineralization.....	5
Alteration.....	5
Reserve Summary.....	6
Orebody Configuration.....	6
Reserve Calculation Procedures.....	11
Evaluation - Data Limitation.....	11
Metallurgical Considerations.....	12
Sulfide Flotation.....	12
Leaching Possibilities.....	12
Mining Considerations.....	13
Economic Analysis.....	14
Deeper Sulfide Potential.....	18
Property Consideration .....	18

## FIGURES

<u>Figure Number</u>		<u>Page</u>
1	Drill Hole Location Map - Areas of Near Surface (Chalcocite Mineralization)	Pocket
2	Location Map-Copper Creek Properties Area	3
3	North Area Ore and Pit Limits Overlay	Pocket
4	South Area Ore and Pit Limits Overlay	Pocket
5	Cross Sections - A-A', B-B' - North Mineral Area	7
6	Cross Sections - C-C', D-D' - North Mineral Area	8
7	Cross Sections - E-E', F-F' - South Mineral Area	9
8	Cross Sections - G-G', H-H' - South Mineral Area	10
9	Drill Hole Location Map - Showing the Three Deep Drill Holes	20

## PURPOSE

SW 70 Participants have been engaged in exploration at Copper Creek since 1970.

The purpose of this report is four fold: (1) to summarize briefly the results of recent shallow rotary-percussion drilling at that location, (2) to calculate a reserve of near surface mineralization after combining recent results with data from previous area exploration, (3) to comment on the possible economics of exploitation of the reserve and (4) to speculate briefly on possible remaining deeper copper potential -- making suggestions as to "farmout possibilities".

## SUMMARY AND CONCLUSIONS

Recent rotary-percussion drilling conducted at Copper Creek verified the presence of two near surface bodies of sulfide copper and molybdenum. Our rough calculations show a reserve of +20,000,000 tons of material at a grade of 0.42% Cu eq. The waste to ore ratio is .92:1.

Assuming a 5000 tpd open pit operation, a conventional sulfide concentrator and a 65¢ NSR copper price, \$87.4 million would be generated over a 12 year operational life.

An increase of 20¢ in copper price would raise total revenues by 23.5% but the average ROI would be elevated to only 11.6%. Other indicators are also unfavorable.

Additional exploration might add reserves to those calculated but it is doubtful that the increase would equal 20% of the copper now outlined. An increase in grade should not be expected.

It is concluded that supergene copper reserves at Copper Creek are unlikely to sustain an economic operation in the foreseeable future.

Additional deeper tests for primary copper-molybdenum sulfides appear warranted.

## RECOMMENDATION

It is recommended that ERC maintain their current mineral interests at Copper Creek (including the Gillings and Trust 60 optioned lands) for a period of 60 days. During this time an attempt should be made to interest the several parties who have inquired as to the availability of these lands for exploration, and others, in undertaking further exploration. The best arrangement would appear to be one where ERC-PKK would have an opportunity to "back in" after expenditures to date had been equalled.

### LOCATION

ERC-PKK Copper Creek properties, held under terms of the SW 70 Agreement, are situated in Secs. 23, 24, 25 and 26, T12 $\frac{1}{2}$ N - R3W, Yavapai County, Arizona. Copper Creek (Little Copper Creek) is located in an area of rugged low hills just south of Hwy 89 about 12 road miles SW of Prescott, and 3 $\frac{1}{2}$ -4 miles SE of Phelps Dodge's Copper Basin copper deposit. All Project lands are within the Prescott National Forest. See the following portion of the Kirkland Quad (Figure 4) for location.

### BACKGROUND

The presence of multiple intrusives of Laramide age at Copper Creek with attendant breccias, pervasive alteration and disseminated copper-molybdenum mineralization has long been recognized. However, the absence of strong "live limonite" indicating substantial enrichment was responsible for the lack of meaningful exploration until Phelps Dodge drilled several core holes in about 1963-64. There followed a period of occasional occupancy and geologic work by several groups but no additional drilling was done until 1970-71 when two groups, SW 70 participants (then ERC, Day Mines and PKK) and Norandex, Inc. - Sierra Mineral Management (SMM) simultaneously occupied lands covering the indicated pervasive mineralization.

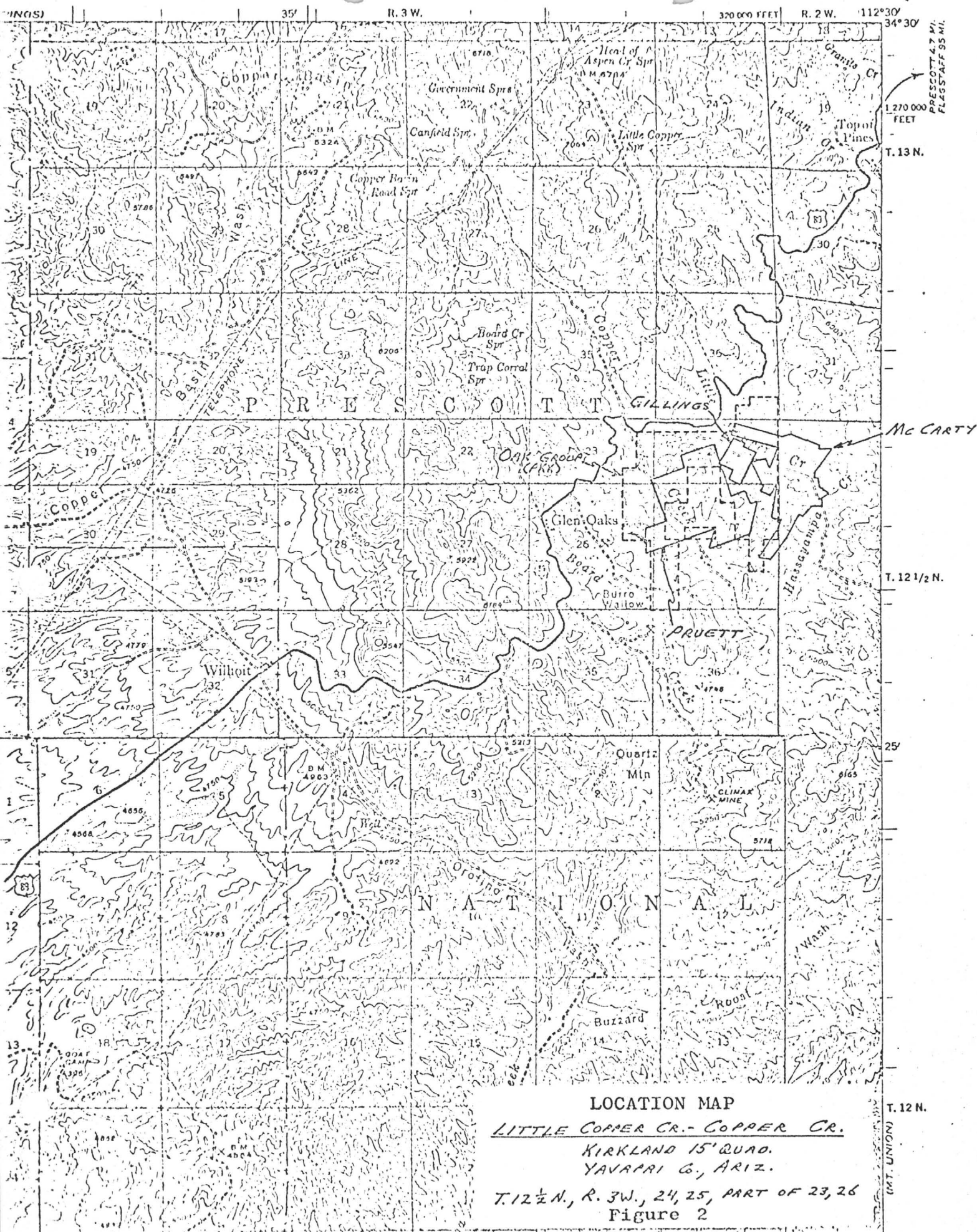
The Norandex - SMM group subsequently abandoned their efforts. SW 70 optioned their lands to Essex International in the fall of 1973. Essex drilled 9 shallow holes in search of supergene ores and promptly terminated the agreement. In March, 1974, SW 70 optioned most of the land formerly held by Norandex (Trust 60 Properties).

In August, 1974, J.N. Swinderman of ERC proposed additional exploration at Copper Creek, for both supergene ores and for the deeper sulfide potential. ERC management approved the shallow drilling project. Day Mines, a 50% financial participant in SW 70, withdrew from the Project at that time.

Exploration for additional chalcocite ores, the principal subject of this report, commenced December, 1974.

### RECENT SHALLOW ROTARY PERCUSSION DRILLING

The recent rotary percussion drilling was undertaken at Copper Creek to further test areas designated by Swinderman as potential enriched areas amenable to open pit mining (North and South areas of Figure 1). The CC74 series holes of that Figure are the result of that drilling.





A total of 2929 feet was drilled (including minor coring) in 12 holes. Abbreviated descriptive logs, simple geologic strip logs, a tabulation of assays, and a description of sampling procedures (all for CC74 series drilling) are appended.

The recent drilling has established that a small reserve of low grade supergene copper mineralization with some by-product molybdenum, all amenable to conventional flotation, is present near surface in two areas on the properties currently held by ERC-PKK.

Discussions as to the character of the mineralization, alteration, limitations of available data, and an "ore" reserve calculation as well as some comments on potential economics follow.

#### CHARACTER OF THE MINERALIZATION AND ALTERATION

Practically all pre-mineral rocks intersected by the rotary-percussion drilling are quartz-rich (Qmp-qlp-etc.) and low in total sulfides -- generally 1-3% or less.

Pyrite is the predominate sulfide. There are, in order of decreasing abundance, lesser amounts of chalcocite, chalcopyrite, molybdenite and covellite. Bornite is occasionally present.

The principal copper minerals are chalcocite and chalcopyrite. The former occurs as coatings on pyrite and chalcopyrite, both of which occur primarily as discrete disseminations -- with only minor amounts being found as veinlets or fracture coatings.  $\text{MoS}_2$  also occurs primarily as discrete flakes either in silicified country rock or along quartz vein selvages. There is no direct relationship between the better  $\text{MoS}_2$  sections and the better copper intervals (see assay tabulation, appendix).

The supergene copper mineralization appears to have little relationship to any particular pre-ore Laramide rocks tested by this drilling -- the degree of chalcocite development being largely a function of the amount of chalcopyrite originally present -- and that in turn having been determined by proximity to available copper bearing solutions (centers of mineralization, more well broken areas, etc.).

Reference to the strip logs, cross sections and assay tabulations attached will show that the downward sequence of mineralization is normally leached capping, chalcocite zone and primary mineralization, in holes drilled from topographic prominences. Holes collared in gulch bottoms generally show sulfides almost immediately -- with only minor oxides being present. Oxide grades in the better mineralized areas are generally .01-.03% Cu grading rapidly upward as chalcocite-coated sulfides are encountered.

Chalcocite, when present, is generally low-grade -- with individual  $2\frac{1}{2}'$  or  $5'$  assays rarely exceeding 0.50% Cu. The highest copper assay recorded was in CC74-3 ( $70-75' = 1.09\%$  Cu) - primarily a chalcocite section.

Sulfide grades of 0.10-0.15% Cu are often found below good chalcocite. Lesser protore grades are common outside the principal areas of mineralization.

Silver commonly reported to assay in amounts between .02-.08 oz/T, and occasionally exceeded .10 oz/T. The specific silver mineralogy is not known but we presume the silver is tied to some of the copper minerals. However, there is no direct relationship between the higher copper intervals and high silver. Essentially no gold has been reported from the few assays collected from previous drilling at Copper Creek.

Qualitative spectrographic analyses of three samples from CC74 series cuttings showed no other elements reporting in amounts suggesting their possible economic interest.

#### Chalcocite Mineralization

Karvinen of Norandex, Briscoe of Sierra Mineral Management, J. Swinderman of ERC, and, in recent months, this author believed that evidence from "live limonite" capping and drill hole analyses available suggested that enriched ores (a chalcocite blanket) of economic interest might be available on ERC-PKK properties at Copper Creek. Results of recent drilling combined with previous exploration results has made possible the reserve calculation of this report.

"Live limonite" is present in discontinuous patches in the area of our recent drilling in Secs. 24 and 25 (North and South areas of Figure 1, attached) and locally elsewhere on the property. The favorable limonite colors are intermixed with those suggesting 1-5% pyrite. Some minor pitch after chalcopyrite is also occasionally observed. Turquoise is present here and there in thin ( $< \frac{1}{2}"$  thick) stringers and blebs. Ferrimolybdate is suggested by occasional pale yellow colorations, especially in well-silicified and veined areas, where limonite after pyrite does not obscure the delicate yellow ochre.

#### Alteration

Reference to the abbreviated descriptive logs of CC74 series holes (Appendix) will show propylitization and silicification as being the dominant alteration types encountered. Some secondary biotite was identified. Minor K-spar development was logged. Sericite and argillite is probably generally more well-developed than recognized in our hand lens/binocular

microscope examination of wet CC74 series cuttings.

Silicification is particularly well-developed in the North Area -- perhaps to the extent of making a substantial difference in any anticipated excavation.

The obvious overlapping ("telescoping") of alteration types was early recognized by Sayers of PKK and supported by the limited petrographic work accomplished.

#### RESERVE SUMMARY

Reserves of copper/molybdenum-bearing material available in the two areas outlined as North and South areas on Figures 2 and 3, using a 0.25% Cu eq. exterior cutoff (0.20% Cu eq. interior cutoff) are as follows:

North Area - 12,993,280 tons - 0.428 Cu eq.

South Area - 8,371,520 tons - 0.410 Cu eq.

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Grand Total- 21,364,800 tons - 0.42 Cu eq.

Total waste measured, both areas, was 19,587,424 tons, resulting in a waste (all categories) to ore ratio of 0.92:1.

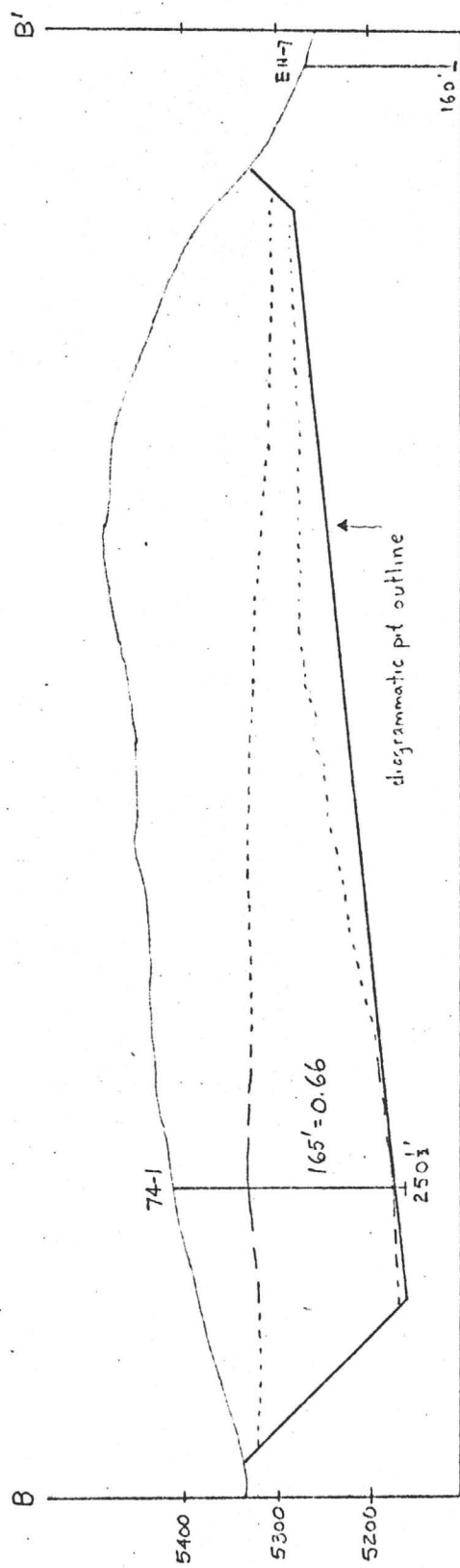
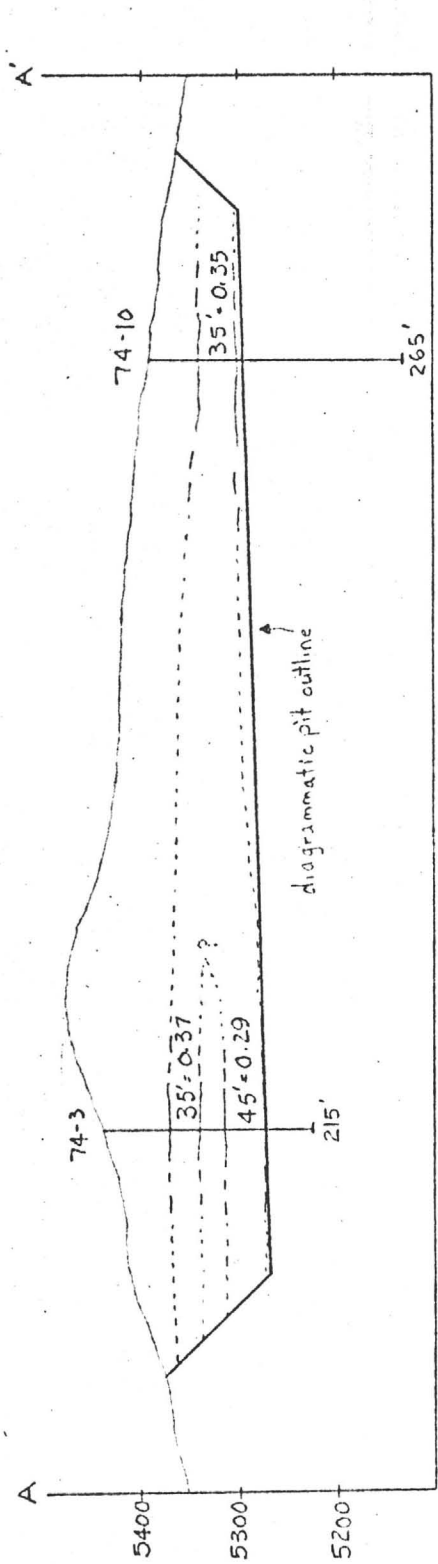
You are referred to the appendix for the detail and further summary of the reserve and waste calculations.

#### OREBODY CONFIGURATIONS

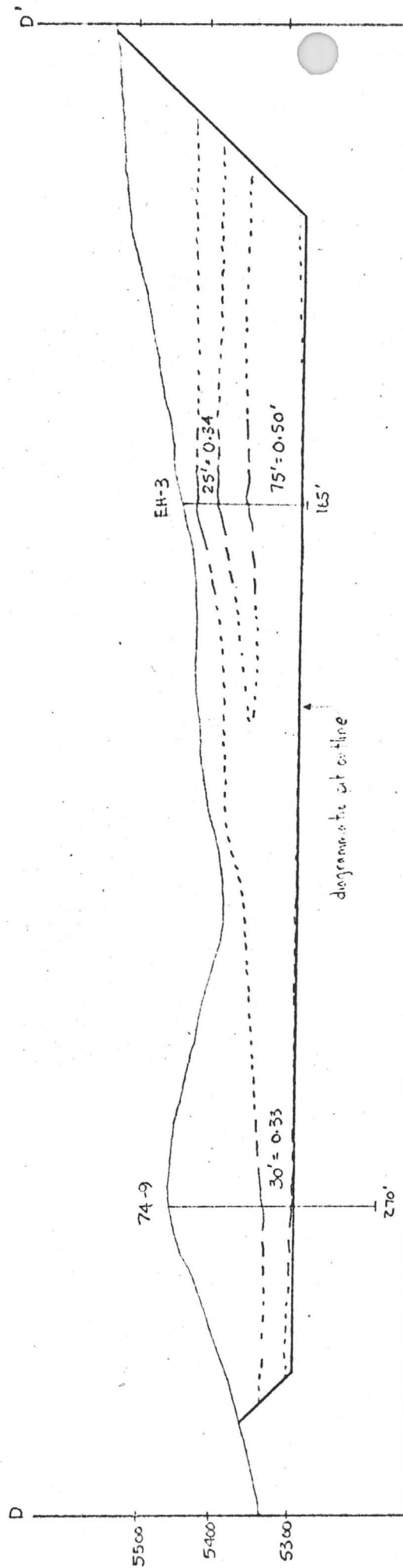
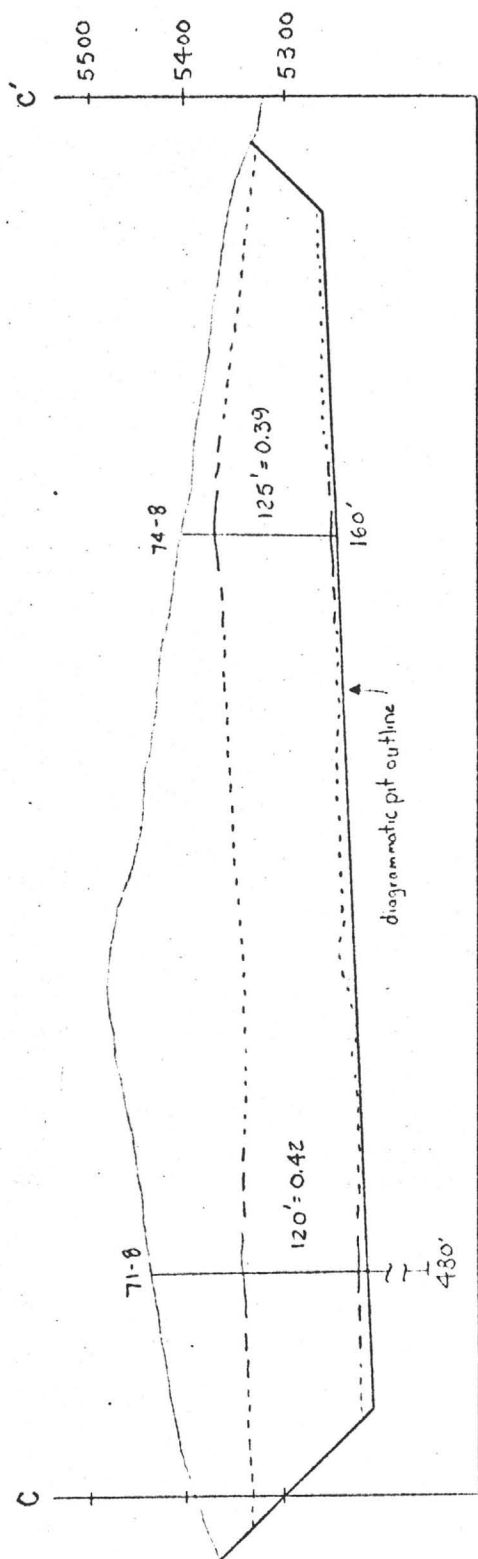
Figure 2, used as an overlay to Figure 1, will show that the North Area "orebody" has dimensions of approximately 1800' X 1100'. Ore thicknesses vary from 10 to 185 feet. Sections A, B, C and D show that the ore is generally flat lying and irregularly tabular, with a slight westerly dip. The ore (using a 0.25% Cu eq. cutoff) tends to be thicker on the west side of the body. There is a tendency for the better zone to drape downward with decreased surface elevations. Chalcocite was measured in the top of DDH CC-4 located just outside the west edge of North Area oreblock (but inside the proposed pit), illustrating that chalcocite can extend beneath valley bottoms, though this may be an exception.

The South Area (use overlay, Figure 3) is an irregular ellipse measuring approximately 1600' X 700' in plan. Ore thicknesses vary from 35 to 160 feet. Sections E, F, G and H illustrate interpreted ore configurations. A particularly good thickness of chalcocite is measured in HA-6, which was collared on a topographic prominence.





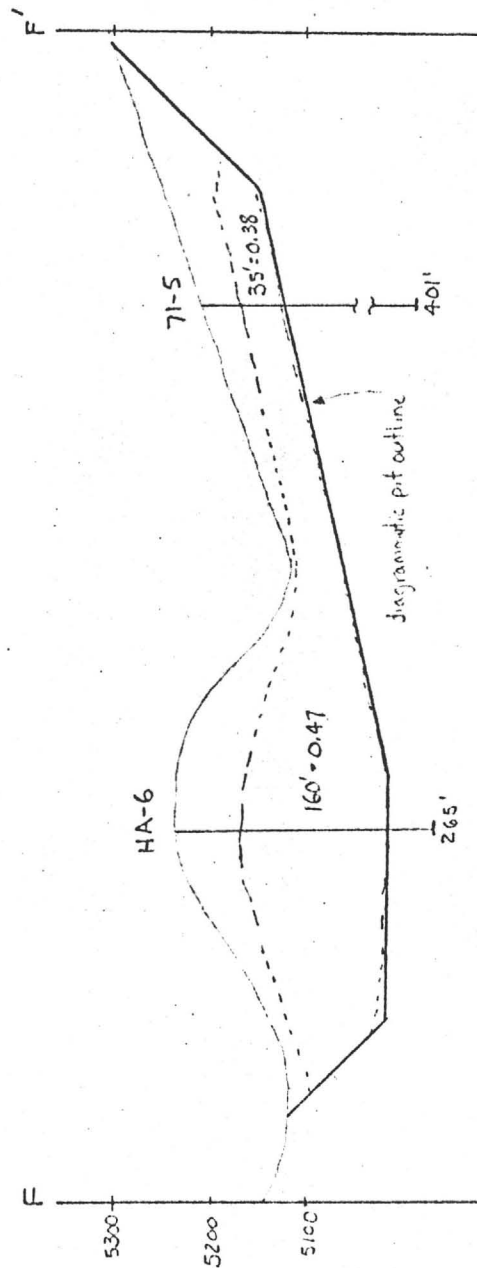
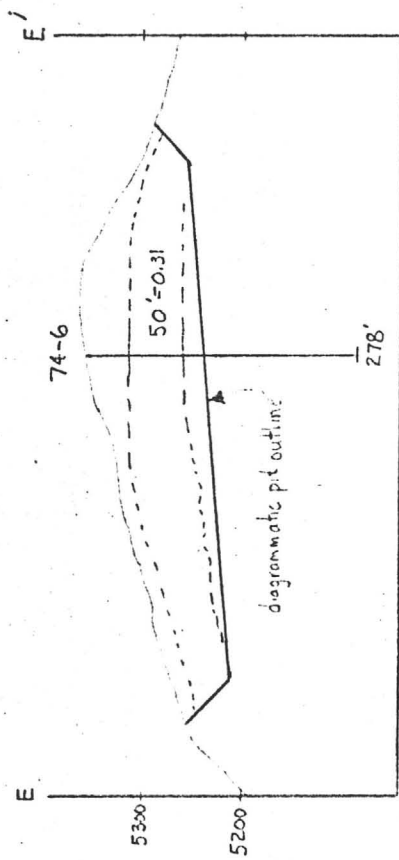
INTERPRETIVE CROSS SECTIONS  
NORTH AREA  
Figure 5



# INTERPRETIVE CROSS SECTIONS

NORTH AREA

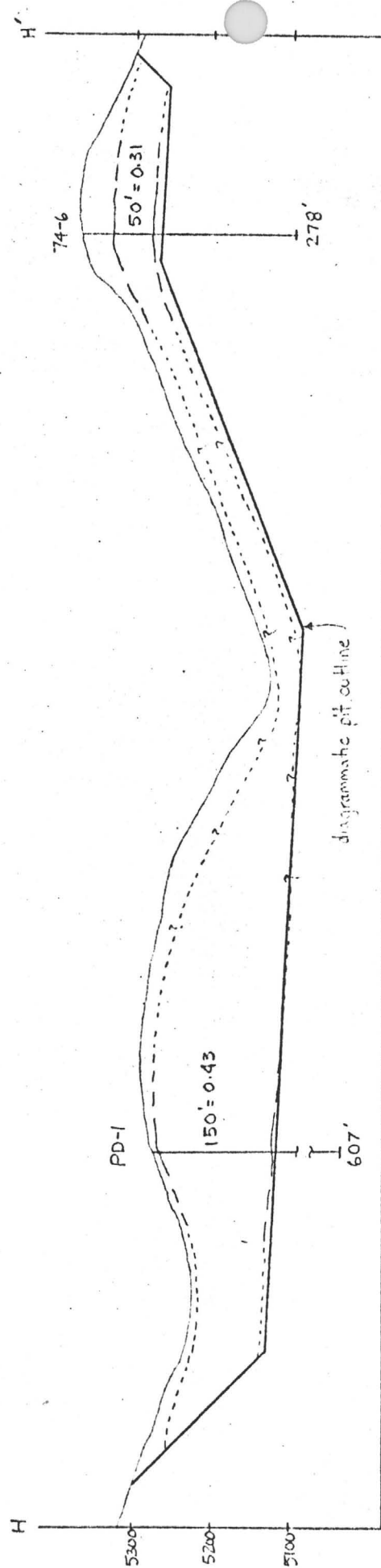
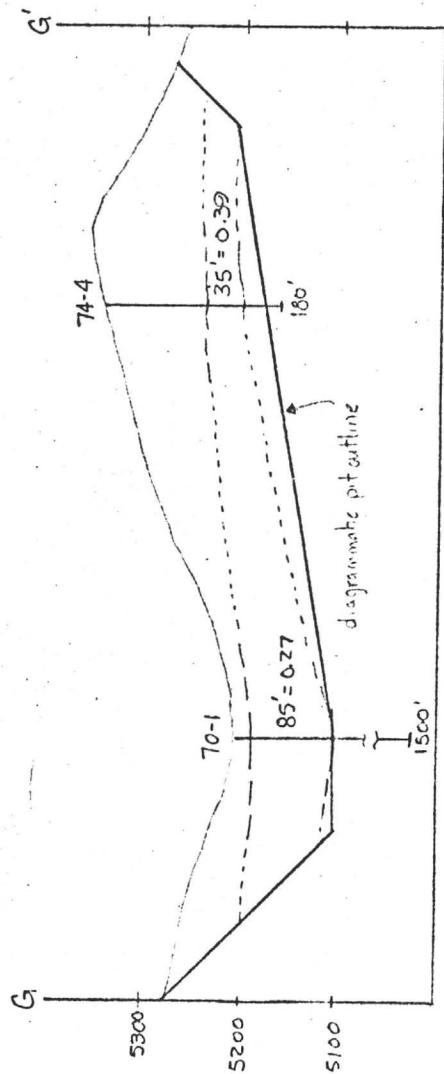
Figure 6



# INTERPRETIVE CROSS SECTIONS

SOUTH AREA

Figure 7



# INTERPRETIVE CROSS SECTIONS

SOUTH AREA

Figure 8

### RESERVE CALCULATION PROCEDURES

Cut-off grades for ore block limits and interior ore of 0.25% Cu eq. and 0.20% Cu eq., respectively, were established by accepted methods -- considering a metals market price of 68¢/#Cu. Modifications of costs (milling overhead and other costs upward) after commencement of the calculation resulted in increasing the copper price to fit the case for report purposes. The final NSR price used for economic considerations was 65¢/#Cu.

Reference to Figures 2 and 3 (attached) will show the distribution of drill holes within "orebody" limits in both the North and South areas to be irregular. A cross section calculation scheme was studied and rejected in favor of a polygonal system using lines connecting midpoints between adjacent holes, modified for terrain and geology. Several cross sections, Figures 5 thru 8 are provided to show suggested ore continuity.

In general, orebody perimeter limits were extended 150 feet or less beyond the outermost hole considered for pit incorporation. Exceptions were made, as in the case of CC-3 in the North Area, where topography and an unusual ore thickness dictated an outward extension. Hole PD-2 (South Area) was rejected from ore calculation.

Polygon areas were each planimetered 4 times and averaged. The thickness of ore and overburden for each polygon was extended over the block from the controlling hole for calculation purposes. A 12.5 Cu ft/ton factor was used in the tonnage determinations.

Pit walls were sloped at  $-45^{\circ}$  from ore limits. By use of cross sections, the surface orebody limit was projected vertically downward to the elevation of the bottom of ore (with some modification for chalcocite zone draping) and a  $+45^{\circ}$  line extended outward from that point to surface. Volumes of pit layback material were calculated using an arithmetic average of cross sectional areas and a planimetered surface area.

Tables of tonnage and overburden calculations are appended.

### EVALUATION-DATA LIMITATION

Considering the purpose/sensitivity of this evaluation there appears to be one substantial limitation to data used for reserve calculations. That is the combining of analyses from several sources -- each of a different reliability. Four Phelps Dodge holes (PD series) and those of Norandex (HA, 70 and 71 series holes) analyses were collected by Swinderman

of ERC from Sierra Minerals graphic assay representations. Essex (EH series) holes were rotary holes with analyses by Iron King. Check assays of select rejected cuttings indicated these analyses were reliable. Molybdenite analyses for many of the substantial copper intercepts in these holes are not available.

Portions of CC74 holes (those of ERC's recent drilling) were analyzed for total copper by Hawley and Hawley; other intervals by ERC. There was generally good agreement. ERC analyzed for copper oxide and molybdenum as well. Checks for moly by Rocky Mtn. Geochem-Tucson indicated ERC's reports of molybdenum were on an average 20% high. All ERC Mo analyses have been subsequently reduced before being incorporated on Figure 1 and in reserve calculations. All assays from CC74 series drilling are tabulated in the Appendix, as reported, without any modification.

#### METALLURGICAL CONSIDERATIONS

##### Sulfide Flotation

Hazen Research, Inc., of Golden is conducting preliminary flotation tests on a composite of cuttings from some of the better-grade recent CC74 series holes intersections. Only very preliminary results are now available. They are somewhat encouraging.

Ralph Light, Hazen VP, reports by phone that using a 0.41% Cu head sample and a grind, allowing 70-80% to pass -200 mesh, about 80% of the total copper available (includes both sulfide and the minor oxide present) is recovered in an unwashed rougher bulk sulfide concentrate. About 90% of the total sulfide copper is being recovered. The bulk concentrate assays about 5% Cu and 0.4% Mo.

Some preliminary Hazen remarks suggested anticipated difficulty with copper sulfide - molybdenite separation.

##### Leaching Possibilities

The Hassayampa Project Report of Sierra emphasizes their approach to the near-surface Copper Creek reserves as a "leachable" blanket. Support for this thesis came from consultants J. Still and Dave Lowell.

Using the better sections of CC74 series holes for which there are copper oxide assays (ERC Lab), the arithmetic average of CuOx to total copper shows that an average of 13½% of the total copper measured reports as oxide copper. This varies from 3% (CC74-1; 168-248') to 35% in CC74-11; 20-30').

Hawley and Hawley, Tucson assayers, upon instructions to determine the amount of readily leachable copper - not necessarily just copper in oxide form -- measured 59% and 66% of the contained copper as leachable -- but leachable only in a very controlled environment: in the case of the 66% soluble copper, only after a 5%  $H_2SO_4$  solution was brought to a boil for 2 minutes (see attached certificate of analysis - Appendix)

In summary, less than 15% of the total copper available in the near-surface mineralized sections tested at Copper Creek reports as oxide copper which would be readily available for leaching. This amount is insufficient to consider recovering either on: (1) a strictly leach ore basis or (2) leaching in combination with sulfide flotation.

Only conventional flotation of a copper and a molybdenum sulfide concentrate are considered in this summary.

#### MINING CONSIDERATIONS

Substantial portions of the waste and ore from both North and South area model pits would be removed from above the current topographic base levels if mining were undertaken.

Lands in addition to these currently held would be necessary for some waste disposal and for plant site and tailings impoundment.

Rocks at Copper Creek are of a normal porphyry type, locally well fractured, but hard. Drilling and blasting will be necessary from the onset of stripping. Considering the small working areas and the normal demands of flexibility of a small operation, a loader and truck operation should be considered.

The perimeter of the proposed pit of the North Area orebody would be within 1200 feet of Highway 89; making ecological considerations important.

### ECONOMIC ANALYSTS

Following is a brief economic run-thru using as a model W.C. Coles' analyses of October, 1974\*.

Using the reserves of this report, assuming open pit mining, a 5000 tpd conventional flotation plant and a 12 year mine life, a total revenue of \$87,400,000 would be generated at 65¢ NSR value copper. The average annual ROI provided would be 5.0%.

Assuming 85¢ NSR value copper, revenue increases to \$114,200,000; but we judge other indicators fall short of ERC's minimum goal.

Reference to the tabulated drill hole analyses in the appendix will show that only thin intercepts of 0.50% Cu eq could be developed for calculation at that grade.

It would appear to PKK that the supergene reserves developed at Copper Creek are substantially less in terms of tons and grade than those required for an economic operation in the foreseeable future.

It is estimated that additional exploration might increase the reserve tonnage somewhat, probably adding < 20%. An increase in the grade above that currently measured should not be expected.

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\*Letter from W.C. Cole to Wm. M. Calhoun, Day Mines, Inc.



COPPER CREEK

Basic Assumptions:

Reserves:	20,000,000 tons @ 0.42 Cu equivalent.
Waste:Ore	.92:1
Mine Life:	12 years
Mill Operates:	325 days/yr.
Flotation Concentrator:	5000 tpd
NSR Revenue:	US Producer Price less 15¢

Capital Costs:

Roads	67,500.
Water Supply	337,500.
Mining Equipment	2,025,000.
Office	275,000.
Mill	12,500,000.
Tailings System	675,000.
Mine Shop	337,500.
Engr. Fees	540,000.
Dev. Drilling	540,000.
Pre-Production Mining	540,000.
Working Capital	<u>810,000.</u>
Sub-Total	\$18,647,500.
+10%	<u>1,864,750.</u>
Total	\$20,512,250.

Note: Assume no replacement of capital equipment and no salvage.

Operating Costs

Mining	35¢/ton of rock @.92:1 =	.67 ton
Milling		1.35
G&A @ 30%		.41
Royalty (2% NSR assuming 40% ore from Trust 60)		.05
	Total	\$2.48
X <u>20,000,000</u> tons =		<u>\$49,600,000</u>

Revenue

NSR FOB Concentrator	=	\$4.37/ton
X 20,000,000 tons	=	\$87,400,000

Summary 12 year mine life @ 65¢ NSR Cu, 0.42% Cu eq. head grade...

Revenue	87,400,000.
Capital costs	20,512,000.
Operating Costs	<u>49,600,000.</u>
Pre-Tax Profit	\$17,288,000.

Depletion (50%) 8,644,000.

Taxable Income	8,644,000.
State and Co. Taxes @ 17%	<u>1,469,480.</u>
Net before Fed. Taxes	7,174,520.

Fed. Tax @ 48% 3,443,770.

Post tax profit	3,730,750
+Deprec. +Depl.	29,156,000
Cash Flow	32,886,750

Total Profit = \$12,374,750

Payback Time = 7.5 years

Profit + Investment = .60

Ave. Annual ROI = 5.0%

Summary 12 year mine life @ 85¢ NSR Cu - 0.42% Cu head grade

Revenue	\$114,200,000
Cap. Costs	20,512,000
*Operating costs	<u>50,000,000</u>
Pre Tax Profit	\$43,688,000
Depletion (15%)	17,130,000
Taxable Income	26,558,000
State & Local Taxes @ 17%	<u>4,514,860</u>
Net before Fed. Taxes	22,043,140
Fed. Taxes @ 48%	<u>10,580,707</u>
Post Tax Profit	11,462,433
+Deprec. +Depl.	37,642,000
Cash Flow	49,104,433
<hr/>	
Total Profit	28,592,433
Payback Time	5.0 years
Profit + Investment	1.40 years
Ave. Annual ROI	11.6%

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\*0.42 = 8.4# X .8 = 6.72# rec. X .85 = \$5.71 NSR value raw ore.  
Change from 80¢ mkt. price calc. because of mod. of  
Trust 60 Royalty (.67 + 1.35 + .41 + .07 = \$2.50)

### DEEPER SULFIDE POTENTIAL

A total of 52 holes are known to have been drilled on ground currently under ERC-PKK control at Copper Creek. Only three of those holes have exceeded 1000 feet in total depth: PD-6 (1235'), DDH70-1 (1500') and CC-4 (1611').

Reference to attached Figure 9 will show that the 3 deeper holes are so spaced as to form an irregular fence with a NE-SW orientation with holes spaced 1500 and 1800 feet apart.

The geology of holes PD-6 and DDH70-1 are unfortunately not known. SW70 Project hole CC4 bottomed at an elevation of 3714', penetrating sparsely mineralized Pre-Cambrian rocks at about elevation 3798'. DDH70-1, SW of CC-4, bottomed at elevation 3700', presumably with no Pre-Cambrian intersected, but with no increase in copper. PD-6 penetrated only to elevation 4214' with some increase in copper (rising from 0.08% Cu  $\pm$  0.14% Cu near the bottom) ~~again with no apparent Pre-Cambrian intersection.~~ Sierra reports that there was also an increase in alteration with depth in PD-6.

Reference to Sayers' transparent alteration outline overlays and the locations of the three deeper holes at Copper Creek will clearly show that only the central portion of the south half of the altered zone has been tested by the +1000' deep holes.

It seems reasonable to assume that a deeper penetration than the 1236' of PD-6 is warranted at that location -- in view of the mineralization - alteration increase -- particularly in light of Swinderman's hypothesis of a SW plunge toward a buried intrusive center. However, other hypotheses developed could also have merit.

### PROPERTY CONSIDERATIONS

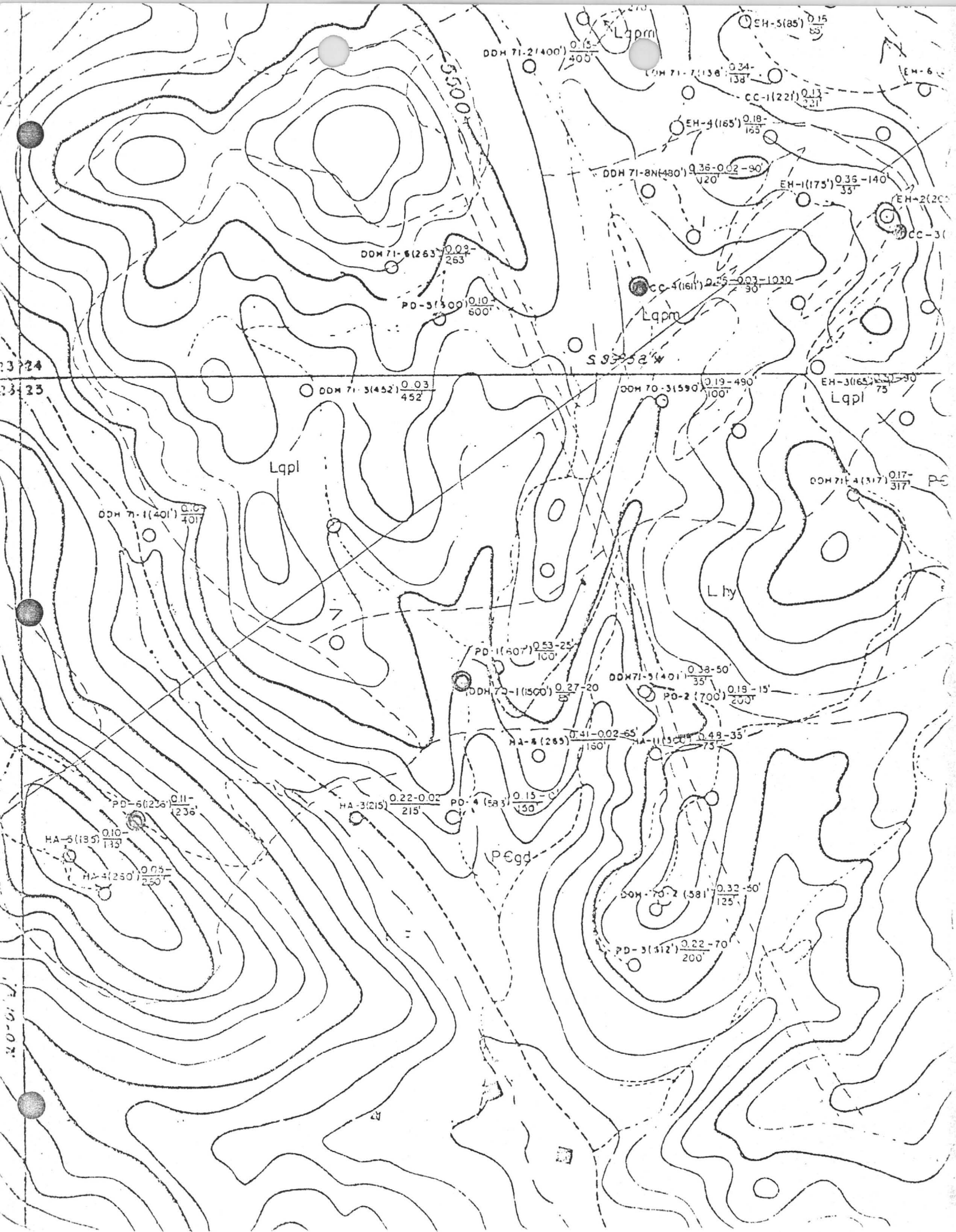
ERC-PKK currently control the following properties at Copper Creek:

- (1) Oak Claims - Project located 58 unpatented lodes and fractions.
- (2) Gillings Property - Two patented claims, leased with the option to purchase, covered by Agreement dated July 14, 1971. Total price for purchase of the property is \$65,000 (option period expires 1976).
- (3) Trust 60 Property - Lease Agreement and Option to Purchase dated March 7, 1974, covers 14 patented, 8 unpatented lodes and 2 unpatented millsite claims. Total purchase price is \$5 million -- until the property is purchased, a 3% NSR payment is due on any production.

Reference to the outlines of the supergene mineralized zones shown in Figures 2 and 3 and to a 500 scale claims map (Company files) will show that about 90% of the North Area mineral reserve is on ground optioned from Gillings; 100% of South Area mineralization is on Trust 60 lands.

Studies of the pervasive alteration indicating areas of copper potential were made by Sayers (PKK) in 1970. This study indicated that 58.3% of the favorable ground was then held by Norandex (Trust 60 property) and 41.7% by ERC-PKK (including Gillings). We now control essentially the entire altered area.

Current monthly payment obligations are: \$1650/mo. to Trust 60 and \$550/mo. to Gillings.



APPENDIX

No.

- 1 Drill Hole Assay Tabulation - CC74 Series Rotary-Percussion Holes.
- 2 Abbreviated Descriptive Logs - CC74 Series Rotary-Percussion Holes.
- 3 Graphic Logs - CC74 Series Rotary-Percussion Holes.
- 4 Qualitative Spectrographic Analyses - CC74 Series Cuttings.
- 4 Oxide (Leachability) Tests - Certificate of Analysis.
- 5 Ore and Waste Calculations - North Area.
- 5 Ore and Waste Calculations - South Area.
- 5 Pit Layback Waste Calculations and Calculations of Waste to Ore Ratios.

# 12/74-1/75 Rotary Drilling

TD - 250.5'

## Hawley & Hawley Assay

## ERC Assay

Sample  
Interval

Cu  
%

Cu  
%

Oxide  
Cu %

Mo  
%

Ag  
oz/T

Hole No.

CC-74-1

15-20 0.01

30-35 0.01

45-50 0.01

60-65 0.01

75-80 0.12

80-85 0.17

85-90 0.66

90-95 0.73

95-100 0.83

100-105 0.69

105-110 0.68

110-115 0.84

115-120 0.74

120-125 0.77

0.032  
0.058  
0.040  
0.070  
0.128  
0.175  
0.610  
0.735  
0.800  
0.685  
0.720  
0.830  
0.705  
0.790

0.008  
0.010  
0.008  
0.014  
0.019  
0.031  
0.040  
0.045  
0.036  
0.034  
0.033  
0.030  
0.027  
0.024

0.012  
0.029  
0.023  
0.030  
0.026  
0.023  
0.036  
0.018  
0.033  
0.026  
0.009  
0.027  
0.039  
0.035

0.085  
0.122  
0.073  
0.085  
0.061  
0.083  
0.087  
0.073  
0.075  
0.060  
0.085  
0.097  
0.080  
0.085

(65-67.5')  
(67.5-70')  
(70-72.5')  
(72.5-75')



## 12/74-1/75 Rotary Drilling

TD - 250.5'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T	
CC-74-1	125-130	0.72	0.730	0.024	0.053	0.088	
	130-135	0.66	0.655	0.027	0.021	0.063	
	135-140	0.76	0.795	0.029	0.060	0.075	
	140-145	0.74	0.725	0.024	0.018	0.073	
	145-150	0.84	0.810	0.025	0.017	0.085	
	150-155	0.61	0.620	0.032	0.030	0.075	
	155-160	0.62	0.590	0.019	0.036	0.060	
	160-165	0.68	0.625	0.018	0.021	0.085	
	165-170	0.64	0.640	0.019	0.024	0.080	
	170-175	0.64	0.625	0.020	0.024	0.073	
	175-180	0.64	0.620	0.019	0.016	0.073	
	180-185	0.51	0.500	0.017	0.024	0.073	
	185-190	0.58	0.575	0.016	0.015	0.073	
	190-195	0.47	0.450	0.015	0.018	0.049	
	200-205	0.35	0.350	0.012	0.019	0.049	
	205-210	0.44	0.430	0.011	0.016	0.073	
	210-215	0.33	0.305	0.009	0.013	0.049	
	215-220	0.28	0.290	0.006	0.015	0.073	
	220-225	0.26	0.245	0.008	0.015	0.049	
	225-230	0.57	0.515	0.013	0.009	0.097	
	230-235	0.26	0.260	0.009	0.010	0.049	
	235-240	0.30	0.285	0.012	0.006	0.049	
	240-245	0.35	0.325	0.012	0.013	0.073	

12/74-1/75 Rotary Drilling  
TD -- 250.5'

Hawley & Hawley  
Assay

ERC  
Assay

Sample  
Interval

Hole No.

CC-74-2

	Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T
5-10	0.01	0.148	0.013	0.022	0.049
10-15	0.02	0.235	0.018	0.013	0.049
15-20	0.01	0.205	0.018	0.018	0.049
20-25	0.02	0.265	0.027	0.021	0.049
25-30	0.01	0.350	0.019	0.015	0.049
30-35	0.01	0.350	0.017	0.015	0.049
35-40	0.05	0.330	0.013	0.022	0.049
40-45	0.07	0.335	0.013	0.024	0.073
45-50	0.15	0.130	0.036	0.003	0.049
50-55	0.25	0.200	0.005	0.013	0.049
55-60	0.21	0.205	0.005	0.019	0.049
60-65	0.27	0.245	0.009	0.024	0.049
65-70	0.34	0.280	0.005	0.027	0.049
70-75	0.37				
75-80	0.35				
80-85	0.37				
85-90	0.21				(85-87.5')
90-95	0.21				(95-97.5')
100-105	0.24	0.225	0.004	0.022	0.073
105-110	0.20	0.190	0.005	0.022	0.049

(85-87.5')  
(95-97.5')  
(97.5-100')

# 12/74-1/75 Rotary Drilling

TD - 250.5'

## Hawley & Hawley Assay

## ERC Assay

Hole No.	Sample Interval	Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T
CC-74-2	110-115	0.19	0.175	0.003	0.018	0.049
	115-120	0.20	0.240	0.015	0.009	0.024
	120-125	0.19	0.195	0.003	0.013	0.049
	125-130	0.24	0.180	0.004	0.016	0.073
	130-135	0.18	0.220	0.005	0.012	0.073
	135-140	0.23	0.170	0.004	0.010	0.049
			0.220	0.005	0.015	0.049
			0.225	0.005	0.018	0.049
	150-155	0.21	0.185	0.008	0.013	0.049
	165-170	0.13				
	180-185	0.18				
	195-200	0.07				
	210-215	0.13				
	225-230	0.06				
	240-245	0.10				

(115-117.5')

(140-142.5')

12/74-1/75 Rotary Drilling  
TD - 215'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>			
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>	
CC-74-3	15-20	0.02					
	30-35	0.03					
	40-45	0.04					
	45-50	0.23					
	50-55	0.15					
	55-60	0.17					
	60-65	0.11					
	65-70	0.14					
	70-75	1.09					
	75-80	0.33					
	80-85	0.22					
	85-90	0.27					
	90-95	0.18					
	95-100	0.15					
	100-105	0.21					
	105-110	0.17					
	110-115	0.16					
	115-120	0.16					
	120-125	0.24					
	125-130	0.26					
			1.000	0.090	0.024	0.073	
			0.290	0.025	0.019	0.073	
			0.205	0.009	0.018	0.097	
			0.250	0.020	0.006	0.097	
			0.155	0.006	0.021	0.073	
			0.200	0.007	0.016	0.097	
			0.170	0.012	0.012	0.073	
			0.160	0.009	0.010	0.073	
			0.165	0.009	0.010	0.073	
			0.225	0.008	0.009	0.073	
			0.245	0.007	0.009	0.073	

# 12/74-1/75 Rotary Drilling

TD - 215'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>
CC-74-3	130-135	0.34	0.320	0.008	0.015	0.073
	135-140	0.22	0.200	0.012	0.018	0.097
	140-145	0.22	0.210	0.016	0.009	0.097
	145-150	0.31	0.300	0.016	0.013	0.122
	150-155	0.25	0.235	0.010	0.015	0.097
	155-160	0.34	0.320	0.015	0.013	0.122
	160-165	0.32	0.310	0.087	0.004	0.049
	165-170	0.09	0.092	0.020	0.001	0.024
	170-175	0.11	0.115	0.032	0.001	0.024
	175-180	0.28	0.260	0.118	0.002	0.024
	180-185	0.28	0.235	0.116	0.002	0.024
	185-190	0.25	0.230	0.075	0.003	0.024
	190-195	0.29	0.270	0.112	0.003	0.024
	195-200	0.26	0.240	0.117	0.003	0.024
	200-205	0.17	0.166	0.046	0.003	0.024

12/74-1/75 Rotary Drilling  
TD - 180'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T	
CC-74-4	15-20	0.01					
	30-35	0.01					
	45-50	0.01					
	60-65	0.01					
	75-80	0.01	0.046 0.079	0.014 0.023	0.002 0.002	0.024 0.024	(80-82.5') (82.5-85')
	90-95	0.15	0.182 0.158 0.086 0.089 0.145 0.245 0.250	0.038 0.031 0.024 0.022 0.024 0.028 0.020	0.003 0.002 0.003 0.003 0.003 0.013 0.007	0.024 0.024 0.024 0.024 0.024 0.024 0.024	(87.5-90') (95-97.5') (97.5-100') (100-102.5') (102.5-105')
	105-110	0.26					

12/74-1/75 Rotary Drilling  
TD - 180'

Hawley & Hawley  
Assay

ERC  
Assay

Hole No.	Sample Interval	Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T	
CC-74-4	120-125	0.40	0.240	0.023	0.007	0.024	(110-112.5')
			0.245	0.025	0.009	0.024	(112.5-115')
			0.285	0.026	0.007	0.024	(117.5-120')
			0.285	0.022	0.007	0.024	(125-127.5')
135-140		0.33	0.530	0.194	0.010	0.024	(127.5-130')
			0.740	0.270	0.007	0.048	(130-132.5')
			0.440	0.185	0.007	0.048	(132.5-135')
			0.750	0.300	0.010	0.048	(140-142.5')
150-155		0.17	0.305	0.053	0.007	0.048	(142.5-145')
			0.100	0.005	0.007	0.048	(145-147.5')
			0.147	0.007	0.009	0.048	(147.5-150')
			0.164	0.014	0.007	0.073	(155-157.5')
165-170		0.20	0.144	0.006	0.012	0.073	(157.5-160')
			0.165	0.006	0.013	0.073	(160-162.5')
			0.155	0.007	0.012	0.075	(162.5-165')
			0.230	0.011	0.009	0.075	
			0.180	0.007	0.008		
			0.202	0.006	0.014		
			0.188	0.006			

12/74-1/75 Rotary Drilling  
TD - 245'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>			
		<u>Cu %</u>	<u>Ag oz/T</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>
CC-74-5	15-20	0.01					
	30-35	0.01					
	45-50	0.03					
	60-65	0.03					
	75-80	0.04					
	90-95	0.08					
	105-110	0.01					
	120-125	0.01					



12/74-1/75 Rotary Drilling  
TD - 245'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>
CC-74-5	135-140	0.01				
	150-155	0.01				
	165-170	0.01				
	180-185	0.01				
	195-200	0.03				
	210-215	0.02				
	225-230	0.03				
	240-245	0.03				

# 12/74-1/75 Rotary Drilling

TD - 278'

## Hawley & Hawley Assay

## ERC Assay

Hole No.	Sample Interval	Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T	
CC-74-6	15-20	0.01	0.029	0.005	0.003	0.050	(25-27.5')
			0.018	0.004	0.005	0.050	(27.5-30')
	30-35	0.20	0.210	0.024	0.014	0.060	
			0.220	0.027	0.012	0.060	(35-37.5')
			0.075	0.014	0.013	0.050	(37.5-40')
	45-50	0.26	0.053	0.012	0.018	0.050	(40-42.5')
			0.126	0.019	0.012	0.040	(42.5-45')
			0.250	0.017	0.008	0.050	
			0.350	0.030	0.014	0.075	(50-52.5')
			0.320	0.032	0.020	0.090	(52.5-55')
	60-65	0.29	0.300	0.034	0.014	0.075	(55-57.5')
			0.235	0.028	0.005	0.050	(57.5-60')
			0.295	0.015	0.011	0.050	
			0.285	0.027	0.008	0.050	(65-67.5')
			0.290	0.025	0.008	0.050	(67.5-70')
	75-80	0.30	0.350	0.031	0.006	0.075	(70-72.5')
			0.210	0.025	0.003	0.050	(72.5-75')
			0.310	0.010	0.006	0.050	
			0.275	0.029	0.017	0.050	(80-82.5')
			0.240	0.027	0.009	0.050	(82.5-85')

# 12/74-1/75 Rotary Drilling

TD - 278'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %		Cu %	Oxide Cu %	Mo %	Ag oz/T
CC-74-6	90-95	0.29		0.190	0.020	0.008	0.050 (85-87.5')
				0.290	0.027	0.010	0.050 (87.5-90')
				0.300	0.014	0.009	0.050
				0.185	0.026	0.019	0.050 (95-97.5')
				0.083	0.016	0.005	0.025 (97.5-100')
	105-110	0.04					
	120-125	0.06					
	135-140	0.16					
	150-155	0.13					
	165-170	0.14					
	180-185	0.13					
	195-200	0.06					

12/74-1/75 Rotary Drilling

TD - 278'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>

CC-74-6	210-215	0.03				
	225-230	0.04				
	240-245	0.04				
	255-260	0.03				

12/74-1/75 Rotary Drilling  
TD - 165'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>
CC-74-7	5-10	<.01				
	20-25	<.01				
	35-40	<.01				
	50-55	<.01				
	65-70	<.01				
	80-85	<.01				
	95-100	.02				
	110-115	<.01				

# 12/74-1/75 Rotary Drilling

TD -.165'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		<u>Ag oz/T</u>
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	
CC-74-7	125-130	< .01				
	140-145	< .01				
	155-160	.01				

12/74-1/75 Rotary Drilling  
TD - 65'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay		
		Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T
CC-74-8A	5-10		0.044	0.017	0.015	0.097
	10-15	0.03	0.044	0.016	0.022	0.122
	15-20		0.053	0.019	0.048	0.146
	20-25		0.300	0.070	0.004	0.097
	25-30	0.51	0.505	0.080	0.012	0.122
	30-35		0.285	0.052	0.013	0.049

12/74 - 1/75 Rotary Drilling  
TD - 160'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %	Oxide Cu %	Mo %	Ag oz/T		
	15-20	0.01					
	25-30		0.026	0.006	0.020	0.109	
	30-35		0.335	0.076	0.011	0.219	
	35-40		0.580	0.075	0.017	0.134	
	40-45		0.730	0.070	0.033	0.158	
	45-50		0.360	0.033	0.021	0.073	
	50-55		0.470	0.039	0.036	0.110	
	55-60		0.415	0.030	0.038	0.122	
	60-65		0.525	0.035	0.042	0.194	
	65-70		0.340	0.018	0.051	0.109	
	70-75		0.345	0.024	0.018	0.097	
	75-80		0.370	0.022	0.014	0.085	
	80-85		0.265	0.012	0.012	0.110	
	85-90		0.270	0.011	0.014	0.085	
	90-95		0.190	0.009	0.015	0.073	
	95-100		0.200	0.006	0.020	0.075	
	100-105		0.185	0.006	0.021	0.061	
	105-110		0.215	0.008	0.017	0.085	
	110-115		0.200	0.010	0.023	0.080	
	115-120		0.195	0.009	0.024	0.073	
	120-125		0.235	0.012	0.020	0.090	
		0.22					
		0.21					
		0.18					
		0.37					
		0.53					
		0.35					
		0.34					
		0.01					

CC-74-8



12/74-1/75 Rotary Drilling  
TD - 160'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %		Cu %	Oxide Cu %	Mo %	Ag oz/T
CC-74-8	125-130			0.205	0.009	0.023	0.085
	130-135			0.240	0.007	0.021	0.095
	135-140	0.26		0.270	0.012	0.017	0.110
	140-145			0.220	0.006	0.039	0.100
	145-150			0.400	0.011	0.026	0.145
	150-155	0.44		0.455	0.019	0.032	0.150

12/74-1/75 Rotary Drilling  
TD - 270'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>			
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>	
CC-74-9	5-10	0.05					
	20-25	0.02					
	35-40	0.01					
	50-55	0.02					
	65-70	0.12					
	80-85	0.03					
	90-95	0.01					
	105-110	0.03					
	120-125	0.03					
	125-130		0.034	0.012	0.024	0.036	

12/74-1/75 Rotary Drilling  
TD - 270'

Hole No.	Sample Interval	Hawley & Hawley Assay		ERC Assay			
		Cu %	Cu %	Oxide Cu %	Mo %	Ag oz/T	
CC-74-9	130-135		0.245	0.030	0.020	0.049	
	135-140	0.27	0.290	0.033	0.008	0.040	
	140-145		0.300	0.026	0.035	0.045	
	145-150		0.350	0.035	0.020	0.085	
	150-155	0.23	0.235	0.022	0.018	0.316	
	155-160		0.195	0.023	0.018	0.049	
	160-165		0.180	0.019	0.015	0.045	
	165-170	0.10					
	180-185	0.11					
	195-200	0.14					
	205-210	0.36					
	220-225	0.16					
	235-240	0.03					
	250-255	0.07					

# 12/74-1/75 Rotary Drilling

TD - 265'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>			
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>	
CC-74-10	5-10	0.10					
	20-25	0.08					
	35-40	0.06	0.090	0.039	0.006	0.050	
	40-45		0.250	0.106	0.016	0.075	
	45-50	0.26	0.160	0.075	0.008	0.075	
	50-55	0.15	0.580	0.190	0.008	0.075	
	55-60	0.63	0.530	0.186	0.004	0.050	
	60-65	0.54	0.700	0.094	0.010	0.100	
	65-70	0.75	0.350	0.070	0.009	0.060	
	70-75		0.450	0.155	0.005	0.075	
	75-80	0.45	0.255	0.052	0.006	0.050	
	80-85	0.27	0.265	0.055	0.005	0.075	
	85-90	0.28					
	90-95	0.16					
	105-110	0.10					
	120-125	0.12					
	125-130	0.12					

12/74-1/75 Rotary Drilling  
TD - 265'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>		
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>
CC-74-10	150-155	0.16				
	165-170	0.13				
	180-185	0.09				
	195-200	0.09				
	210-215	0.12				
	225-230	0.10				
	240-245	0.10				
	255-260	0.10				

12/74-1/75 Rotary Drilling  
TD - 265'

<u>Hole No.</u>	<u>Sample Interval</u>	<u>Hawley &amp; Hawley Assay</u>		<u>ERC Assay</u>			
		<u>Cu %</u>	<u>Cu %</u>	<u>Oxide Cu %</u>	<u>Mo %</u>	<u>Ag oz/T</u>	
CC-74-11	10-15	0.09					
	20-25			0.285	0.004	0.061	
	25-30			0.265	0.003	0.055	
	30-35		0.26	0.160	0.002	0.045	
	35-40			0.170	0.002	0.055	
	40-45		0.21	0.230	0.002	0.073	
	45-50			0.175	0.002	0.061	
	50-55			0.145	0.003	0.075	
	55-60		0.16				
	70-75		0.08				

COPPER CREEK PROJECT

CC74 SERIES ROTARY PERCUSSION HOLES (OCCASIONAL SECTIONS CORED)  
DRILL CONTRACTOR - HARRIS - WOODIS (HUGH M. HARRIS DRILLING CO.)  
PROJECT WORK PERFORMED: 12/74-1/75 4 3/4" Hammer/NQ Core

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ABBREVIATED DESCRIPTIVE LOGS (See strip logs - attached -  
for relationship/rock types to assays)

CC-74-1 - TD 250 1/2

0-5 Fill

5-200 Quartz monzonite porphyry (Qmp); light gray except medium gray 115-125 and 150-160 (more mafic sections); medium grained except for granophyric texture 70-75 and 175-190.

Secondary biotite 90-160, including some phylogopite veinlets 125-130; heavy sections of quartz veinlets to 1/16" are common. Fe mags generally destroyed; oxidized to 85 w/medium to light brown limonite.

Trace to minor chalc. begins @ 40, moderate to heavy chalc. 85-200 (200-215 some covellite). Trace cpy 145-200. MoS<sub>2</sub> prevalent 160-200. Pyrite < 1/2% 40-70; 1/2+% 70-90, 2-3% 90-130, less 130-170; +2% 175-200. Qtz-py veinlets 110-115, turquoise 80-85.

200-205 Quartz latite porphyry (Qlp), variable, light pinkish gray; a fine grained porphyry - some sericite. Minor to moderate chalc. Fine grained Py - 1-2%.

205-250 1/2 Quartz monzonite porphyry (Qmp) as above 200' but somewhat granophyric 225-250 1/2, variable light to medium gray, siliceous; no secondary biotite noted.

Minor to moderate chalc.; trace to minor cpy; trace MoS<sub>2</sub>; Py 1-2%.

Water table @ 245'  
(cored 247 1/2 - 250 1/2)

CC-74-2 - TD 250 1/2

0-5 Fill

5-35 Quartz monzonite (Qm) medium grained; oxidized; buff to orange in color; Fe oxide stringers to 35'.

35-222 1/2 Quartz latite porphyry (Qlp or Quartz monzonite porphyry (Qmp)); variable light green gray to medium gray; silicified (locally heavy). Fe mags well chloritized.

Trace to moderate chalc., variable cpy (more than in most holes); trace to minor MoS<sub>2</sub>, increasing w/qtz veinlets 205-210; 115-125 quartz veinlets carry Py, MoS<sub>2</sub>, trace cpy. Py  $\pm 2\%$ .

Water table @ 140'.

(cored 140-149.2).

Some dilution of sample below 165'.

222 1/2-225 Latite-Rhyolite dike - post ore; buff colored, only minor pyrite.

225-235 Quartz latite porphyry - Quartz monzonite porphyry; light green gray, w/some flow banded rhyolite. Qlp-Qmp is siliceous (then bone white).

2-3% Py, trace to minor Cpy and MoS<sub>2</sub>.

235-250 1/2 Quartz latite (Ql) - Rhyolite (Rhy), light green gray; chloritized ferromags; w/abundant quartz veinlets.

1-2% Py; some cpy; trace to minor MoS<sub>2</sub>

CC-74-3 - TD 215

0-5 Fill

5-65 Quartz latite porphyry (Qlp) - Quartz monzonite porphyry (Qmp) medium gray to dark pinkish gray; a mafic Qlp-Qmp below 30'; oxidized - leached to 30' - w/heavy Fe oxide fracture coatings. Possible secondary biotite 55-60.

Sulfides begin @ 35'; minor chalc; trace cpy, 2-3% Py.

65-70 Quartz monzonite porphyry (Qmp) - dike medium green gray; propylitized (chloritized Fe mags, epidotes, hematite) a little FeS<sub>2</sub>.

70-160 Quartz monzonite porphyry (Qmp) mafic; dark green gray, fine grained; brown shredded secondary biotite 90' and below; minor to some chalc., but



heavy 70-75; trace to some cpy; trace MoS<sub>2</sub> 145-150;  
1-2% Py (tarnished).

160-170 Quartz latite porphyry (QIp) leucocratic; buff;  
w/well bleached Fe mags; trace chalc; trace cpy  
and minor Py.

170-215 Monzonite (Monz); equigranular; fine grained; buff;  
w/some hairline qtz veinlets; some chalc; generally  
low pyrite.

CC-74-4 - TD 180

0-5 Fill

5-35 Quartz-Feldspar Rock (QFR) (a well oxidized Qmp?);  
orange; bleached biotite, some quartz veining;  
heavy Fe oxides after Py.

35-180 Quartz monzonite porphyry (Qmp); medium light gray  
to buff; silicified; bleached biotite to 170'. Biotite  
70% fresh below 170'; abundant Fe oxides to 85-95.  
Bottom zone of oxidation @ 100'.

Some Kspar flooding 160-170.

CC variable, locally heavy; trace cpy; MoS<sub>2</sub> w/quartz  
veinlets 150-155, Py diminishes to  $\pm 1\%$  below 115'.

CC-74-5 - TD 245

0-5 Fill

5-85 Quartz monzonite (Qm) medium grained, light yellow  
to yellow gray; well oxidized to 60' w/abundant  
limonite coatings; w/possible quartz latite (silicified)  
55-60 (dike?); quartz veinlets are prevalent below  
60'.

$\pm 1/2$ -2% Py to 60'; trace chalc and cpy 35-60'.  
Below 60' - Py  $\pm 1\%$ ; very minor chalc, trace cpy  
and minor MoS<sub>2</sub>.

85-105 Latite (Lat); fine grained; light gray; silicified;  
 $1/2 \pm$  Py; trace chalc.

105-245 Quartz monzonite porphyry (Qmp); as above 85'.  
Light pink gray to green gray - darker toward  
bottom; no Fe mags noted 140-190; elsewhere biotite  
generally bleached; but possibly secondary biotite.  
235-245'.

Trace hematite 200-205, 1/2-1 1/2% Py, possible occasional trace chalc, trace cpy below 225; trace MoS<sub>2</sub> below 195'.

Water table @ 190'.

CC-74-6 - TD 278

0-5        Fill

5-15        Quartz-Feldspar Rock (QFR) yellow-brown; well leached - oxidized; Fe (Mn?) coatings well developed; minor silicification; no sulfides noted.

15-20        Latite (Lat) green gray - oxidized to orange; (other comments as above).

20-65        Quartz monzonite porphyry (Qmp) - Quartz latite porphyry (Qlp) medium to dark gray.

Some chalc; trace cpy; 1-2% Py except ±3% Py 30-35.

65-95        Biotite Quartz Monzonite (Bqm); medium to dark gray.

Some chalc; trace MoS<sub>2</sub> 90-95. Py 2-3% - including with biotite in veinlets.

95-100        Quartz latite (Ql) dike - very light gray, w/numerous quartz veinlets; only minor chalc; 2-3% Py.

100-105        Quartz latite porphyry (Qlp) - quartz monzonite porphyry (Qmp); medium gray; with some 1/8" quartz-Py-MoS<sub>2</sub> veinlets, minor chalc.

105-170        Latite-rhyolite (Lat-Rhy); light to medium gray; trace to minor MoS<sub>2</sub>; trace chalc; ±2% Py below 110.

170-278        Quartz monzonite porphyry (Qmp); light gray 170-175; medium to dark gray 175-278; fine to medium grained with sucrosic texture 180-215; bleached biotite;

1-2% Py below 180' (2-3% - 220-260'). Trace to very minor chalc, trace MoS<sub>2</sub>; rock almost devoid of sulfides 70-180'.

Water table @ 245'.  
(cored NQ - 272 1/2 - 278)

CC-74-7 - TD 165

0-5        Fill

5-35        Quartz monzonite porphyry (Qmp); buff to orange;  
medium grained; well oxidized - leached; w/very  
few remaining Fe mags; Fe-Mn oxide coatings;  
some silicification.

35-165      Quartz latite porphyry (Qlp); medium gray; medium  
to coarse grained; some bleached biotite, possible  
sericite, trace tarnished Py.

CC-74-8 - TD 160

0-40        Monzonite; fine grained, yellow brown, leached;  
good Fe oxide coatings below 32 1/2, green gray,  
fine grained; w/possible secondary biotite.

Good chalc; trace cpy;  $\pm 3\%$  Py including quartz -  
pyrite veinlets.

40-45        Mixed Monzonite (monz) fine grained and Quartz  
latite (foliated) - light green gray.

good chalc; trace cpy,  $\pm 3\%$  Py.

45-55        Quartz latite (Ql) light pink gray -- otherwise as  
40-45 but with more cpy.

55-65        Mixed Ql-Monz - (as 40-45) Ql dikes cut monz.  
green gray w/some dark gray mafic dikes; good  
chalc; possible trace native Cu; trace to minor  
cpy, some Py.

65-70        Quartz latite porphyry (Qlp) light pink to green  
gray (translucent) w/quartz veinlets (w/Py-cpy)  
good chalc.

70-150      Mixed Qlp-Qm (fg Biotitic Qm); variable yellow  
white to dark green - mottled. Qlp predominating -  
Qlp cuts Qm as 55-65; possible secondary biotite  
below 120.

Chalc variable; cpy - trace to moderate amounts;  
trace to some  $\text{MoS}_2$  115-160; Py variable 1-2%;  
possible native Cu 130-135.

150-160      Quartz monzonite (biotitic); mottled blue green  
w/dark brown biotite-Py veinlets; some quartz  
veinlets; substantial cpy; trace  $\text{MoS}_2$ ;  $\pm 3\%$  Py.

CC-74-8A - TD 65

0-20 Soil and gravel

20-40 Quartz latite (Ql) - Quartz monzonite (Qm); medium green gray; w/granophyric textures; good chalc; trace cpy - MoS<sub>2</sub>; 2-3% Py

Water table @ 40'.

40-42 1/2 No sample.

42 1/2-65 (cored) Mixed Quartz Monzonite porphyry (Qmp) and mafic dikes; Qmp green gray, well fractured, with chloritized hornblende fracture fillings; abundant quartz veinlets >1/4" w/Py, cpy, MoS<sub>2</sub>. 5-10% total sulfides w/some chalc.

CC-74-9 - TD 270

0-5 Fill

5-230 Biotite quartz monzonite porphyry (Bqmp) light to medium gray and off white, locally green gray (mottled). Biotite destroyed to 50'; leached, oxidized w/Fe oxides to 50'; some oxidation continues to 120'.

Trace Py 50-100, 1-2% below 190, 2-3% 190-230. Chalc begins at about 100, increases @ 125, less to none below 160'; cpy variable, trace 135-210, minor 210-230; MoS<sub>2</sub> in trace amounts 150-230.

Water table @ 205'.

230-240 Quartz monzonite porphyry (Qmp) dike green gray; w/shredded chlorite; very little sulfide.

240-270 "Crowded" biotite quartz monzonite porphyry (Bqmp) med gray rock w/dark brown biotite books - including secondary biotite; 1-2% Py, trace cpy and MoS<sub>2</sub>.

CC-74-10 - TD 265

0-225 Quartz monzonite (Qm) fine to medium grained; mafic; mottled dark green to green gray; heavily propylitized (30% epidote, chlorite quartz); w/possible mafic dike 150-155; well oxidized to 50 w/abundant Fe oxides.

Some quartz veinlets; increasing to 20-30% of rock as quartz veinlets 140-150, 10% 160-225. Some CaCO<sub>3</sub> veinlets @ 215.

Trace chalc; trace to minor cpy; trace MoS<sub>2</sub>;  
Py - 1-3%.

225-235 Fault gouge and mafic quartz monzonite

235-265 Qm - as above 225 but more biotitic w/some zones  
of Qlp. Trace cpy, no visible chalc.

CC-74-11 - TD 85

0-15 Quartz monzonite? (Qm) heavily oxidized - leached;  
good Fe oxides.

15-45 Quartz latite (Ql) (foliate); mottled dark green  
to green gray; heavily chloritized. 2-3% Py,  
trace to minor cpy and chalc.

45-50 Quartz monzonite (dike) leucocratic pink to tan -  
minoc chalc.

50-85 Quartz latite (Ql) mafic, mottled color as 15-45,  
heavily chloritized; 2-3% Py, trace cpy, trace to  
minor MoS<sub>2</sub>; no visible chalc.



TUCSON OFFICE

# ROCKY MOUNTAIN GEOCHEMICAL CORP.

2561 EAST FORT LOWELL ROAD • TUCSON, ARIZONA 85716 • PHONE: (602) 795-9780

## Certificate of Analysis

Page 1 of 2

Date: March 14, 1975  
Client: Earth Resources  
P. O. Box 693  
Cuba, New Mexico 87013

RMGC Numbers:  
Local Job No.: 75-4-36TC  
Foreign Job No.:  
Invoice No.: S 5511

Client Order No.:

Report On: 3 of 15 samples

Submitted by: E.E. Saffell

Date Received: March 10, 1975

Analysis: Qualitative spectrographic analysis.

Analytical Methods:

Remarks: Percent ranges given are approximate.

cc:

Enc.  
A. Perry  
J.N. Swinderman  
RMGC: SLC  
file

PDW/sl

All values are reported in parts per million unless specified otherwise. A minus sign (—) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = None Detected

1 ppm = 0.0001%

1 Troy oz./ton = 34.286 ppm

1 ppm = 0.0292 Troy oz./ton

<u>Sample No.</u>	<u>(+1%) Major</u>	<u>(.01% to 1%) Minor</u>	<u>(less than .01% Trace</u>
12	Aluminum Iron Silicon Sodium Titanium	Calcium Copper Magnesium Molybdenum(low) Potassium	Barium Chromium Lead Manganese Nickel Silver Strontium Vanadium Zinc

<u>Sample No.</u>	<u>Major</u>	<u>Minor</u>	<u>Trace</u>
13	Aluminum Iron(low) Potassium Silicon Sodium	Calcium Copper Magnesium	Barium Lead Manganese Molybdenum Nickel Silver (low) Titanium Zinc

<u>Sample No.</u>	<u>Major</u>	<u>Minor</u>	<u>Trace</u>
14	Aluminum Iron(low) Silicon Sodium	Calcium Copper Magnesium Potassium Titanium	Barium Lead Manganese Molybdenum Nickel Silver(low) Vanadium Zinc

By

*Parry D. Willard*

Parry D. Willard



ROCKY MOUNTAIN GEOCHEMICAL CORP.

SALT LAKE CITY UTAH • RENO, NEVADA • SPOKANE, WASHINGTON • TUCSON, ARIZONA


# SKYLABS, INC.

Hawley & Hawley, Assayers and Chemists Division  
1700 W. Grant Rd., P.O. Box 50106, Tucson, Arizona 85703  
(602) 622-4836

Charles E. Thompson  
Arizona Registered Assayer No. 9427

William L. Lehmbeck  
Arizona Registered Assayer No. 9425

## CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Cu %	N.S. Cu %	N.S. Cu %						
1	Composite: CC-74-10	0.41	0.24	0.27						
<p>* Method I Sample shaken with a mixture of <math>H_2SO_4</math> (5%) and <math>H_2SO_3</math> for <math>\frac{1}{2}</math> hour.</p> <p>** Method II Sample brought to boil for 2 minutes in <math>H_2SO_4</math> (5%).</p>										
TO: Perry, Knox, Kaufman, Inc. P.O. Box 12754 Tucson, Arizona 85732		REMARKS:			CERTIFIED BY: <i>[Signature]</i> 					
Attn.: Mr. A. J. Perry		DATE REC'D: 1/29/75			DATE COMPL.: 2/13/75			JOB NUMBER: 750132-A		



GRADE CALCULATION IN COPPER EQUIVALENTS

<u>NORTH AREA</u>						
<u>Hole No.</u>	<u>Total Depth</u>	<u>Ore Intervals</u>	<u>% Cu (Total)</u>	<u>% MoS<sub>2</sub></u>	<u>% Cu as Mo eq</u>	<u>% Cu equivalent</u>
EH-4	165	@60'-35'	0.24			0.24
71-8	480	@90'-120'	0.36	.02	.06	0.42
74-9	270	@130'-30'	0.27	.016	.05	0.32
74-8A	65	@20'-15'	0.36	.008	.03	0.39
74-8	160	@30'-125'	0.33	.02	.06	0.39
EH-6	245	@30'-35'	0.31			0.31
74-1	250½	@80'-165'	0.58	.018	.06	0.64
EH-1	175	@140'-35'	0.37			0.37
EH-2	205	@90'-65'	0.26			0.26
		@185'-20'	0.50			0.50
CC-3	886	@110'-185'	0.38	.0115	.04	0.42
74-2	250½	@45'-95'	0.24	.02	.06	0.30
74-10	265	@55'-35'	0.45	.006	.02	0.47
EH-3	165	@20'-25'	0.34			0.34
		@90'-75'	0.50			0.50
74-3	215	@70'-35'	0.35	.012	.04	0.39
		@120'-45'	0.28	.01	.03	0.31
74-11	85	@20'-10'	0.28	.003	0.1	0.29

OREBODY GRADE CALCULATION

NORTH AREA

<u>Hole No.</u>	<u>Tons Ore (Total)</u>	<u>Tons Ore Detail</u>	<u>Grade % Cu (Cu eq)</u>	<u>Tons X Grade (% Tons)</u>
EH-4	248,640		0.24	59,674
71-8	1,209,600		(0.42)	508,032
74-9	271,680		(0.32)	86,938
74-8A	39,840		(0.39)	15,538
74-8	540,000		(0.39)	210,600
EH-6	271,040		0.31	84,022
74-1	2,529,120		(0.64)	1,618,637
EH-1	208,320		0.37	77,078
EH-2	527,680	124,160	0.50	62,080
		403,520	0.26	104,915
CC-3	2,829,760		(0.42)	1,188,499
74-2	2,036,800		(0.30)	611,040
74-10	579,040		(0.47)	272,149
EH-3	764,800	573,600	0.50	286,800
		191,200	0.34	65,008
74-3	824,320	360,640	(0.39)	140,650
		463,680	(0.31)	143,741
74-11	112,640		(0.29)	32,666
Total:	12,993,280		Total:	5,568,157

$$\text{GRADE} = \frac{\% \text{ Tons}}{\text{Tons}} = 0.428\% \text{ Cu eq.}$$

NORTH AREA OREBODY

o Reserve Calculation

<u>Hole No.</u>	<u>Area of Influence ft<sup>2</sup></u>	<u>Thickness of Ore ft</u>	<u>Volume of Ore ft<sup>3</sup></u>	<u>Tons Ore (12.5 ft<sup>3</sup>/ton)</u>	<u>Tons Ore Detail</u>
EH-4	88,800	35	3,108,000	248,640	
71-8	126,000	120	15,120,000	1,209,600	
74-9	113,200	30	3,396,000	271,680	
74-8A	33,200	15	498,000	39,840	
74-8	54,000	125	6,750,000	540,000	
EH-6	96,800	35	3,388,000	271,040	
74-1	191,600	165	31,614,000	2,529,120	
EH-1	74,400	35	2,604,000	208,320	
EH-2	77,600	20 65	1,552,000 5,044,000	527,680	124,160 403,520
CC-3	191,200	185	35,372,000	2,829,760	
74-2	268,000	95	25,460,000	2,036,800	
74-10	206,800	35	7,238,000	579,040	
EH-3	95,600	75 25	7,170,000 2,390,000	764,800	573,600 191,200
74-3	128,800	35 45	4,508,000 5,796,000	824,320	360,640 463,680
74-11	140,800	10	1,408,000	112,640	
Total Tons Ore:				12,993,280	

# NORTH AREA OREBODY

## Overburden Tonnage Calculation

Hole No.	Overburden Thickness ft	Overburden Volume ft <sup>3</sup>	Tons Overburden	Internal Waste Thickness ft	Internal Waste Volume ft <sup>3</sup>	Tons Internal Waste	Total Tons Waste
EH-4	60	5,238,000	426,240				426,240
71-8	90	11,340,000	907,200				907,200
74-9	130	14,716,000	1,177,280				1,177,280
74-8A	20	664,000	53,120				53,120
74-8	30	1,620,000	129,600				129,600
EH-6	30	2,904,000	232,320				232,320
74-1	80	15,328,000	1,226,240				1,226,240
EH-1	140	10,416,000	833,280				833,280
EH-2	95	7,372,000	589,760	25	1,940,000	155,200	744,960
CC-3	110	21,032,000	1,682,560				1,682,560
74-2	45	12,060,000	964,800				964,800
74-10	55	11,374,000	909,920				909,920
EH-3	20	1,912,000	152,960	45	4,302,000	344,160	497,120
74-3	70	9,016,000	721,280	15	1,932,000	154,560	875,840
74-11	20	2,816,000	225,280				225,280

Total tons  
Overburden: 10,885,760

GRADE CALCULATION IN COPPER EQUIVALENTS

SOUTH AREA

<u>Hole No.</u>	<u>Total Depth</u>	<u>Ore Intervals</u>	<u>% Cu (Total)</u>	<u>% MoS<sub>2</sub></u>	<u>% Cu as Mo eq</u>	<u>% Cu equivalent</u>
74-4	180	@105'-35'	0.37	.006	.02	0.39
70-1	1500	@20'-85'	0.27			0.27
PD-1	607	@3'-150'	0.43			0.43
71-5	401	@50'-35'	0.38			0.38
HA-6	265	@65'-160'	0.41	.02	.06	0.47
HA-11	300	@35'-75'	0.48			0.48
74-6	278	@45'-50'	0.28	.008	.03	0.31
70-2	581	@50'-125'	0.32			0.32

OREBODY GRADE CALCULATION

SOUTH AREA

<u>Hole No.</u>	<u>Tons Ore</u>	<u>Grade % Cu (Cu eq)</u>	<u>Tons X Grade (% Tons)</u>
74-4	411,040	(0.39)	160,306
70-1	671,840	0.27	181,397
PD-1	1,785,600	0.43	767,808
71-5	399,840	0.38	151,939
HA-6	2,534,400	(0.47)	1,191,168
HA-11	1,032,000	0.48	495,360
74-6	748,800	(0.31)	232,128
70-2	788,000	0.32	252,160
Total:	8,371,520	Total:	3,432,266

$$\text{GRADE} = \frac{\% \text{ Tons}}{\text{Total Tons}} = 0.410\% \text{ Cu eq.}$$

SOUTH AREA

OREBODY TONNAGE CALCULATION

Hole No.	Area of Influence ft <sup>2</sup>	Thickness of Ore ft	Volume of Ore ft	Tons Ore	Overburden Thickness	Overburden Volume	Tons Overburden	
74-4	146,800	35	5,138,000	411,040	105	15,414,000	1,233,120	
70-1	98,800	85	839,800	671,840	20	1,976,000	158,080	
PD-1	148,800	150	22,320,000	1,785,600	3	446,400	35,712	
71-5	142,800	35	4,998,000	399,840	50	7,140,000	571,200	
HA-6	198,000	160	31,680,000	2,534,400	65	12,870,000	1,029,600	
HA-11	172,000	75	12,900,000	1,032,000	35	6,020,000	481,600	
74-6	187,200	50	9,360,000	748,800	45	8,424,000	673,920	
70-2	78,800	125	9,850,000	788,000	50	3,940,000	315,200	
Total:				8,371,520	Total:			4,498,432

PIT WALL LAYBACK WASTE CALCULATION

	<u>Area</u> <u>(ft<sup>2</sup>)</u>	<u>Ave.</u> <u>Depth</u> <u>(ft)</u>	<u>Volume</u>	<u>Tons</u>	<u><math>\frac{1}{2}</math>Tons</u>	<u>Over-</u> <u>burden/</u> <u>Layback</u>
NORTH	538,400	127	68,376,800	5,470,144	2,735,072	3.98
SOUTH	396,800	92.5	36,704,000	2,936,320	1,468,160	3.06
Pit wall layback waste:					4,203,232	

STRIP RATIO CALCULATION

	<u>Tons</u> <u>Over-</u> <u>burden</u>	<u>Tons</u> <u>Pit wall</u> <u>Layback</u>	<u>Total</u> <u>Tons</u> <u>Waste</u>	<u>Tons</u> <u>Ore</u>	<u>Waste/</u> <u>Ore</u>
NORTH	10,885,760	2,735,072	13,620,832	12,993,280	1.05/1
SOUTH	4,498,432	1,468,160	5,966,592	8,371,520	0.713/1
Total:	15,384,192	4,203,232	19,587,424	21,364,800	0.917/1



EARTH RESOURCES COMPANY

MEMO

August 7, 1974

To: W. C. Cole

From: J. N. Swinderman

Re: COPPER CREEK PROJECT-PROPOSED EXPLORATION & DEVELOPMENT

We have thus far completed 2 diamond drill holes this year at Copper Creek, both of which penetrated extensive sections of altered and mineralized volcanic textured porphyries before bottoming in very weakly mineralized Precambrian rocks. Although assays are somewhat disappointing, we have tested less than half the intrusive complex and have yet to penetrate the intrusive center. Our holes indicate a plunge to the west. Deep potential is still good for several hundred million tons of 0.7% Cu equivalent if we can find the intrusive center.

Hole CC-3 penetrated 135 feet of 0.42% Cu and 0.01% Mo at a depth of 135 feet. This mineralization represents a shallow enrichment blanket near the eastern contact of the intrusive. Similar mineralization was encountered in EH-1, EH-2 and EH-3. Excellent open pit potential exists for about 12 million tons of 0.5% Cu - .025% Mo at about a 1:1 - waste : ore ratio.

Several holes along the southern contact of the intrusive indicate enriched copper values in brecciated and sheared rocks near ore grade (holes PD-1, HA-6, HA-11, DDH-70-2). Potential there looks fair for an aggregate of some 15 million tons of 0.4 - 0.5% Cu - 0.02% Mo at less than a 1:1 waste : ore ratio.

I recommend that we test the shallow enriched areas by means of rotary drilling (11 holes, average depth 250') and test the deep potential with one more diamond drill hole to a possible depth of 3,000'.

Our recent drilling has essentially substantiated previous interpretations that we are dealing with a major porphyry copper sulfide system, but primary grades are low and we have been unable to recognize a distinct grade increase with depth. Our drill holes have not tested the hypothesized parent quartz monzonite intrusive because both holes drilled through the complex into Precambrian rocks. The intrusive complex is either plunging to the west or has silled out into the Precambrian from feeder dikes. The lack of mineralization below the complex compared to that in hole PD-6 indicates the former. Considering the potential target, I still believe we have a good exploration bet.

W. C. Cole

Copper Creek Project Proposed Exploration & Development

J. N. Swinderman 8/7/74

Page Two

Monthly payments of \$1,100 will start September 7, 1974 for the Trust 60 ground.

Assay summaries of our drill holes, a generalized geologic and drill hole map, and a conceptual cross section are enclosed, please refer to logs prepared by Al Perry for detailed rock descriptions.

Budget Estimate: To Complete Recommended Program

Core Drilling	3000'	@\$16.00	\$ 48,000
Rotary Drilling	3000'	@\$5.00	15,000
Mobilization-Demobilization		@\$1,000	1,000
Roads		@\$5,000	5,000
Consulting	30 days	@\$110	3,300
Air travel	5 trips	@\$125	625
Auto	5 trips	@\$80	400
Meals, lodging, entertainment (5)		@\$50	250
Labor	20 days	@\$40	800
Assays	750 Cu-Mo	@\$4.50	3,375
Land - Gillings	4 months	@\$550	1,650
Trust 60	4 months	@\$1,100	4,400
Miscellaneous			<u>1,200</u>
			\$ 85,000

ASSAY SUMMARY

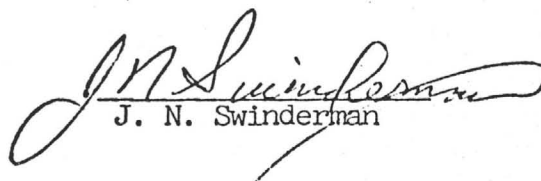
CC-3

<u>Interval</u>	<u>Intercept</u>	<u>O/O Cu</u>	<u>O/O Mo</u>	<u>Equiv. @ Mo.=3.2xCu</u>
0 - 9	9'	No Core	No Core	
9 - 110	101'	0.04	0.01	0.07
110 - 135	25'	0.24	0.009	0.27
135 - 270	135'	0.42	0.0115	0.46
270 - 445	175'	0.28	0.0247	0.36
445 - 690	245'	0.20	0.0145	0.25
690 - 886	196'	0.12	0.003	0.13

CC-4

12 - 160	148'	0.18	0.006	0.20
160 - 440	280'	0.10	0.004	0.11
440 - 1030	590'	0.15	0.02	0.22
1030 - 1120	90'	0.26	0.03	0.36
1120 - 1380	260'	0.13	0.01	0.16
1380 - 1420	40'	0.08	0.03	0.16
1420 - 1470	50'	0.01	0.001	0.01
1470 - 1611	141'	0.04		

JNS:rm

  
J. N. Swinderman

# EARTH RESOURCES COMPANY

MEMO

January 31, 1974

To: W. C. Cole  
From: J. N. Swinderman  
Re: LITTLE COPPER CREEK

## SUMMARY and RECOMMENDATIONS:

Extensive efforts by various exploration companies have defined a major sulfide system at Little Copper Creek but have failed to define a distinct orebody. In spite of excessive drilling and negative interpretations, I believe the most promising area has yet to be tested. Field interpretation of outcrops, core and available data leads me to believe that we are looking at the upper, subvolcanic expression of a porphyry copper intrusive complex which crops out on land largely controlled by Earth Resources Company and Day Mines. I recommend that we test this area for economic mineralization by means of diamond drilling.

## GEOLOGY and MINERALIZATION

The area of the enclosed map depicted as quartz porphyry includes rocks with volcanic textures which have been intruded by complex, variable textured quartz monzonite porphyry "dikes". The "dikes" contain impressive stockwork veinlets of quartz, pyrite, chalcopyrite and molybdenite. Pyrite and chalcopyrite are disseminated in the groundmass. Chalcocite has replaced much of the fine chalcopyrite in surface outcrops. Alteration assemblages are argillic in the volcanics and clay-sericite to phyllic in the "dikes". Argillic and propylitic assemblages are present in the Precambrian rocks.

There is an excellent exploration chance that the quartz monzonite porphyry dikes are genetically related to a major porphyry copper sulfide system. If so, with depth, volcanic textures should give way to porphyry textures and argillic and clay-sericite mineral assemblages will give way to phyllic or biotite-orthoclase assemblages containing possible ore grade, primary mineralization.

## DRILLING

Thus far, drilling has been concentrated in the Precambrian granodiorite, aplites and hybrid porphyry, where obvious oxide copper occurrences are fracture controlled.

Hole 70-1 penetrated to 1500 feet in the dark groundmass, hybrid porphyry but showed no increase in copper content, bottoming in 0.05% copper. Hole PD-6 penetrated to 1236 feet, probably in granodiorite, copper content apparently increased from 0.10% at 700 feet to 0.14% from 700 to the bottom at 1236 feet. Hole CC-2 penetrated to 921 feet in porphyry dikes and Precambrian granodiorite; copper content generally decreased from slightly greater than 0.10% above 550 feet to less than 0.10% below 550. Porphyry dikes were more prevalent in the upper portion of the hole.

Except for the shallow holes recently drilled by Essex, the porphyry has only one significant test, hole 70-3. Copper content increased from about 0.12% to about 0.18% in the quartz monzonite porphyry intercepted from 420 feet to the bottom of the hole at 590 feet. Stockwork veining and potassic alteration also increased markedly in this interval.

Holes HA-1, HA-9, EH-2, EH-3 and EH-19 encountered chalcocite enrichment near ore grade in the porphyry intercepts. This enrichment was apparently not bottomed in holes EH-2, EH-3 and EH-19.

#### LAND CONSIDERATIONS

In the area of interest land control is shared by four owners. The patented Dean Rose ground east of the intrusive center has an asking price of \$300,000. The owners will presently not consider an option agreement. Because of the price this land is not worth tying up at this stage. If an orebody is discovered we will have to negotiate for any needed ground.

The Trust 60 ground on the west edge of the intrusive center will go for a 3% NSR royalty, but owners are presently asking about \$3,600 front money and advance royalties of \$1200 per month for the first year, escalating to \$50,000 annual minimum after the fourth year. Because our drilling will benefit this ground, we might negotiate a free one year option if we drill the property ourselves. We should attempt this and also attempt to reduce advance royalty payments. If successful we should option this ground before drilling.

The Green Mountain Mill Site is owned by a woman who considers it of sentimental value and who is asking an unrealistic \$56,000 for the five acre site. This ground is not critical to exploration and need not be considered until a mine is developed.

The central intrusive area is controlled by Earth Resources Company and Day Mines and presently commands \$500 per month payment for the two patented Little Copper claims. If Days Mines considers the project worthwhile they should continue to share expenses. If not, we should finance the initial drilling ourselves.

## OBJECTIVES

Our objective is to test the target area by drilling. A vertical diamond drill hole located near the center of the most altered area should either substantiate or negate the concept of potential ore grade mineralization at depth and will further test the chalcocite enrichment encountered in hole EH-2. Some provision should be allowed for alternative drilling if unexpected conditions are encountered. Results of this drilling should be evaluated before additional work or abandonment is recommended. Positive results will require at least 4000 feet of additional drilling to assess the advisability of developing the deposit or selling it to a major producer.

## BUDGET

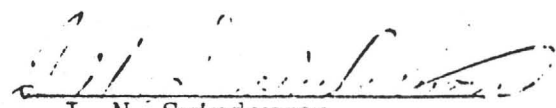
A Budget estimate based on one 1500 foot diamond drill hole follows:

Drilling 1500 NX min.	@ 16	24,000
Mobilization-demobilization	@ 500	500
Consulting 15 days	@ 110	1,650
Gillings payments 4 months	@ 500	2,000
Air travel 3 trips	@ 100	300
Auto 3 trips	@ 70	210
Meals, Lodging, Entertainment 3 trips	@ 35	105
Labor 7 days core splitting	@ 25	175
Core storage 4 months	@ 20	80
Miscellaneous	@ 700	700
Assay 70 Cu- Mo.	@ 4	280

\$30,000

Trust 60 Land Down	@ 3600	3,600
4 Months Minimum Royalty	@ 1200	4,800

\$38,400

  
J. N. Swinderman

JNS:rm

# PERRY, KNOX, KAUFMAN, INC.

MINERAL EXPLORATION AND DEVELOPMENT

## OFFICES:

### TUCSON, ARIZONA (BUSINESS)

2343 E. BROADWAY, SUITE 206  
P. O. BOX 12754, ZIP 85732  
TELEPHONE (602) 622-0582

### SPOKANE, WASHINGTON

NORTH 20 PINES ROAD, SUITE 21  
P. O. BOX 14336, ZIP 99214  
TELEPHONE (509) - WA 4-0878

Tucson, Arizona  
April 8, 1975

Mr. J. Bruce Imswiler  
Manager of Expl.-W.USA

IMC  
Suite 12, 390 Freeport Blvd.  
Sparks, Nevada 89431

As you know, Earth Resources Company and PKK recently completed shallow rotary percussion drilling at Copper Creek (Little Copper Creek) near Prescott -- in the process outlining a small reserve of low grade sulfide mineralization, considered sub-economic at this time. Earth Resources is not prepared to undertake additional exploration in search of deeper, primary ores. We now seek to option the properties under our control to a Company interested in searching for these possible deeper copper-molybdenum sulfide ores. As your Company and others have shown an interest in learning more of this opportunity we submit the attached data for your study.

#### Tabulation of Data:

1. Summary Report, Near-Surface Copper-Molybdenum Sulfide Mineralization at Copper Creek, March, 1975.
2. Claim Map - Scale 1"- 500'.
3. Generalized Geologic and Drill Hole Map - Scale 1"-500'.
4. Conceptual Geologic Section - 1"-500'.
5. Geologic-Assay log - CC-4 (Earth-PKK's deep hole).
6. Recommendation of Swinderman - Jan. 31, 1974.
7.       "               "               "               - Aug. 7, 1974.



page 2- Copper Creek Option Terms

Other data including the logs of other Earth-PKK holes (CC1 thru CC3) and some Norandex holes; as well as all Earth-PKK cores and some Norandex cores are available for inspection to seriously interested parties.

The terms of option for both the Gillings and Trust 60 lands and terms proposed by Earth-PKK are outlined in the attached pages.

Earth-PKK expect to hold the Trust 60 ground for a reasonable period of time in order to allow evaluation by others to whom this data is submitted, but we urge: 1) your expeditious study if interested, or 2) your prompt rejection if the exploration concept, the risk, option terms, etc. are such as to be of no interest to your Company.

In the event your Company does not enter into an Agreement with ERC-PKK on the subject properties we request that all data provided be promptly returned to PKK-Tucson office.

We thank you for your initial interest. We would be pleased to answer any questions you might have.



A. J. Perry  
PERRY, KNOX, KAUFMAN, INC.

copy: Earth Resources, Mr. Wm Cole

Attachments



ABSTRACT

Gillings Exploration and Option Agreement:

Effective date- July 14, 1971

Property - Little Copper #2 and #3, patented lode claims  
(see claims map)

Term - 5 years

Schedule of Payments - currently and until expiration of  
term, \$550/mo + \$300 interest each  
July 14.

Termination - upon 90 days written notice

Total purchase price - \$65,000 - all payments to apply  
(remaining to be paid, about \$48,000)

Trust 60 Lease Agreement and Option to Purchase

Effective date - March 7, 1974.

Property - 15 patented claims, 8 unpatented lodes and  
2 unpatented millsites (see claims map)

Term - 20 years and thereafter, if mining

Schedule of Payments -

- 1) Advanced Royalties - currently- \$1650/mo.  
March 7, 1976 thru February 7, 1977 - \$2200/mo.  
March 7, 1977 thru term - \$4125/mo.

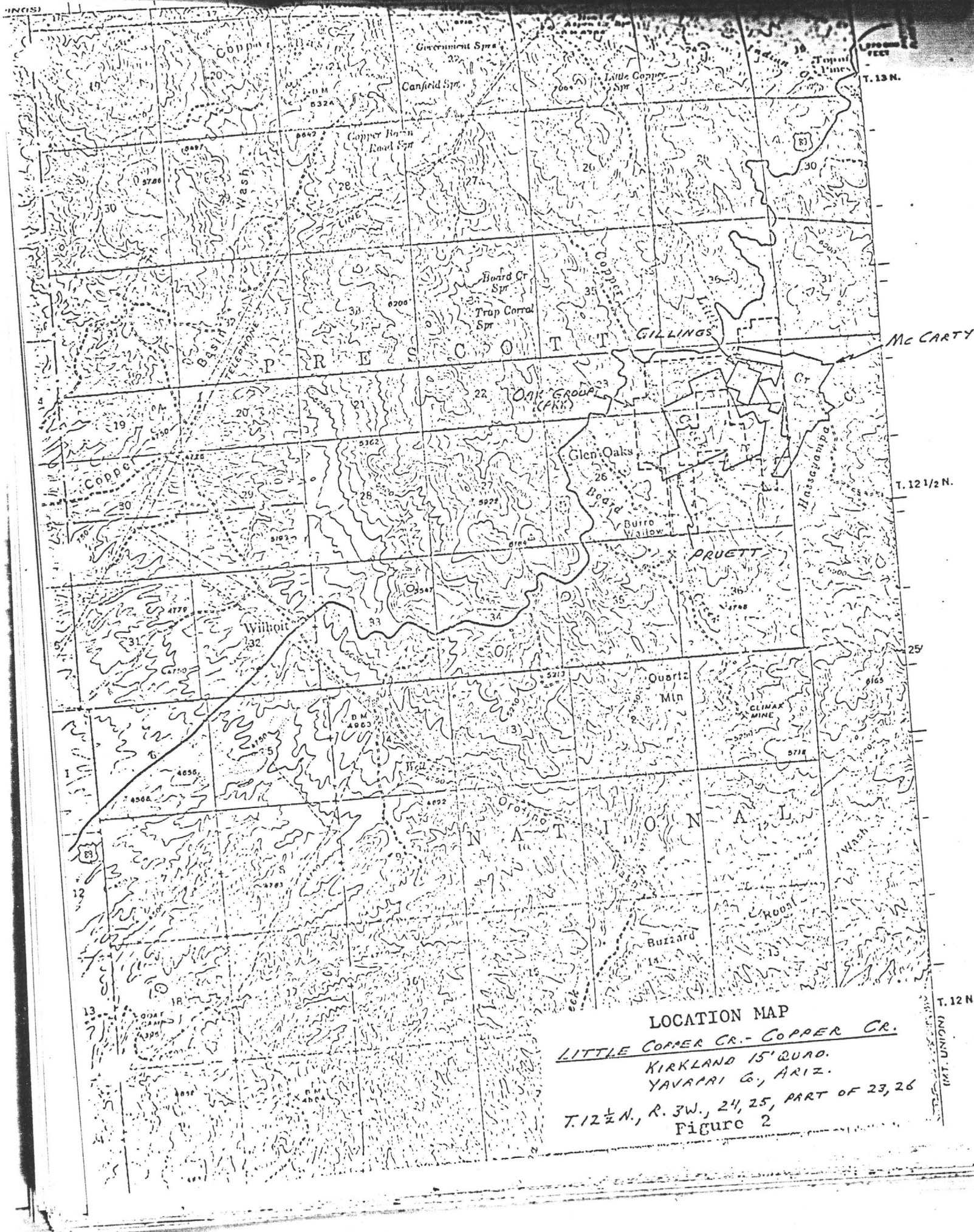
- 2) Production royalty - 3% NSR thru buyout.

Termination - 30 days notice

Purchase Price - \$5 million (all payments apply)

PROPOSED TERMS TO PROSPECTIVE OPTIONEES - Copper Creek

- 1) Optionee would receive a 1 year (minimum) option assuming all property burdens (payments, assessments, etc.)
- 2) At the end of 1 year, if optionee desired to continue, a cash payment of \$100,000 would be made Earth Resources; with optionee naturally continuing with all obligations during ensuing option months.
- 3) If optionee desired to continue beyond the end of the 3d year, a further payment of \$500,000 would be made ERC-PKK. Earth and PKK would have no further interest in the property or the project.
- 4) After the first year, termination could be achieved with 30 days notice.



microscope examination of wet CC74 series cuttings.

Silicification is particularly well-developed in the North Area -- perhaps to the extent of making a substantial difference in any anticipated excavation.

The obvious overlapping ("telescoping") of alteration types was early recognized by Sayers of PKK and supported by the limited petrographic work accomplished.

#### RESERVE SUMMARY

Reserves of copper/molybdenum-bearing material available in the two areas outlined as North and South areas on Figures 2 and 3, using a 0.25% Cu eq. exterior cutoff (0.20% Cu eq. interior cutoff) are as follows:

North Area - 12,993,280 tons - 0.428 Cu eq.

South Area - 8,371,520 tons - 0.410 Cu eq.

---

Grand Total - 21,364,800 tons - 0.42 Cu eq.

Total waste measured, both areas, was 19,587,424 tons, resulting in a waste (all categories) to ore ratio of 0.92:1.

You are referred to the appendix for the detail and further summary of the reserve and waste calculations.

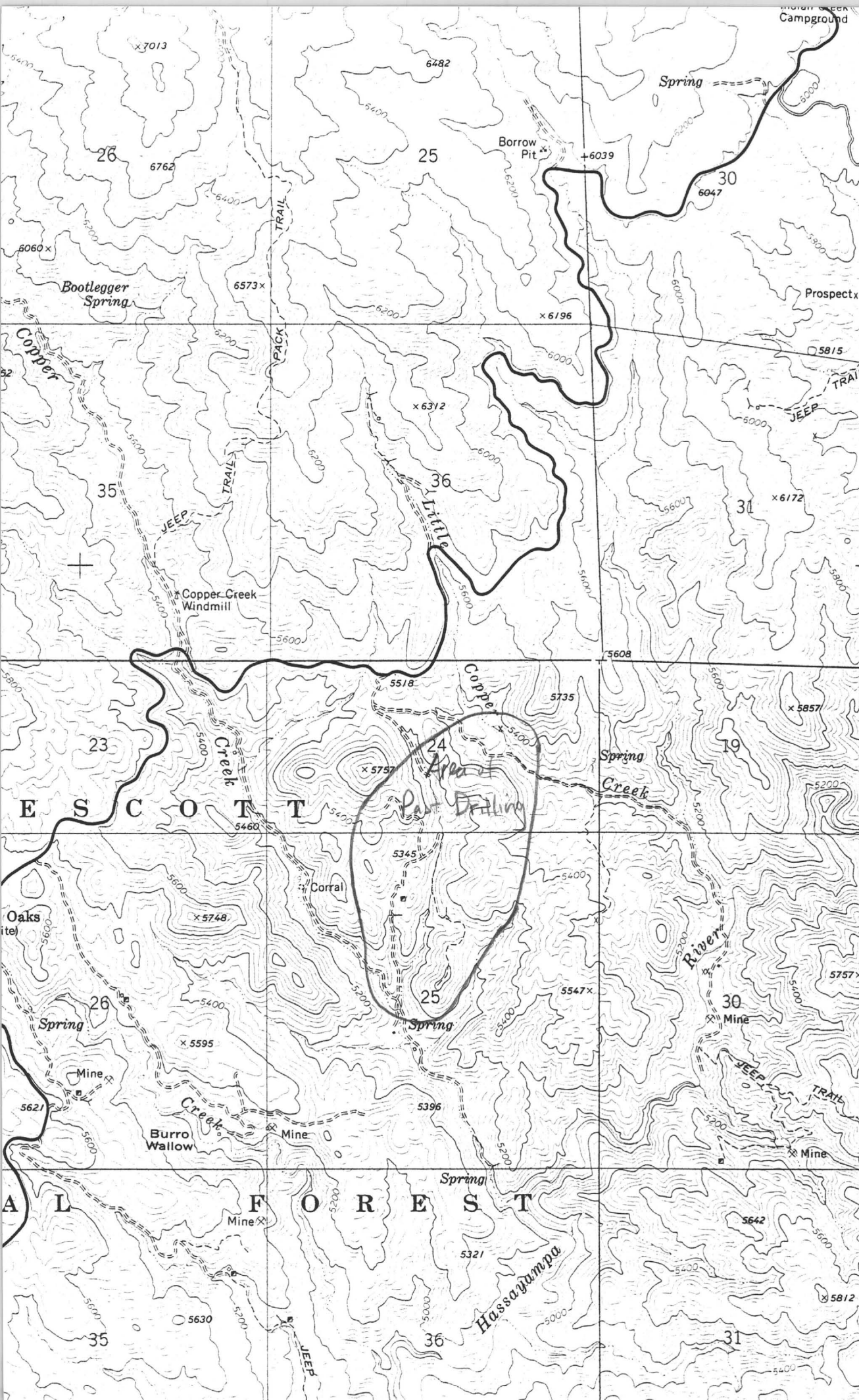
#### OREBODY CONFIGURATIONS

Figure 2, used as an overlay to Figure 1, will show that the North Area "orebody" has dimensions of approximately 1800' X 1100'. Ore thicknesses vary from 10 to 185 feet. Sections A, B, C and D show that the ore is generally flat lying and irregularly tabular, with a slight westerly dip. The ore (using a 0.25% Cu eq. cutoff) tends to be thicker on the west side of the body. There is a tendency for the better zone to drape downward with decreased surface elevations. Chalcocite was measured in the top of DDH CC-4 located just outside the west edge of North Area oreblock (but inside the proposed pit), illustrating that chalcocite can extend beneath valley bottoms, though this may be an exception.

The South Area (use overlay, Figure 3) is an irregular ellipse measuring approximately 1600' X 700' in plan. Ore thicknesses vary from 35 to 160 feet. Sections E, F, G and H illustrate interpreted ore configurations. A particularly good thickness of chalcocite is measured in HA-6, which was collared on a topographic prominence.

3/4/92 - Brief Review suggests that the reserve in both N & S areas is open for expansion laterally, likely not at depth, perhaps so w/ lower cut-off, etc. Drillings likely oriented to finding deep sulfide rather than shallow chalcocite. Need to evaluate more. Are apparently 14 ft. clams along most of N. Area body.





3816

3815

3814

T. 13 N.

T. 12 1/2 N.

3813

T12 1/2 N  
R3W

3812

(GROOM CREEK)  
3552 IV NW

3811

3810

Beane

Bishop

Bolin

Butler

Dean - Durrel - El Alacran Area, W. Sonora, Mex.

Farriss

Gerla

Gillette

Hammer

→ Hennessey - Little Cu Creek Area SW of Prescott. - says is eroded base of deposit

Hillebrand

Koenig

Laine

Roe

Spatz

Wardt

Weitz

U of A Theses re geology of Cu  
deposits, districts, AZ & Mexico

- has map of protox (hypoxene grade) at  
7,100' alt - 70, along w/ grade  
- ben-bet

4/1/92

Talk w/ Yavapai Cty. Assessor. (602) 771-3220

Secs. 24, 25 T 12½ N, R 3 W

207 Acres. Parcel # 205-15-013

Deeded to 1<sup>st</sup> Title and Trust Co. of AZ

mostly in Sec. 25

Trust #60

Bills to Irene <sup>Cummings</sup> ~~Cummings~~

7014 N. 11<sup>th</sup> Pl.

Phoenix 85020

40 Acres

205-15-09

mostly in Sec. 24

Joseph Womb

P.O. Box 3812 Prescott 86302

~~205-15-00~~

for NE corner of Sec. 24

and Sec. 19, 30?

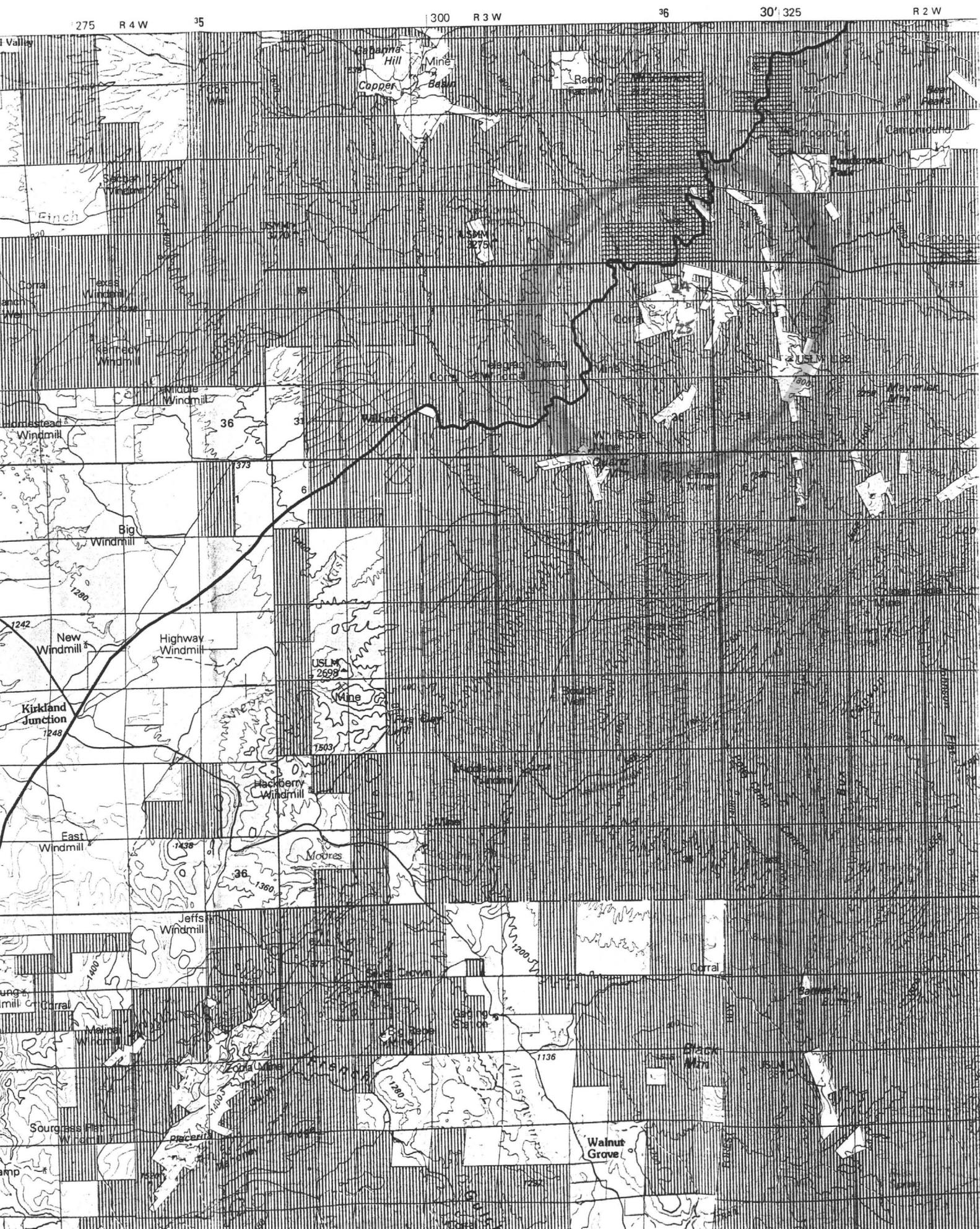
205-15-12

122 Acres

Marshall Marinakis

P.O. Box 3867 Prescott 86302







3 W 22 SE

PAGE NO: 4014  
PCN: LT892PP1

**MERIDIAN: GILA-SALT R.**

LEAD	COUNTY	LOCATION	LATEST	CASE
FILE	BOOK:PAGE	DATE	ASMT-YR	CLOSEN

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7/18/1990

066:18112

**7-10**

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6/30/1987

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3/09/1989

10/07/1303

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REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONAUNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTPAGE NO: 4015  
PCN: 11892PP1GEOGRAPHIC INDEX  
ALL CLAIMS

MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION- - GEO BLM SERIAL CASE									
TOWNSHIP	RANGE	SEC	SUBDV	CITY	DIST	NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)
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SE	25	2	31278 LD	OAK 7					
SE	25	2	31279 LD	OAK 8					
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SE	25	2	31282 LD	OAK 11					
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SE	25	2	31391 LD	OAK 120					
SE	25	2	31392 LD	OAK 121					
SE	25	2	31393 LD	OAK 122					
SE	25	2	31394 LD	OAK 123					
SE	25	2	31395 LD	OAK 124					
SE	25	2	31396 LD	OAK 125					
SE	25	2	31397 LD	OAK 126					
SE	25	2	31398 LD	OAK 127					
SE	25	2	31399 LD	OAK 128					
SE	25	2	31400 LD	OAK 129					
SE	25	2	31401 LD	OAK 130					
SE	25	2	31402 LD	OAK 131					
SE	25	2	31403 LD	OAK 132					
SE	25	2	31404 LD	OAK 133					
SE	25	2	31405 LD	OAK 134					
SE	25	2	31406 LD	OAK 135					
SE	25	2	31407 LD	OAK 136					
SE	25	2	31408 LD	OAK 137					
SE	25	2	31409 LD	OAK 138					
SE	25	2	31410 LD	OAK 139					
SE	25	2	31411 LD	OAK 140					
SE	25	2	31412 LD	OAK 141					
SE	25	2	31413 LD	OAK 142					
SE	25	2	31414 LD	OAK 143					
SE	25	2	31415 LD	OAK 144					
SE	25	2	31416 LD	OAK 145					
SE	25	2	31417 LD	OAK 146					
SE	25	2	31418 LD	OAK 147					
SE	25	2	31419 LD	OAK 148					
SE	25	2	31420 LD	OAK 149					
SE	25	2	31421 LD	OAK 150					
SE	25	2	31422 LD	OAK 151					
SE	25	2	31423 LD	OAK 152					
SE	25	2	31424 LD	OAK 153					
SE	25	2	31425 LD	OAK 154					
SE	25	2	31426 LD	OAK 155					
SE	25	2	31427 LD	OAK 156					
SE	25	2	31428 LD	OAK 157					
SE	25	2	31429 LD	OAK 158					
SE	25	2	31430 LD	OAK 159					
SE	25	2	31431 LD	OAK 160					
SE	25	2	31432 LD	OAK 161					
SE	25	2	31433 LD	OAK 162					
SE	25	2	31434 LD	OAK 163					
SE	25	2	31435 LD	OAK 164					
SE	25	2	31436 LD	OAK 165					
SE	25	2	31437 LD	OAK 166					
SE	25	2	31438 LD	OAK 167					
SE	25	2	31439 LD	OAK 168					
SE	25	2	31440 LD	OAK 169					
SE	25	2	31441 LD	OAK 170					
SE	25	2	31442 LD	OAK 171					
SE	25	2	31443 LD	OAK 172					
SE	25	2	31444 LD	OAK 173					

12.2N 3 W 25 W2

J 18

REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONA

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

PAGE NO: 4016  
PCN: 11892pp1

GEOGRAPHIC INDEX  
ALL CLAIMS

MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION- GEO BLM SERIAL CASE									
TOWNSHIP	RANGE	SEC	SUBDV	CITY	DIST	NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)
FILE	LEAD	COUNTY	LOCATION	LATEST	CASE				
BOOK	PAGE	DATE	ASSMT-YR	CLOSED					
12.2N	3 W	25 W2	2	2	2	70960*LD	PEACOCK # 12 FRACT	CUMMINGS ROBERT P JR	70952 614:901 8/21/1970 1991
SE	25	25	2	2	2	70961*MS	PEACOCK MILL S NO. 1		70952 559:91 7/01/1969 1991
SE	25	25	2	2	2	70962*MS	PEACOCK MILL S NO. 2		70952 559:92 7/01/1969 1991
SW	25	25	2	2	2	84667*LD	KAYLEEN	TRUFFA JOHN	84653 10/01/1979 1990
SW	25	25	2	2	2	84668*LD	CARL		84653 10/01/1979 1990
SW	25	25	2	2	2	84672*LD	CORI		84653 10/01/1979 1990
SE	25	25	2	2	2	101693*LD	CINDY		10/01/1979 1990
SE	25	25	2	2	2	10882*PL	LOG CABIN	GOETTSCH DOUG	4/17/1980 1987 12/23/1988
SW	25	25	2	2	2	110882*PL	JOSHUA #1	CROUCH JOSEPH	1321:738 9/03/1980 1990
SW	25	25	2	2	2	111716 LD	DOROTHEY E #1	HODGKINSON & PEET	1317:905- 8/15/1980 1982
SW	25	25	2	2	2	111760*LD	JAMES CLAIMS NO 12	ROY C POGUE JR	7/05/1980 1990
SW	25	25	2	2	2	111763*LD	JAMES CLAIMS NO 13		7/05/1980 1990
SW	25	25	2	2	2	111764*LD	JAMES CLAIMS NO 16		7/05/1980 1990
SW	25	25	2	2	2	129536*MS	STAR #1	IRWIN CHARLES	1376:865 4/23/1981 1988 7/18/1990
SW	25	25	2	2	2	129537*MS	STAR #2	IRWIN WILHELMINA	129536 1376:867 4/23/1981 1988 7/18/1990
SE	25	25	2	2	2	129542*MS	STAR #7	IRWIN CHARLES	129536 1380:110 5/08/1981 1988 7/18/1990
SE	25	25	2	2	2	129543*MS	STAR #8	IRWIN WILHELMINA	129536 1380:108 5/08/1981 1988 7/18/1990
SE	25	25	2	2	2	139189*LD	JOSHUA #1	IRWIN WILHELMINA	1407:309 9/01/1981 1990
S2	25	25	2	2	2	163843 PL	DAY-AT-A-TIME #1	CROUCH JOSEPH	1457:257 4/19/1982 0000 9/18/1985
W2	25	25	2	2	2	163844 PL	EASY DOES IT CLAIM 1	MOORE ARLACE	1456:604 4/02/1982 0000 4/18/1983
NW	25	25	2	2	2	166762 PL	EASY DOES IT #3	ALLEN EARL	1460:657 5/01/1982 0000 3/05/1986
NW	25	25	2	2	2	170906 PL	EASY DOES IT #4		1467:699 3/17/1982 0000 3/05/1986
SW	25	25	2	2	2	170907 PL	EASY DOES IT #5		170906 1467:701 5/12/1982 0000 3/05/1986
SW	25	25	2	2	2	170908 PL	EASY DOES IT #7		170906 1467:695 5/17/1982 1986 3/21/1988
S2	25	25	2	2	2	170909 PL	EASY DOES IT #8	ALLEN RONALD	170906 1467:697 5/17/1982 1986 3/21/1988
NW	25	25	2	2	2	171165 PL	EASY DOES IT NO 6	ALLEN EARL	1468:252 5/12/1982 0000 6/10/1985
SE	25	25	2	2	2	171166 PL	EASY DOES IT NO 9	ALLEN EARL	1468:250 5/17/1982 1986 3/21/1988
ALL	25	25	2	2	2	171167 PL	EASY DOES IT NO 10	ALLEN RONALD	1468:256 6/01/1982 1986 3/21/1988
N2	25	25	2	2	2	171168 PL	EASY DOES IT NO 11	ALLEN EARL	1468:248 6/01/1982 0000 6/10/1985
SW	25	25	2	2	2	191872 PL	EASY DOES IT #1	ALLEN EARL	3/02/1983 1986 3/21/1988
NW	25	25	2	2	2	222615*LD	REED #2	ALLEN RONALD	222612 : 00 8/15/1984 1985 3/23/1987
SE	25	25	2	2	2	270439*LD	GOSSAN #1	GIBSON CHARLES	270439 1927:0135 4/27/1987 0000 5/05/1989
SE	25	25	2	2	2	270440*LD	GOSSAN #2	REED JIM	270439 1927:0137 4/27/1987 0000 5/05/1989
								KOBERDANCE JOHN	

\* DISCLOSURE \* ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT. NAMES AND ADDRESSES ARE ENTERED AS THEY APPEAR ON THE LOCATION NOTICE OR ARE ABBREVIATED TO FIT LIMITED SPACE. THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. A BLANK LATEST ASSESSMENT YEAR IN THIS REPORT DOES NOT CONSTITUTE AN ABANDONED CLAIM. \* AFTER S/N INDICATES LAND STATUS CHECKED.

K 78

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

PAGE NO: 4017  
PCN: 17803201

**MERIDIAN: GILA-SALT R.**

LEAD FILE	COUNTY BOOK:PAGE	LOCATION DATE	LATEST ASSMT-YR	CASE CLOSED
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[illegible]

NE	25	299325*LD	NICOLE #3	MARINAK'S DIANA	COOMBS JOE	299323 2177-0507	8/20/1989	1991
				MARINAK'S DIANA	COOMBS ROSE			
				MARINAK'S DIANA	COOMBS JOE			
				MARINAK'S DIANA	COOMBS ROSE			
NE	25	299326*LD	NICOLE #4	MARINAK'S MARSHALL	299328 2181-0807	8/20/1989	1991	

SE	299	89	*P	EASY	DOES	1	#9	COOMBS JOE	299	89	2193	0258	10/12/1989	0000	
SE	299	08	*P	EASY	DOES	1	#1	COOMBS ROSE	299	08	2193	0258	10/12/1989	0000	3/18/1991
SE	299	09	*P	EASY	DOES	1	#8	ARMSTRONG BOBBY	299	08	2194	0258	10/12/1989	1990	
NW	300	96	*P	EASY	DOES	1	#3	ARMSTRONG CLYDE	300	96	2193	0258	10/12/1989	1990	
SE	302	23	*P	EASY	DOES	1	#3		302	23	2193	0258	10/12/1989	1990	
SE	315	71	*P	DAVIDS	ROSE			LOGAN GENE	302	23	2193	0258	10/12/1989	1990	
SE	315	71	*P	DAVIDS	ROSE			ROSE DAVID R	302	23	2193	0258	10/12/1989	1990	
SE	315	71	*P	DAVIDS	ROSE				302	23	2193	0258	10/12/1989	1990	

SE	312025+PL	DOUBLE EAGLE	BROOK BEAR/ICE A	312075	10/18/1991	0000	8/31/1979
25	13598 LD	HACIENDA #5	YOUNG GREG	1097:595	9/08/1977	0000	8/31/1979
25	13599 LD	HACIENDA #6	MCALISTER BROOKS F	1097:596	9/08/1977	0000	8/31/1979
25	13601 LD	HACIENDA #8	MCALISTER JOHN E	1097:598	9/08/1977	0000	8/31/1979

SE	25	35126*LD	A SQUARE	TRUFFA JOHN TER LAND & MINING	35122	351:277	2/15/1965	1990
SE	25	84665*LD	PATRICIA	TRUFFA JOHN	84653		10/01/1979	1990
SE	25	84667*LD	KAYLEEN		84653		10/01/1979	1990
SE	25	84668*LD	CARI		84653		10/01/1979	1990
SE	25	84675*LD	ADDIE		84653		10/01/1979	1990

* DISCLOSURE *	#	ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT	NAMES AND ADDRESSES ARE ENTERED AS
SE	25	84677-D	CINDY LEONA SANDY
SM	25	84678-D	
SR	25	84679-D	

\* \* DISCLOSURE \* \* ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT, NAMES AND ADDRESSES ARE ENTERED AS THEY APPEAR ON THE LOCATION NOTICE OR ARE ABBREVIATED TO FIT LIMITED SPACE; THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. A BLANK LATEST ASSESSMENT YEAR IN THIS REPORT DOES NOT CONSTITUTE AN ABANDONED CLAIM. \* AFTER S/N INDICATES LAND STATUS CHECKED.



12.2N 3 W 26 S2

L 18

REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONAUNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTPAGE NO: 4018  
PCN: L7892PPIGEOGRAPHIC INDEX  
ALL CLAIMS

MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION- GEO BLM SERIAL CASE											CLAIM NAME/NUMBER		CLAIMANT(S)		LEAD	COUNTY	LOCATION	LATEST	CASE
TOWNSHIP	RANGE	SEC	SUBDY	CITY	DIST	NO.	TYPE							FILE	BOOK:PAGE	DATE	ASSMT-YR	CLOSED	
12.2N	3 W	26 S2	N2	25	2	84681*LD	2 SARAH	TRUEFA JOHN			84653		10/01/1979	1990					
			N2	25		98994*LD	CHRISTINE CLAIMS NO7	POGUE ROY JR			1284:61		3/07/1980	1990					
			N2,SE	25		98995*LD	CHRISTINE CLAIMS NO8	POGUE ROY JR			98994 1284:63		3/07/1980	1990					
			SE	25		98996*LD	CHRISTINE CLAIMS NO9	POGUE ROY JR			98994 1284:65		3/07/1980	1990					
			S2	25		98997*LD	CHRISTINE CLAIMSNO10	POGUE ROY JR			98994 1234:67		3/07/1980	1990					
			S2	25		98998*LD	CHRISTINE CLAIMSNO11	POGUE ROY JR			98994 1284:69		3/07/1980	1990					
			SU	25		98999*LD	CHRISTINE CLAIMSNO12	POGUE ROY JR			98994 1284:71		3/07/1980	1990					
			NW	25		100103*LD	TIN CAN	POGUE ROY JR			1282:121		3/01/1980	1990					
			NW	25		100104*LD	CHRISTINE CLAIMS NO1	POGUE ROY JR			100103 1282:123		2/29/1980	1990					
			W2	25		100105*LD	CHRISTINE CLAIMS NO2	POGUE ROY JR			100103 1282:125		2/29/1980	1990					
			W2	25		100106*LD	CHRISTINE CLAIMS NO3	POGUE ROY JR			100103 1282:127		2/29/1980	1990					
			W2	25		100107*LD	CHRISTINE CLAIMS NO4	POGUE ROY JR			100103 1282:129		2/29/1980	1990					
			NW	25		100108*LD	CHRISTINE CLAIMS NO5	POGUE ROY JR			100103 1282:131		2/29/1980	1990					
			NW	25		100109*LD	CHRISTINE CLAIMS NO6	POGUE ROY JR			100103 1282:133		2/29/1980	1990					
			NW	25		102006*LD	PEARL NO 1	POGUE ROY JR			1285:019		3/08/1980	1990					
			W2	25		102007*LD	PEARL NO 2	POGUE ROY JR			102006 1285:021		3/08/1980	1990					
			SU	25		102008*LD	PEARL NO 3	POGUE ROY JR			102006 1285:023		3/08/1980	1990					
			SE	25		111717*LD	BRENDA LUE #1	POGUE ROY JR			111716 1317:902		8/15/1980	1988					
			W2	25		111746*LD	COMPLETION NO 1	HODGKINSON & PEET			111746 1327:393		7/10/1980	1990					
			W2	25		111747*LD	COMPLETION NO 2	ROY C POGUE JR			111746 1327:395		7/10/1980	1990					
			SU	25		111748*LD	COMPLETION NO 3				111746 1327:397		7/10/1980	1990					
			NE	25		111749*LD	JAMES CLAIMS NO 1				111746 1327:399		7/05/1980	1990					
			NE	25		111750*LD	JAMES CLAIMS NO 2				111746 1327:401		7/05/1980	1990					
			NE	25		111751*LD	JAMES CLAIMS NO 3				111746 1327:403		7/05/1980	1990					
			NE	25		111752*LD	JAMES CLAIMS NO 4				111746 1327:405		7/05/1980	1990					
			E2	25		111753*LD	JAMES CLAIMS NO 5				111746 1327:407		7/05/1980	1990					
			E2	25		111754*LD	JAMES CLAIMS NO 6				111746 1327:409		7/05/1980	1990					

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12.2N 3 W 26 E2

M 18

REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONAUNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTPAGE NO: 4019  
PCN: L1892PP1GEOGRAPHIC INDEX  
ALL CLAIMS

MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION- GEO BLM SERIAL CASE									
TOWNSHIP	RANGE	SEC	SUBDV	CITY	DIST	NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)
12.2N	3 W	26 E2							
SE	25	2	111755*LD	JAMES CLAIMS NO 7	ROY C POGUE JR	111746	1327:411	7/05/1980	1990
SE	25		111756*LD	JAMES CLAIMS NO 8		111746	1327:413	7/05/1980	1990
SE	25		111757*LD	JAMES CLAIMS NO 9		111746	1327:415	7/05/1980	1990
SE	25		111758*LD	JAMES CLAIMS NO 10		111746	1327:417	7/05/1980	1990
SE	25		111759*LD	JAMES CLAIMS NO 11		111746	1327:419	7/05/1980	1990
SE	25		111760*LD	JAMES CLAIMS NO 12		111746	1327:421	7/05/1980	1990
SE	25		111761*LD	JAMES CLAIMS NO 13		111746	1327:423	7/05/1980	1990
SE	25		111762*LD	JAMES CLAIMS NO 14		111746	1327:425	7/05/1980	1990
SE	25		111763*LD	JAMES CLAIMS NO 15		111746	1327:427	7/05/1980	1990
NE	25		136683*LD	GOLDEN NUGGAI T #4		136680	1390:502	6/13/1981	1988
E2	25		165566 LD	BURRO WALLOW NO 1	IRWIN CHARLES	1451:771		3/30/1982	1983
					SHALLENBERGER JOE				10/10/1985
					PORTER CHARLES				
					KILBOURNE DONALD				
					TRACEY LLOY				
SE	25		165567 LD	BURRO WALLOW NO 2	SHALLENBERGER JOE	165566	1451:773	3/30/1982	1983
					PORTER CHARLES				
					TRACEY LLOY				
SE	25		165568 LD	BURRO WALLOW NO 3	SHALLENBERGER JOE	165566	1451:775	3/30/1982	1983
					PORTER CHARLES				
					TRACEY LLOY				
SE	25		165569 LD	BURRO WALLOW NO 4	SHALLENBERGER JOE	165566	1451:775	3/30/1982	1983
					PORTER CHARLES				
					TRACEY LLOY				
NE	25		170906 PL	EASY DOES IT #4	ALLEN EARL	1467:699		5/17/1982	0000
E2	25		191873 PL	EASY DOES IT #13	ALLEN EARL	191872		3/02/1983	1986
					ALLEN RONALD				
NE	25		211697*PL	ER #1	ALLEN RONALD	12/13/1983		1986	3/21/1988
					ALLEN EARL				
SE	25		302123*LD	DAVIDS ROSE	ROSE DAVID R	302123	2229:0014	2/27/1990	0000
			13594 LD	HACIENDA #1	MCALISTER BROOKS F	1094:613		9/01/1977	0000
					MCALISTER JOHN E				8/31/1979
					MCALISTER BROOKS F				
25			13595 LD	HACIENDA #2	MCALISTER BROOKS F	1094:614		9/01/1977	0000
					MCALISTER JOHN E				8/31/1979
25			13596 LD	HACIENDA #3	MCALISTER BROOKS F	1097:593		9/01/1977	0000
					MCALISTER JOHN E				8/31/1979
25			13597 LD	HACIENDA #4	MCALISTER BROOKS F	1097:594		9/01/1977	0000
					MCALISTER JOHN E				8/31/1979
25			13598 LD	HACIENDA #5	MCALISTER BROOKS F	1097:595		9/08/1977	0000
					MCALISTER JOHN E				8/31/1979
25			13599 LD	HACIENDA #6	MCALISTER BROOKS F	1097:596		9/08/1977	0000
					MCALISTER JOHN E				8/31/1979
25			13600 LD	HACIENDA #7	MCALISTER BROOKS F	1097:597		9/08/1977	0000
					MCALISTER JOHN E				8/31/1979

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LEGAL DESCRIPTION - GEO BLM SERIAL CASE	SHP RANGE SEC SUBDY CITY DIST	NO. TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)	LEAD FILE	COUNTY BOOK:PAGE	LOCATION DATE	LATEST ASSMT-YR	CASE CLOSED
2 N 2 W 36 NE	25	2	309086*PL	HIDDEN TREASURES	WARD JOE	309086	2301:0753	10/09/1990	0000
2 N 2 W 19 SE	25	2	107545*PL	NUGGET	PASCOE JAMES	1299:375-	5/18/1980	1990	2/07/1985
E2	25	2	107758 LD	ASHBY	SZCZOTKA THOMAS	1293:285-	4/19/1980	1984	7/18/1990
NW	25	2	207640*LD	LOOKOUT MINE #9	IRWIN CHARLES	207632	1572:664	9/01/1983	1988
NW	25	2	207641*LD	LOOKOUT MINE #10	IRWIN CHARLES	207632	1572:666	9/01/1983	1988
NW	25	2	248300*LD	LIGHTNING FLAME #18	IRWIN WILHELMINA	248283	1739:380	1/20/1986	0000
NW	25	2	248301*LD	LIGHTNING FLAME #19	JONES DAVID	248283	1789:382	1/20/1986	0000
NW	25	2	248302*LD	LIGHTNING FLAME #20	IRWIN CHARLES	248283	1789:384	1/20/1986	1988
NE	25	2	249024*LD	LIGHTNING FLAME #25	IRWIN CHARLES	249024	1796:79	2/20/1986	1988
ALL	25	2	250476*PL	VALENTINE	SZCZOTKA THOMAS	250476	1793:831	2/12/1986	1989
SE	25	2	313472*PL	ANNIE B #4	BROCK JOHN	313470	2347:0718	4/09/1991	0000
SE	25	2	316609*PL	PAINT YOUR WAGON	BROCK BEATRICE A	316609		10/06/1991	0000
20 NE	25	2	26581 PL	YOUNG MINING CO #1	HENRY JIM	1151:340	7/10/1978	1979	6/06/1983
N2	25	2	26582 PL	YOUNG MINING CO #2	WORKS, MARYIN E	26581	1151:339	7/10/1978	1979
SW	25	2	97794 PL	VALENTINE MINE	WORKS, SHERON L	1278:916	1/01/1980	0000	5/23/1986
SW	25	2	97795 PL	YELLOW NUGGET	COLLIE, JERRY	1278:914	1/01/1980	0000	11/06/1982
N2	25	2	100672 LD	NEW BOND NO 1	WALKER ROBERT B	1282:92	2/29/1980	1982	9/17/1983
NE	25	2	100673 LD	ORE CAR	RADER LARRY	1282:94	2/29/1980	1982	9/17/1983
NW	25	2	140085 LD	SILVER-BELL	GIFORD-HILL	1406:281	8/26/1980	0000	10/06/1981
NW	25	2	140657 LD	SILVER-BELL	JLR MINING CO ASSOC	1411:646	9/01/1981	0000	11/06/1985
SE	25	2	142346*LD	HALCYON NO 1	RADER LARRY	1418:539	10/18/1981	1990	
SE	25	2	142347*LD	HALCYON NO 2	WALKER ROBERT B	1418:541	10/18/1981	1990	
SE	25	2	142348*LD	HALCYON NO 3	WALKER ROBERT B	142346	1418:543	10/18/1981	1990
SE	25	2	142349*LD	HALCYON NO 4	WALKER ROBERT B	142346	1418:545	10/18/1981	1990
SE	25	2	144721*LD	HALCYON NO.8	WALKER ROBERT B	144718	1421:236	10/28/1981	1988
E2	25	2	144722*LD	HALCYON NO.9	WALKER ROBERT B	144718	1421:238	10/28/1981	1988
SW	25	2	144723*LD	HALCYON NO.10	WALKER ROBERT B	144718	1421:240	10/29/1981	1988
N2	25	2	144724*LD	HALCYON NO.11	WALKER ROBERT B	144718	1421:242	10/29/1981	1988
N2	25	2	145889 LD	ORE CAR	WALKER ROBERT B	145889	1427:433	11/26/1981	1984
SE	25	2	147768*LD	HALCYON NO 13	JLR MINING	147767	1431:684	12/17/1981	1988
SW	25	2	147770*LD	HALCYON NO 15	CAROUSO NICHOLAS	147767	1432:9	12/19/1981	1988
W2	25	2	147771*LD	HALCYON NO 16	CAROUSO NICHOLAS	147767	1432:11	12/19/1981	1988
NW	25	2	187869 LD	SILVER BELL #1	RADER LARRY	1497:961	10/01/1982	0000	11/06/1985
NW	25	2	187870 LD	SILVER BELL #2	RADER LARRY	1497:963	10/01/1982	0000	11/06/1985
N2	25	2	193391 PL	LUCKY SEVEN	DOHERTY RICHARD	1525:379	2/27/1983	0000	4/02/1986

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\* \* DISCLOSURE  
THEY APPEAR  
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-LEGAL DE  
TUNSHIP RAN

12.2N 2

ADMINISTRATIVE

12.2N 2 W 29 NW

REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONA

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

PAGE NO: 3618  
PCN: L1892PP1

GEOGRAPHIC INDEX  
ALL CLAIMS

MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION-- GEO BLM SERIAL CASE									
TOWNSHIP	RANGE	SEC	SUBDY	CITY	DIST	NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)
12.2N	2 W	29 NW							
SE	25	2	128179 LD	BROWN MULE #THREE(3)	RANK MIKE	128176	1367:783	3/18/1981	1982
SE	25	2	137780 LD	HELEN #3	EASTMOORE NORMAN JR	137769	1400:866	6/28/1981	1982
SE	25	2	137781 LD	HELEN #4		137769	1400:866	6/28/1981	1982
SE	25	2	137782 LD	HELEN #5		137769	1400:870	6/28/1981	1982
SE	25	2	137782 LD	HELEN #6		137769	1400:872	6/28/1981	1982
NE	25	2	142348 LD	HALCYON NO 3	CAROUSO NICHOLAS	142346	1418:543	10/18/1981	1990
NE	25	2	142349 LD	HALCYON NO 4		142346	1418:545	10/18/1981	1990
NE	25	2	144718 LD	HALCYON NO 5		144718	1421:230	10/27/1981	1988
NE	25	2	144719 LD	HALCYON NO 6		144718	1421:232	10/27/1981	1988
NE	25	2	144720 LD	HALCYON NO 7		144718	1421:234	10/28/1981	1988
NE	25	2	144721 LD	HALCYON NO 8		144718	1421:236	10/28/1981	1988
NE	25	2	144723 LD	HALCYON NO 10		144718	1421:240	12/17/1981	1988
NE	25	2	144767 LD	HALCYON NO 12		144767	1431:682	12/17/1981	1988
NE	25	2	144768 LD	HALCYON NO 13		144767	1431:684	12/17/1981	1988
NE	25	2	144769 LD	HALCYON NO 14		144767	1432:9	12/19/1981	1988
NE	25	2	144770 LD	HALCYON NO 15		144767	1432:9	12/19/1981	1988
N2	25	2	180149 PL	JASON PATCH	DORCEY WARREN	180148	1471:939	7/08/1982	0000
					DORCEY CARL				
					STANISICK MICHAEL				
					STANISICK STERN				
					DE LEON TRINA				
					DE LEON SHANNIA				
					CUMMINGS ROBERT P JR	70952	765:912	7/03/1972	1991
					HALSEY ROBERT SR	1270:102	1704/1980	1986	5/13/1988
					HALSEY GLENN				
					GROSS DICK	1288:906	3/31/1980	1990	
					PASCOE JAMES				
					HAYS LAURENCE ALAN	1288:904	3/31/1980	0000	9/27/1985
					CLAYPOOL DENNIS	1292:739	4/16/1980	1989	4/03/1991
					LAUGHLIN MICHAEL				
					GROSS RICHARD	1276:533	2/04/1980	0000	10/11/1985
					PASCOE JAMES	102160	1276:535	2/04/1980	1990
					JENNESS WAYNE R SR	1299:616-	5/19/1980	0000	4/12/1983
					PASCOE JAMES	1299:575-	5/16/1980	1990	
					CLAYPOOL DENNIS	1319:027	8/18/1980	1989	4/03/1991
					CLAYPOOL MICHAEL				
					RANK MIKE	1367:779	3/18/1981	1982	10/07/1985
					JENNESS WAYNE				
					RANK MIKE	128176	1367:781	3/18/1981	1982
					JENNESS WAYNE SR	128176	1367:717	3/18/1981	0000
					JENNESS WAYNE JR				

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12.2N 2 W 30 NW

REPORT DATE: NOV 8, 1991  
ADMINISTRATIVE STATE: ARIZONAUNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTPAGE NO: 3619  
PCN: L1892P1GEOGRAPHIC INDEX  
ALL CLAIMS

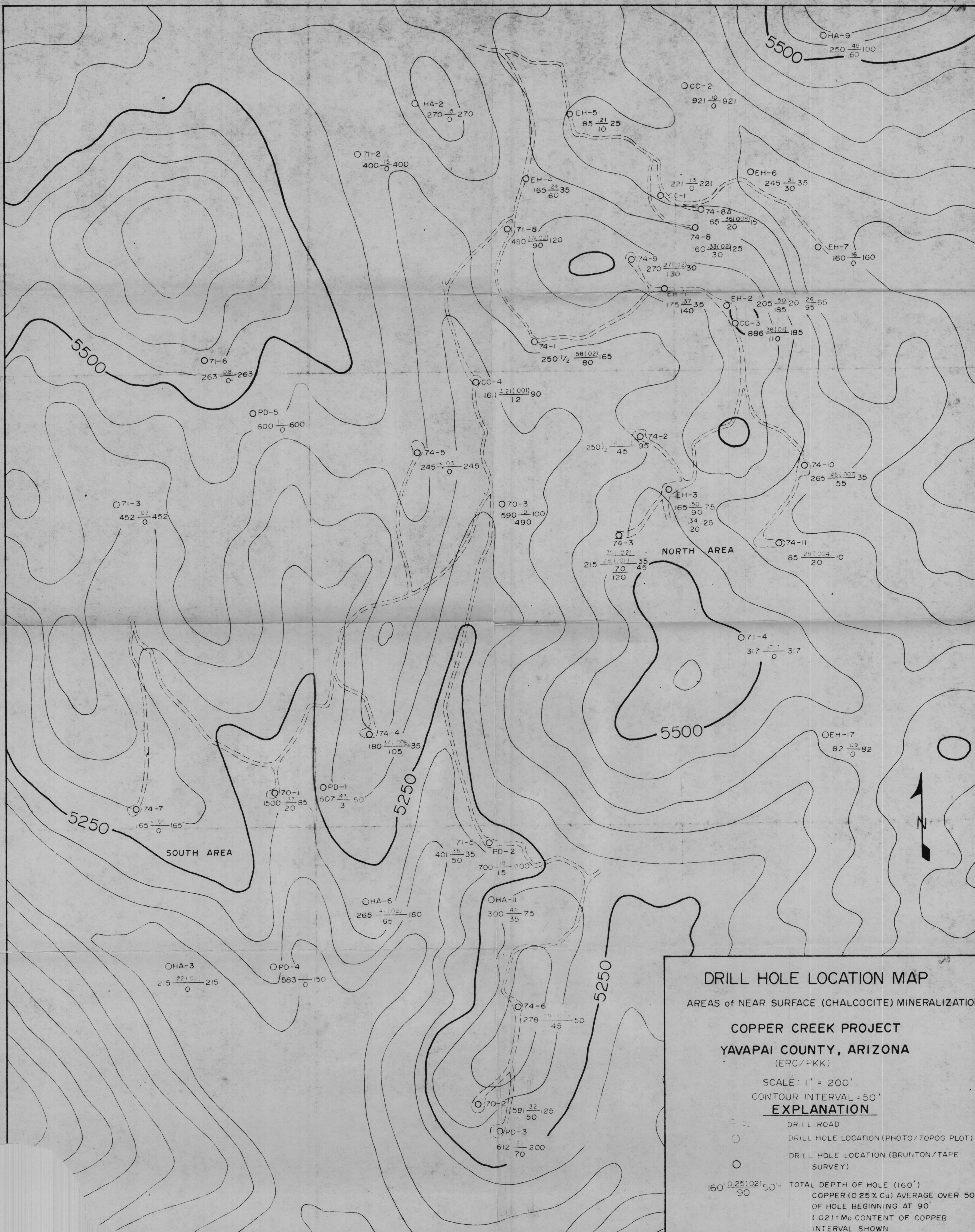
MERIDIAN: GILA-SALT R.

-LEGAL DESCRIPTION- GEO BLM SERIAL CASE CLAIM NAME/NUMBER CLAIMANT(S) LEAD COUNTY LOCATION LATEST CASE														
TOWNSHIP	RANGE	SEC	SUBDY	CTY	DIST	NO.	TYPE	FILE	BOOK:PAGE	DATE	ASSMT-YR	CLOSED		
12.2N	2 W	30 NW				2	128180 LD	PEAUGEE #THREE (3)	JENNESS WAYNE	128176	1367:786	3/18/1981	0000	10/07/1985
		SW	25				143163*LD	SUNDANCE #1	JOHNSON WAYNE L	1423:267	9/27/1981	1990		
		SE	25				143164*LD	SUNDANCE #2		1423:267	9/27/1981	1990		
		SW	25				187220 PL	FC #1	MARTIN D K	1491:913	10/14/1982	1983		8/08/1985
		SW	25				187221 PL	FC #2	MARTIN D K	187220	1491:911	10/14/1982	1983	8/08/1985
		N2	25				190409*PL	PERSISTANCE #1	CLARK FRANK	1533:351	12/10/1982	1990		
		SE	25				192080*LD	SUNDANCE #3	PASCOE JAMES					
		SW	25				193081*LD	SUNDANCE #4	GOSSE RICHARD					
		SW	25				192087*LD	SUNDANCE #10	JOHNSON WAYNE L					
		NE	25				193804*LD	PEAUGEE # ONE						
		NE	25				193805*PL	PEAUGEE # TWO	JENNESS WAYNE SR	193804	1523:470	3/17/1983	1990	
		ALL	25				227616*LD	GIVERA	JENNESS WAYNE SR					
		NE	25				249606*PL	BIG BEND	OLIVERA JOHN	227612	: 00	8/15/1984	1985	3/23/1987
		E2	25				250475*PL	BIG BEND	PRICE BILL JR	249606	1803:569	3/19/1986	0000	6/08/1988
		N2	25				250476*PL	VALENTINE	SZCZOTKA THOMAS	250475	1796:226	2/21/1986	0000	6/20/1988
		SE	25				283624*LD	CU #1	RESPONDER ED	250476	1793:851	2/12/1986	1989	6/19/1991
		S2	25				283625*LD	CU #2	SZCZOTKA THOMAS	283624	2037:0769	4/26/1988	0000	8/23/1990
		SE	25				283626*LD	CU #3	PORTER CL	283624	2037:0771	4/26/1988	0000	8/23/1990
		S2	25				283627*LD	CU #4	TRACEY WL	283624	2037:0775	4/26/1988	0000	8/23/1990
		SW	25				284145*PL	K1	KORIGICH MICHAEL	284145	2039:0727	5/03/1988	0000	7/23/1990
		SW	25				284146*PL	K2	SHADE TREE INVESTMENT	284145	2039:0727	5/03/1988	0000	7/23/1990
		SW	25				292690*PL	WILDCAT	MARINAKIS MARSHALL	292689	2118:0023	1/23/1989	0000	6/17/1991
		NW	25				299326*LD	NICOLE #4	MARINAKIS DIANA	299323	2181:0894	8/20/1989	1991	
		SW	25				308335*PL	ANNIE B	COOMBS JOE	308335	2294:0315	8/05/1990	1990	
		SW	25				313470*PL	ANNIE B #2	BROCK JOHN R					
		SW	25				313471*PL	ANNIE B #3	BROCK JOHN	313470	2347:0714	4/09/1991	0000	
		NE	25				313472*PL	ANNIE B #4	BROCK BEATRICE A	313470	2347:0716	4/09/1991	0000	
									BROCK JOHN	313470	2347:0718	4/09/1991	0000	

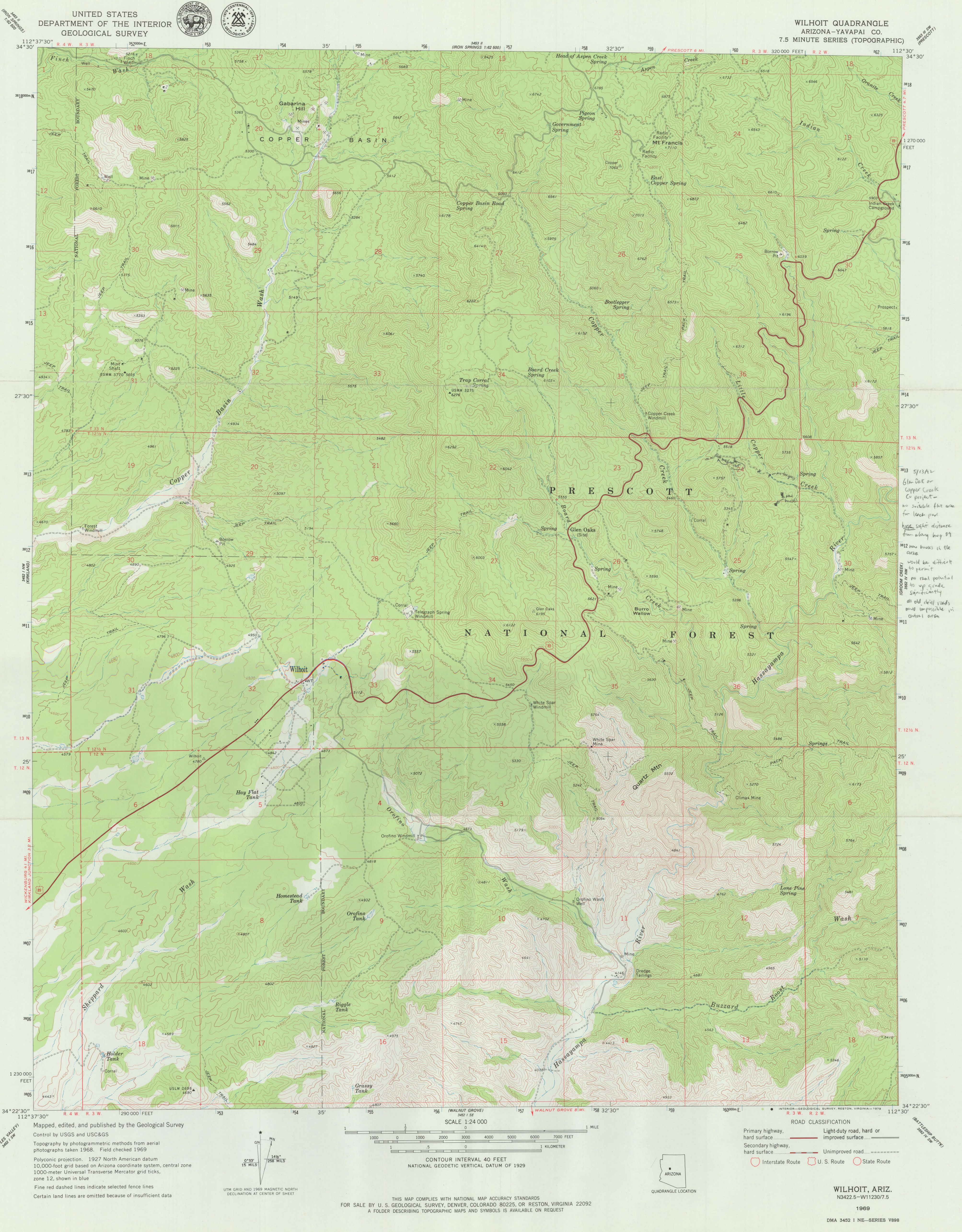
\* \* DISCLOSURE \* \* ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT. NAMES AND ADDRESSES ARE ENTERED AS THEY APPEAR ON THE LOCATION NOTICE OR ARE ABBREVIATED TO FIT LIMITED SPACE. THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. A BLANK LATEST ASSESSMENT YEAR IN THIS REPORT DOES NOT CONSTITUTE AN ABANDONED CLAIM. \* AFTER S/N INDICATES LAND STATUS CHECKED.



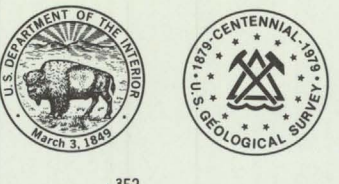






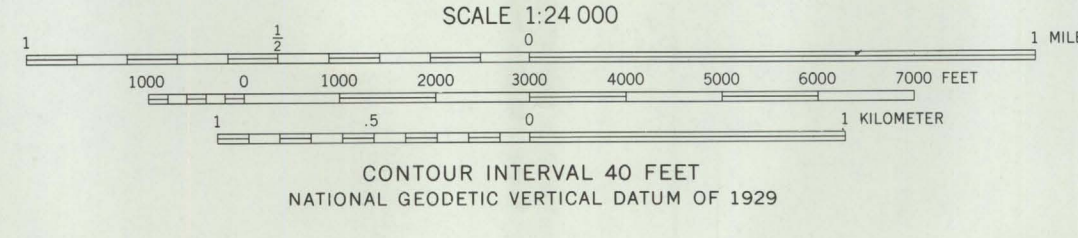
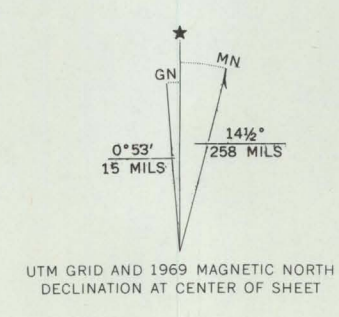


UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

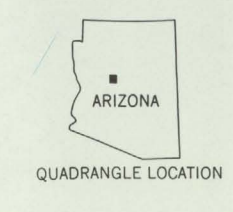


WILHOIT QUADRANGLE  
ARIZONA-YAVAPAI CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

Mapped, edited, and published by the Geological Survey  
Control by USGS and USC&GS  
Topography by photogrammetric methods from aerial  
photographs taken 1968. Field checked 1969  
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  
Fine red dashed lines indicate selected fence lines  
Certain land lines are omitted because of insufficient data



ROAD CLASSIFICATION  
Primary highway, hard surface  
Secondary highway, hard surface  
Unimproved road  
Interstate Route  
U. S. Route  
State Route



WILHOIT, ARIZ.  
N3422.5-W11230/7.5

1969  
DMA 3452 I NE-SERIES V898

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



## Copper Creek

### Deal

nan perging

1650/mo

15 pats + some unpat

Two outstand pats.

550/mo

PKK 55 unpat

20 mm ton 0.12 Cu equivalent  
Cu/Mc

minor by

Chalcocite : Conellite

Pupile

Chalcocite

Chalcocypite

Conellite

1:1 stock ration

20mm in two separated bodies

12 mm

big

8 mm

small

Went 60

1650/mo until Feb. 76

then

2200/mo

" 77

4125 / 1000 tons

Payant @ 3% NSR = 2-3 mm

Gillies

550/mo then July 76

Exercise option July 70 after = 65,000

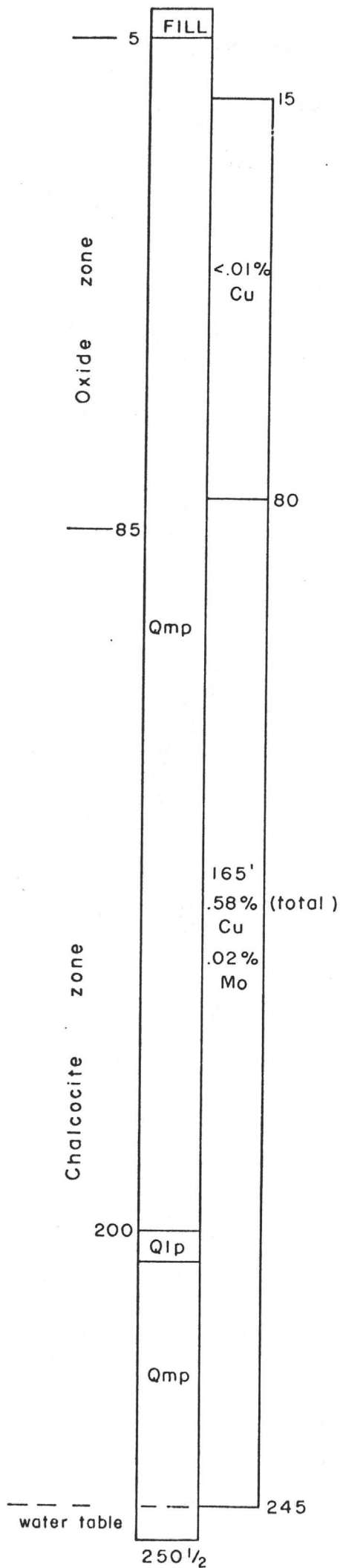
50,000 remain.

Carta Resumer

Give a one year option which guarantees payment of all obligations

If want to continue beyond 1 yr  
pay \$100,000 for two more years  
at end of third year pay \$500,000 more  
Everyone out.

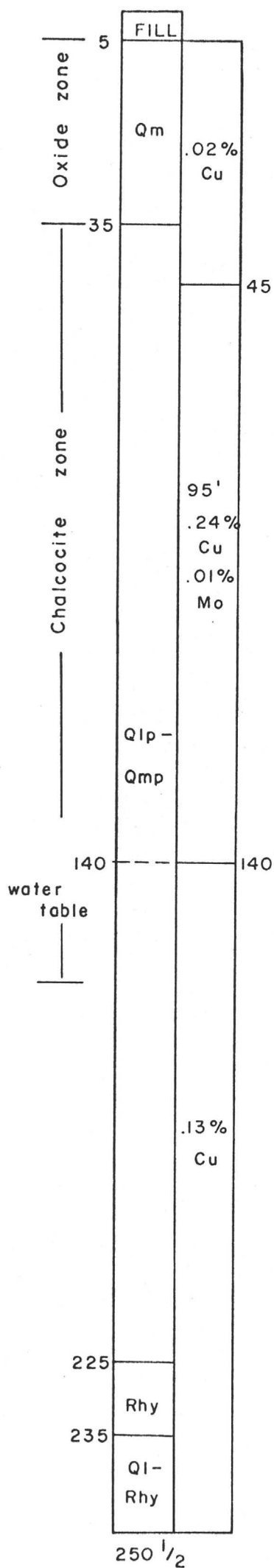
Buyout price from carta = \$600,000

Summary:

Essentially quartz monzonite porphyry; siliceous with numerous quartz veinlets; moderate to heavy chalcocite 90-200. Very minor chalcopyrite 145 to bottom. Good secondary biotite above 200.  $\text{MoS}_2$  stringers 160-200. Pyrite variable but generally +1%.

This is the best hole of the CC 74 series holes.



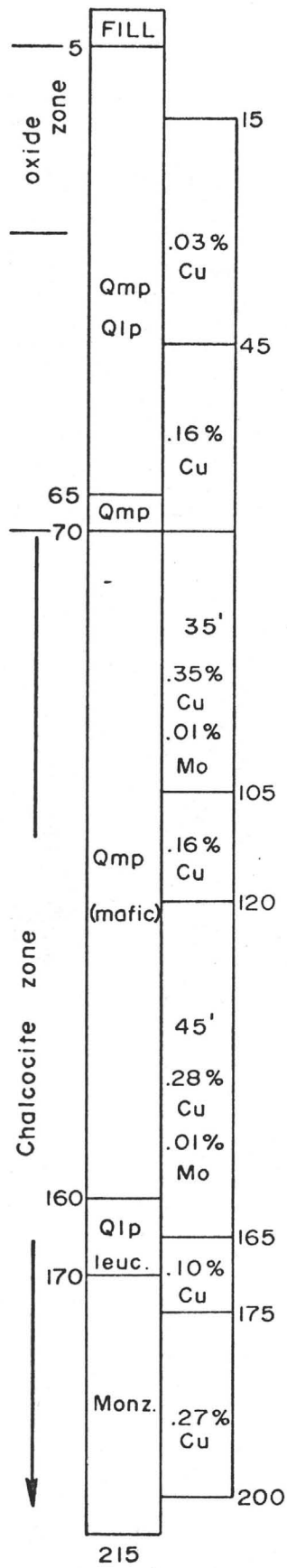


Summary:

Quartz monzonite  
 porphyry-quartz  
 latite porphyry;  
 heavily silicified;  
 some chloritization;  
 better than average  
 MoS<sub>2</sub> (especially  
 near 220-235 dike  
 contacts).

1-3% pyrite;  
 trace to some  
 chalcopyrite.

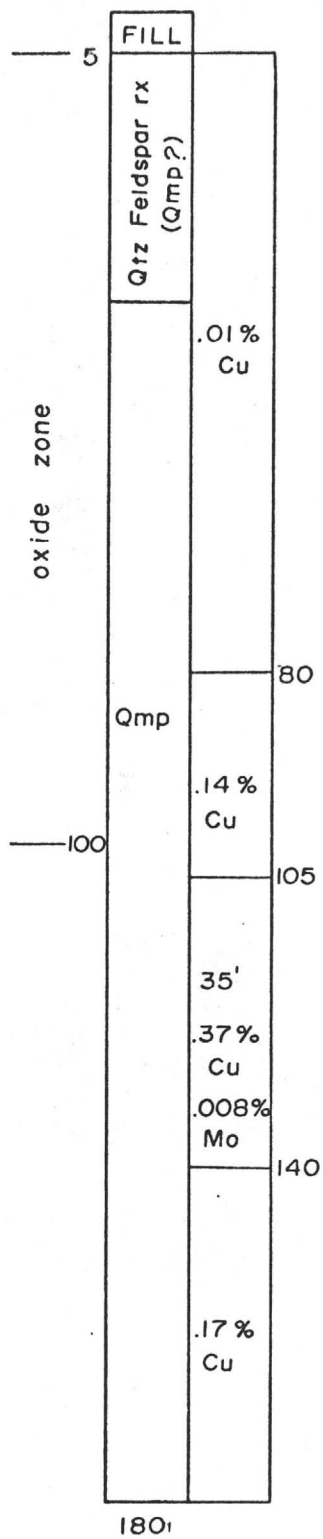




Summary:

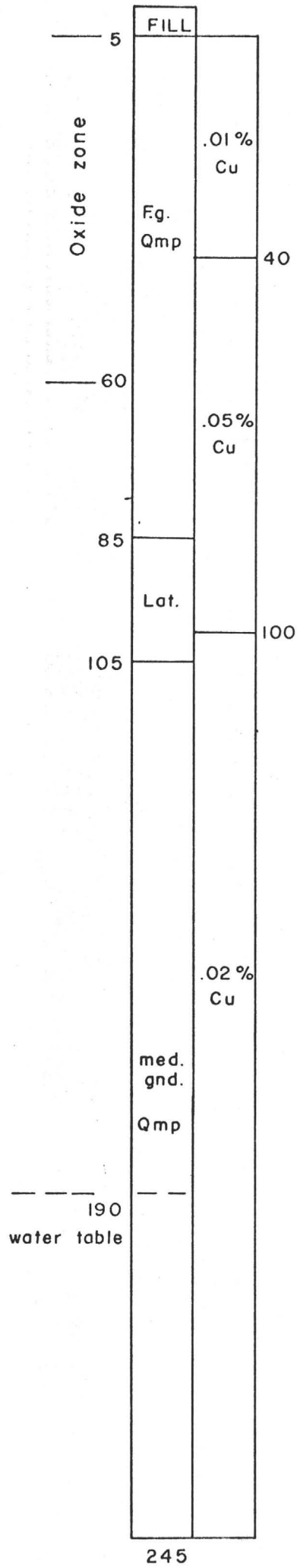
Mafic Quartz latite porphyry to quartz monzonite porphyry to 160. Monzonite (low in pyrite) 160 to bottom.

Trace to minor chalcocite 35-215. 1-2% pyrite, trace chalcopyrite.

Summary:

Entire hole is probably quartz monzonite porphyry. Good silicification. K-feldspar flooding 160-170.

2-3% pyrite, diminishing below 115'.  
 MoS<sub>2</sub> in quartz veinlets 150-155'.

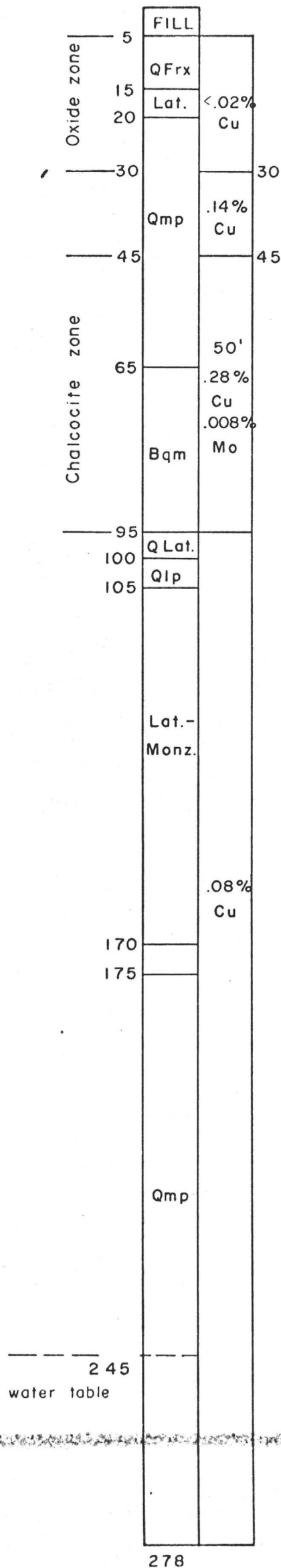


Summary:

Hole located outside well-mineralized area. Some propylitization.

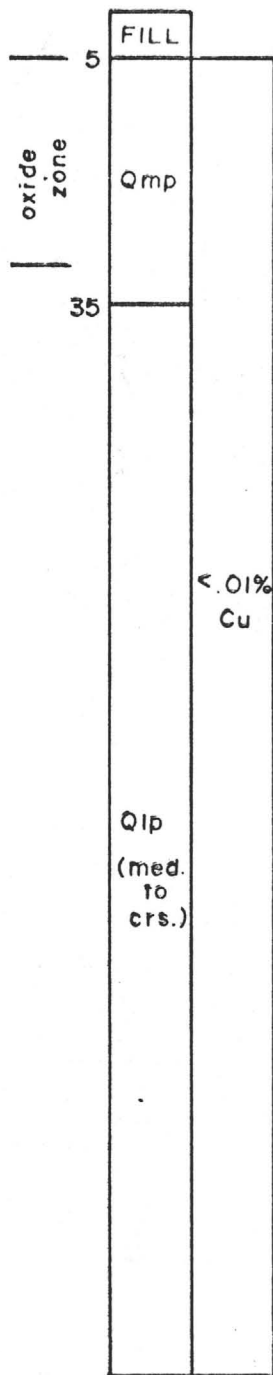
1/2-2% pyrite, bare trace chalcocite 25'-130'; trace chalco-pyrite 45'-60', more below 190'. Scattered traces MoS<sub>2</sub>.

A duster!

Summary:

Quartz monzonite  
porphyry cut by  
latite-rhyolite  
dikes and masses.  
Secondary biotite  
as flakes and vein-  
lets.  
Minor silicification.

1-3% pyrite; at  
least a trace amount  
of chalcocite to  
the bottom of the  
hole. Trace-  
minor  $\text{MoS}_2$ .  
Trace chalcopyrite



Summary:

Quartz monzonite  
porphyry-quartz latite  
porphyry.

Only trace amounts  
of pyrite encountered.  
Water table not en-  
countered.

A duster!

CC-74-8

TD-160'

Oxide zone	32 1/2	Monz. (fg)	<.02% Cu
Chalcocite zone	40	Monz (fg)	
	45	Fol QL	
		Q Lat.	
	55	Mxd Monz- QL	
	65	Qlp	
	70		
			125' .33 % Cu .02 % Mo
		Mxd Qlp- Bqm	
	150	Bqm	no assay
			160

Summary:

Mixed rock types;  
well-broken (faulted)  
Propylitized - with  
possible secondary  
biotite

+3% pyrite (heavy  
for area)

Heavier than nor-  
mal chalcopyrite

20   40 water table 42 1/2   65	Soil — gravel	<.05% Cu
	Ql	15' .36% Cu
	Qm (grano text.)	.008% Mo
	no smpl	
	Qmp w/ mafic dikes	No assays

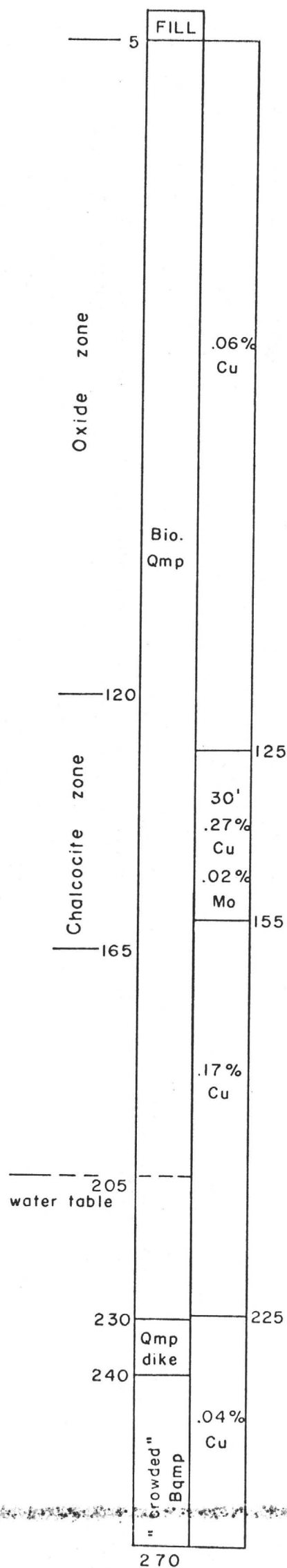
Summary:

Mixed rocks; well frac-

tured.

Some propylitization

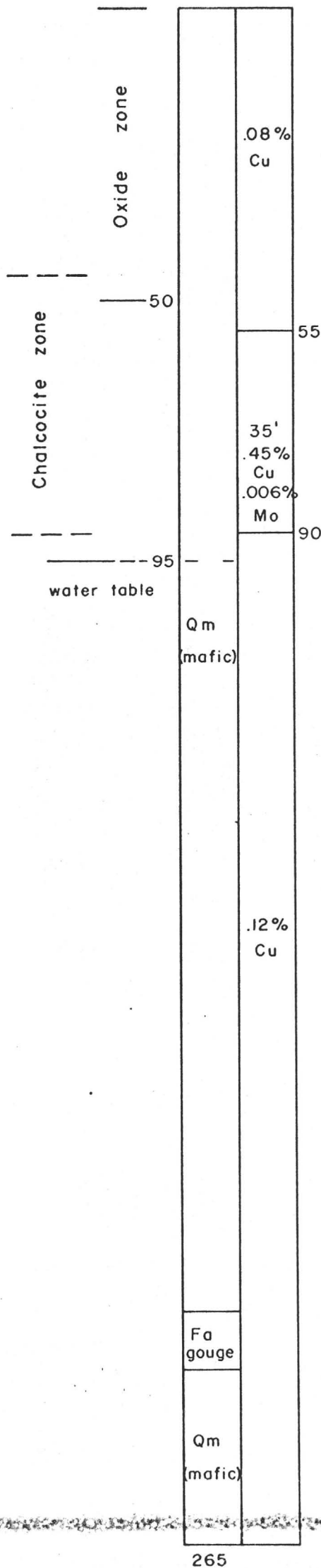
2-5% pyrite (heavy);  
locally good chalcocite,  
some chalcopyrite and  $\text{MoS}_2$

Summary:

Biotite quartz monzonite porphyry with post-mineral quartz monzonite porphyry dike 230-240, and less well-mineralized "crowded" quartz monzonite porphyry below 240. Minor silicification.

Less than 1-2% pyrite; trace to minor amounts of chalcopyrite below 135; trace amounts of  $\text{MoS}_2$  below 130.

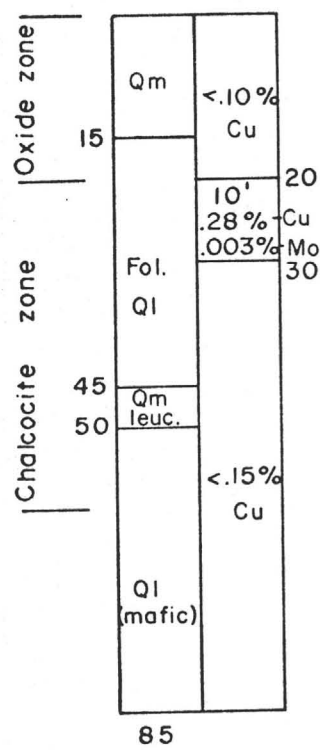




Summary:

Mafic quartz monzonite top to bottom. Heavily propylitized; heavy quartz veinlet development 45'-80'. Heavy faulting 225-235.

1-3% pyrite, trace to minor amounts chalcopyrite. Heavy sample dilution below 205.



Summary:

Well-chloritized quartz latite cut by quartz monzonite dikes. Some quartz veinlet development.

2-3% pyrite; trace chalcopyrite and MoS<sub>2</sub>.