

CONTACT INFORMATION  
Mining Records Curator  
Arizona Geological Survey  
416 W. Congress St., Suite 100  
Tucson, Arizona 85701  
520-770-3500  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

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James Doyle Sell Mining Collection

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J.H.C.

JAN 5 1967

Air Mail

January 4, 1967

Mr. S.I. Bowditch  
American Smelting & Refining Company  
Box 5795  
Tucson, Arizona

P.P. 9182

Dear Sir:

This refers to your letter of December 30.

Mr. Grose's Department does not have a record of this and I cannot easily find a map that shows the exact location of the Prospecting Permit. Would you please, therefore, send me a map or description which will permit us to put this information in the proper category.

Yours very truly,

Kenyon Richard

CC:HLGoodenough  
HWGrose  
RRichter  
JHCourtright

Blind note on Bowditch and Courtright's copies:

You are, of course, aware that some things get buried in these offices and we do not have time to dig them out.

KER

*Shirley Peak*

J. H. C.

DEC 30 1966

December 30, 1966

State Land Department  
State Office Building  
Phoenix 7, Arizona

P. P. 9182

Gentlemen:

On May 27, 1966, you issued Prospecting Permit 9182 in our favor, covering the SE 1/4 Section 36, Township 14 North, Range 12 West.

We have completed our work in the area with negative results and wish to cancel this permit. For your information, we did not work on the ground covered by the permit.

Please advise us when this permit has been canceled, so that we may cancel our bond.

Yours very truly,

AMERICAN SMELTING AND REFINING COMPANY

By S. I. Bowditch

SIB:bam  
cc: HIGoodenough  
RRichter  
KERichard  
JHCourtright  
KvdSteinen

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

September 29, 1966

J. H. C.

OCT 3 1966

TO: J. H. COURTRIGHT

FROM: J. R. WOJCIK

GREENWOOD PEAK  
SUMMARY, 9/29/66

Drilling on the Greenwood Peak prospect began June 17, 1966 and ended August 13, 1966. No samples of sulfide mineralization were recovered. Hole GP-3 was stopped at 1100' in leached capping so that another penetration of bedrock could be attempted further to the northeast. That attempt was abandoned at 800' in conglomerate. Out of 40 core samples, only two returned assays better than .01% Cu and these were .02 and .03 respectively.

Insufficient evidence of copper mineralization, apparent deep leaching in the mineralized zone, and rapidly increasing thickness of conglomerate cover make further exploration in this area unattractive.

An analysis of the costs of this program is tabulated below:

Diamond core drilling (incl. cost of mud & $\frac{1}{2}$ mobilization)	\$ 3,789.96
Rotary drilling (incl. cost of mud and $\frac{1}{2}$ mobilization)	15,658.50
Rotary coring	1,091.00
Overhead (incl. approx \$3000 surveying claim corners and gravity surveying)	<u>10,322.22</u>
	\$30,861.68

On a unit footage basis:

Diamond core drilling:

Unit footage charge	\$8.605/ft.
Mud and chemicals	.38 /ft
Water	.315/ft
Total direct cost	<u>\$9.30 /ft.</u>

Rotary drilling:

Unit footage charge	\$4.925/ft
Mud and chemicals	.16 /ft
Water	.315/ft
Total direct cost	<u>\$5.50 /ft</u>

Total cost including all expenses \$8.93/ft.

JRW/kw

J. R. WOJCIK

Attachments: Drilling Map  
Geologic Assay Logs

*JRWojcik*



Final Depth  
Collar Elevation  
Coordinates  
Inclination

ASARCO  
GEOLOGIC - ASSAY LOG  
Property Greenwood Peak

HOLE NO. GP-1  
Sheet No. 1 of 3  
Date Completed 7/1/66  
Logged By JRW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other				
9.3	9.3	NC	2.58	5%	—	—	—						Wk	Sil.	Gr. Talus	
20.0	9.7	NC	2.57	17%	0.01								Wk	Kaol.	Gr.	Wk kaol along frac. Trace lm after py minor specularite.
24.3	4.3	NX	2.58	100%	0.01								Wk	Kaol.	Gr.	Sec. bio along shears. Shld & ggy red flt 23'-23.5'
33.0	8.7	"	2.54	9%	>0.01								Wk.	—	Gr.	Sagregations of biotite, spec. & limon. gte vults.
35.5	2.5	"	2.13	76%									Wk.		Gr.	Shld. & ggy. kaol & sec. ksp on shears; lim flooding
44.0	8.5	"	2.56	30.7%	0.01								Wk.		Gr	Shld with ksp on shears, spec. in vults, bio in bunches
46.5	2.5	"	2.50	91%									Wk.	Kaol.	Gr.	Yellow earthy lm or d. spec. in frac. No sul. brkks.
51.3	4.8	"	NA	90%	>0.01								Wk.	Kaol.	Gr.	DO
56.9	5.6	"	NA	66%									Wk.	Kaol.	Gr.	DO
7.9	1.0	"	NA	66%									Wk.	Kaol.	Gr.	DO
1.3	3.4	"	NA	66%									Wk.	Kaol.	Gr.	
53.5	2.2	"	2.07	79%	>0.01								Wk.	Kaol.	Gr.	Tr. Sul. box works
8.5	5.0	"	2.50	100%									Wk.	Kaol.	Gr.	Tr. py, cpy brkks on vult. @ 61.5'
3.7	5.2	"	2.48	65%	0.01								Wk.	Kaol.	Gr.	Tr. sul. brkks. Shld. Sec ksp on frac. Sec bio on frac. Flt. 68'
18.8	5.1	"	2.23	100									Wk.	Kaol.	Gr.	Shld on high & flt. with red orange gg
2.8	4.0	"	2.38	67%	>0.01								—	—	GG.	Crushed gte. with deep red gg.
38.8	6.0	"	2.30	100%									—	—	Gr.	Shld but healed. Yellow lm on frac. Orange red lm (earth) in vult.
13.8	5.0	"	2.31	100%	>0.01								Wk.	Kaol.	Gr.	Shld on high & flt. red gg 87-88'
99.2	5.4		2.36	47%									—	—	GG.	Crushed gte. with dark red gg.
04.2	5.0		NA	100%	>0.01								Wk.	Kaol.	GG.	Crushed gte, occas. hem flooding, faint gr. color in clay.
09.3	5.1		2.34	100%									Wk.	Kaol.	GG.	DO with less hem and tr. sericite
14.2	4.9		NA	100%	>0.01								Wk.	Kaol.	GG.	DO
19.2	5.0		NA	100%									Wk.	Kaol.	GG.	Alt. red & white gg with crushed gte & tr.
24.1	4.9		2.31	100%	>0.01								Wk.	Kaol.	GG.	Red gg. with slightly rounded gte fragments gte 20'
29.0	4.9		2.24	100%									Wk.	Kaol.	GG.	DO 2 schist frags @ 126.5'
34.0	5.0		2.22	100%	>0.01								Wk.	Kaol.	GG.	DO
39.0	5.0		2.48	100%									Wk.	Kaol.	GG.	DO with 2-1' gr boulders @ 136', 138'
43.7	4.7		2.53	67%	0.01								Wk.	Kaol.	Gr.	Shld & healed with sec ksp. Kaol on frac. lm & spec.
48.7	5.0		2.53	41%									Wk.	Kaol.	Gr.	DO
53.7	5.0		2.55	100%	0.01								Wk.	Kaol.	Gr.	DO
58.7	5.0		2.44	78%	0.01								Mod	Ser.	Gr.	Shld with sec. ksp. - llm @ 154.5' (minor)
63.7	5.0		2.62	15%									Mod	Ser.	Gr.	Shattered white gte with disc. spec. & 55% vugs with lm.
66.2	2.5		2.60	12%									"		"	DO
69.5	5.8		2.62	17%	>0.01								"		"	DO
74.7	5.2		2.62	10%									"		"	DO
75.2	.5		2.60	90%									"		"	DO Type of sul. 170'
76.7	3.5		2.62	41%	0.01								Wk		"	
86.0	7.3				0.01								Wk		Tr. tr. MoSv	
91.0	5.0												Mod	Ser.	Gr.	Llm in vugs 170' gte 16.2% fracture. Llm cont. py
92.0	5.0												Mod	Ser.	Gr.	Qte to 189' Crushed gr with lm & hem flooding below
													Mod	Ser.	Gr.	Wk. llm on vults & fissures
													Mod	Ser.	Gr.	Massive llm ca 191'-196'

Final Depth  
Collar Elevation  
Coordinates  
Inclination

ASARCO  
GEOLOGIC - ASSAY LOG  
Property Greenwood Peak

HOLE NO. GP-1  
Sheet No. 2 of 3  
Date Completed  
Logged By JRW & DPC

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other				
201.7	5.7	NX	2.38	96%				Fe	-	-	-	-	ARG		GR	SHEARED & GGY WK LL.
206.0	4.3	"	2.35	86%	0.02			"	-	-	-	-	"		"	AS BEFORE
210.6	4.6	"	2.54	97%				"	-	-	-	-	"	WK SER	"	AS BEFORE W/ LOCAL BK FEATURES
214.6	4.0	"	2.43	50%	0.03			"	-	-	-	-	"	"	"	END OF RUN GGY - NOTE LOST RUN BELOW
220.6	6.0	"	-	0				-	-	-	-	-	-	-	-	-
224.6	4.0	"	2.54	46.5%				Fe	-	-	-	-	ARG	WK SER	GR	GGY - LOCAL WK LL
226.9	2.3	"	2.35	73%				"	-	-	-	-	"	"	"	AS BEFORE
231.0	4.1	"	2.48	57.5%	70.01			"	-	-	-	-	"	"	"	AS BEFORE W/ SHEAR AT - 75° I
232.9	1.9	"	2.38	54.5%				"	-	-	-	-	"	"	GG	GG - W/ FRAGS
237.5	4.6	"	2.49	100%				"	-	-	-	-	"	"	GR	ST. GG W/ FB STAIN - LOCAL ST. LL
243.1	5.6	"	2.29	98%	70.01			"	-	-	-	-	"	"	GG	AS BEFORE
248.3	5.2	"	2.58	100%				"	-	-	-	-	"	"	"	AS BEFORE
253.3	5.0	"	-	0				-	-	-	-	-	-	-	-	-
256.3	3.0	"	2.62		70.01			Fe	-	-	-	-	ARG	WK SER	GG	V. ST. Fe
261.0	4.7	"	2.33					"	-	-	-	-	"	"	GG	GGY IN PLACES ORIGINAL TEXTURE VISIBLE
266.0	5.0	"	2.41		70.01			"	-	-	-	-	"	"	"	AS BEFORE
270.5			2.20					"	-	-	-	-	"	"	"	AS BEFORE
275.4			2.31		70.01			"	-	-	-	-	"	"	GR/GG	AS BEFORE
280.4			2.20					"	-	-	-	-	"	"	GR	BIO LESS ALTD FIELDS ST. ALTD
285.0			2.17		70.01			"	-	-	-	-	"	"	GR	WK GG - RK V. SOFT
290.0			2.52					Fe Mn	-	-	-	-	"	"	GG	ST. Mn Ox
295.0			-		70.01			"	-	-	-	-	"	"	GG	BROKEN SHATTERED - FEW RELICT TEXT.
300.0			2.15					Fe	-	-	-	-	"	"	"	AS BEFORE
305.0			2.20		70.01			"	-	-	-	-	"	"	"	AS BEFORE
310.0			2.22					"	-	-	-	-	"	"	GR	RK HARDER GR TEXTURE VISIBLE
311.6																
316.2					70.01			"	-	-	-	-	WK ARG	WK SER	"	AS BEFORE
318.2								"	Tr	-	-	-	"	"	"	AS BEFORE
321.5								"	-	-	-	-	"	"	"	AS BEFORE
324.7								"	-	-	-	-	"	"	"	V. HARD WK SILIF.
328.9					0.01			"	-	-	-	-	"	"	"	FR. BIOTITE
332.9								"	-	-	-	-	"	"	"	AS BEFORE
336.5								"	-	-	-	-	"	"	"	"
341.0								"	-	-	-	-	"	"	"	MINOR GG
345.7								"	-	-	-	-	"	"	"	AS BEFORE
350.7					70.01			"	-	-	-	-	"	"	"	MINOR LL
353.9								"	-	-	-	-	MOD SILIF	-	GR	BROKEN CORE - IN PLACES GGY
357.7								"	-	-	-	-	"	-	"	AS BEFORE
362.1					0.01			"	-	-	-	-	"	-	"	AS BEFORE

Property GREENWOOD PEAK

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other				
67.0								FE	-	-	-	-	MOD SILIF		GR	TR. LIM AFTER CPY - FRESH BIOTITE
69.8								"	-	-	-	-	"		"	AS BEFORE
74.8					<0.01			"	-	-	-	-	"		"	AS BEFORE
79.9								"	-	-	-	-	"		"	MOD. SOLID CORE W/ WK GG ZONES
84.9					0.01			"	-	-	-	-	"		"	AS BEFORE
89.9								"	-	-	-	-	"		"	AS BEFORE
89.8					<0.01			"	-	-	-	-	"		"	AS BEFORE
89.9								"	-	-	-	-	"		"	UNALTD B.D. - RX CRUSHED
93.8								"	-	-	-	-	"		"	AS BEFORE
97.9					<0.01			"	-	-	-	-	"		"	AS BEFORE

HOLE NO. GP-2  
Sheet No. 1 of 1  
Date Completed 7/22/66  
Logged By JRW

[illegible]

HOLE NO. GP-3  
Sheet No. 1 of 1  
Date Completed 8/6/66  
Logged By JRW

[illegible]

ASARCO  
GEOLOGIC - ASSAY LOG  
Property GREENWOOD PEAK

HOLE NO. GP-4  
Sheet No. 1 of 1  
Date Completed 8/13/66  
Logged By JRW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other				
800'	800'															Cgl. 0'-800' finegrained pebble to boulder cgl. No change indicating approaching bedrock



R12W R11W

1/2 mile to Burro Creek

Pre mineral Post mineral

STATE PROSPECTING PERMIT (ASARCO)

3536  
211

31  
6

T14 N  
T13 N

- GP2 Holes in mineralized rock.
- GP2 Holes stopped in conglomerate.
- P Holes in unmineralized rock.

Weak to Moderate Alteration

Inferred Limits of Alteration Zone  
Beneath cover

Claims extend  
1 mile to east

GW (Greenwood) Claim Group - ASARCO

PROGRESS DRILLING MAP  
GREENWOOD PEAK PROSPECT  
Mohave County, Arizona

SCALE 1"=800'

July, 1966

1882

5 miles to Hwy 93

To Signal



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

September 7, 1966

Mr. C. P. Pollock, Vice President  
American Smelting and Refining Company  
120 Broadway  
New York, N. Y. 10005

Dear Sir:

You will recall our telephone conversation regarding a probable overrun in the Greenwood Peak authorization.

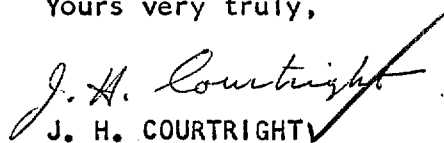
At the time of our discussion, we were preparing to stop hole No. 3 which was nearing a depth of 1100' in leached capping composed of weakly mineralized granite. Core samples showed lower Au, Cu and Mo values than outcrop samples.

Since No. 3 had reached bedrock at 300', it appeared that we could make another test of the zone with a 500 or 600 foot hole in the same area, which would have involved an overrun of around \$3,000.

Hole No. 4, located farther along the northeast trend of the zone, did not find shallow bedrock and was stopped at 800' in gravels.

All bills against the project are now in, and it is evident that the estimated balance remaining of the original \$25,000 authorization was in error at the time No. 4 was started, as the overrun now amounts to \$6,005.

Yours very truly,

  
J. H. COURTRIGHT

JHC/kw

cc: KvdSteinen  
WESaegart  
JRWojcik



**HAWLEY & HAWLEY**

ASSAYERS AND CHEMISTS, INC.

1700 W. GRANT RD. • BOX 5934 • 622-4836

TUCSON, ARIZONA 85703

BRANCHES

DOUGLAS, ARIZONA  
HAYDEN, ARIZONA  
EL PASO, TEXAS  
AMARILLO, TEXAS

IDENTIFICATION	GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	MO. %	IRON %		
100-1000000	1.000	1.000							
100-1000000	1.000	1.000							

CC: American Smelting &amp; Refining Company

ADD: Attention: Mr. Rogers

CITY: Box 5795

DD: Tucson, Arizona

CITY:

## REMARKS:

Minimum geochem charge \$25.00

Compositing

Au &amp; Ag Special

ANALYSIS CERT. BY

PREPARATION \$

1.80

ANALYSIS \$

22.00

ACC: AMERICAN SMELTING &amp; REFINING COMPANY

DATE SPL  
RECEIVED 8/2/66

DATE COMPL 8/3/66

TUC 332015

\$ 23.80

**ASSAYERS AND CHEMISTS, INC.**

**TUCSON, ARIZONA 85703**

## BRANCHES

DOUGLAS, ARIZONA  
HAYDEN, ARIZONA  
EL PASO, TEXAS  
AMARILLO, TEXAS

IDENTIFICATION		GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	MO. %	IRON %		
<p>AMERICAN SMELTING &amp; REFINING COMPANY</p> <p>Attention: Mr. Jorgert</p> <p>Box 5705</p> <p>Tucson, Arizona</p>									6	
<p>CC: American Smelting &amp; Refining Company</p> <p>ADD: Attention: Mr. Jorgert</p> <p>CITY: Box 5705</p> <p>DD: Tucson, Arizona</p> <p>CITY:</p>		<p>REMARKS:</p> <p>In charge for July - included in time charge of our #332015</p> <p>Special</p>			<p>ANALYSIS CERT. BY</p> <p>Plus 1.50</p> <p>Core splitting &amp; PREPARATION \$ 1.50</p> <p>ANALYSIS \$ 3.25</p>					
<p>ACC: AMERICAN SMELTING &amp; REFINING COMPANY</p>		<p>DATE SPL. RECEIVED 8/2/66</p>		<p>DATE COMPL 8/8/66</p>		<p>TUC 332016</p>		<p>\$ 6.25</p>		

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

August 8, 1966

J. H. C.

AUG 8 1966

TO: J. H. COURTRIGHT

FROM: J. R. WOJCIK

GREENWOOD PEAK  
DRILLING, JULY 1966

During the month of July hole GP-1 advanced from 341' to 407' where it was stopped in kaolinized granite with little evidence of sulfides. Twenty feet of NX casing were left in the hole to allow re-entry at a later date if required.

Hole GP-2 advanced from 735' to 1058' where it was stopped in sheared, recrystallized granite with essentially no alteration or evidence of sulfides. Top of bedrock is at a depth of approximately 1000'.

Hole GP-3 entered leached capping at about 300' and is still drilling in capping at 795' at month's end. A core from 485' to 490' showed strong silicification with some sericite and minor (2%) amounts of limonite after sulfides occurring as blebs or tiny veinlets. A core at 885' to 890' showed slightly better evidence of sulfides (3%-4%).

Cost of drilling these holes is tabulated below.

.....

GP-1

341'-407' = 66' @ \$7.40/ft	\$488.40	
1 sack mud gel @ \$2.25/sack	2.25	
20' NX csg. @ \$2.50/ft (est.)	50.00	
	<u>\$540.65</u>	\$ 540.65

GP-2

735'-1000' = 265' less 9' core =		
256' @ \$4.60/ft	\$1177.60	
1000'-1055' = 55' less 9' core =		
46' @ \$5.60/ft	257.60	
Coring: 36 hrs @ \$17.50/hr.	600.30	
26 ft @ \$6.00/ft	156.00	
23 sacks mud gel @ \$2.25/sack	51.75	
1 sack CC-16 @ \$16.00/sack	16.00	
	<u>\$2259.25</u>	2259.25

Mr. Courtright

-2-

August 8, 1966

GP-3

0'-795' = 795' less 5' core =		
790' @ \$4.60	\$3634.00	
Coring: 6 hrs @ \$17.50/hr	105.00	
5 ft @ \$6.00/ft	30.00	
21 sacks mud gel @ \$2.25/sack	47.25	
1 sack Cellex @ \$54.00/sack (est.)	54.00	
	<u>\$3870.25</u>	\$3870.25
 Water Truck: 1 mo. @ \$190.00/mo.	190.00	
535 mi. @ 15¢/mi.	80.15	
Driver: 172 hrs @ \$2.10/hr.	361.20	
+15%	54.18	
	<u>\$ 685.53</u>	\$ 685.53
 Total Direct Drilling Cost		<u><u>\$7355.68</u></u>

  
J. R. WOJCIK

JRW/kw

This memo not  
typed as authorization  
memo to J.H.C. Request  
was not  
submitted

August 5, 1966 File  
J.H.C.  
OCT 25 1966 Authorization Request  
Greenwood Peak Project  
Mohave County, ARIZ

The attached map shows the current status of drilling on the Greenwood Peak Project.

Diamond drill hole GP-1, collared in altered granite, was bottomed at 407' without reaching sulfides. The upper part of the hole was in moderately to strongly altered leached capping containing up to 0.03% (300 ppm) Cu. The hole passed through a high angle (post mineral?) fault zone between 130' and 300'. Below the fault zone the granite was very weakly mineralized. The hole was stopped short of the base of oxidation since a test of sulfides below the fault zone would not have been <sup>representative</sup> indicative of the capping exposed at the surface.

Rotary hole GP-2 was collared in post mineral conglomerate 1000 ft east of GP-1. Fresh granite bedrock was intersected at ~~the~~ a depth of 1000 ft.

Rotary hole GP-3, located 1100 ft north of GP-2, was also collared in post mineral conglomerate. This hole entered mineralized granite bedrock at 325 ft. As of August 1, it was still drilling in leached capping at 775 ft. The ~~nature~~ type and intensity of mineralization in this hole is similar to that exposed in outcrops west of GP-1. The original sulfide content in a core run from 485 to 490 (GP-3) is estimated at 1%. The hole will be continued at least to the top of sulfides.

The difference in bedrock elevation between holes GP-2 and GP-3 indicates extreme topographic relief. There is probably a ~~normal~~ fault between the two holes, down dropping bedrock to the south. A limited amount of gravity work is planned to define the ~~location~~ position of fault blocks and their boundaries.

The results of our third hole demonstrate a northeast continuation of ~~the altered zone~~ <sup>mineralization</sup> under cover. ~~At least two additional holes are needed to test the zone farther northeast.~~ <sup>This hole.</sup> ~~GP-3~~ may be on the south fringe of mineralization and therefore not representative of the interior portion of the zone. An ~~valid~~ evaluation of ~~this prospect is not possible~~ <sup>potential</sup> of the covered portion of the ~~mineralization~~ <sup>zone</sup> is not possible with a single drill intersection. At least two additional holes are needed to test ~~the~~ for economic mineralization farther northeast.

The balance of the existing authorization as of August 1 was \$6500. Most of this amount, which will be exhausted by August 20, may be required to complete hole GP-3. The proposed additional drilling will aggregate between 2000 to 2500 ft. Total costs to date have averaged \$8.00 per foot. I recommend an authorization request in the amount of \$20,000 to cover the cost of this drilling.

Attach: 1"=800' drilling map  
cc: JHC-ZX

W. E. Saegert



1/2 mile to Burro Creek

Pre mineral Post mineral

STATE PROSPECTING PERMIT (ASARCO)

35 36  
2 11

31  
6

T 14 N  
T 13 N

- GP2 Holes Completed
- GP2 Holes in Progress
- P Holes - Proposed

Weak to Moderate Alteration

Inferred Limits of Alteration Zone Beneath cover

Claims extend 1 mile to east

GW (Greenwood) Claim Group - ASARCO

To Signal

5 miles to Hwy 93

PROGRESS DRILLING MAP  
GREENWOOD PEAK PROSPECT  
Mohave County, Arizona

SCALE 1"=800'



1/2 mile to Burro Creek

Pre mineral Post mineral

STATE PROSPECTING PERMIT (ASARCO)

35 36  
21 1

31  
16

T 14 N  
T 13 N

- GP2 Holes Completed
- GP2 Holes in Progress
- P Holes - Proposed

Weak to Moderate Alteration

Inferred Limits of Alteration Zone  
Beneath cover

Claims extend  
1 mile to east

GW (Greenwood) Claim Group - ASARCO

PROGRESS DRILLING MAP  
GREENWOOD PEAK PROSPECT  
Mohave County, Arizona

SCALE 1"=800'



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 21, 1966

J. H. C. JUL 22 1966

AUG 1 1966

Mr. David P. Cadwell  
c/o Rancho Grande Motel  
Wickenburg, Arizona

Dear Dave:

Enclosed are original and duplicate copies of location notices for the DC 1-144 and DC 169-179 claims. These are to replace the notices for the GW claims with the same numbers.

These notices should all be signed by you, both original and duplicate where it says "agent", and dated the day they are posted in the field. The original is to be posted and the duplicate brought back here and kept for later recording. The original GW notices should be destroyed at the time they are replaced by the DC notices.

On one of the two maps of the claims Bill Saegart sent you are some dates with outlines or brackets. These are the dates those particular groups of claims were located, and they will not be open for relocation until 90 days from those dates. For example, the groups 1-72, located April 27, will not be open for relocation until July 26.

A couple of notes which I hope will prove helpful. As you probably know, the claims are north and south of a surveyed common end line, which you can recognize on the map by the dots for end centers. Where the north line crosses the middle of Section 31 you will find some rough cliffs. The locations for two claims, I think they were 9 and 10, fall on the wooded talus at the base of a west-facing cliff. I never did find Bill Hoskins stake for the common end centers, but I think I came pretty close. The posts are in fairly heavy brush, so you may have to look a bit.

We left behind the 2 x 2 posts for locations 127 and 128 (it may have been 129 and 130, I can't remember for sure) so if you have a couple of extra 2 x 2 posts you should replace the palo verde sticks we used. In fact, it would be a good idea to everywhere carry along a few extra 2 x 2's and plastic bottles in case the originals have been lost or destroyed.

Mr. Cadwell

-2-

July 21, 1966

The map shows the east end of the northern most and southern most lines (claims 35 and 36 and 143 and 144) as 500 feet east of the section line, but actually they are practically on the line, and in the case of claims 35-36 the end center is almost at the 1/4 corner between sections 32 and 33, and for claims 143 and 144, very near the common corner of sections 4, 5, 8 and 9. Considering the rough country and poor assistance, Bill Hoskins did pretty well, but I think he misread his rod a few times.

Good luck!

Sincerely,



S. I. Bowditch

SIB:bam

cc: JHCourtright ✓  
WESaegart

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

W.E.S.

JUL 20 1966

July 20, 1966

J.H.C.

AUG 1 1966

Green wood post

Mr. David P. Cadwell  
c/o Rancho Grande Motel  
Wickenburg, Arizona

Dear Dave:

As you probably already know, 4 X 4 corner and end center posts are required on the GW claims by the last week of July for validation. These claims were located April 27 through April 29 of this year.

We could hardly justify cornering all of the claims based on the drilling results (or lack of results) to date.

The discovery requirements in Section 1 have already been fulfilled with drill holes GW-1 and GW-2. To take advantage of the discovery work already performed, we should erect corners on the 20 claims located in Section 1. As shown on the attached map, these include the following claims:

146	157	158
148	159	160
150	161	162
152	163	164
154	165	166
156	167	168
	181	182

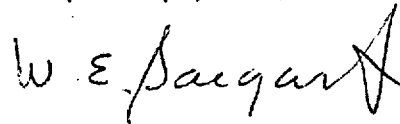
I would like you to supervise the surveying and placement of the corner and end center posts for the above claims. At the same time the existing 2 X 2 discovery posts should be replaced with 4 X 4's. You will be assisted by two helpers from Manpower, Inc., David Phillips and Roger Larsen, who should arrive in Wickenburg the afternoon of July 21. These helpers will bring an extra vehicle, a rented T-1 transit, stadia board, and plastic flagging. A single post can be used for the common corner of each of 4 claims or for the common end center of 2 claims. Seventy-eight posts should be sufficient for the 20 claims and I suggest you purchase these in Wickenburg.

The discovery monuments for the even numbered claims 146 through 156 were located adjacent to a surveyed line along the common boundary between Sections 1 and 36. The remainder of the 20 claims were located along an east-west survey line which lies 2900 feet south of the boundary between Sections 1 and 36. All claim dimensions for the GW group are 590 feet by 1450 feet. If possible, these posts should be in place by July 28.

July 20, 1966

Mr. Bowditch and I decided that the balance of the GW claims should be re-papered on or about August 1. The numbers will remain the same for the new claims but the group name will be changed from GW to DC. The new claim notices are being prepared and will be mailed to you as soon as they are completed. You probably should retain the two men from Manpower to assist with re-papering after the corners are placed in Section 1.

Very truly yours,



W. E. SAEGART

WES/pjc

Enclosures - Two copies of map

cc: JHCourtright, w/o encl. 

SfBowditch, " "

DIAMOND CORE DRILLING  
DIAMOND DRILLING EQUIPMENT  
GROUTING  
FOUNDATION TESTING  
MINING  
QUARRYING  
PISTON SINKING  
PISTON DRIVING  
PISTON PLANT DESIGN  
AND FABRICATION



CONTRACTORS-ENGINEERS-GEOLOGISTS

10801 North 21st Avenue  
PHOENIX, ARIZONA 85020  
Phones: Office 944-1731  
Home 948-2009

General Offices and Plant  
1624 Pioneer Road P. O. Box 58  
SALT LAKE CITY, UTAH 84110  
Phone 487-7595

BRANCH OFFICES  
PHOENIX  
RENO  
SPOKANE  
DENVER  
SACRAMENTO  
SANTIAGO, CHILE  
LIMA, PERU

MR. JHC - copy for Kuds & JRW

READ AND RETURN \_\_\_\_\_

PREPARE/ANSWERS \_\_\_\_\_ HANDLE \_\_\_\_\_

FILE ☒ INITIALS \_\_\_\_\_

July 19, 1966

W.E.S.

JUL 20 1966

Mr. W. E. Saegart  
Asst. Chief Geologist  
Asarco  
P.O. Box 5795  
Tucson, Arizona

Dear Mr. Saegart:

Mr. Joe Wojcik called this morning for a price on Rotary drilling beyond 1000 ft. The price from 1000 to 1500 ft. will be \$5.60 per foot plus cost of drilling mud and additives.

Sincerely yours,

J. E. Roberts  
District Manager

JER/tk

Note to JRW:

Roberts is sending additional drill rods to Greenwood on 7/21. He will also add a second shift immediately.  
W. E. S.

J. H. C.

JUL 7 1966

July 7, 1966

Hawley & Hawley, Inc.  
P. O. Box 5934  
Tucson, Arizona 85703

Gentlemen:

This is to confirm the verbal instructions given you on the above date regarding the assays to be made on our samples identified by numbers 6871 to 6884 inclusive. These samples were delivered to you on the same date.

All of the samples in this group are to be assayed only for total copper. Some, if not all, of the tags enclosed in the bags request non-sulfide copper assays in addition to total copper. These non-sulfide requests are to be ignored.

Very truly yours,

*NW*

N. P. WHALEY

NFW/pjc

cc: JHCourtright ✓

DIAMOND CORE DRILLING  
DIAMOND DRILLING EQUIPMENT  
GROUTING  
FOUNDATION TESTING  
MINING  
QUARRYING  
SINKING  
TUNNEL DRIVING  
MINE PLANT DESIGN  
AND FABRICATION

# Boyles Bros. DRILLING COMPANY

CONTRACTORS - ENGINEERS - GEOLOGISTS

10801 North 21st Avenue  
PHOENIX 21, ARIZONA  
Phones: Office 944-1731  
Home 947-0637

General Offices and Plant  
1624 Pioneer Road P. O. Box 58  
J. H. C. SALT LAKE CITY 10, UTAH  
HUnter 7-7595

JUL 7 1966

BRANCH OFFICES

PHOENIX  
RENO  
SPOKANE  
DENVER  
SACRAMENTO  
ST. LOUIS

MR. WES, J. H. C.  
READ AND RETURN \_\_\_\_\_  
PREPARE ANSWERS \_\_\_\_\_ HANDLE \_\_\_\_\_  
FILE \_\_\_\_\_ INITIALS \_\_\_\_\_

July 6, 1966

JUL 7 1966  
WES.

Mr. J. H. Courtright  
Chief Geologist  
Asarco  
P.O. Box 5795  
Tucson, Arizona

Addendum # 1  
Greenwood Peak Prospect

J. R. W  
JUL 14 1966

Dear Mr. Courtright:

Referring to my telephone conversation with Mr. Wojcik today regarding the taking of spot cores with the Failing drill, the following rate will apply:

\$17.50 per hr. plus \$6.00 per ft.

Yours sincerely,

*J. L. Janco*  
J. L. Janco

Assistant District Manager

File

J. H. C.

JUL 5 1966

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 5, 1966

W.E.S.

JUL 11 1966

TO: J. H. COURTRIGHT

FROM: J. R. WOJCIK

GREENWOOD PEAK  
DRILLING, JUNE 1966

Drilling on the Greenwood Peak prospect began June 17 with Boyles Bros. core drill. At the end of the month, the drill was at 341' in very weakly chloritized granite with some limonite staining possibly derived from ferro-magnesian minerals in rock. Having passed through approximately 170' of fault gouge from 130' to 300', no boxworks after sulfide were observed. Hole GP-2 was collared approximately 1200' east of GP-1 in the conglomerate. At month's end GP-2 was at 735' and may be in fresh granite.

Costs on the prospect to date are estimated below.

Mobilization

\$ 500.00

GP-1

Core Drilling

NC 0'-20' = 20' @ \$8.00/ft

✓ \$ 160.00

NX 20'-341' = 321' @ \$7.40/ft

✓ 2,375.40

Cementing and drilling cement

14 hr. @ \$12.50/hr

✓ 175.00

1/2 standby waiting for site preparation

12 hr. @ \$10.60/hr

✓ 127.20

Drill mud & additives

Mud-Gel 22 sacks @ \$2.25

✓ 47.25

Q-Broxin 1 sack @ \$17.40

✓ 17.40

Caustic soda 1/2 drum @ \$8.72

✓ 4.36

Cellex 1 sack @ \$54.45

✓ 54.45

Dextrid 1 sack @ \$29.85

✓ 29.85

Total GP-1

\$2,990.91

2,990.91

GP-2

4-3/4" rotary drilling

0'-735' = 735' @ \$4.60/ft

✓ \$3,381.00

Drill mud & additives

Mud-Gel 20 sacks @ \$2.25

✓ 45.00

CC-16 1 sack @ \$24.00 (est.)

✓ 24.00

Cellex 1 sack @ \$54.45

✓ 54.45

Coring 5 hrs. @ \$22.50/hr

✓ 112.55

Total GP-2

\$3,617.00

3,617.00



Mr. Courtright

-2-

July 5, 1966

Water truck rental 1/2 mo. @ \$190.00/mo	\$ 95.00	
" " mileage 440 mi. @ 15¢/mi	66.00	
" " driver 93 hrs. @ \$2.10 + taxes (est)	<u>244.12</u>	
Total Water Truck	\$ 405.12	<u>\$ 405.12</u>
Total Boyles Bros. (\$7.00/ft)		\$7,513.03
Hershkowitz dozer, 45 hrs @ \$15.00 + 58 mi. @ \$1.00/mi.		<u>733.00</u>
Estimated Total Direct Cost		\$8,246.03

*RW*  
J. R. WOJCIK

JRW/kw



ASSAYERS AND CHEMISTS, INC.

1700 WEST GRANT ROAD - TELEPHONE 622-4836 - POST OFFICE BOX 5934

TUCSON, ARIZONA 85703

## THE SOUTHWEST'S LEADING ASSAYERS AND REPRESENTATIVES

Branch Representatives at Buyer's Plants:  
Phelps Dodge Corp., Douglas, Arizona; ASARCO, El Paso, Amarillo, Texas and Hayden, Arizona

IDENTIFICATION	Gold ozs.	Silver ozs.	Lead %	Copper %	Zinc %	Mo. %			
6851				0.01					
6852				0.01					
6853				< 0.01					
6854				0.01					
6855				< 0.01					
6856				< 0.01					
6857				0.01					
6858				< 0.01					
6859				< 0.01					
6860				< 0.01					
6861				< 0.01					
6862				< 0.01					
6863				0.01					
6864				0.01					
6865				0.01					
6866				0.01					
6867				< 0.01					
6868				0.01					
6869				0.01					
6870				0.01					
<p><i>W. C. ...</i></p> <p><i>by ...</i></p>									
CC: American Smelting & Refining Co. ADD: Adm: Mr. J. H. Campbell CITY: Don 9159 ADD: Tucson, Arizona CITY:	REMARKS:  Special			Analysis-Cert: By <i>[Signature]</i>					
ACC: AMERICAN SMELTING & REFINING CO.			Date Sp. Received: 6/20/66	Date Comp: 6/20/66	Preparation \$ 25.00 Analysis \$ 35.00		Total \$ 60.00		

**GREENWOOD PEAK PROSPECT**  
**MOHAVE COUNTY, ARIZONA**

Hole No. GP-1  
6/18/66

<u>From</u>	<u>To</u>	<u>Interval</u>	<u>% Recovery</u>	<u>Total Cu</u>	<u>Oxide Cu</u>	<u>Code No.</u>
9.3	20.0	9.7				6851
20.0	24.3	4.3	100%			6852
24.3	33.0	8.7	9%			6853
33.0	44.0	11.0	41%			6854
44.0	53.5	9.5				6855
53.5	63.5	10.0				6856
63.5	73.7	10.2				6857
73.7	82.8	9.1				6858
82.8	93.8	11.0				6859
93.8	104.2	11.4				6860
104.2	114.2	10.0				6861
114.2	124.1	9.9				6862
124.1	134.0	9.9				6863
134.0	143.7	9.7				6864
143.7	153.7	10.0				6865
153.7	158.7	5.0				6866
158.7	169.5	10.8				6867
169.5	178.7	9.2				6868
178.7	186.0	7.3				6869
186.0	196.0	10.0				6870

# PURCHASE ORDER

## AMERICAN SMELTING & REFINING CO.

Tucson Office 813 Valley National Building  
Tucson, Arizona 85701

DATE

June 9, 1966

ORDER NO.

T-6008

REQUISITION NO.

PLANT JOB NO.

APPROPRIATION NO.

To:

Mr. Wm. "Junior" Hershkowitz  
Wickenburg,  
Arizona

DATE REQUIRED AT DESTINATION:

SHIPPING INTERVAL PROMISED

SELLER WILL SHIP BEFORE:

POINT OF SHIPMENT

TERMS

F. O. B. POINT

FINAL DESTINATION — PLEASE NOTE CONSIGNMENT BELOW

J. H. C.

CONSIGNMENT — SELLER WILL SHIP TO

JUN 10 1966

— RENDER BILLS AS PER ATTACHED SHIPPING INSTRUCTIONS —

SHIP VIA

QUANTITY

UNIT

SPECIFICATIONS

ITEM  
NO.

UNIT PRICE

This order is written to cover road construction and drill site preparation on the Greenwood Peak Prospect in Mohave County, Arizona according to the following rates and specifications:

- (1) Mr. Hershkowitz will use a Case 1000 dozer. Time on the dozer will be at the rate of \$15/hr. Flat bed transportation of the dozer to and from Wickenburg will be at a cost of \$1/mile. In the event we use the dozer one week or more, we will be charged only one way on transportation to the job site.
- (2) Mr. Hershkowitz has agreed to commence dozer work on the Greenwood Peak prospect on Friday, June 10.
- (3) Contractor's particular attention is directed to clause eleven (11) on the reverse of this order.

Orig: Mr. Wm. "Junior" Hershkowitz  
cc: Mr. Wm. "Junior" Hershkowitz, for acceptance  
JHCourtright  
WESaegart  
JRwojcik  
KvdSteinen, File

Mr. Wm. "Junior" Hershkowitz

Accepted by: \_\_\_\_\_  
CONTRACTOR

### IMPORTANT

Attached Acknowledgment Card must be completed and returned promptly.

PLEASE ENTER OUR ORDER FOR THE ITEMS SPECIFIED ABOVE, SUBJECT TO ALL INSTRUCTIONS AND PROVISIONS ON REVERSE SIDE.

ORIGINAL SIGNED BY  
W. E. SAEGART

W. E. Saegart

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

J. H. C.

June 9, 1966

JUN 9 1966

MEMORANDUM FOR: J. R. WOJCIK

The following pertains to the arrangements I have made with Mr. Wm. "Junior" Hershkowitz of Wickenburg concerning road construction and drill site preparation on the Greenwood Peak Prospect.

Mr. Hershkowitz will use a Case 1000 dozer. Time on the dozer will be at the rate of \$15/hr. Flat bed transportation of the dozer to and from Wickenburg will be at a cost of \$1/mile. In the event we use the dozer one week or more, we will be charged only one way on transportation to the job site.

Mr. Hershkowitz has agreed to commence dozer work on the Greenwood Peak prospect on Friday, June 10.

His telephone in Wickenburg is 684-5688.

W. E. Saegart  
W. E. SAEGART

WES/pjc

cc: JHCourtright ✓  
KAvdSteinen

J. H. C.

JUN 13 1966

MR. ~~Kings~~ ~~WES~~

READ AND RETURN :.....

PREPARE ANSWERS.....HANDLE.....

FILE ☒ INITIALS.....

New York, N. Y., June 8, 1966

Mr. C. P. Pollock

W.E.S.  
JUL 14 1966

K.V.D.S.  
JUN 13 1966

The following is an extract from the minutes of the meeting of the Advisory Committee held today:

Mining Authorization No. 29-66  
Greenwood Peak Prospect  
Mohave County, Arizona

It was reported that the Company's geologists recommend 2,000 feet of drilling in three holes in the Greenwood Peak area, located 15 miles west of Bagdad in Northwestern Arizona, a possible copper-molybdenum prospect, at a cost of \$25,000.

There was approved an expenditure of \$25,000 for drilling on the Greenwood Peak Prospect, Mohave County, Arizona.

Harold Howe

FGHarrick  
HLGoodenough-2  
TASnodden  
RBMeen  
JHCourtright

# PURCHASE ORDER

*Greenwood Peak*

PLANT JOB NO.
APPROPRIATION NO.

**AMERICAN SMELTING & REFINING CO.**  
Tucson Office 813 Valley National Building  
Tucson, Arizona 85701

DATE June 8, 1966
ORDER NO. T-5995
REQUISITION NO.

TO: Boyles Bros. Drilling Co. Att: Mr. J. E. Roberts 10801 North 21st Avenue Phoenix, Arizona 85020	
DATE REQUIRED AT DESTINATION:	
SHIPPING INTERVAL PROMISED	SELLER WILL SHIP BEFORE:
POINT OF SHIPMENT	TERMS
F. O. B. POINT	

FINAL DESTINATION — PLEASE NOTE CONSIGNMENT BELOW <b>J. H. C.</b> <b>JUN 8 1966</b>
CONSIGNMENT — SELLER WILL SHIP TO
— RENDER BILLS AS PER ATTACHED SHIPPING INSTRUCTIONS —
SHIP VIA

QUANTITY	UNIT	SPECIFICATIONS	ITEM NO.	UNIT PRICE																
<p>This order is written to cover the cost of drilling a series of holes for a maximum total of 1500 linear ft. on ASARCO's Greenwood Peak Prospect in Mohave County, Arizona according to the following rates and specifications:</p> <p>(1) Mobilization: A lump sum of \$500.00</p> <p>(2) Rotary drilling 4-1/4" to 4-3/4" diameter hole: 4.60/ft.</p> <p>(3) Core drilling:</p> <table><tr><td></td><td>BXWL</td><td>NXWL</td><td>NC or Collar Pipe</td></tr><tr><td>0-500'</td><td>6.80/ft.</td><td>7.40/ft.</td><td>8.00/ft.</td></tr><tr><td>500-1000'</td><td>7.40/ft.</td><td>8.00/ft.</td><td></td></tr><tr><td>1000-1500'</td><td>8.20/ft.</td><td>8.80/ft.</td><td></td></tr></table> <p>(4) a. Cementing, if necessary, \$12.50/hr. b. Cement or cement substitutes, including drilling mud &amp; chemicals - cost f.o.b. jobsite..</p> <p>(5) Casing lost or left in hole at ASARCO's request - cost f.o.b. jobsite.</p> <p>(6) Standby time at ASARCO's request - \$10.60/hr.</p> <p>(7) Water truck rental - \$190.00/mo. plus \$0.15/mi.</p> <p>(8) Extra water truck driver if required - \$2.10/hr + payroll taxes.</p> <p>(9) Drilling mud &amp; chemicals: cost f.o.b. jobsite.</p> <p>(10) Boyles Bros. will furnish one core drill capable of drilling NXWL holes to 1500' depth and one rotary drill capable of drilling to 1000' depth with all necessary accessory equipment to perform the work in an efficient manner.</p> <p>(11) ASARCO will provide drill sites and means of access thereto.</p> <p>(12) Contractor's particular attention is directed to clause eleven (11) on the reverse of this order. Contractor will submit evidence of the required insurance before entering on ASARCO's property to perform the work.</p>						BXWL	NXWL	NC or Collar Pipe	0-500'	6.80/ft.	7.40/ft.	8.00/ft.	500-1000'	7.40/ft.	8.00/ft.		1000-1500'	8.20/ft.	8.80/ft.	
	BXWL	NXWL	NC or Collar Pipe																	
0-500'	6.80/ft.	7.40/ft.	8.00/ft.																	
500-1000'	7.40/ft.	8.00/ft.																		
1000-1500'	8.20/ft.	8.80/ft.																		
			Boyles Bros. Drilling Co.	Accepted by: _____ CONTRACTOR																



## IMPORTANT

Attached Acknowledgment Card must be completed and returned promptly.

Orig: Boyles Bros.  
cc: Boyles Bros., for acceptance  
JHCourtright  
JR Wojcik, KvdSteinen,  
K Ward, File

PLEASE ENTER OUR ORDER FOR THE ITEMS SPECIFIED ABOVE, SUBJECT TO ALL INSTRUCTIONS AND PROVISIONS, ON REVERSE SIDE.

Original signed by  
J. H. Courtright

J. H. Courtright

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

J H. C.  
JUN 2 1966

June 2, 1966

Mr. William Hoskins  
American Smelting and Refining Company  
535 Thurlow Street, Room 504  
Vancouver 5, B. C.

Greenwood Prospect

Dear Bill:

Will you please sign the enclosed deed to the Greenwood claims, and return it to me. We will take care of having it notarized here. Be sure and sign "Wm. Hoskins," as this is the way the name is written on the deed, and is the way the location notices were made out. Also, fill in the date as the day you sign.

Due to one cause or another, drilling has not yet started up there, so we may have to put up the corners and do the discovery work to give us time to finish. We will have to contract the surveying for the corners.

Hope all goes well up there with you.

Sincerely,

S. I. Bowditch

SIB:bam  
Enclosure  
cc: JHCourtright  
WESAegart



DIAMOND CORE DRILLING  
DIAMOND DRILLING EQUIPMENT  
GROUTING  
FOUNDATION TESTING  
MINING  
HARRYING  
T SINKING  
NEL DRIVING  
MINE PLANT DESIGN  
AND FABRICATION

*Greenwood*  
*Plan*

**Boyles Bros.**  
**DRILLING COMPANY**

CONTRACTORS-ENGINEERS-GEOLOGISTS

10801 North 21st Avenue  
PHOENIX, ARIZONA 85020  
Phones: Office 944-1731  
Home 948-2009

General Offices and Plant  
1624 Pioneer Road P. O. Box 58  
SALT LAKE CITY, UTAH 84110  
Phone 487-7595

**BRANCH OFFICES**  
PHOENIX  
RENO  
SPOKANE  
DENVER  
SACRAMENTO  
SANTIAGO, CHILE  
LIMA, PERU  
**J. R. W.**

JUN 2 1966

June 1, 1966

J. H. C.

JUN 2 1966

Mr. Joe R. Wojcik  
Asarco  
P.O. Box 5795  
Tucson, Arizona

Dear Joe:

As per your phone call this morning here are the prices  
you asked for.

1. Coring NX - 500' to 1000' @ \$ 8.00 per foot.
2. Standby time as requested by you, \$ 10.60 per hour.
3. Extra man for driving water truck, if necessary, the  
charge will be \$ 2.10 per hour plus payroll taxes.

Sincerely yours,

*J. E. Roberts*  
J. E. Roberts  
District Manager

JER/tk



**E. J. LONGYEAR COMPANY**

GENERAL OFFICES, 76 SOUTH 8th STREET  
MINNEAPOLIS, MINNESOTA 55402, U.S.A.  
TELEPHONE (612) 339-7631 • CABLE LONGCO

308 East Pima Street  
Phoenix, Arizona 85004  
May 25, 1966

J. H. C.

JUN 9 1966

American Smelting and Refining Company  
Southwestern Exploration Department  
Post Office Box 5795  
Tucson, Arizona

*Greenwood PK*

Attention: Mr. J. R. Wojcik, Drilling Engineer

SUBJECT: PROPOSAL COVERING YOUR PLANNED EXPLORATORY DRILLING PROGRAM  
IN THE GREENWOOD PEAK AREA, ARIZONA

Gentlemen:

1. In response to your recent request, we are pleased to forward our proposal covering drilling activity in the above subject area.
2. Our understanding of your project is as follows:

Minimum program will entail approximately 1,500 linear feet of vertically inclined combination rotary, NX and BX size core drill holes. The first hole will be collared in ledge rock and will be carried out by core drilling methods. Two additional holes that are planned will be drilled via rotary methods through an undetermined thickness of conglomerate material. Core drilling will be carried out in the granitic formations in the bottom portions of each hole.

The formations to be core drilled are expected to consist primarily of granitic rocks.

Water for drilling purposes is obtainable from Burro Creek approximately four miles distance one way.

Housing in the area of the project is non-existent. It will be necessary for crews to travel from the nearest available housing at Bagdad or Wickenburg, whichever should prove to be more convenient.

American Smelting and Refining Company will construct and maintain suitable access and water haulage roads to permit the haulage of water from Burro Creek to the various drill sites. Because of the grade and sandy condition of the top soil, it may be necessary to employ a 4-wheel drive water truck for the purpose of transporting water from the source to the drill sites. If not, it may be necessary to travel via an alternate route of easier access but considerably longer in distance. You will also prepare the necessary drill sites.

3. For the purpose of carrying out this program, we would propose to employ one Longyear truck-mounted core drilling rig of suitable capacity and a rotary rig, either Mayhew or Failing for drilling the rotary sections involved. We would further propose to furnish all accessory equipment required including water and service trucks.

Because of the present acute personnel shortage, we propose to operate each rig on a one shift basis, six day per week schedule. In the event the program is expanded, we would be agreeable to provide additional shifts as experienced drillers become available.

4. We will carry public liability insurance covering personal injury and property damage, and Workmen's Compensation insurance and also all-risk insurance on the drilling equipment protecting against loss by theft, fire, flood, landslides and other similar hazards. Certificates showing the coverage referred to will be furnished upon request.

5. Based upon conditions anticipated to prevail in this program, we are pleased to quote as follows:

- a) Mobilization and demobilization of personnel  
and drilling equipment.....\$335.00 Lump Sum  
Per Rig
- b) Rotary drilling (non-core),  
4 1/2" in diameter -  
0 to 500 feet in depth.....\$4.65 per foot  
500 to 1,000 feet in depth.....\$5.10 per foot
- c) Diamond core drilling - Vertical holes -

	<u>NX WL</u>	<u>BX WL</u>
0 to 500 feet in depth.....	\$6.95/ft.	\$6.70/ft.
500 to 1,000 feet in depth.....	\$7.45/ft.	\$7.20/ft.
1,000 to 1,500 feet in depth.....	\$7.95/ft.	\$7.70/ft.
- d) Reaming, when required and where  
applicable - For all sizes and  
depths involved.....\$3.90 per foot
- e) Standby time or delays for your convenience  
or for which you are responsible.....\$12.25 per hour  
with 2-man drill crew.
- f) Time spent by crews in cleaning out pre-  
viously drilled rotary holes preparatory  
to deepening via core drilling methods,  
performing cementing operations, casing  
holes or performing other hole stabilizing  
activity.....\$12.25 per hour  
with 2-man drill crew.
- g) Cement, drill mud, additives or other hole conditioning,  
stabilizing or plugging material consumed will be invoiced  
at our cost, F.O.B. job site basis.

May 25, 1966

h) Water truck service will be provided on the following basis:

- (1) Truck rental charge.....\$175.00 per month  
plus 20¢ per mile traveled per truck  
while hauling water.
- (2) Any cost associated with purchasing water from  
the source will become invoiceable to you.
- (3) If required, a separate water truck  
driver will be provided for.....\$3.50 per hour  
No charge will be made if the regular  
2-man drill crew can furnish the required  
drilling water without incurring drilling  
delays.

It is felt that a separate water truck driver and  
one water truck would be sufficient for supplying  
water to both drilling rigs.

- i) Core boxes, cardboard type, capacity  
ten feet of core, if furnished by the  
Longyear Company will be invoiced in  
either BX or NX size at.....\$0.90 each
- j) Casing or pipe lost through normal drilling operations will  
be invoiceable at 50% of replacement cost.

Casing or pipe left in holes at your request will be invoiceable  
at replacement cost.

6. Cores and/or samples will be turned over to your representative at the  
drill sites in containers furnished by you or by the Longyear Company as out-  
lined above.
7. Statements will be rendered promptly after the end of the month covering  
all invoiceable work performed during the month and payment will become due  
promptly upon approval of our invoices.
8. We appreciate the opportunity to submit this proposal to you. If selected  
to perform the work, we estimate a minimum of ten days to two weeks will be  
required before we could commence work with the first core drill rig.
9. We look forward to receiving your decision concerning the award of this work.

Sincerely,

J.R.Miller:jag

E. J. LONGYEAR COMPANY

ACCEPTED:

Company \_\_\_\_\_

By \_\_\_\_\_

Date \_\_\_\_\_

*J. R. Miller*  
Manager, Western Zone  
Contract Drilling Division

DIAMOND CORE DRILLING  
DIAMOND DRILLING EQUIPMENT  
GROUTING  
FOUNDATION TESTING  
MINING  
QUARRYING  
RAFT SINKING  
TUNNEL DRIVING  
PIPE PLANT DESIGN  
AND FABRICATION

*no starting date below*

**Boyles Bros.**  
**DRILLING COMPANY**

CONTRACTORS-ENGINEERS-GEOLOGISTS

10801 North 21st Avenue  
PHOENIX, ARIZONA 85020  
Phones: Office 944-1731  
Home 948-2009

MAY 27 1966

*JHC*

General Offices and Plant  
1624 Pioneer Road P. O. Box 58  
SALT LAKE CITY, UTAH 84110  
Phone 487-7595

BRANCH OFFICES  
PHOENIX  
RENO  
SPOKANE  
DENVER  
SACRAMENTO  
SANTIAGO, CHILE  
LIMA, PERU

May 23, 1966

Mr. W. E. Saegart  
Assistant Chief Geologist  
Asarco  
P.O. Box 5795  
Tucson, Arizona

Dear Mr. Saegart:

For your contemplated drilling in the Burro Creek Area, Mohave County, Arizona we submit the following prices.

1. Mobilization --- \$500.00
2. Rotary drilling 4 $\frac{1}{4}$ " to 4 3/4" hole the price will be \$4.60 per foot plus cost of drilling mud and additives.
3. 

<u>Coring</u>	<u>BXWL</u>	<u>NXWL</u>	<u>NC or Collar Pipe</u>
0 to 500 ft.	6.80	7.40	8.00
500 to 1,000 ft.	7.40		
4. Cementing, if necessary, \$12.50 per hour plus cost of cement or cement substitutes including drilling mud and chemicals.
5. Casing lost or left in hole as requested by you to be charged for at list price F.O.B. jobsite.
6. Water truck rental of \$190.00 per month plus .15 cents a mile. Water to be hauled from your source of supply.
7. Core boxes can be furnished at \$1.00 per box.

Thanks for asking our prices.

Sincerely yours,

*J. E. Roberts*  
J. E. Roberts  
District Manager

JER/tk

*W.E.S.*  
*MAY 26 1966*  
*Greenwood Peak*  
*Prospect*  
*Mohave County, Ariz*

*Greenwood*

J.H.C.

MAY 19 1966

May 19, 1966

State Land Department  
State Office Building  
Phoenix, Arizona

Prospecting Permit 9182

Gentlemen:

Enclosed is our check for \$320.00 and a bond by Federal Insurance Company, both in connection with Prospecting Permit 9182, covering the SE 1/4 Sec. 36, T14N, R12W, Mohave County.

In due course we will expect the permit for our signature.

Yours very truly,

S. I. Bowditch

SIB:bam

Enclosures

Blcc: JHCourtright ✓  
KvdSteinen, w/ copy of bond  
SMetzger, w/copy of bond

AMERICAN SMELTING AND REFINING COMPANY  
Tucson ArizonaJ. H. C.  
JUN 8 1966

May 13, 1966

TO: R. J. LACY  
FROM: W. G. FARLEYI. P.-Resistivity Survey  
Greenwood Peak Prospect  
Mohave Co., Arizona

During the period 4/22/66 through 5/5/66, in 8 field days, approximately 21 line miles of reconnaissance I. P. resistivity was conducted on the Greenwood Peak Prospect using a 800 foot "a" wenner electrode configuration (Fig. 1). Two additional field days were spent in obtaining a depth profile (Fig. 2) over a weak I. P. anomaly.

This survey was initiated to test for the occurrence of sulfides beneath alluvial cover eastward of a small area of weak to moderate hydrothermal alteration and pyritic mineralization which occurs in exposed Precambrian granite. Alteration and mineralization in the area improves towards the east to the edge of cover and it was postulated that I. P. might detect a large area of sulfides beneath cover with possible copper mineralization.

Line 1 was run immediately east of the altered outcrop along the granite - alluvium contact. No anomalous I. P. response was obtained next to the altered outcrop. The highest reading was 4.5 m.v.lv. over a diabase dike with background ranging from about 2.5 to 3.0 m.v.lv. The rest of the I. P. resistivity lines to the east indicate thick alluvium east of the altered outcrop with bedrock probably greater than 800 feet deep. With bedrock at that depth, any sulfides in bedrock would probably be at a depth of 900' or 1000' and would not be detected by I. P.

Two miles east of the altered outcrop a weak I. P. anomaly was detected which appears to be in the alluvium or a volcanic bed within the alluvium. It has dimensions of one half mile NE - SW by two miles NW - SE. At the shallowest point it is about 150 feet deep and it dips at a low angle towards the southwest. The high readings are 3.7 m.v.lv. with a background around 1.8 m.v.lv. or less. The water table in this area is 50 to 75 feet deep (water well data plus resistivity data) so the anomaly does not appear to be associated with water saturated clays. Ratio readings were taken over the anomalous area and over a non-anomalous area. Ratios of 1.40, 1.34, and 1.38 over the anomalous area suggest a sulfide source while the ratios over the non-anomalous area were 1.24 and 1.25 and suggest an extraneous polarizer. Many areas in the last couple of years have been tested for ratio values and in all cases

values over 1.26 have proved to be sulfides. If the anomaly is from a sulfide source with great depth, the high I. P. values indicate about 1% disseminated sulfides. If the anomaly is from a thin bed of 15 to 30 feet thick, then it would take several percent of sulfides to account for the anomalous response.

There is some doubt whether the I. P. anomaly is actually coming from a sulfide source in the alluvium as sulfides in alluvium or thin volcanic beds are quite rare. Alternate possibilities are (1) the high I. P. ratios are from some extraneous source which we have not previously come in contact with, (2) the assumption of deep bedrock from low resistivity values is not correct, or (3) sulfides occur in a thick volcanic bed.

Alternate (1): If this is some new type of extraneous polarizer giving high ratios, it would be valuable information to know what the source is. Although this anomaly is weak, someday we may get a strong anomaly from the same source. The best method of obtaining more information about the source of the anomaly is I. P. decay curves plus a drill hole which should be logged with I. P.-resistivity. Since a drill will be on the property to drill the area immediately east of the altered outcrop, little additional expense would be involved in drilling a research hole on the weak I. P. anomaly.

Alternate (2): Schist outcrop in the northern part of the area on line 6 gave relatively low resistivity values ranging from 125 ohm·feet. The low end of this range is close to the resistivity values within the anomalous I. P. area so there is a chance that the I. P. anomaly is coming from shallow low resistivity schist. If this is true, then the whole alluvial area may have shallow schist bedrock and be of no economic importance.

Alternate (3): It could very well be that the I. P. anomaly is coming from 1% disseminated sulfides in a thick volcanic bed. Volcanic rocks characteristically give low resistivity values. In this case the sulfides would be of no economic value.

#### Summary and Recommendations

The I. P.-resistivity survey outlined a weak I. P. anomaly beneath cover two miles east of the altered outcrop and granite-alluvium contact. No anomalous response was obtained adjacent to the altered area. The anomalous area has dimensions of 1/2 by 2 miles and is 150' deep at its shallowest point. The polarizer is believed to be 1% disseminated sulfides in the alluvium, low resistivity schist or low resistivity volcanics. The anomaly in any case is too low in amplitude to be indicating economic sulfides. If the alluvium and volcanics are deep as suggested by resistivity, then an economic sulfide body could still be hidden at depth beyond reach of I. P. First I recommend decay curves be obtained from the anomaly to prove or



disprove the existence of sulfides. If they indicate sulfides, then I recommend a drill hole on the anomaly as a means of eliminating a large area of non-potential ground should the sulfides be in schist. If the decay curves indicate an extra-neous polarizer, then I recommend a research drill hole to explain the high ratio values. Since a drill will be on the property, a 200 foot hole on the anomaly would involve little additional expense.

*Wayne G. Farley*  
WAYNE G. FARLEY

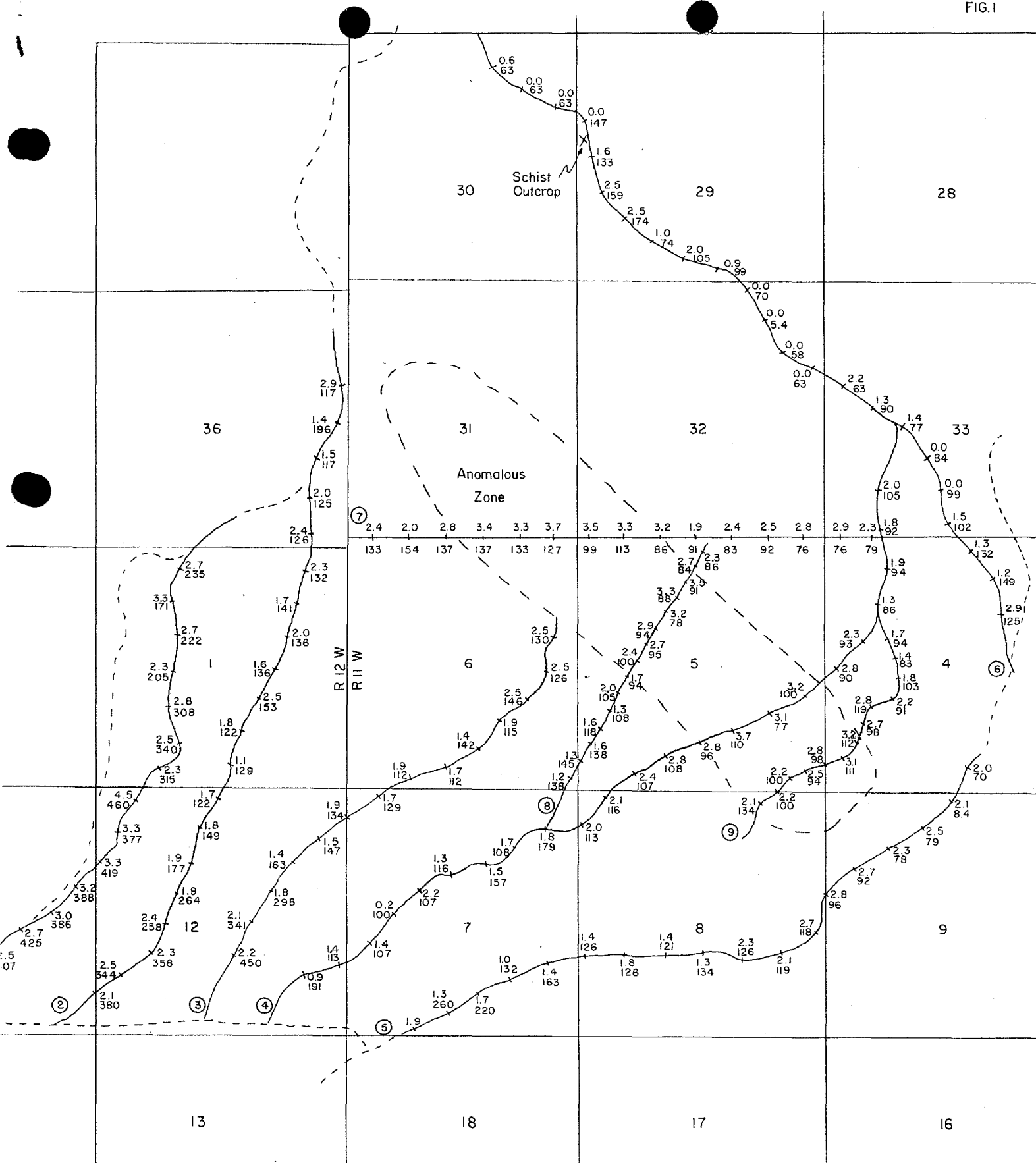
WGF/pjc

Attachments

cc: CPPollock

JHCourtright

WESaegart



## ELECTRODE CONFIGURATION

- ①, ②, ③, ④, ⑤, ⑥ & ⑦ - Wenner 800 foot "a"  
 ⑧ & ⑨ - Wenner 400 foot "a"

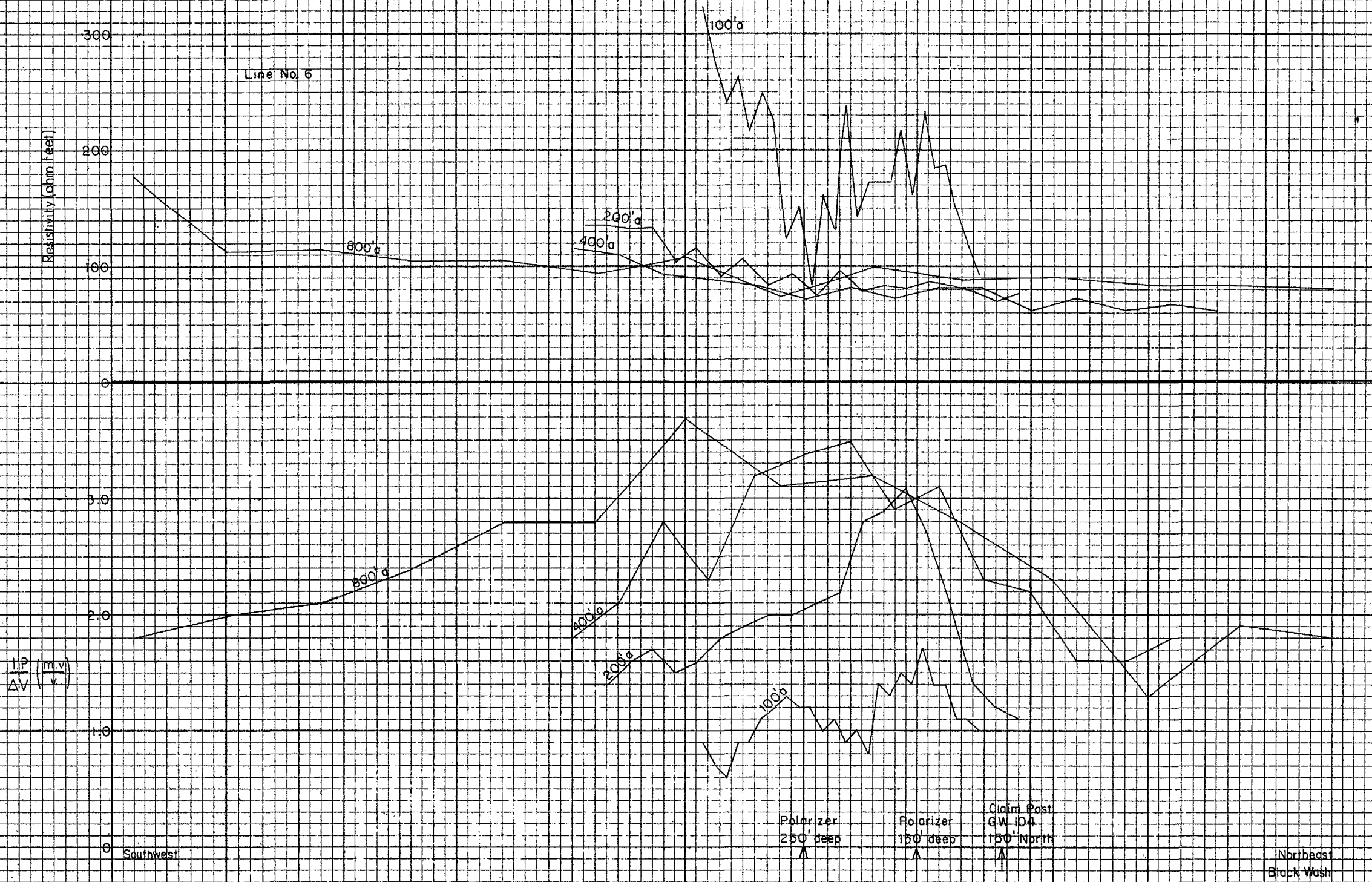
I.P - RESISTIVITY SURVEY  
 Greenwood Peak Prospect

Mohave Co., Arizona

1" = 1/2 mile

April '66

FIG 2



IP- RESISTIVITY SURVEY LINE (4)  
 Greenwood Peak Prospect  
 Mohave Co., Arizona  
 1" = 1/2 mile April 1966

J. H. C.

MAY 11 1966

P. O. Box 5795  
Tucson, Arizona 85703  
May 10, 1966

Mohave County Recorder  
Kingman  
Arizona

Dear Sir:

Enclosed are 175 notices of location for the GW group of claims, located by Wm Hoskins. Although the numbers run up to 182, numbers 145, 147, 149, 151, 153, 155 and 180 were never located. I understand that the recording fee is \$1.75 per location, and accordingly I am enclosing my check in your favor for \$306.25. If this amount is not correct, please let me know.

Will you please record these notices, and then return them to me.

Yours very truly,

S. I. Bowditch

Enclosure - check  
Blcc: JHCourtright ✓  
WESaegart  
KvdSteinen

J. H. C.

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

MAY 5 1966

May 2, 1966

MEMORANDUM FOR J. H. COURTRIGHT

Greenwood Peak Prospect  
Greenwood District  
Mohave County, Arizona

Mr. William Hoskins started surveying for claim locations on the Greenwood Peak Prospect on April 21, aided by two men from "Manpower". He had to leave on the evening of April 27, at which time all but nine stations had been established. Mr. Saegart put these in the next day.

Mr. Luning and I started putting out the location notices on April 27, and located claims GW 1-72 that day. On April 28, we located claims GW 146, 148, 152, 154, and 156 (the odd numbered claims on this line fall on State ground, so were not located), GW 157-179, 181 and 182, and 109-112. In the afternoon Mr. Saegart located claims GW 95-108.

On April 29, Mr. Luning and I located the remaining claims, i.e. GW 73-94, 113-144.

The claims are all located in the name of Wm. Hoskins.

If we wish to hold on to these claims, corners must be put in by July 25, and location work (drilling and/or pits) finished by August 24.

A map showing the layout of these claims is attached. We found that errors were made in the northernmost and southernmost location lines, as these are about 400 feet too short.



S. I. BOWDITCH

SIB/mcg  
cc: WESaegart  
Attachment

R12W

30

R11W

25

N  
↑

T14N

35

36

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36

33

210'

156	154	152	150	148	146	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
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2

161	167	165	163	161	159	157	73	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	107
162	168	166	164	162	160	158	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108

4

179	177	175	173	171	169	109	111	113	115	117	119	121	123	125	127	129	131	133	135	137	139	141	143
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178	176	174	172	170	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144
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T13N

11

12

7

8

9

GW Claims  
1" = 1/2 mile

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 26, 1966

J. H. C.  
APR 26 1966

FILE MEMORANDUM

LAND STATUS  
GREENWOOD PEAK PROSPECT  
MOHAVE COUNTY, ARIZONA

The following correction should be made on all copies of my April 13 memorandum concerning the subject. The mineral rights on all of Section 36, T14N, R12W, belong to the State of Arizona. The map accompanying my April 13 memorandum incorrectly shows that the mineral rights are privately owned in the East 1/2, SE 1/4 of Section 36.

Mr. S. I. Bowditch applied to the State of Arizona for a prospecting permit on the SE quarter of Section 36 on April 14.

W. E. SARGANT

WES/pjc

cc: JHCourtright  
SIBowditch  
DBBeck

J. H. C.  
APR 14 1966

April 14, 1966

Mr. Walter V. Murphy  
Leasing Supervisor  
State Land Department  
State Office Building  
Phoenix, Arizona 85007

Blind Subject:  
Greenwood Prospect  
Mohave County, Arizona

Dear Sir:

Enclosed is an application for a prospecting permit  
on the SE 1/4, Section 36, T14N, R12W, Mohave County, and  
our check for \$15.00 to cover the application fee.

Yours very truly,

S. I. Bowditch

SIB:bam  
Enclosures

blcc: JHCourtright ✓  
WESaegart  
KvdSteinen



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

J. H. C.  
APR 19 1966

April 13, 1966

TO: J. H. COURTRIGHT

FROM: W. E. SAEGART

CLAIMS

GREENWOOD PEAK PROSPECT  
MOHAVE COUNTY, ARIZONA

Three old lode claim locations have been found within the exposed altered outcrop area. These are described as follows:

<u>Claim Name</u>	<u>Locator</u>	<u>Location Date</u>
Red Hill No. 1	C. A. McDowell	27 July 43
President	Charlie Shipp	14 March 56
Mohave Uranium	Charlie Shipp	14 March 56

No proof of labor affidavits have been recorded at the Mohave County Court House for any of the years subsequent to these locations. I assume these claims have been abandoned.

  
W. E. SAEGART

WES/pjc  
cc: SIBowditch  
DBBeck

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

J. H. C.

MAY 19 1966

April 13, 1966

TO: J. H. COURTRIGHT

FROM: W. E. SAEGART

LAND STATUS  
GREENWOOD PEAK PROSPECT  
MOHAVE COUNTY, ARIZONA

I checked the land status in the vicinity of the subject prospect on March 29 and April 7. The status of ownership is shown on the attached map.

All uncolored parcels are Federal Mineral. The mineral belongs to the U. S. on all State sections except Section 36, T14N, R12W.

Parcels "A" are Arizona Highway Department patents for right-of-way material sites and are closed to location. These will be returned to the U. S. upon completion of the construction work on Highway 93.

Parcel "B" is a patent in the name of Charles J. Shipp (local rancher). This patent includes both surface and mineral rights.

Parcel "C" is a surface patent to Mr. Shipp with the mineral rights reserved to the State.

Parcels "D" are surface patents to Mr. Shipp with the minerals reserved to the U. S.

Ownership was not checked on other patented land.

*W. E. Saegart*  
W. E. SAEGART

WES/pjc  
Attachment

cc: JHCourtright, I X ✓  
SIBowditch, w/ attach.  
DBBeck, w/ attach.





**EXPLANATION**

MINERAL RIGHTS	
	FEDERAL SURFACE & MINERAL
	LOCATABLE STATE SURFACE - FEDERAL MINERAL
	PRIVATE SURFACE - FEDERAL MINERAL
	LEASABLE PRIVATE SURFACE - STATE MINERAL
	PRIVATE PRIVATE SURFACE & MINERAL
Road	
GENERALIZED FROM AERIAL PHOTOS	
	Granite-alluvium contact
	Basalt-alluvium contact

**LAND STATUS MAP**  
**GREENWOOD PEAK PROSPECT**  
**MOHAVE COUNTY, ARIZONA**

SCALE: 1" = 1/2 MILE

NOTE: Base from official B.L.M. plats.

April 1966



AMERICAN SMELTING AND REFINING COMPANY  
Tucson ArizonaJ. H. C.  
APR 19 1966

April 12, 1966

TO: J. H. COURTRIGHT

FROM: W. E. SAEGART

GREENWOOD PEAK PROSPECT  
MOHAVE COUNTY, ARIZONA

The Greenwood Peak prospect was recognized during the course of field reconnaissance by Messrs. Beck and Whaley. I examined the area briefly on March 29 and again, accompanied by Mr. Hoskins, on the 31st.

An area of weak hydrothermal alteration and pyritic mineralization occurs in the Precambrian granite about two miles east of Greenwood Peak and two miles south of Burro Creek. Alteration diminishes gradually to the west in well exposed Precambrian granitic rocks. To the east alteration passes beneath alluvium.

Alteration and mineralization are associated with or related to a system of easterly striking quartz veins. The vein system diverges radially to the west and appears to converge to the east about at the point where the granite becomes concealed by alluvium. It is at this point (convergence at edge of alluvium) that the best alteration and mineralization is found. It also may be significant that at this location the dominant strike of the vein system is N 70° E.

Alteration consists of silicification (probably related to quartz veining) and local sericitization. It must be considered weak as fresh feldspars can be found throughout the zone except in the wall rocks immediately adjacent to individual veins. The mineralization looks pyritic and includes both disseminations and fracture fillings. No copper minerals were observed in the leached capping.

The over all exposed size of the zone of weak alteration is approximately one-quarter mile in diameter. Alteration-mineralization of moderate intensity is limited to an area approximately 300 feet in diameter at the extreme eastern limit of the outcrop.

To the east the area is entirely covered by Quaternary gravels for a distance of  $\pm 3\frac{1}{2}$  miles. There is some evidence which suggests that the granite alluvial contact is marked by a fault down dropping the gravels on the east side. The amount of displacement along such a fault and the resulting thickness of alluvium and possibly underlying basalt are unknown. Further east the Precambrian is concealed beneath a large Quaternary or late Tertiary basalt flow. These geologic contacts are shown on the attached sketch map. To a large extent they have been generalized from an interpretation of the aerial photographs.

April 12, 1966

Although the exposed mineralization is in itself of no interest, this discovery could represent the fringe of an area of important copper mineralization. The area to the east is almost entirely public domain on which there is no evidence of prior claim locations. I recommend that we locate approximately 200 claims in the alluvial covered area to the east of the exposed prospect. These claims should cover parts or all of the following sections: 31 and 32, T14N, R11W; 5, 6, 7, and 8, T13N, R11W; and 1 & 12, T13N, R12W. All but the E 1/2, SE 1/4 of Section 36, T14N, R12W is State Mineral (private surface). We should make application for a State Prospecting Permit on the E 1/2 of Section 36, excluding the E 1/2, SE 1/4.

An induced polarization survey should be initiated contemporaneously with the claim staking.

I have made arrangements with Blanton and Cole to photograph the area at a contact print scale of 1" = 800'. These photos will be useful for the I. P. survey and additional geologic reconnaissance.

W. E. Saegart   
W. E. SAEGART

WES/pjc

Attachment

cc: JHCourtright, 3X

DBBeck, w/ attachment

WGFarley, w/ attachment



Alteration ~ Mineralization

<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> moderate	<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> weak	<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> fresh	<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> Qtz Vein
--	--	---	---

Inferred Fault

Diabase Dike

GEOLOGIC SKETCH MAP  
 GREENWOOD PEAK PROSPECT  
 MOHAVE CO , ARIZ  
 1" = 1/2 mile  
 April 1966

Kathy : placing in active file, personal

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

J. H. C.

APR 19 1966

April 13, 1966

TO: J. H. COURTRIGHT

FROM: W. E. SAEGART

LAND STATUS  
GREENWOOD PEAK PROSPECT  
MOHAVE COUNTY, ARIZONA

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All uncolored parcels are Federal Mineral. The mineral belongs to the U. S. on all State sections except Section 36, T14N, R12W.

Parcels "A" are Arizona Highway Department patents for right-of-way material sites and are closed to location. These will be returned to the U. S. upon completion of the construction work on Highway 93.

Parcel "B" is a patent in the name of Charles J. Shipp (local rancher). This patent includes both surface and mineral rights.

Parcel "C" is a surface patent to Mr. Shipp with the mineral rights reserved to the State.

Parcels "D" are surface patents to Mr. Shipp with the minerals reserved to the U. S.

Ownership was not checked on other patented land.

*W. E. Saegart*  
W. E. SAEGART

WES/pjc

Attachment

cc: JHCourtright, 1 X  
SIBowditch, w/ attach.  
DBBeck, w/ attach.





**EXPLANATION**

<u>MINERAL RIGHTS</u>	
LOCATABLE	FEDERAL SURFACE & MINERAL
	STATE SURFACE - FEDERAL MINERAL
	PRIVATE SURFACE - FEDERAL MINERAL
LEASABLE	PRIVATE SURFACE - STATE MINERAL
	PRIVATE SURFACE & MINERAL
PRIVATE	PRIVATE SURFACE & MINERAL
Road	
GENERALIZED FROM AERIAL PHOTOS	Granite-alluvium contact
	Basalt-alluvium contact

**LAND STATUS MAP**  
**GREENWOOD PEAK PROSPECT**  
**MOHAVE COUNTY, ARIZONA**

SCALE: 1" = 1/2 MILE

NOTE: Base from official B.L.M. plots

April 1966