



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

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James Doyle Sell Mining Collection

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Forest Service

General Dubo

Geochemistry

Oak Flat

Photography

J I Ranch

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STANDARD MAP SYMBOLS FOR LAND RECORDS AND STATUS USE

BOUNDARIES AND MONUMENTS

Withdrawals	
Patents	
Leases	
Limits of surveyed land, (hatching on unsurveyed side)	
Triangulation station	
U S Mineral or location monument	

WORKS AND STRUCTURES

Railroad of any kind station	
Railroad fenced 1 side	
2 sides	
Telephone line	
Telegraph line	
Power trans. line	
Fences (barbed wire or other)	
Highways hard surfaced	
graveled	
improved dirt	
County road	
Road for wagons only	
Fenced highways	
Fenced County road	
Trail	
Established livestock route	
Cattle guard	
Bridge	
Ferry	
Ford	
Dam	

Airplane landing field	
Airway light beacon	
Settlement (towns and cities)	
Buildings in general	
Ranch house	
House (abandoned)	
B.L.M. Office	
B.L.M. Warehouse	
Granary or storage dump	
School	
Church	
Store	
Gas station	
Cemetery	
Historic ruins	
Prehistoric ruins	
Cliff dwelling	
Indian House, Hogan	
Mine or Quarry	
Mine prospect	
Oil or Gas	
active	
inactive	
Sheep herder monument	
Dipping Vat	
Corral	
Fire lookout	
primary	
secondary	
Fire warden headquarters	
Fire tool cache	
Radio station	
Cultivated land	

Facility

WATER

River and island	
Stream	
Stream flow with flow in certain season	
Dry wash	
Sand wash	
Lake and island	
Marsh or swamp	
Intermittent or dry Lake bed	
Salt Lake	
Intermittent dry lake	
Spring	
Spring (improved)	
Seep	
Water well	
with trough	
with storage and trough	
housed well	
artesian well	
Windmill	
Storage tank	
trough	
Water pumping plant	
Pond or pot hole etc	
Reservoir	
Stock pond or earthen tank	
Designed to be permanent water	
Water storage underground bulkhead	
Pipe line or conduit	
Flume	
Canal or Ditch	
Dike or Levee	

Resealed
Access Control
drainage easement

Livestock Scales
Rainwater Catchment
Gauging Station

Appendix B

COMMON ABBREVIATIONS
used on
LAND OFFICE RECORDS

A.	acre or acres	Pot.	potash or potassium
Acq.	acquired	Pre.	pre-emption
Act of Cong.	Act of Congress	Proc.	Proclamation
Adm. S.	administrative site	Proj.	project
AHE	Additional homestead entry	PS	public sale
Amend.	amendment	PW Res.	public water reserve
ANS	Air Navigation Site	Pwr. Proj.	power project
Apln.	application	Pwr. Site	power site
Asgn.	assignment	PX	private exchange
ASRHE	Additional stockraising homestead entry	QCD	quitclaim deed
Canc.	cancellation or cancelled	R.	range
CE	cash entry	Rec. Lse.	recreation lease
Cl.	classification	Rec. & PP Cl.	recreation & public purposes classification
Cur. Pat.	curative patent	Recl. Wdl.	reclamation withdrawal
D/C	ditches and/or canals	Recon.	reconveyed
DLE	desert land entry	Rej.	rejected or rejection
E	east	Rel.	relinquished or,--ment
EHE	enlarged homestead entry	Res.	reservation or reserve
Elim.	elimination	Rest.	restoration or restored
Enlgmt.	enlargement	Rev.	revocation or revoked
EO	Executive Order	RHE	reclamation homestead entry
Fis	Fissionable materials	RI	range improvement
FLS	Forest lieu selection	RR	railroad
FPA	Federal Power Act	RRG	railroad grant
FUP	Free Use Permit	RRLS	railroad lieu selection
FX	Forest exchange	R/W	right-of-way
GSR Mer.	Gila & Salt River Meridian	Ry.	railway
HE	homestead entry	S	South - State
HEC	homestead entry		



AMERICAN SMELTING AND REFINING COMPANY
EXPLORATION DEPARTMENT
SOUTHWESTERN UNITED STATES DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST
PROPERTY MANAGER

March 31, 1971

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

Mr. William H. Moehn
District Ranger
1100 N. Broad Street
Globe, Arizona 85501

Dear Mr. Moehn:

Enclosed please find the Special Use Application that we discussed in your office last Monday.

At your convenience, we will be available for a joint field inspection.

Mr. Howard Crittendon is in direct charge of the Road Work and Drilling Program. He will contact your office shortly.

Sincerely,

R. B. Crist
R. B. Crist

RBC:sh
att.

cc: HCrittendon
JDSell

United States Department of Agriculture
Forest Service

**SPECIAL USE
APPLICATION AND REPORT**

Ref: FSM 2712

FOREST SERVICE USE ONLY	a. Record no. (1-2)	b. Region (3-4)	c. Forest (5-6)
	70 --	--	--
	d. District (7-8)	e. Use number (9-12)	f. Kind of use (13-15)
	--	-----	----
	g. State (16-17)	h. County (18-20)	k. Card No. (21)
	--	---	1

PART I - APPLICATION (To be completed by applicant)

Application is hereby made for a permit to use National Forest land as indicated below:

1. Description of land: (Attach MAP or PLAT)

OAK FLAT WITHDRAWAL AREA, PINAL COUNTY, ARIZONA
LOCATED IN T 1 S, R 13 E
COPY OF TOPO MAP ATTACHED.

2. Purpose of use.

THE USE OF PRESENT ROADS AND JEEP TRAILS FOR ACCESS TO SEC. 5, T 2 S, R 13 E and SEC. 27, T 1 S, R 13 E. ACCESS TO SEC. 34 WOULD ENTAIL APPROXIMATELY 400' OVER GROUND THAT HAS NO PRESENT ROAD OR TRAIL

3. Land Area applied for (For Rights-of-Way show length and width and convert to acres; for other uses show acres)

Length in: $\frac{\text{Miles or}}{\text{Feet}} \times \text{Width} \frac{\text{Feet}}{\text{Feet}} = \text{Acres}$

4. Improvements

a. Description

MINIMUM ROAD WORK REQUIRED TO PERMIT PASSAGE OF DRILLING EQUIPMENT AND DRILL CREWS TO SECTIONS 5 & 27. ACCESS WILL BE LIMITED TO YEARLY DRILL PROGRAMS OF LIMITED DURATION.

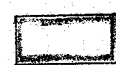
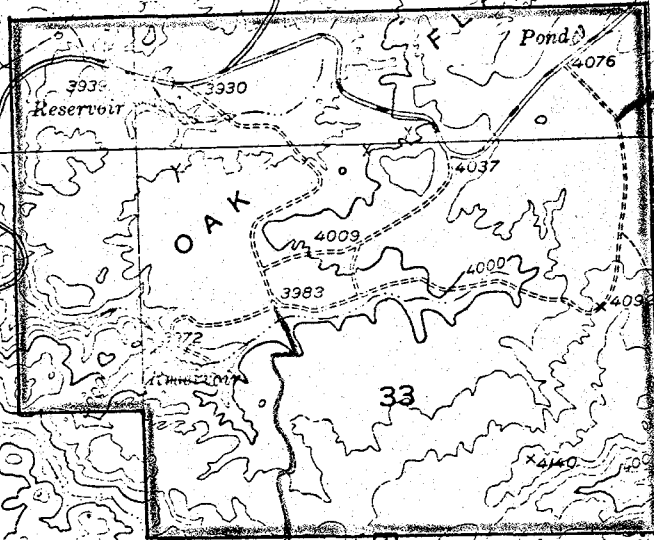
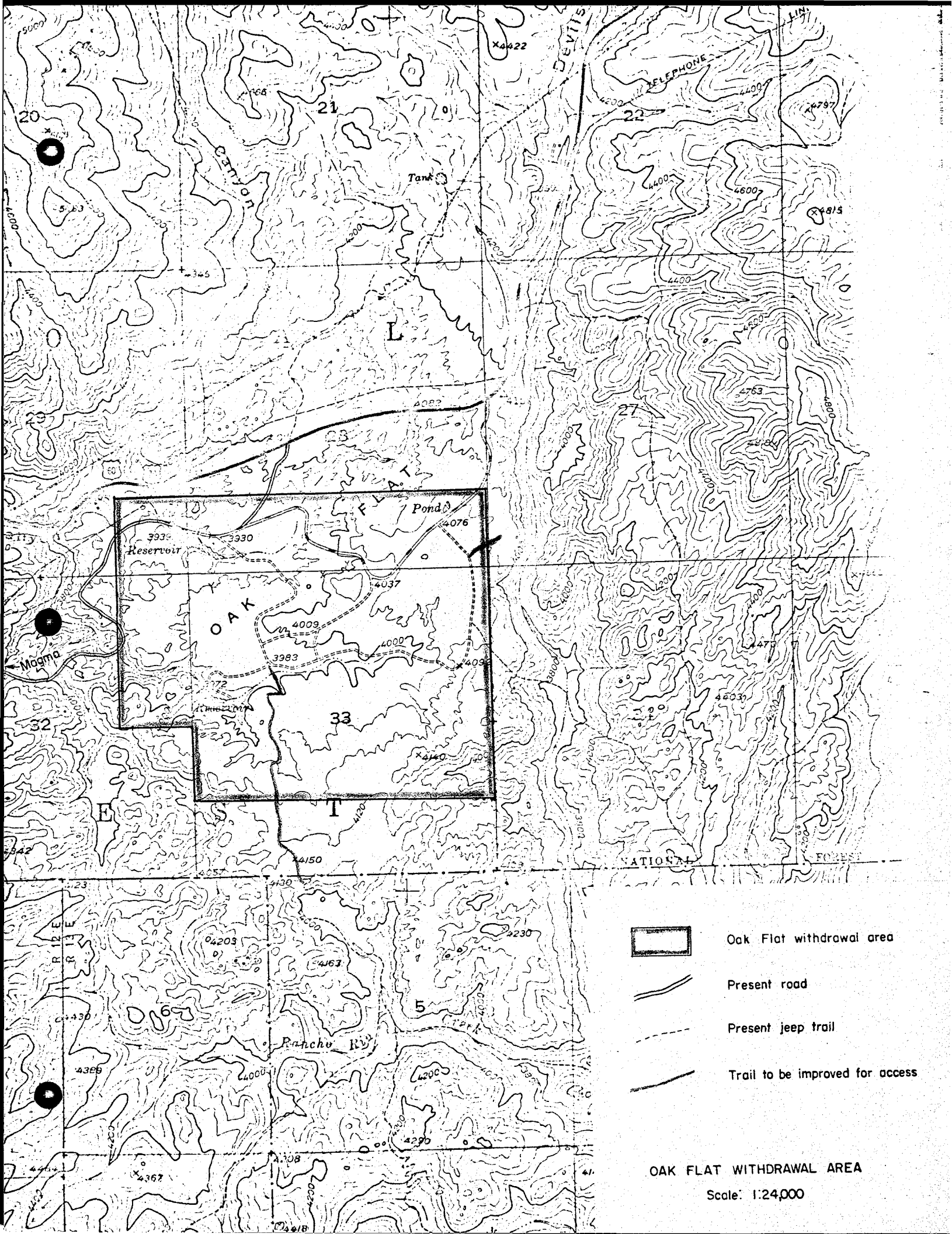
b. Plans attached Yes No. If "NO" show date plans will be furnished _____

c. Estimated cost	d. (Construction) will begin within Roadwork	e. Construction will be completed within Drilling
\$ 5,000 - \$6,000	ONE (Months)	THREE (Months)

Date of Application	Applicants name and signature	Applicant's address
3/31/71	AMERICAN SMELTING AND REFINING COMPANY BY: <u>R. B. Crist</u> R. B. Crist	P. O. Box 5747 Tucson, Arizona 85703 (ZIP Code)

(OVER)

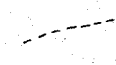
2700-3 (12-70)



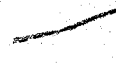
Oak Flat withdrawal area



Present road



Present jeep trail



Trail to be improved for access

OAK FLAT WITHDRAWAL AREA

Scale: 1:24,000

JDS

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Tonto National Forest
Globe Ranger District
Globe, Arizona

2730 Right-of-Way Grants
American Smelting & Refining Co.

June 2, 1971



Mr. R. B. Crist
P. O. Box 5747
1150 North 7th Avenue
Tucson, Arizona 85703

Dear Mr. Crist:

I have attached your copy of American Smelting and Refining Company's Oak Flat special use road permit and a signed copy of the Letter of Understanding we agreed to.

You may know that we now have a full fire closure in effect on the Tonto National Forest. I want to again caution you and your men to be extra careful with fire. No smoking, blasting, welding, or fires are allowed. All internal combustion equipment must be equipped with an approved spark arrester.

MRS. Webb }
Globe }
69950 }

I have attached a map which indicates the exterior boundary of the Devils Canyon Allotment as per your request last week.

Sincerely,

WILLIAM H. MOEHN
District Ranger

Enclosures

United States Department of Agriculture Forest Service SPECIAL USE PERMIT (Road) Ref. FSM 2733.	a. RECORD NO. (1-2)	b. REGION (3-4)	c. FOREST (5-6)
	70	03	12
	d. DISTRICT (7-8)	e. USE NO. (9-12)	f. KIND OF USE (13-15)
02	2730	720	
g. STATE (16-17)	h. COUNTY (18-20)	k. CARD NO. (21)	
04	021	1	

American Smelting and Refining Company of Box 5747, Tucson, AZ 85703
 (Name) (Address)

(hereafter called the permittee) is hereby authorized to use National Forest lands for the construction, reconstruction, maintenance, and use of a road within the TONTO National Forest for the protection, administration, management and utilization of lands and the resources thereof now or hereafter owned or controlled by the permittee.

This permit is subject to the general provisions listed herein and to the special clauses and requirements, items 8 through 12, on page(s) 2 through _____ attached hereto and made a part of this permit.

This permit covers a right of way .5 miles in length and containing approximately .8 acres, and located upon the ground according to the survey line, figures, measurements, widths, and other references shown on the plat attached hereto and made a part hereof.

Permit class E

GENERAL PROVISIONS

1. This permit is subject to all valid rights existing on this date.
2. The permittee in exercising the privileges granted by this permit shall comply with all applicable State and Federal laws, Executive Orders, and Federal rules and regulations.
3. The permittee shall cut only such timber as necessary in clearing for road construction, reconstruction, and maintenance. Timber so cut shall, unless otherwise agreed to, be cut into logs of lengths specified by the Forest Service and decked along the road for disposal by the Forest Service.
4. The permittee shall do everything reasonably within his power to prevent forest fires, and will not dispose of material by burning in open fires during the closed season established by law or regulation without a written permit from the Forest Service.
5. The permittee shall fully repair all damage, other than ordinary wear and tear, to National Forest roads and trails caused by the permittee in exercise of the privileges granted by this permit.
6. No member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise herefrom unless it is made with a corporation for its general benefit.
7. This permit may be terminated or suspended upon breach of any of the conditions herein or at the discretion of the Regional Forester or the Chief, Forest Service.

THIS PERMIT IS ACCEPTED SUBJECT TO ALL OF ITS TERMS AND CONDITIONS

PERMITTEE	NAME OF PERMITTEE	SIGNATURE OF AUTHORIZED OFFICER	DATE
	American Smelting & Refining Company	<i>R. B. Smith</i>	4/22/71
ISSUING OFFICER	NAME AND SIGNATURE	TITLE	DATE
	<i>Fred J. Wirth</i> FRED J. WIRTH	Forest Supervisor	May 20, 1971

8. This permit issued free of charge under regulation 36 CFR 51.2 (U-17).
9. Construction of the road shall be in accordance with the specifications set forth in exhibit A, attached hereto.
10. The permittee shall provide maintenance made necessary by his use of the road constructed under this permit: Provided, that haulers of products from Federal lands and all other commercial haulers will be required to perform or bear their proportionate share of maintenance made necessary by their use of the road as determined by the Forest Service.
11. The United States shall have unrestricted use of the said right-of-way and any road constructed thereon for all purposes deemed necessary or desirable in connection with the protection, administration, management, and utilization of Federal lands or resources, and shall have the right alone to extend rights and privileges for use of the right-of-way and road thereon to States and local subdivisions thereof, and to other users including members of the public, except users of land or resources owned or controlled by the permittee: Provided, that such use shall be controlled by the Forest Service so as not unreasonably to interfere with use of the road by the permittee or the permittee's use bears to all use of the road.

U.S. FOREST SERVICE — REGION 3

MINIMUM STANDARDS FOR SINGLE LANE FAIR WEATHER ROAD

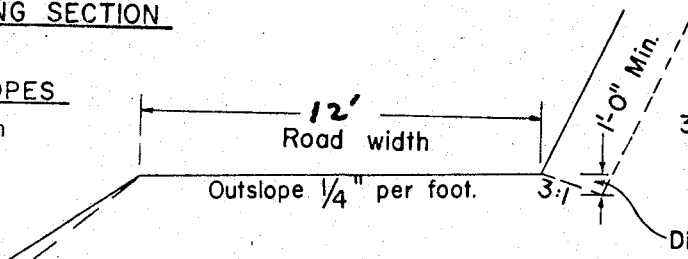
DESIGN CRITERIA

- Grade — Maximum of 8% unless c. proved in writing by the Forest Service.
- Alignment — Minimum radius 50 ft.

TYPICAL GRADING SECTION

FILL SLOPES

- 1 1/2:1 Common
- 1 1/2:1 Rock

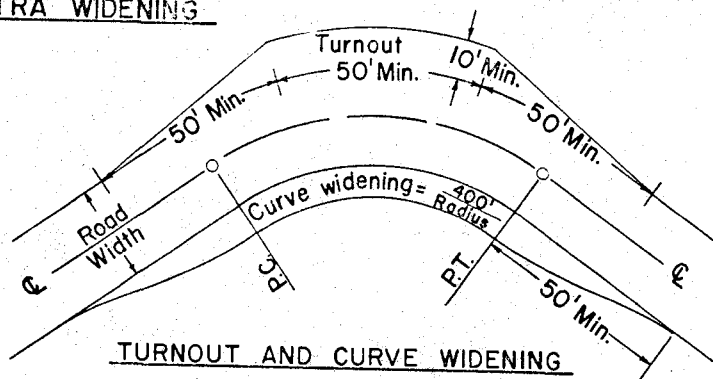


CUT SLOPES

- 1:1 — Common, 0–55% Side Slopes.
 - 3/4:1 — Common, over 55% Side Slopes.
 - 1/2:1 — Hardpan — Soft rock.
 - 1/4:1 — Solid rock.
- Ditch only where required for adequate drainage.

Side cast on contour grade line permitted except where topography is so broken that designed end haul is necessary to obtain reasonable minimum alignment standard.

EXTRA WIDENING



WIDENING ON FILL

Height of fill at Shoulder	Widen each Shoulder
0' – 6' (1 1/2:1 Fill Slopes)	1' – 0"
Over 6' (1 1/2:1 Fill Slopes)	2' – 0"

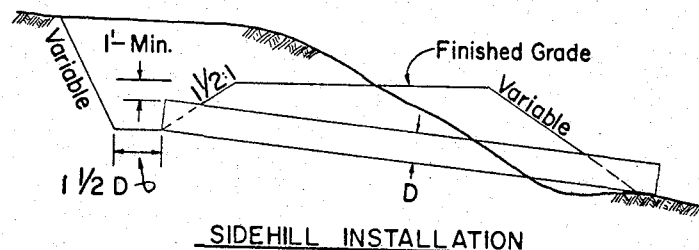
SURFACING

Spot surface with selected material where needed.

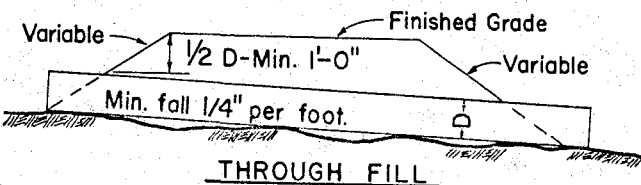
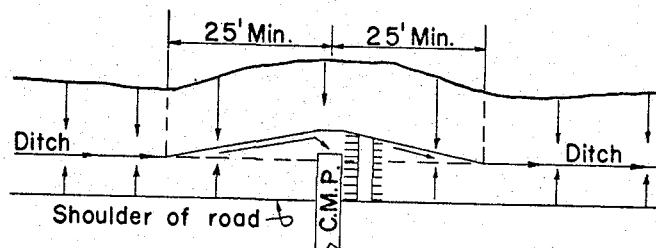
TURNOUT SPACING

Turnouts to be located on blind curves and supplemented between blind curves as necessary to keep spacing less than 1,000 ft.

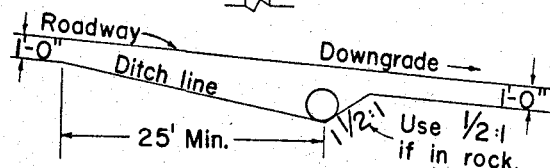
CULVERTS



SIDEHILL INSTALLATION



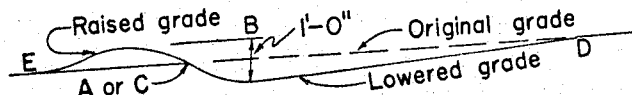
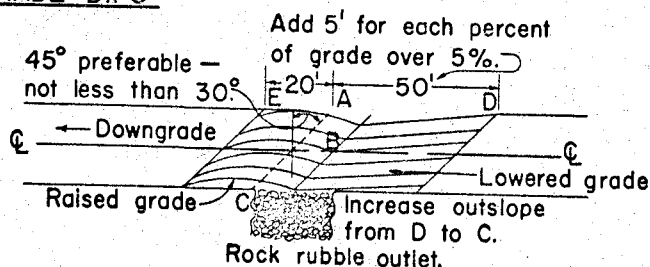
THROUGH FILL



SIDEHILL INSTALLATION

All culverts must discharge at natural ground level unless slope under pipe is protected by rock fill. Gradient of culverts on Sidehill installation not less than approaching ditch gradient.

GRADE DIPS



Grade Dips may be used in lieu of culverts ordinarily used for ditch relief.

For spacing of Grade Dips and Ditch Relief Culverts see F.S.M. 5613.54.

LETTER OF UNDERSTANDING

This agreement is made by and between American Smelting & Refining Co. who is the locator, owner, or lessee of certain unpatented mining claims located as shown on the attached map in Pinal County, Arizona, on the Globe Ranger District of the Tonto National Forest, hereinafter called the Cooperator, and the Forest Supervisor, Tonto National Forest.

In the public interest and for the protection of National Forest lands within or adjacent to these claims, the COOPERATOR agrees to take the following action:

1. Contact the responsible District Forest Ranger with respect to the claim area involved prior to any new road construction, major improvement of existing roads, blasting, fence cutting, and similar activities, to assure coordination with other Forest uses in the area, which may include salvaging commercial timber on the road right-of-way.
2. Construct all new roads in accordance with Forest Service specifications. In general, for pioneer type roads, this requires grades not greater than 8% with roadbed outsloped, berms removed, and rolling dips or water bars built where needed.
3. Maintain existing and newly constructed roads on an equitable basis with other users and in conjunction with the Forest Service maintenance program.
4. Limit the size of surface clearings and excavations to actual needs for drill sites, sludge pits, equipment storage, campsite, and other related installations.
5. Conduct prospecting and minerals exploration work, and perform any mining claim location and assessment work, by methods that minimize surface damage. This would exclude the use of bulldozers and similar earth moving equipment for making excavations in the search for mineral deposits, but is not intended to restrict the lawful use of such equipment for development of a mine after a valuable mineral deposit has been discovered.
6. Maintain disturbed areas so as to prevent harmful contamination or pollution of watercourses and drainages.

7. Safeguard persons and livestock from open shafts and other hazardous excavations by appropriate posting and adequate fencing.
8. Schedule field operations as possible to avoid muddy periods for prevention of excessive damage to roads and watershed.
9. Inform contractors working under your control that all internal combustion engines are to be equipped with Forest Service approved spark arresters.
10. Coordinate the use of stock tank waters for drilling with other forest uses through the District Ranger.
11. Repair all fences damaged by prospecting operations in accordance with Forest Service specifications.
12. Comply with applicable State laws in regard to blasting and storage of blasting materials.
13. Protect public land survey monuments and bearing trees within the claims area.
14. Close all temporary roads which are abandoned and no longer needed by erecting closure structures.
15. Dispose of litter, refuse, and flammable debris as directed by the District Ranger.
16. Exercise reasonable precautions to prevent and suppress forest and range fires.
17. Take reasonable measures to restore temporary roads and cleared sites no longer needed by filling pits, reducing slopes on steep cut banks, and reseeding disturbed areas to adaptable grass species.
18. Provide information or drill hole logs showing aquifers for possible development of range water improvement. This does not require disclosure of mineralization or assay values.
19. Inform all subcontractors and local company officers and employees of this agreement.

In turn, the FOREST SERVICE agrees as a part of this agreement to work with the Cooperator as follows:

1. Coordinate activities between the mineral exploration, timber, grazing, and other Forest activities in the claims area.

2. Furnish technical advice and help to lay out any roads to best serve all purposes and preserve the surface values.
3. Keep in touch with contractors and equipment operators to insure they are working for the best interests of all parties concerned in this agreement.
4. Make fire inspection of all internal combustion engines and install necessary inspection stickers on such equipment, or report deficiencies to the Cooperator.
5. Upon request provide the technical assistance in training of fire crews for fire prevention and fire suppression.
6. Assist in the location of garbage pits for campsites to avoid conflicts with other Forest uses.
7. Upon request provide available aerial photo and map data to the Cooperator.

Local representative for the COOPERATOR will be:

J. D. Sell, District Geologist
 Name Title
Claypool, Arizona 85532, 473-3802
 Address Telephone

The Tonto National Forest will be represented
 by W. H. Moehn, District Ranger, Globe
 Ranger District, 1100 N. Broad St., Globe, AZ, 425-2081
 Address 85501 Telephone

This agreement is approved by:

U.S. FOREST SERVICE:
nd. Fred Wirth
FRED J. WIRTH
 Forest Supervisor

COOPERATOR:
Robert B. Pirt 4/22/71
 Date Date

Property Manager
National Forest American Smelting & Refining Co.
P. O. Box 5747
Tucson, AZ 85703



AMERICAN SMELTING AND REFINING COMPANY
EXPLORATION DEPARTMENT
SOUTHWESTERN UNITED STATES DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST
PROPERTY MANAGER

August 16, 1971

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

Mr. William Moehn
District Ranger
1100 N. Broad Street
Globe, Arizona 85501

SUPERIOR EAST

Dear Mr. Moehn:

We have completed reseeding two of the sites that we have recently occupied within the Tonto National Forest.

The sites are located approximately as follows:

- 1) NW/SW/SW Sec. 15, T 1 S, R 13 E
- 2) NE/SW/SE Sec. 2, T 1 S, R 13 E

Enclosed is a copy of the seed species and proportion of the mix.

Very truly yours,


R. B. Crist

RBC:sg

cc: JDSell
RBCummings
WLKurtz

DISTRIBUTION AND DELIVERY RECORD

(Seeds and Plants)

Delivered to Dr. John L. Thomas, Watershed Management Dept, U. of A., Tucson, Arizona
(Project or individual) (Address)

Ordered by R. Joy Date 8-6-71 Shipped to above

Shipped from Tucson, Arizona Plant Materials Center Date shipped Picked up 8-6-71

Parcel Post Freight Express Govt. B/L No. _____ Other _____

ACCESSION NO.	SPECIES	HOW PACKED	SEEDS (pounds)		PLANTS (number)
			Clean	Unclean	
P-15653	Atriplex semibaccata (Australian saltbush)	4939	2		
A-68	Eragrostis lehmanniana	4856	1		
P-15641	Sporobolus usitatus (Creeping dropseed)	4903	1		

Storage facility from which delivered: Regular inventory, Tucson PMG

Order prepared by R. Joy Filled by R. Joy Checked by R. Joy

Received by [Signature] 6 Aug 1971
(Signature) (Date)
Gen. Dir.
(Title)

Approved by [Signature] 8-6-71
(Signature) (Date)
for: Robert D. Slayback
Manager, Tucson Plant Materials Center

W. L. K.

Please copy to: JSC
W/LK file.

W. L. K. Kurlitz et al
RECEIVED

SEP 3 1971

SEP 2 1971

route to JDS
RBCominings

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Tonto National Forest
Globe Ranger District
Globe, Arizona

Supervisor
East

2810 Mining Claims

September 1, 1971



Mr. R. B. Crist
American Smelting & Refining Company
P. O. Box 5747
Tucson, Arizona 85073

Dear Mr. Crist:

I would like to take this opportunity to tell you how much we appreciate the additional time and monies spent on reseeding the sites your company occupied on the Globe District. We are indeed fortunate to have cooperators, such as yourselves, who are willing to protect and restore the National Forest lands after they have served their purpose. The seed mixture you used, combined with the summer rains, should produce a good catch and we will look forward to seeing the results of your reseeding project.

For future use in development of recreational and range management water wells in the area of Oak Flat, we would like very much to have a copy of your drilling logs as they relate to ground water within one mile of the Oak Flat area.

Thanks again for your cooperation.

Sincerely,

Tobias A. Martinez

TOBIAS A. MARTINEZ
Acting District Ranger

Copy for J. D. SELL

W. L. N.

MAR 14 1972

RECEIVED

MAR 13 1972

S. W. U. S. EXPL. DIV.



American Mining Congress

March 1, 1972

*File with
Copy of E.I.S.
Symposium Paper
ENVIRONMENTAL
Impact
Statement*

Honorable Rogers C. B. Morton
Secretary of the Interior

Honorable Earl L. Butz
Secretary of Agriculture

Honorable Peter G. Peterson
Secretary of Commerce

Mr. Edward P. Cliff, Chief
Forest Service
U. S. Department of Agriculture

Dear Secretary Morton, Secretary Butz, Secretary Peterson and Mr. Cliff:

The American Mining Congress submitted a letter dated April 27, 1971 to Mr. Edward P. Cliff, chief of the U.S. Forest Service, commenting on the proposed regulations to apply to mineral activities in national forests. Recognizing the pressures upon the Forest Service to define its role with respect to these activities, and in a spirit of cooperation, we provided our qualified support of the regulations with suggested changes which we had hoped would enable the mining industry to continue operating in national forests.

However, in April 1971 we did not anticipate certain subsequent events--the decisions in Calvert Cliffs v. A.E.C., in Natural Resources Defense Council v. Morton, and in Kalut v. Resor--which indicate clearly that the environmental impact statement procedures arising from Section 102 (2)(C) of the National Environmental Policy Act will be applied even to minor federal actions and which define the detail with which the courts will require the application of those procedures.

Because the proposed Forest Service regulations would require an action by a federal official each time mechanized equipment is used, we are extremely concerned that the result will be an intolerable burden both upon the

continued . . .

1100 RING BUILDING • WASHINGTON, D. C. 20036 • TELEPHONE 202/338-2900 • TELEX 89-2745

W. A. MARTING
PRESIDENT

L. J. RANDALL
FRANK R. MILLIKEN
JOHN CORCORAN
E. W. LITTLEFIELD
VICE PRESIDENTS

J. ALLEN OVERTON, JR.
EXECUTIVE VICE PRESIDENT

HENRY I. DWORSHAK
SECRETARY AND TREASURER

DIRECTORS

HERBERT C. JACKSON*, CLEVELAND, OHIO
ANDREW FLETCHER*, NEW YORK, N. Y.
RAYMOND E. SALVATI*, FT. LAUDERDALE, FLA.
CHARLES J. POTTER, INDIANA, PA.
L. J. RANDALL, WALLACE, IDAHO
CLYDE E. WEED*, NEW YORK, N. Y.
ELLERY SEDGWICK, JR., CLEVELAND, OHIO
C. F. BEUKEMA, PITTSBURGH, PA.
FRANK R. MILLIKEN, NEW YORK, N. Y.
CRIS DOBBINS, DENVER, COLO.
KENNETH C. KELLAR, LEAD, S. D.
*HONORARY

W. A. MARTING, CLEVELAND, OHIO
CLAUDE O. STEPHENS, NEW YORK, N. Y.
E. MCL. TITTMANN, NEW YORK, N. Y.
JAMES BOYD, NEW YORK, N. Y.
JOHN CORCORAN, PITTSBURGH, PA.
JOHN K. MACGREGOR, NEW YORK, N. Y.
T. C. MULLINS, ST. LOUIS, MO.
C. J. PARKINSON, NEW YORK, N. Y.
NELSON C. WHITE, SKOKIE, ILL.
N. T. CAMICIA, NEW YORK, N. Y.
EDWARD P. LEACH, BETHLEHEM, PA.
J. B. LONG, MT. HOPE, W. VA.

GEORGE B. MUNROE, NEW YORK, N. Y.
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JOHN R. KRINGEL, GREENWICH, CONN.
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L. J. OTT, MANSFIELD, OHIO
JOHN N. PHILIPS, BOSTON, MASS.
ROBERT H. ALLEN, HOUSTON, TEXAS
STONIE BARKER, JR., CLEVELAND, OHIO
L. J. BURGER, PITTSBURGH, PA.
H. S. HARRISON, CLEVELAND, OHIO
PLATO MALOZEMOFF, NEW YORK, N. Y.

*will
always
fight!*

Note Pg. 2

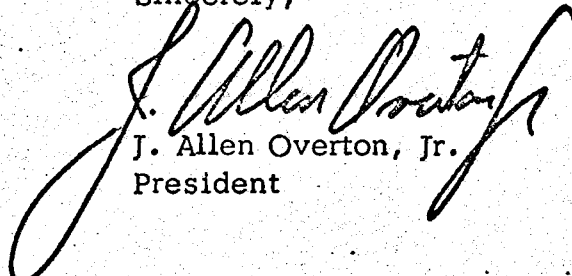
March 1, 1972

Page Two

Forest Service and upon the mining industry. In the relatively few instances in which the impact statement procedures have been applied to mineral activities, the time required from the date of application to the final federal action has ranged from six months to more than one year. Such delays would have a tremendously limiting effect upon mineral activities, particularly exploration. Therefore, we request that the proposed Forest Service regulations be revised to assure that, to the maximum possible extent, they are self-operating. We believe it would be possible to provide regulations not requiring a federal permit or approval, at least applying to the prospecting and development stages of mineral activities, which would allow the Forest Service to carry out its responsibilities and still allow mineral exploration and development to continue on lands under its jurisdiction.

We would be happy to provide any assistance or more specific suggestions in the formulation of such regulations.

Sincerely,



J. Allen Overton, Jr.
President

No problems yet in our contacts with Forest Service - W.L. Kurtz



ARIZONA MINING ASSOCIATION

SUITE 1222 • ARIZONA TITLE BUILDING • 111 WEST MONROE ST. PHOENIX, ARIZONA 85003 • (602) 258-3476

MINING
MAR 22
TUCSON
March 20, 1972

Noted
NV
RSH
Kvds
PPK
JHC
AJK

EDWARD H. PELOW, JR.
Executive Secretary

R. B. M.
MAR 22 1972

R. S. H.
MAR 22 1972

- R. C. COLE
President
- R. D. LYNN
Vice President
- R. F. MORISON
Secretary-Treasurer
- DIRECTORS
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- G. A. KOMADINA
- J. A. LENTZ
- R. B. MEEN
- I. G. PICKERING
- W. J. RUNDLE

MEMO TO: AMA Board Members
AMA Representatives

FROM: Edward H. Peplow, Jr.

SUBJECT: U.S. Forest Service Region III

Return to
S.W. MINING DEPT.

Attached are copies of a letter to me from Jerry Haggard, and a letter to him from Keith Knoblock. May I suggest that Jerry's proposal to compile a file of cases is a good one and that we should follow it. I hesitate to send this correspondence to the Southwestern Minerals Exploration Association, (Dirty Dozen); but perhaps it would be a good idea for your personnel to canvass explorationists they know who might have encountered the kind of difficulties with Region III discussed in the attached.

I will forward your replies to Jerry Haggard; and I will have a chance to see Bob May, whom I know, and Keith Knoblock in Washington when I am there in April, if any follow-up is needed.

Region 3 - Southwestern Region
ARIZ & N. Mex.
Hdqr. Albuquerque

NAT'L Forests & Grasslands:

- ARIZ: APACHE
- COCONINO
- CORONADO
- KAIABAB
- PRESCOTT
- SITGREAVES
- TUMTO
- NEW MEX.: CARSON
- CIBOLA

LAW OFFICES

*Evans, Kitchel & Jenckes, P.C.*363 NORTH FIRST AVENUE
PHOENIX, ARIZONA 85003
TELEPHONE (602) 254-3101DENISON KITCHEL
ALFRED B. GARR
OF COUNSEL

JOS. S. JENCKES, JR. [1908-1970]

WILLIAM A. EVANS	RALPH J. LESTER
W. F. BOLAND, JR.	EARL H. CARROLL
WES M. BUSH	EDWARD C. LEBEAU
LESLIE T. JONES, JR.	BURTON M. APKER
STEPHEN W. POGSON	NEWMAN R. PORTER
DAVID WM. WEST	WILLIAM H. JURY
ROBERT R. MILLS	FRED E. FERGUSON, JR.
JERRY W. LAWSON	G. STARR ROUNDS
WILLIAM W. CLEMENTS	HAROLD J. BLISS, JR.
JOHN O. THEOBALD, II	F. PENDLETON GAINES, III
GARY H. FRY	LEX J. SMITH
LEON D. BESS	JERRY L. HAGGARD
JAMES D. KITCHEL	

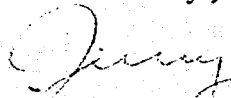
March 14, 1972

Mr. Edward H. Peplow, Jr.
Executive Secretary
Arizona Mining Association
1222 Arizona Title Bldg.
111 West Monroe
Phoenix, Arizona 85003

Dear Pep:

Enclosed is a letter I received from Keith Knoblock concerning the management of mineral activities in Region 3 of the Forest Service. Mr. Knoblock has advised me in other conversations that Region 3 is generally regarded in the Forest Service headquarters as following an exceptionally restrictive policy with respect to entry into national forests in that region for mineral activities. It might be worthwhile to canvass the member companies of the Arizona Mining Association, the "Dirty Dozen" in Tucson and the New Mexico Mining Association to compile a file of cases in which Region 3 has appeared to be excessively restrictive. It appears that, if a sufficiently clear case of a general practice of excessive restrictions can be established, some relief may be provided by the Forest Service headquarters.

Sincerely,



Jerry L. Haggard
For EVANS, KITCHEL & JENCKES

JLH:mp
Enclosure

RECEIVED
MAR 14 1972

3/4/72



American Mining Congress

March 3, 1972

Jerry L. Haggard, Esquire
Evans, Kitchel & Jenckes
363 North First Avenue
Phoenix, Arizona 85003

Dear Jerry:

You have mentioned in previous conversations the difficulty that some of the mining interests in Arizona have in dealings with Region III of the Forest Service. I mentioned this to Bob May, head of the minerals management group in the Division of Watershed Management. He told me that he had yet to hear from anybody in Arizona connected with the mining industry about these problems. Bob indicated it would be most helpful if a representative of the Arizona Mining Association would discuss these problems with him and also back it up with facts and figures. Perhaps you may want to discuss this with some of your associates.

Sincerely,

Keith R. Knoblock

cc: Richard Pendleton

1100 RING BUILDING • WASHINGTON, D. C. 20036 • TELEPHONE 202/338-2900 • TELEX 89-2745

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PRESIDENT

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FRANK R. MILLIKEN
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VICE PRESIDENTS

J. ALLEN OVERTON, JR.
EXECUTIVE VICE PRESIDENT

HENRY I. DWORSHAK
SECRETARY AND TREASURER

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C. F. BEUKEMA, PITTSBURGH, PA.
FRANK R. MILLIKEN, NEW YORK, N. Y.
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KENNETH C. KELLAR, LEAS...

W. A. MARTING, CLEVELAND, OHIO
CLAUDE O. STEPHENS, NEW YORK, N. Y.
E. MCL. TITTMANN, NEW YORK, N. Y.
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L. J. BURGER, PITTSBURGH, PA.
H. S. HARRISON, CLEVELAND, OHIO

DEPARTMENT OF THE INTERIORBureau of Land Management
ARIZONA

Notice of Filing of Plats of Survey

MARCH 13, 1972.

1. Plat of survey of the land described below, accepted March 13, 1972, will be officially filed in the Arizona State Office on the date of publication in the FEDERAL REGISTER.

GILA AND SALT RIVER MERIDIAN, ARIZONA

T. 1 N., Ranges 13 and 14 E.,
Tracts 40 and 41.

2. The above survey was made to provide for an exchange of land within the Tonto National Forest, Serial No. A 6396, and therefore the lands will not be open to entry.

CHARLES G. BAZAN, JR.,
Chief, Branch of
Records and Data Management.

[FR Doc.72-4265 Filed 3-20-72; 8:47 am]

DEPARTMENT OF AGRICULTURE

Rural Electrification Administration

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.

Draft Environmental Statement

Notice is hereby given that the Rural Electrification Administration has prepared a Draft Environmental Statement in accordance with section 102(2)(C) of the National Environmental Policy Act of 1969, in connection with a change of purpose for use of REA funds previously loaned to Arizona Electric Power Cooperative, Inc., of Benson, Ariz., to finance construction of 73 miles of 230 kv. transmission line between Cochise and Santo Tomas, Ariz., plus 18 miles of related 115 kv. transmission line and substation facilities.

Additional information may be secured on request, submitted to Mr. James N. Myers, Assistant Administrator—Electric, Rural Electrification Administration, U.S. Department of Agriculture, Washington, D.C. 20250. Comments are particularly invited from State and local agencies which are authorized to develop and enforce environmental standards, and from Federal agencies having jurisdiction by law or special expertise with respect to any environmental impact involved from which comments have not been requested specifically.

Copies of the REA Draft Environmental Statement have been sent to various Federal, State, and local agencies, as outlined in the Council on Environmental Quality Guidelines. The Draft Environmental Statement may be examined during regular business hours at the offices of REA in the South Agriculture Building, 12th Street and Independence Avenue SW., Washington, DC, Room 4322, or at the borrower address indicated above.

Comments concerning the environmental impact of the construction proposed should be addressed to Mr. Myers at the address given above. Comments must be received within thirty (30) days of the date of publication of this notice to be considered in connection with the proposed action.

Final REA action with respect to this matter (including any release of funds) will be taken only after REA has reached satisfactory conclusions with respect to its environmental effects and after procedural requirements set forth in the National Environmental Policy Act of 1969 have been met.

Dated at Washington, D.C., this 15th day of March 1972.

DAVID A. HAMIL,
Administrator,
Rural Electrification Administration.

[FR Doc.72-4297 Filed 3-20-72; 8:50 am]

**TRI-STATE GENERATION AND
TRANSMISSION ASSOCIATION, INC.**

Draft Environmental Statement

Notice is hereby given that the Rural Electrification Administration has prepared a Draft Environmental Statement in accordance with section 102(2)(C) of the National Environmental Policy Act of 1969, in connection with a loan application from Tri-State Generation and Transmission Association, Inc., 10520 Melody Drive, Northglenn, CO. This loan application includes financing for the construction of 80 miles of 230 kv. transmission line from Midway to Limon, Colo., and a 230/115 kv. substation at Limon.

Additional information may be secured on request, submitted to Mr. James N. Myers, Assistant Administrator—Electric, Rural Electrification Administration, U.S. Department of Agriculture, Washington, D.C. 20250. Comments are particularly invited from State and local agencies which are authorized to develop and enforce environmental standards, and from Federal agencies having jurisdiction by law or special expertise with respect to any environmental impact involved from which comments have not been requested specifically.

Copies of the REA Draft Environmental Statement have been sent to various Federal, State, and local agencies, as outlined in the Council on Environmental Quality Guidelines. The Draft Environmental Statement may be examined during regular business hours at the offices of REA in the South Agriculture Building, 12th Street and Independence Avenue SW., Washington, DC, Room 4322, or at the borrower address indicated above.

Comments concerning the environmental impact of the construction proposed should be addressed to Mr. Myers at the address given above. Comments must be received within thirty (30) days of the date of publication of this notice to be considered in connection with the proposed action.

Final REA action with respect to this matter (including any release of funds) will be taken only after REA has reached satisfactory conclusions with respect to its environmental effects and after procedural requirements set forth in the National Environmental Policy Act of 1969 have been met.

Dated at Washington, D.C., this 15th day of March 1972.

DAVID A. HAMIL,
Administrator, Rural
Electrification Administration.

[FR Doc.72-4298 Filed 3-20-72; 8:50 am]

**DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE**Food and Drug Administration
BIO-RAD LABORATORIESNotice of Filing of Petition for Food
Additive

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5), 72 Stat. 1786; 21 U.S.C. 348 (b)(5)), notice is given that a petition (PAP 2B2755) has been filed by Bio-Rad Laboratories, 32d and Griffin Avenue, Richmond, Calif. 94804, proposing the issuance of a food additive regulation (21 CFR Part 121) to provide for the safe use of acrylamide-N,N'-methyleneisacrylamide copolymer as a filtration medium intended for use in food processing.

Dated: March 14, 1972.

VIRGIL O. WODICKA,
Director, Bureau of Foods.

[FR Doc.72-4281 Filed 3-20-72; 8:48 am]

[Docket No. FDC-D-446]

PFIZER, INC.

Dihydrostreptomycin Solution and Procaine Penicillin G in Oil; Withdrawal of Approval of New Animal Drug Applications

In the FEDERAL REGISTER of July 1, 1970 (35 F.R. 10698, DESI 0024NV) and in the FEDERAL REGISTER of August 25, 1970 (35 F.R. 13536, DESI 0019NV), the Commissioner of Food and Drugs announced the conclusions of the Food and Drug Administration following evaluation of reports received from the National Academy of Sciences-National Research Council, Drug Efficacy Study Group on Dihydrostreptomycin Sulfate Crystalline Solution and Sterile Penicillin G Procaine in Sesame Oil marketed by Pfizer Agricultural Division, Pfizer, Inc., 235 East 42d Street, New York, N.Y. 10017.

Pfizer, Inc., advised the Commissioner that they did not intend to pursue the requested revisions and updating suggested by said announcements. They notified the Commissioner that they waive an opportunity for a hearing on the above-named products.

THIS IS AN EXCHANGE BETWEEN THE FOREST SERVICE
& TRANSMISSION TITLE & SHOWLOW - 4,687 ACRES

Leib

JDS - JCB - JHC

WLK

any objections?

"Lost Dutchman Found"

6501

Kutz

Notices

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[A 6608]

ARIZONA

Notice of Proposed Withdrawal and Reservation of Lands

The Forest Service, U.S. Department of Agriculture, has filed an application, Serial No. A 6608 for withdrawal of lands from location and entry under the General Mining Laws, but not the mineral leasing laws.

The Forest Service has designated these lands for a research natural area, primarily because of its picturesque stands of pine and spruce, representative of the best species in Northern Arizona. Any mining activity would interfere with the purpose for which the lands have been designated. The withdrawal would be made subject to valid existing rights.

For a period of 30 days from the date of publication of this notice, all persons who wish to submit comments, suggestions, or objections in connection with the proposed withdrawal, may present their views in writing to the undersigned officer of the Bureau of Land Management, Department of the Interior, 3022 Federal Building, Phoenix, Ariz. 85025.

If circumstances warrant it, a public hearing will be held at a convenient time and place, which will be announced.

The determination of the Secretary on the application will be published in the FEDERAL REGISTER. A separate notice will be sent to each interested party.

The lands involved in the application are as follows:

GILA AND SALT RIVER MERIDIAN, ARIZONA
SAN FRANCISCO PEAKS RESEARCH NATURAL AREA

T. 23 N., R. 7 E.,
Sec. 19, lots 2, 3, and 4, SE 1/4 NW 1/4,
E 1/2 SW 1/4, and SE 1/4;
Sec. 30, lots 1 through 12, inclusive, and
E 1/2 W 1/2.

The area described aggregates 1,023.93 acres, within the Coconino National Forest.

Dated: March 24, 1972.

EDWARD J. HOFFMANN,
Associate State Director.

[FR Doc.72-4865 Filed 3-29-72; 8:48 am]

[A 6837]

ARIZONA

Notice of Proposed Withdrawal and Reservation of Lands

The Forest Service, U.S. Department of Agriculture, has filed an application, Serial No. A 6837 for withdrawal of lands

from location and entry under the mining laws only, subject to valid existing rights.

The Forest Service plans to use these lands for development of public recreation facilities in conjunction with the adjacent Lost Dutchman Recreation site.

For a period of 30 days from the date of publication of this notice all persons who wish to submit comments, suggestions, or objections in connection with the proposed withdrawal may present their views in writing to the undersigned officer of the Bureau of Land Management, Department of the Interior, 3022 Federal Building, Phoenix, Ariz. 85025.

If circumstances warrant it, a public hearing will be held at a convenient time and place which will be announced.

The determination of the Secretary on the application will be published in the FEDERAL REGISTER. A separate Notice will be sent each interested party.

The lands involved in the application are as follows:

GILA AND SALT RIVER MERIDIAN, ARIZONA
LOST DUTCHMAN RECREATION SITE

T. 2 N., R. 3 E.,
Sec. 36, lots 8, 11, and 12 (less approximately 16 acres withdrawn by PLO 4172 for Highway 88; approximately 20.24 acres of unpatented M.S. 3886 in W 1/2 SE 1/4.

T. 2 N., R. 9 E. (unsurveyed).
Sec. 31, S 1/2, (less approximately 5 acres in NW 1/4 SW 1/4 withdrawn by PLO 4172 for Highway 88).

T. 1 N., R. 9 E.,
Sec. 6, lots 1, 2, 3, 4, 5, 6, and 7, SE 1/4 NW 1/4,
E 1/2 SW 1/4, and SE 1/4;
Sec. 7, lots 1 and 2, NE 1/4 and E 1/2 NW 1/4.

The areas described aggregate approximately 1,265.42 acres, within Superstition Mountain Area in the Tonto National Forest.

Dated: March 24, 1972.

JOE T. FALLINI,
State Director.

[FR Doc.72-4866 Filed 3-29-72; 8:48 am]

Office of the Secretary

DUCK STAMP

Increase in Price

Public Law 92-214, 85 Stat. 777, approved December 22, 1971, amends the Migratory Bird Hunting Stamp Act (48 Stat. 451), as amended (16 U.S.C. 718b), to authorize the Secretary of the Interior to establish the price of the migratory bird hunting stamp (commonly called the "Duck Stamp") at not less than \$3 nor more than \$5. The Secretary, in making his determination of the price, must take into consideration, among other matters, the increased cost of lands needed for the conservation of migratory birds.

Proceeds from the sale of duck stamps are set aside in a special fund known

as the Migratory Bird Conservation Fund. All moneys received into this fund, except expenses of the Postal Service for printing and sale of the stamps, are to be made available by law for the location, ascertainment, and acquisition of Waterfowl Production Areas and suitable areas for migratory bird refuges under provisions of the Migratory Bird Conservation Act, 45 Stat. 1222, as amended.

Because of rising land costs, moneys accruing to the Migratory Bird Conservation Fund from duck stamp sales at the current price of \$3 and other sources are insufficient to reach projected land acquisition goals.

Notice is hereby given that by the authority vested in me by Public Law 92-214, I have determined the price of the Migratory Bird Hunting Stamp shall be \$5 effective July 1, 1972. This price will remain in effect until further notice.

Dated: March 24, 1972.

ROGERS C. B. MORTON,
Secretary of the Interior.

[FR Doc.72-4869 Filed 3-29-72; 8:51 am]

ENVIRONMENTAL STATEMENTS

Preparation

MARCH 24, 1972.

Notice is hereby given of the publication of procedures of the Bureau of Outdoor Recreation to implement the policy and directives of section 102(2)(C) of the National Environmental Policy Act of 1969 (Public Law 91-190, 83 Stat. 852, January 1, 1970); section 2(f) of Executive Order 11514 (March 5, 1970); the guidelines issued by the Council on Environmental Quality (36 F.R. 7724, April 23, 1971); Office of Management and Budget Bulletin No. 72-6 (September 14, 1971); and Part 516, Chapter 2 of the Department of the Interior Manual.

Set forth below is the Bureau of Outdoor Recreation Manual Part 705, Chapter 1, entitled "Environmental Statements, Preparation by the Bureau." The numbering system is that of the Bureau of Outdoor Recreation Manual.

These procedures become effective at the beginning of the 30th calendar day following the date of publication in the FEDERAL REGISTER.

JOHN W. LARSON,
Assistant Secretary of the Interior.

1. Purpose. This chapter contains instructions and guidance regarding environmental statements prepared by the Bureau to meet the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969, section 2(f) of Executive Order 11514 (March 5, 1970), the guidelines of the Council on Environmental Quality, Bulletin No. 72-6 of the Office of Management and Budget (September 14, 1971), and 516 DM 2.

AMENDMENT # 1

Jim Sall

United States Department of Agriculture Forest Service AMENDMENT FOR SPECIAL USE PERMIT Ref: FSM 2714	a. Record no. (1-2) <u>70</u>	b. Region (3-4) <u>03</u>	c. Forest (5-6) <u>12</u>
	d. District (7-8) <u>02</u>	e. Use number (9-12) <u>2730</u>	f. Kind of use (13-15) <u>720</u>
THIS AMENDMENT IS ATTACHED TO AND MADE A PART OF THE <input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT	g. State (16-17) <u>04</u>	h. County (18-20) <u>021</u>	k. Card no. (21) <u>1</u>

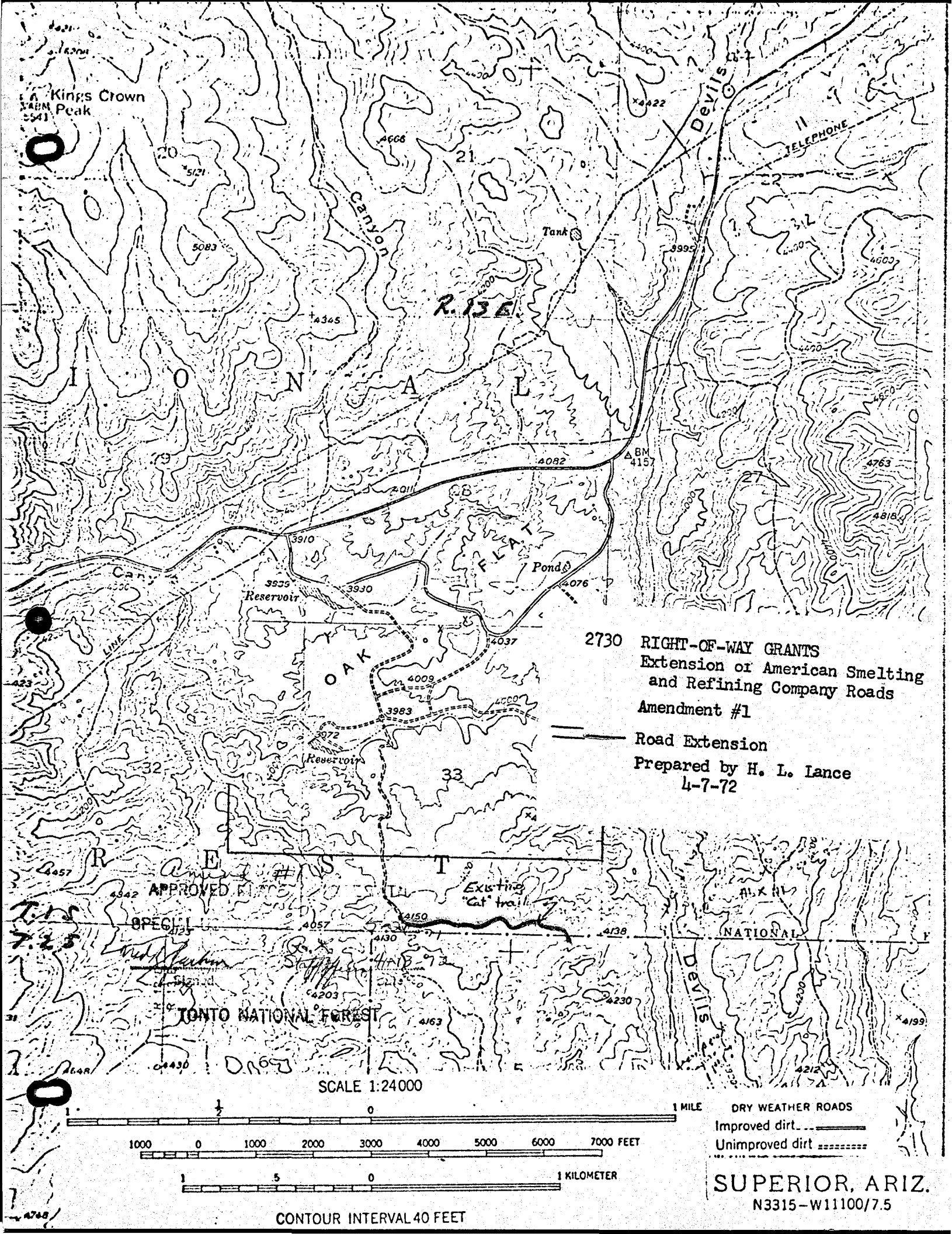
For Road Right-of-Way issued to _____
(KIND OF PERMIT)
American Smelting and Refining Company, on 5-20-71
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

Improving and using an existing cat road as shown on the attached map labeled "Extension of American Smelting and Refining Company roads Amendment #1," dated 5-20-71 and approved by Ned R. Jackson. Specifications and conditions of the extension are the same as the original permit.

This Amendment is accepted subject to the conditions set forth herein, and to conditions _____ to attached hereto and made a part of this Amendment.

PERMITTEE	NAME OF PERMITTEE American Smelting & Refining Company	SIGNATURE OF AUTHORIZED OFFICER <i>Robert B. Print</i> TITLE <i>Property Mgr.</i>	DATE <u>4/19/72</u>
ISSUING OFFICER	NAME AND SIGNATURE <i>Ned R. Jackson</i> NED R. JACKSON	TITLE Recreation and Lands Staff Officer	DATE <u>4-13-72</u>



Kings Crown Peak
5541

CANYON

R. RISE

DEVILS

TELEPHONE

IONANAL

CANYON

Reservoir

Pond

OAK

Reservoir

33

APPROVED

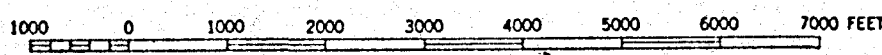
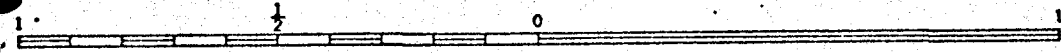
TONTO NATIONAL FOREST

Existing "cat" trail

NATIONAL

DEVILS

SCALE 1:24000



1 MILE DRY WEATHER ROADS
Improved dirt
Unimproved dirt

2730 RIGHT-OF-WAY GRANTS
Extension of American Smelting
and Refining Company Roads
Amendment #1

Road Extension
Prepared by H. L. Lance
4-7-72

SUPERIOR, ARIZ.
N3315-W11100/7.5

CONTOUR INTERVAL 40 FEET

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

June 7, 1972

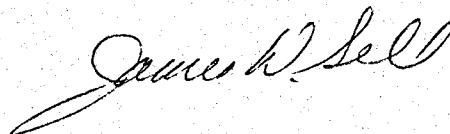
TO: MR. R. B. Crist

FROM: J. D. Sell

Seeding of Drill Sites
Superior East Project
Pinal County, Arizona

On June 6, 1972, Mr. Tony Benavidez of this office seeded the ASARCO drill sites located in the NW1/4 NE1/4, Section 3 and the NE1/4 SE1/4, Section 22, both in T1S, R13E.

The sites had originally been cleaned, pits refilled, and the land contoured by Mr. Paul Bryant of Superior, Arizona.



James D. Sell

JDS:sg



AMERICAN SMELTING AND REFINING COMPANY
EXPLORATION DEPARTMENT
SOUTHWESTERN UNITED STATES DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST
PROPERTY MANAGER

June 15, 1972

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

Mr. H.L. Lane
Forest Service
1100 N. Broad Street
Globe, Arizona 85501

SUPERIOR EAST PROJECT

Dear Mr. Lance:

Enclosed please find a memorandum from Mr. J.D. Sell indicating the Drill Site Restoration work that we have completed on our Superior East Project.

The approximate locations are given for the two sites on ASARCO's unpatented Federal lode claims lying within the Tonto National Forest.

Also enclosed is a copy of the seed mixtures which is the same mixture used in reseeding on the two previous sites.

Very truly yours,

R.B. Crist
R.B. Crist

RBC:kre

Encls: as noted

cc: W.L. Lockhart - Forest Service w/encl.
W.L. Kurtz w/encl.
J.D. Sell w/encl. ✓

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

June 7, 1972

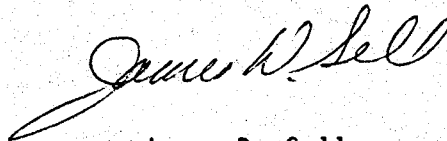
TO: MR. R. B. Crist

FROM: J. D. Sell

Seeding of Drill Sites
Superior East Project
Pinal County, Arizona

On June 6, 1972, Mr. Tony Benavidez of this office seeded the ASARCO drill sites located in the NW1/4 NE1/4, Section 3 and the NE1/4 SE1/4, Section 22, both in T1S, R13E.

The sites had originally been cleaned, pits refilled, and the land contoured by Mr. Paul Bryant of Superior, Arizona.



James D. Sell

JDS:sg

DISTRIBUTION AND DELIVERY RECORD

(Seeds and Plants)

Delivered to Dr. John L. Thomas, Watershed Management Dept., U. of A., Tucson, Arizona
(Project or individual) (Address)

Ordered by R. Joy Date 8-6-71 Shipped to above

Shipped from Tucson, Arizona Plant Materials Center Date shipped Picked up 8-6-71

Parcel Post Freight Express Govt. B/L No. _____ Other _____

ACCESSION NO.	SPECIES	HOW PACKED	SEEDS (pounds)		PLANTS (number)
			Clean	Unclean	
P-15653	Atriplex semibaccata (Australian saltbush)	4939	2		
A-68	Eragrostis lehmanniana	4856	1		
P-15641	Sporobolus usitatus (Creeping dropseed)	4908	1		

Storage facility from which delivered: Regular inventory, Tucson RMG

Order prepared by R. Joy Filled by R. Joy Checked by R. Joy

Received by [Signature] 6 Aug 1971 Approved by [Signature] 8-6-71
(Signature) (Date) (Signature) (Date)
Garbois
v (Title) for: Robert D. Slayback
Manager, Tucson Plant Materials Center



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE
DEPARTMENT OF WATERSHED MANAGEMENT

August 9, 1972

Robert Crist
American Smelting and Refining Co.
1150 North 7th Avenue
Tucson, Arizona

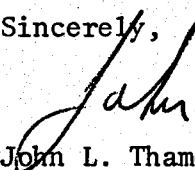
Dear Bob:

Attached is a first draft of the impact statement. From reading over a few statements that were available and the material you generously supplied, I believe, as we discussed, that the statements of possible impact should, if anything, be overstated; that is, made to bring out the worst (rather we say it than someone else) and once the statement is made then explain how ASARCO plans to avoid or minimize the impact.

I will be out of town for a couple of weeks and would greatly appreciate it if you were to review the draft. Please be as critical and as blunt as you wish. Circulate it among your mining colleagues and ask them not to be gentle. Please pay particular attention to the section on rehabilitation and the appendices to see if we haven't gone overboard on ASARCO's obligations.

I have also asked some of my associates for critical views. When I return, I will pick up what pieces are left, put them back together in a second draft and circulate it among people we know in the Forest Service. When they are finished we will prepare a third draft and send it out for comment as we discussed.

Sincerely,


John L. Thames

JLT/kl

Enclosure

Rawhide



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010


December 18, 1972

Mr. W. L. Lockhart, District Ranger
Tonto National Forest
1100 North Broad Street
Globe, Arizona 85501

Dear Sir:

Attached is our map showing the proposed rehabilitation and extension of the road system over ASARCO-held mining claims. As you know, the existing road was badly washed away during the late summer rains and we propose to rebuild a portion of it up out of the drainage, in conformance with Forest Service standards. We would further extend the road into the center of Section 23 for a drill site to be occupied during 1973.

Very truly yours,

James D. Sell
James D. Sell 

JDS:lab
Attach.

cc: HLLance - w/enc.
WLKurtz - "
RBCrist - "

*Jan. 17, 1973
Met Mr. Lockhart, in field on D No 12 claim area,
& discussed road work to south etc. going into
center of Section 23 area.*

7.5 MINUTE SERIES (TOPOGRAPHIC)

2'30"

770000 FEET

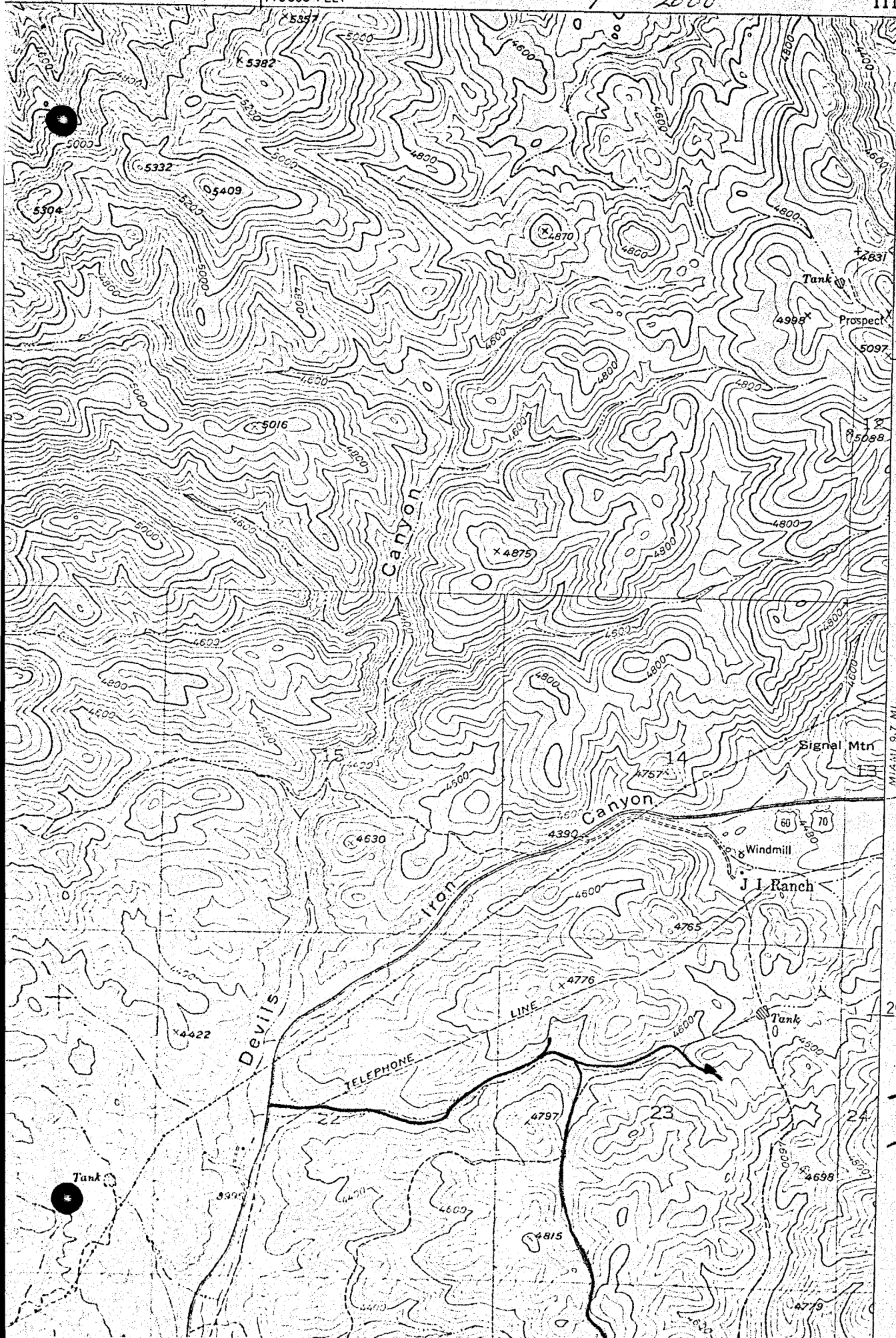
1" = 2000'

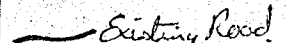
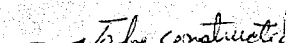
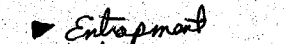
111°00'

33°22'30"

860000 FEET

MIAMI 9.7 MI.
GLOBE 16 MI.



-  Existing Road
-  To be constructed
-  Entrapment basin

ASARCO

J. D. Bell

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

December 22, 1972

CONFIDENTIAL

Mr. S. N. Kesten
ASARCO
Wallace Office

Oak Flat

Dear Norm:

The enclosed letter from Mr. Hurst, Regional Forester from Region 3, will be of interest to you concerning your proposed visit to Albuquerque. The discussion mentioned in paragraph #1 took place in mid-September. Mr. Crist will determine just what Hurst means by "large numbers of persons".

Lastly, it is quite obvious that the decision not to lift the mineral withdrawal did not take into consideration the highest and best use of the land.

Very truly yours,

W. L. Kurtz
W. L. Kurtz

WLK:lad
Enc.

cc: TCOsborne - w/enc.
RBCrist - w/enc.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Region 3
517 Gold Avenue, S.W.
Albuquerque, New Mexico 87101

RECEIVED
DEC 22 1972
EXPLORATION DEPT.

2810
December 20, 1972



Mr. R. B. Crist
American Smelting & Refining Co.
P. O. Box 5746
Tucson, Arizona 85703

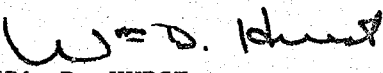
Dear Mr. Crist:

During our discussion in Tucson concerning the mineral prospecting in the Oak Flat Picnic and Camp Ground, I promised to investigate for you the possibility of lifting the mineral withdrawal. The Forest Supervisor of the Tonto National Forest and members of this office have carefully considered your request.

The picnic area is still being utilized by large numbers of persons. The need for the withdrawal is just as valid today as it was when imposed. We cannot, therefore, recommend its lifting. Additionally, there is no authority under which we can authorize exploration in the area as long as the withdrawal remains in effect.

I'm sorry that a more favorable reply could not be made. I am convinced, however, that we should not move in the direction of opening the area in question to mining exploration.

Sincerely,


WM. D. HURST
Regional Forester

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

January 16, 1973

FILE MEMORANDUM

Superior East

I talked with Norm Keston today and he is now in agreement that we may drill at anytime near A-4. N. Keston has made no contact as yet with the Forest Service.

W. L. Kurtz

WLK:1b

cc: RBCrist

JDSell

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

February 9, 1973

TO: J. D. Sell

FROM: W. L. Kurtz

OAK FLAT

Lockhart is agreeable to our fixing a road south across Oak Flat so that we can drill on Section 5. He would like to keep blasting to the bare minimum and would like us to consider the possibility of hauling fill rather than blasting, especially at the start of the road immediately south of the big oak tree. Would you and/or Howard assess this possibility with the view of using a Failing 1500 drill rig.

After rather specifically assessing the amount of work on the road necessary, please meet with Lockhart to discuss the permit.


W. L. Kurtz

WLK:lb

cc: RBCrist
HLCrittendon



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

February 14, 1973

Mr. W. L. Lockhart, District Ranger
Tonto National Forest
1100 North Broad Street
Globe, Arizona 85501

Dear Sir:

In continuance of our program of rehabilitation and improvement of the existing road system over ASARCO-held mining claims, I submit the attached map showing the proposed work for reaching State Lease sections east of Devils Canyon.

The work will essentially follow existing roads used in earlier work in the area with improvement along the existing trail on the south end.

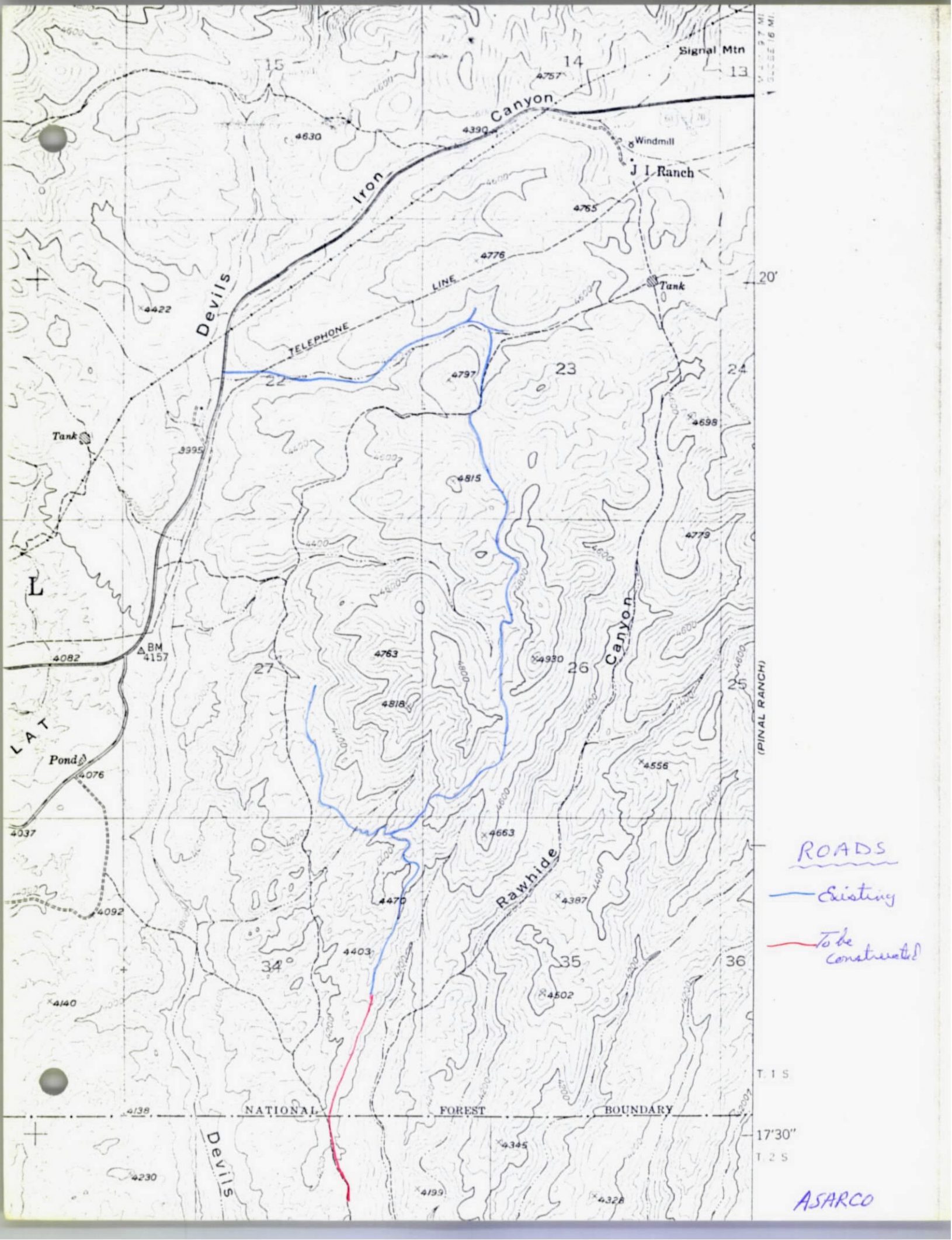
Sincerely yours,

James D. Sell

JDS:1b

Enc.

cc: HLLance - w/enc.
WLKurtz - "
RBCrist - "



ROADS

Existing

To be constructed

ASARCO

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
TONTO NATIONAL FOREST

W L K
~~J D J~~
H L C
T C B

Greetings!
From your
Globe District



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Tonto National Forest
Globe Ranger District
Globe, Arizona

May 18, 1973



Dear Friend:

"Time and tide," so they say, "wait for no man" and neither, might I add, does fire!! Each of these physical phenomena can wreak havoc in its own particular way. The only difference between the three is that something can be done about one of them! Since we have not discovered how successfully to trip Father Time as he determinedly marches on; and the tides, well, they will ebb and flow without any assist from us; this leaves only fires, that uncuencheable old devil who devours everyone and everything in his path if he gets a chance!!

Ah, ha! You are absolutely correct, its me again! The merry month of May not only ushered in bright sunny skies and an abundant emerald-green countryside profusely dotted with wildflowers, but also your friendly fire prevention messenger who suddenly realized it was time once again to enlist your aid. Thousands of you will be using the Forest this summer, as you do every year, and this is as it should be. Cattle grazing on the range (and with the amount of feed on the ground, I know they will get fat and sassy); heavy equipment working in a number of areas; all our forest users busily engaged in numerous and varied endeavors; while outdoor enthusiasts will again enjoy the summer magic associated with being in one of America's many playgrounds, the Tonto National Forest! We are happy this is so, but because Mother Nature has been so lavish with her winter storms this year, we are blessed with dense stands of fuel from one end of this Forest to the other. All too soon the sun's rays will dry up these fuels and the Tonto will be as explosive as a tinderbox, a Forest that figuratively speaking could go up in a giant puff of smoke unless we are all extremely careful!

Last year was a good year as far as fire statistics were concerned on the Tonto. The Forest had 274 fires, 69 of which were man-caused. Out of 260 acres burned, 128 were attributed to man, and we have a great many of you to thank for this small percentage! No, I am not trying to give you an unjustifiable pat on the back; we had some 1,900,000 visits by people playing or working in the Forest last year and yet, due in part to your vigilance, the total as well as the man-caused acreage was held to a minimum. Many of you took the time and effort to call from the nearest telephone to report a possible fire you saw while driving down one of the many roads that traverse the Forest; you diligently scanned the surrounding mountains after a lightning storm; you passed by an unattended campfire and put it out; cautioned someone when they did not stamp out one of their smokes; and perhaps even caught yourself before tossing a lighted match out the window of your car; or in some cases, even stopped to help put out a fire!

While it takes a large number of people to staff the Tonto during the fire season, think of the multitude we did not have on our payroll! Your only reward, well, come to think of it, it is your Forest, comprising some 2,898,118 acres of desert grassland, high chaparral, and tall pines, still intact and waiting to welcome with open arms--you, our friend and benefactor!

Sincerely,

Walter E. Lockhart
WALTER E. LOCKHART
District Ranger



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

May 31, 1973

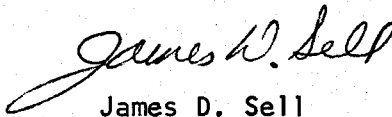
Mr. W. L. Lockhart, District Ranger
Tonto National Forest
1100 North Broad Street
Globe, Arizona 85501

Dear Sir:

In continuance of our exploration program, ASARCO proposes to establish a drilling site on the Margaret claims (in Section 27) north of the highway, as shown on the attached map.

The road work will follow existing roads used in previous drilling north of the highway and conform to Forest Service standards in the access to the new site.

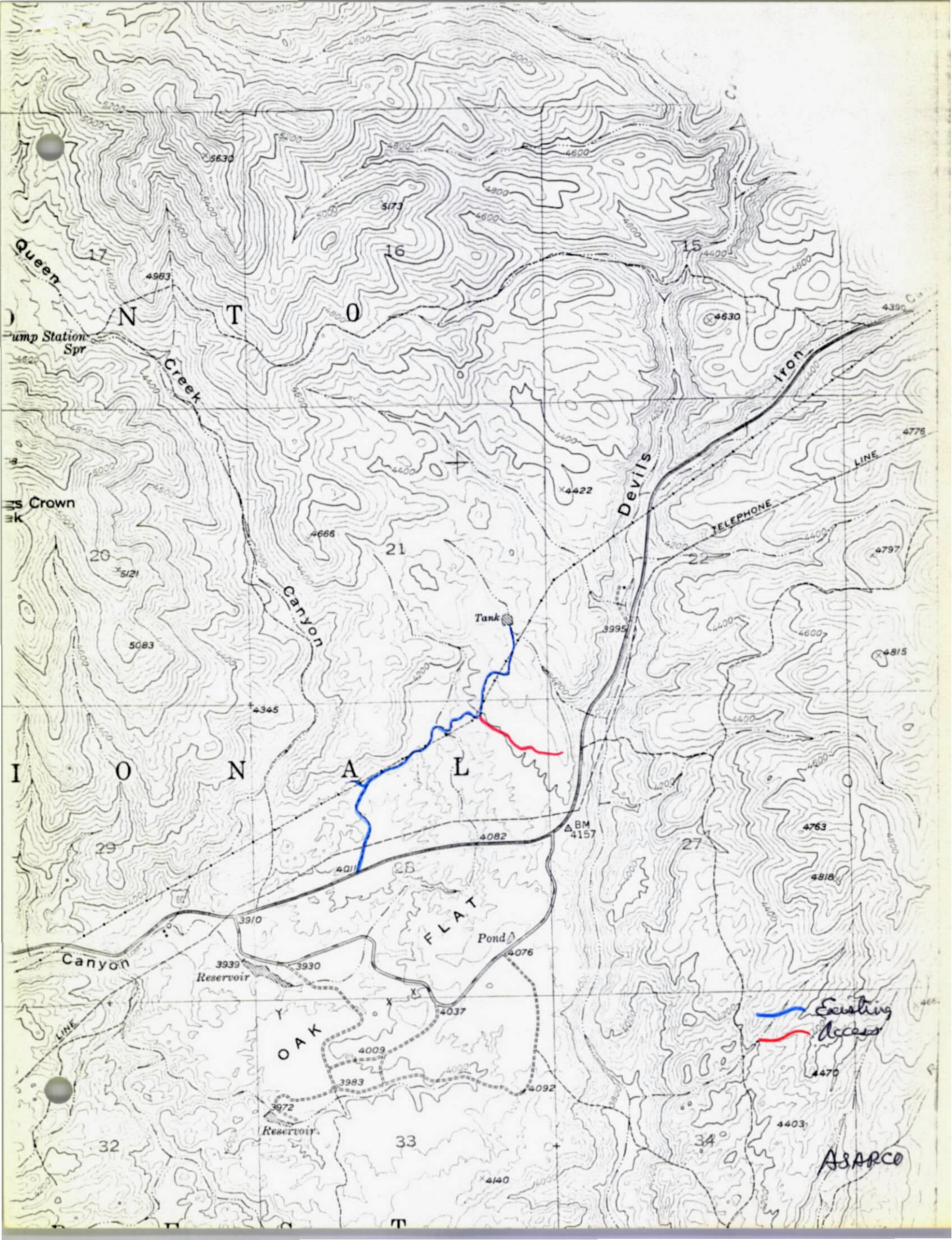
Sincerely,

A handwritten signature in cursive script that reads "James D. Sell".

James D. Sell

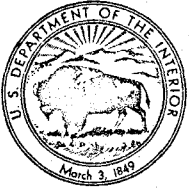
JDS:lb
Attach.

cc:HLLance - w/enc.
WLKurtz - w/enc.
RBCrist - w/enc.



ASARCO

JDS



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Arizona State Office
3022 Federal Building
Phoenix, Arizona 85025

IN REPLY REFER TO
A 7476
PL 359
(945)

June 8, 1973

RECEIVED

JUN 12 1973

EXPLORATION BRANCH

Mr. R. B. Crist
Property Manager
American Smelting and Refining Company
P. O. Box 5747
Tucson, Arizona 85703

Dear Mr. Crist:

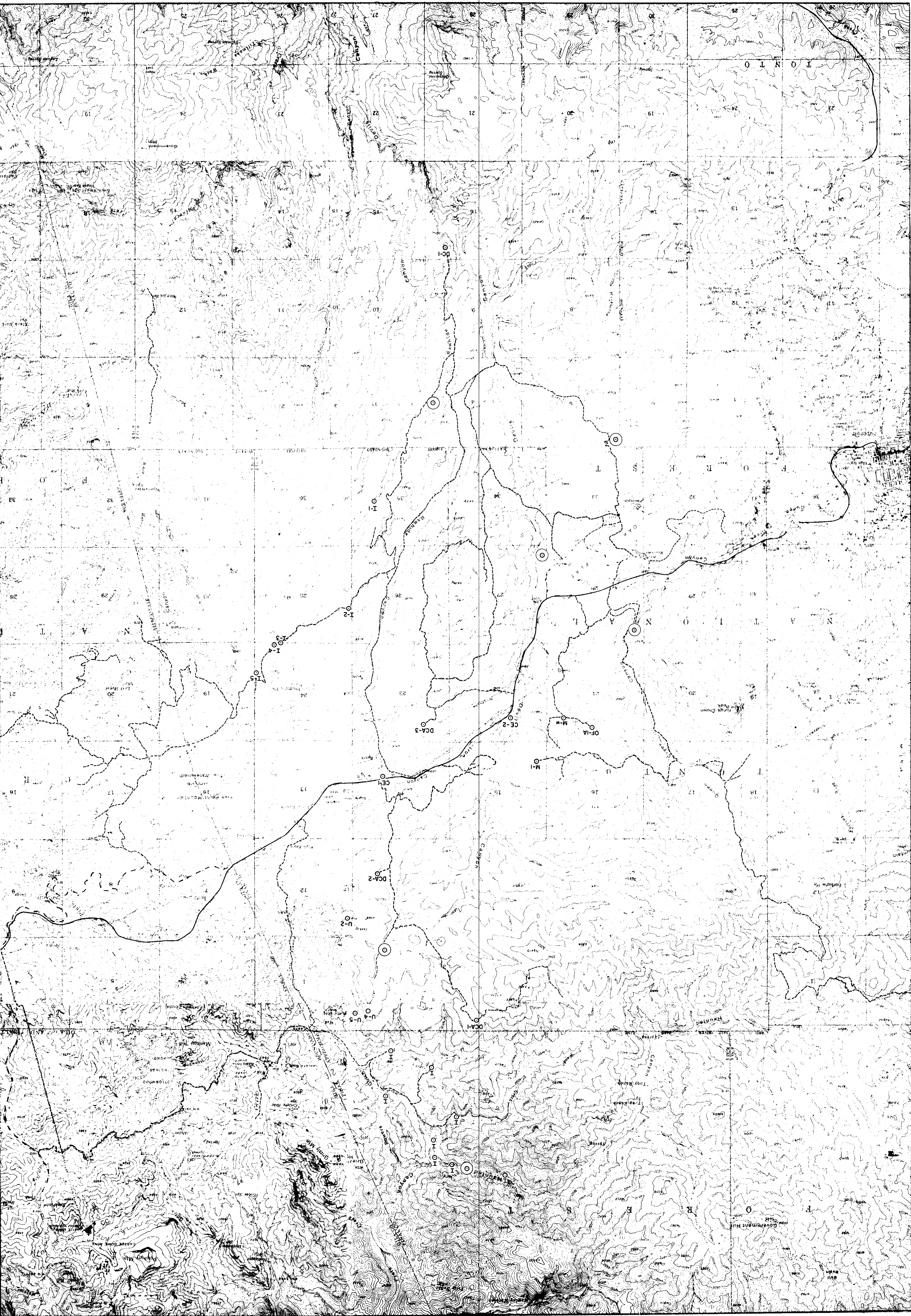
On February 15, 1973, you filed copies of location notices of certain of the Margaret group of lode mining claims in compliance with Public Law 359. The claims embrace lands in secs. 14, 15, 21, 22 and 28, T. 1 S., R. 13 E., GSR Mer., Arizona, part of which lands are within Water Power Designation 9 (AR 6) dated February 7, 1917.

The Federal Power Commission has advised that the affected lands are not presently included in any power project under permit or license issued under the Federal Power Act and there are no plans known to be pending for such use.

The lands involved are in the Tonto National Forest, and the Forest Service reports that it has no objection to location of the claims in the Water Power Designation. Part of the claims, however, conflict with Highway Roadside Zone Withdrawal, PLO 2919 of January 30, 1963, and the Forest Service has no authority to grant permission for mineral entry on such withdrawn lands.

Sincerely yours,

Hall F. Susie
Chief, Branch of Minerals



Sheet 2 of 2

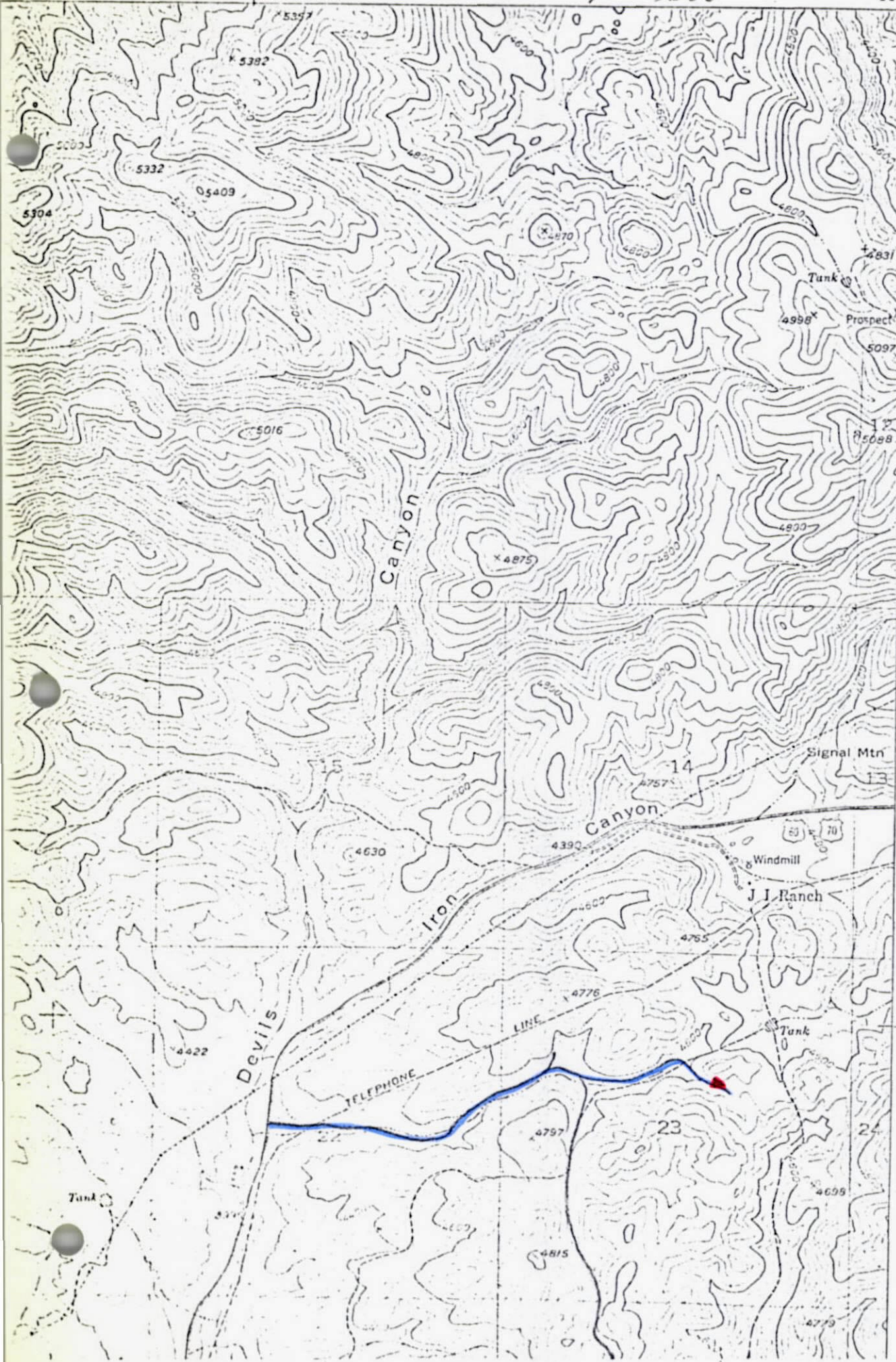
2'30"

770000 FEET

1" = 2000'

111°00'

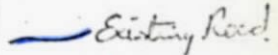
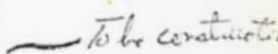
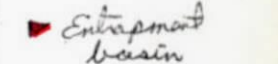
33°22'30"



860000 FEET

SCALE 1:20000

20'

-  Existing Road
-  To be constructed
-  Entrapment basin

ASARCO

Ship, New York, New York, new United States Mint, Fifth and Arch Streets, Philadelphia, Pennsylvania; United States Army Office, 155 Hermann Street, San Francisco, California; the old United States Mint Building, 53 Fifth Street, San Francisco, California; and the United States Bullion Depository, West Point, New York.

The authority conferred by this order shall be exercised in accordance with the Act of June 1, 1943, as amended (62 Stat. 291; 49 U.S.C. 313-313c).

This order revises Treasury Department Order No. 117-25 (Revision 1, September 25, 1970) and is effective from July 25, 1973.

Dated: August 8, 1973.

[SEAL] Edward L. Morgan, Assistant Secretary of the Treasury. [FR Doc.73-16303 Filed 8-13-73; 8:45 am]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management KANAS DISTRICT ADVISORY BOARD Notice of Meeting

Notice is hereby given that the Kanab District Advisory Board will hold a meeting August 17, 1973, at 9:00 a.m. at the Escalante Resource Area Office, Escalante, Utah. The meeting will consist of a range field tour of the Escalante Resource Area beginning at 9:00 a.m. followed by a business meeting at about 4:00 p.m. in the Double "D" Cafe in Escalante. Interested members of the public going on the range tour will have to furnish their own transportation and lunches.

The agenda for the business meeting will include: applications for transfer of grazing privileges, management of grazing allotments, review and discussion of Wild Free-Roaming Horse and Burro Regulations and discussion on land use planning.

The meeting and tour will be open to the public. Persons wanting to make verbal statements during the meeting should notify in advance the advisory board chairman, Wallace Ott of Tropic, Utah, 84776.

MORGAN S. JENSEN, District Manager.

[FR Doc.73-16781 Filed 8-13-73; 8:45 am]

[A 7346]

ARIZONA

Order Opening Reclamation Withdrawn Lands to Mineral Location, Entry, and Patent

By virtue of the authority of the Act of April 23, 1932 (47 Stat. 136; 43 U.S.C. 154) and the regulations thereunder contained in 43 CFR 3816, and pursuant to the authority delegated by Bureau of Land Management Order No. 701 dated July 23, 1964 (29 FR 10526) as amended, it is ordered as follows:

1. Subject to valid existing rights and the provisions of existing withdrawals, the following described lands shall, com-

mencing at 10 a.m. on September 10, 1973, be open to location, entry, and patenting under the United States Mining Laws, subject to the stipulations hereinafter quoted, to be executed and acknowledged in favor of the United States by the locators, for themselves, their heirs, successors, and assigns, and recorded in the county records and in the United States Land Office at Phoenix, Arizona, before any rights attach by virtue of this order:

GILA AND SALT RIVER MERIDIAN, ARIZONA T. 5 S., R. 16 E., Sec. 8, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, SW 1/4.

The area described contains 332.53 acres.

2. The land lies within the withdrawal for the Middle Gila River Project made by Public Land Order No. 2835, dated September 27, 1965.

3. Location, entry, and/or patenting of the land shall be subject to the following stipulations:

a. In carrying on the mining and milling operations contemplated hereunder, applicant will, by means of substantial dikes or other adequate structures, confine all tailings, debris, and harmful chemicals in such a manner that the same shall not be carried into Gila River bottom lands by storm waters or otherwise.

b. There is reserved to the United States, its successors and assigns, the prior right to use any of the land herein described to construct, reconstruct, operate, and maintain dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, drainage works, flood channels, telephone and telegraph lines, electric transmission lines, roadways, and appurtenant irrigation structures, without any payment made by the United States, or its successors and assigns, for such right, with the agreement on the part of the applicant that if the construction or reconstruction of any or all of such dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures across, over, or upon said lands should be made more expensive by reason of the existence of improvements or workings of the applicant thereon, such additional expense is to be estimated by the Secretary of the Interior, whose estimate is to be final and binding upon the parties hereto; and that within thirty days after demand is made upon the applicant for payment of such sums, the applicant will make payment thereof to the United States, or its successors and assigns, constructing or reconstructing such dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures across, over, or upon said lands. There is also reserved to the United States the right of its officers, agents, employees, licensees, and permittees, at all proper times and places freely to have ingress to, passage over, and egress from all of said

lands for the purpose of exercising, enforcing, and protecting the rights reserved herein.

c. Applicant further agrees that the United States, its officers, agents, employees, and assigns, shall not be liable for any damage to the improvements or works of the applicant resulting from the construction, reconstruction, operation, or maintenance of any of the works hereinabove enumerated.

Inquiries concerning these lands shall be addressed to Chief, Division of Technical Services, Arizona State Office, Bureau of Land Management, 3622 Federal Building, Phoenix, Arizona 85025.

JOE T. FALLINI, State Director.

AUGUST 6, 1973.

[FR Doc.73-16782 Filed 8-13-73; 8:45 am]

Office of the Secretary

JOHN E. FORD, JR.

Statement of Changes in Financial Interests

In accordance with the requirements of section 710(b)(6) of the Defense Production Act of 1950, as amended, and Executive Order 10647 of November 28, 1955, the following changes have taken place in my financial interests during the past six months:

- (1) None. (2) None. (3) None. (4) None.

This statement is made as of August 2, 1973.

Dated: July 26, 1973.

JOHN E. FORD, JR.,

[FR Doc.73-16775 Filed 8-13-73; 8:45 am]

OTIS B. HOCKER

Statement of Changes in Financial Interests

In accordance with the requirements of section 710(b)(6) of the Defense Production Act of 1950, as amended, and Executive Order 10647 of November 28, 1955, the following changes have taken place in my financial interests during the past six months:

- (1) None. (2) None. (3) None. (4) None.

This statement is made as of July 28, 1973.

Dated: August 2, 1973.

OTIS B. HOCKER.

[FR Doc.73-16776 Filed 8-13-73; 8:45 am]

[FES 73-43]

AUTHORIZED AUBURN-FOLSOM SOUTH UNIT, CENTRAL VALLEY PROJECT, CALIF.

Availability of Supplement to Final Environmental Statement

Pursuant to section 102(2)(C) of the National Environmental Policy Act of

BEAR CROOK - They must stake the ground. 1st. Requested & rec'd permission to have the land opened for mineral entry.



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

September 10, 1973

Mr. W. L. Lockhart, District Ranger
Tonto National Forest
1100 North Broad Street
Globe, Arizona 85501

Dear Sir:

Shown on the attached map are the newly constructed roads on National Forest land put in by Arizona Mining Properties, Inc. (Mr. Robert Franks of Globe, agent), present optionee of the Lindburg group of claims.

ASARCO proposes to extend these roads to reach claims owned by ASARCO.

Sincerely,

A handwritten signature in cursive script that reads "James D. Sell".

James D. Sell

JDS:lb
Attach.

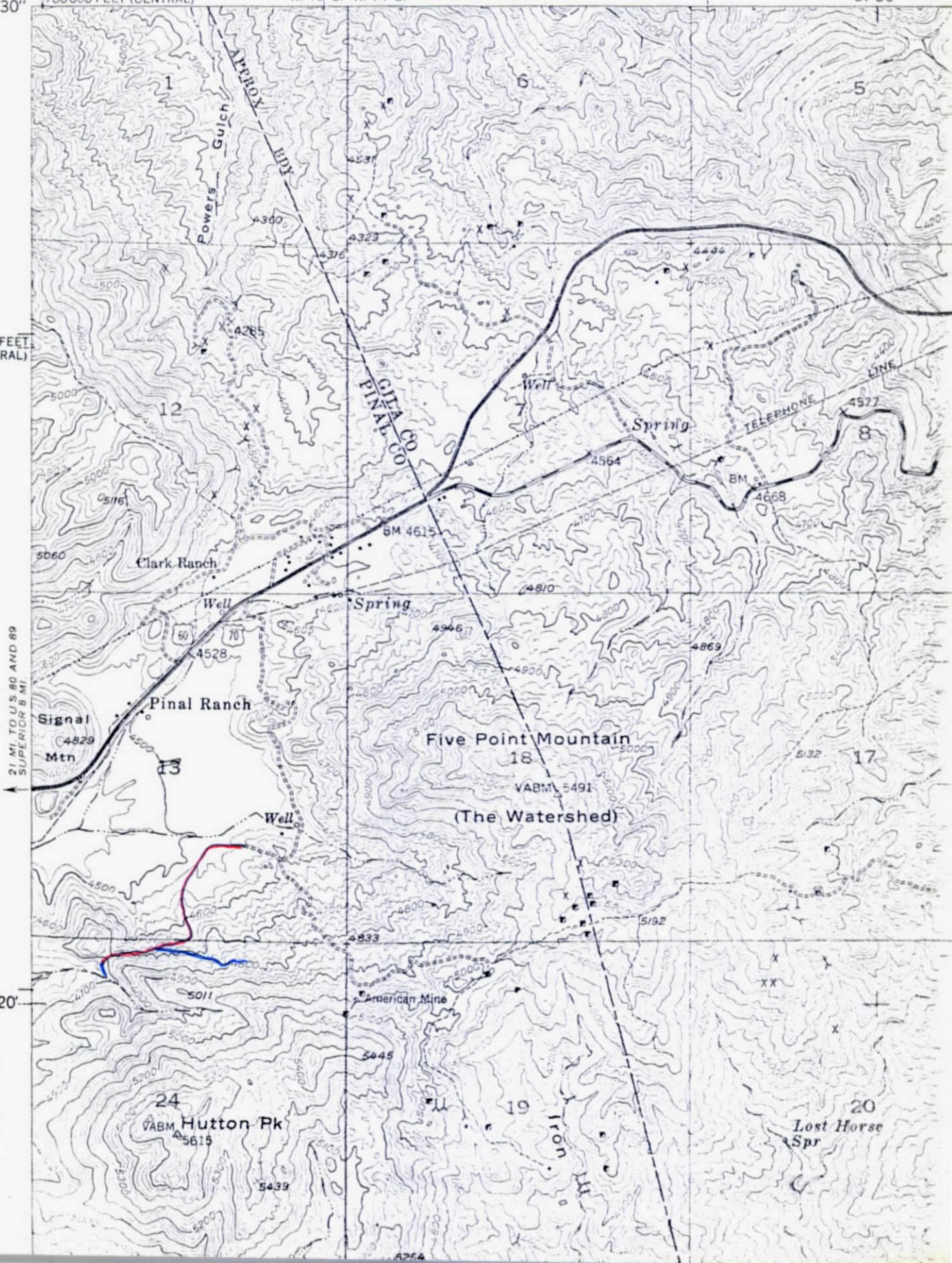
cc: HLLance - w/enc.
WLKurtz - w/enc.
RBCrist - w/enc.

HAUNTED CANYON

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

111°00' 780000 FEET (CENTRAL) R. 13 E. R. 14 E. 57°30'

860000 FEET
(CENTRAL)



21 MI. TO U.S. 80 AND 89
SUPERIOR B.M.

Roads

Existing

To be Constructed

ASARCO

AMERICAN SMELTING AND REFINING COMPANY
TUCSON ARIZONA

October 1, 1973

Mr. S. N. Kesten
ASARCO
Wallace Office

Superior East Project

Enclosed is a copy of an EIS Statement we unofficially submitted to the District Forest Ranger in Globe.

The Rangers in Globe are working on a Land Use Study for the Tonto National Forest. The area between Superior, Arizona and Globe, Arizona will be classified as minerals for primary use. Perhaps this will make our problem at Oak Flat easier.

W. L. Kurtz
W. L. Kurtz

WLK:1b
Enc.

cc: TCOsborne - w/enc.
RBCrist - w/o enc.
✓ JDSell - w/o enc.

405
~~FT 6~~
9/20/73

ENVIRONMENTAL ANALYSIS REPORT

Environmental Impact of Mineral Exploratory Work
in a Claims Area East of Superior, Arizona

Submitted to

The U. S. Forest Service
Tonto National Forest

by

American Smelting and Refining Company

I. INTRODUCTION

The mineral industry has an increasing awareness of changing national attitudes and policies growing out of the complexities of population growth and our expanding technology. As a result its dual role in the production of wealth and the preservation of the environment is becoming increasingly clear. ASARCO recognizing the necessity for multiple use of public land and in an earnest desire to cooperate with the natural resource managers of the Forest Service initiated this analysis.

The analysis attempts to evaluate the environmental impact of mineral exploration work in an area east of the town of Superior, Arizona. The area includes about 60,000 acres within the Tonto National Forest of which 50,000 acres are in claims held by seven or more mining companies (Figure 1).

The exploratory work being undertaken is the minimum necessary for a preliminary geologic evaluation. If preliminary results are favorable, the work may be intensified and if an ore body is indeed found to exist then application for patent will be made. This report is concerned only with the preliminary exploration phase.

2. OBJECTIVES

The objective of the mineral exploration project is to accomplish sufficient work to maintain the claims and to develop confidence in the mineral potential of the area.

The objective of this analysis is to determine, to the extent possible with existing data, the effects of the exploration project on the natural and social environment in the claims area.

3. METHODS AND PERSONNEL

The analysis was performed in consultation with specialists at the University of Arizona in wildlife, range, recreation, soils and water. Forest Service staff members of the Tonto National Forest were helpful in providing technical information and in assisting the preparation of the appendices. The American Smelting and Refining Company supplied information on the equipment used in the exploratory operation and their operating policies. Dr. John Thames (resumé attached), University of Arizona compiled the analysis.

4. NATURE OF THE PROJECT

Exploratory operations in the claims area require samples from great depths. Heavy drill equipment such as a Mayhew 3000 rotary rig is necessary. At each drill site an area of about 1/2 acre must be cleared for the drill pad, storage of casing and vehicle turn around space. Heavy duty truck roads must be developed to the site if none exists.

Water and drilling mud are used in the operation which require sumps, pits dug on the drill site or storage tanks, to contain the mud and to allow water to settle for re-use. Water is hauled into the sites by tankers of 1,000 gallon or more capacity from the most convenient municipality.

A single drilling operation requires 90 to 120 days to complete. During this time the equipment is operated 24 hours a day by crews of two or three men each plus supervisory personnel.

The duration of the exploratory operation in the claims area and the number of holes that will be drilled are difficult to predict. The operation proceeds cautiously, hole by hole, at rates depending upon the indications of probable success. If indications are favorable the activity would be increased; if not then the entire operation could be abandoned.

5. PHYSIOGRAPHY OF CLAIMS AREA

5.1 CLIMATE

Precipitation at Pinal Ranch which is located in the claims area averages 25 inches a year. About 48 percent of this occurs between May and October and about 30 percent between November and March. Snow is uncommon. Temperature data are not available for the ranch but the growing season is estimated at 167 days. Temperatures at the nearby town of Superior where the growing season is 223 days average 50° in January and 85° in July.

5.2 TERRAIN

The terrain is rugged with elevations ranging from about 3,000 to 5,500 feet. Slopes are steep, ranging from 15 to 75 percent or more. Narrow ridges dropping sharply into narrow V shaped valleys, sculptured rock formations, pinnacles, ledges and canyons characterize the area. The soil between the numerous rock outcrops supports a dispersed, shrubby vegetation. The overall impression is one of extreme rockiness (Figure 2).

The surface rock is dacite which was deposited to great thicknesses during a period of volcanism in Tertiary times, and overlies a variety of rock units.

5.3 SOILS

The claims area lies within soil mapping unit E3 as delineated on the Pinal County soil map.¹ The unit makes up about 7 percent of the county and

1. General Soil Map, Pinal County, Arizona, USDA Soil Conservation Service, March 1971 (revised April 1972).

is described in general terms as follows:

Approximately 50 to 60 percent of the unit is shallow and very shallow, gravelly, cobbly, or stony medium to fine-textured soils between rock outcroppings, with small areas of moderately deep soils included. Slopes of these soils range from 5 to 45 percent. The other 40 to 50 percent of the unit consists of rock outcrop in the form of ledges, pinnacles and talus slopes. Slopes range from 15 to 75 percent or more.

Some properties of the soils within the mapping unit are classed as follows: Permeability - slow to moderate, Water Holding Capacity - low to moderate, Shrink-Swell Potential - low to high, pH - 6.1 to 8.4, Top Soil Source - very poor, Flooding Hazard - none to slight and Erosion Hazard - moderate to high. The soils are unsuitable as a source of sand and gravel and are a poor source for road fill.

The unit is severely limiting for septic tank absorption fields, sanitary land fill, roads and streets, ponds, dikes or levees, and irrigation for cropland, golf courses, lawns, etc.

For recreation purposes, the mapping unit is classed as severely limiting for the establishment of camp sites, playgrounds, trails and picnic areas because of excessive cobble, stone and rock outcrops.

5.4 VEGETATION

The plant composition on the claims area is characteristic of the chaparral cover type but its density is considerably lower than typical. The crowns of the shrub overstory (as indicated by line transects) covers only 32 percent of the area. Forty three percent of the area is bare ground. The remainder plus some of the area under the overstory has a cover of perennials and forbs. The table below lists the composition and relative density of the plant species

encountered on the transects. It is not a complete species listing for the entire area. The transects were taken before the annuals appeared.

SUMMARY OF DATA FROM SIX LINE TRANSECTS
AT THREE DRILL SITES

SPECIES RELATIVE DENSITY
(percent of total number)

Trees and Shrubs

Quercus turbinella	34
Arctostaphylos pungens	22
Juniperus deppeana	13
Ceanothus spp.	10
Calliandra eriophylla	7
Eriogonium wrightii	5
Cercocarpus spp.	4
Rhamnus spp.	2
Miscellaneous	3
Total	<u>100</u>

Grasses and Grass Like Plants

Bouteloua curtipendula	28
Bouteloua hirsuta	18
Bromus rubens	14
Muhlenbergia emersleyi	12
Nolina macrocarpa	12
Sitanion hystrix	7
Andropogon spp.	5
Miscellaneous	4
Total	<u>100</u>

Forbs

Menodra scabra	20
Lonicera spp.	14
Ferns	5
Miscellaneous	61
Total	<u>100</u>

5.5 WILDLIFE

Detailed inventories of the fauna in the general region of the claims area have not been made. Presumably, deer, javelina and coyote are among the large resident wildlife species. Birds, no doubt, include doves, tannengers, cardinals and Gambel quail. There is no perennial aquatic life in the area. A list of probable fauna could be developed from information contained in Lowe's The Vertebrates of Arizona, University of Arizona press, but without on site inventories the list would only be supposition.

There are no outstanding bird nesting sites on the claims. The general area has been classed by the SCS as poor for wildlife in both forest and range.

5.6 WATERSHED - CENTRAL HIGHLANDS PROVINCE

No permanent streams are near the area. Surface runoff, particularly from summer storms, is high and occasionally results in intense ephemeral flows of short duration. About 13 percent of the claims area drains toward Queen Creek which until recently partially supplied the town of Superior with water empounded in a flood control reservoir about 2 miles to the northeast. The town is now supplied by pipeline from wells located near Florence Junction.

From its origin in the general region of the claims site, Queen Creek enters the outwash plain at Black Point near Florence Junction. It then passes over the desert toward Chandler, spreads over the lowlands, and disappears. About 60% of the claims area drains south through Ray to the Gila River.

The remaining 27 percent of the claims area drains toward Roosevelt Lake. When Roosevelt dam was constructed, there was concern over possible storage

capacity loss from silt washed in from the depleted uplands. The general region was one of several selected for extensive erosion control activity that continued through the 1930's (Figure 3).

The Central Highlands Province is a recharge source of ground water for use in the Basin and Range Lowlands Province.

Figure 2. Hillside view typical of the claims area - steep slopes, massive rock outcrops, thin soil and sparse vegetation.

Figure 3. One of a large number of erosion control dams constructed in the Oak Flat area by the Civilian Conservation Corps. Many of these structures have failed but this one has backed up an acre foot or more of sediment. Nevertheless, soil is still being eroded from the area above at rates faster than it is being formed.

6. EVALUATION OF PROJECT ON ENVIRONMENT

6.1 AIR

An exploratory drilling operation will have short term effects on air quality. Dust and noise will be produced by the drilling itself and to a lesser extent by travel over the access road to the drill site. Additional dust and noise will result temporarily if new access roads must be constructed.

Drilling involves the use of both rotary and diamond drills. Both are powered by diesel engines which produce noise. The rotary drill produces dust only during the first three or four days. The air rotary drill requires a compressor which is noisy. However, the air drill operation rarely extends beyond 30 days and frequently during this time if water is encountered or continuity broken, drilling mud rather than air must be used for extended periods. About 6 percent of the material removed by compressed air during rotary drilling is less than 2 microns in size. A portion of this material is elutriated into the atmosphere and usually settles out within 50 to 150 feet of the drill site, but on windy days may extend considerably further.

Once a new road has been constructed or an old one made serviceable and the drill equipment moved into position, travel of service vehicles will be on the order of 5 to 6 round trips a day. Because of the light traffic, its necessarily slow speed, and the coarse nature of the soils, dust production should be slight both during and after construction. The service vehicles will produce some noise.

6.2 WATER

There should be no adverse effects of the operation on ground water underlying the claims area. Although water is frequently encountered at 300 feet or more during drilling, it is believed to be very old and contained within lenses and pockets within the dacite. Because of the low permeability and the lack of fractures in the dacite, recharge from the surface is negligible.

Oil spills, litter and erosion if not cleaned up, removed or prevented could have an adverse impact on the surface runoff water. However, any adverse impact would be minimal during this stage of exploration. Oil is the only toxic material that will be used and the amounts will never approach the volume that could adversely affect the ground water in the withdrawal area. Oil spills will be prevented or cleaned up during restoration (see section 6.17).

The erosion potential in the area of drill sites and newly constructed roads will be increased by the operation. Sediment could be released into the surface drainage system.

Surface waters entering Pinto Creek drainage conceivably could reduce storage in Roosevelt Lake; but to put things in prospective--If a drill site were to produce twice the amount of sediment that reaches Roosevelt Lake from the average site on the watershed it would only be on the order of 5 tenths parts per million of the total annual sediment deposited.² Because of tortuosity, travel distance and spasmodic flows, the travel time of this small amount would be very long, possibly exceeding the expected life of the reservoir.

2. USDA Agricultural Research Service, Miscellaneous Publication No. 964.

Similarly, sediment entering the Queen Creek drainage should have even less effect. The creek normally carries large quantities of sediment which have been deposited in the lowland over a long past to an extent that has raised its level above the surrounding terrain.

6.3 FIRE

There is little history of wildfire in the general claims area. The surface is rocky and sparsely vegetated. Litter cover is insignificant. The dominant species of shrubs making up the dispersed chaparral cover are turbenella, oak and manzanita. Perennial grasses and forbs are present to some extent but annuals, when rainfall is suitable, may produce considerable herbage. In years of good herbage production under proper meteorological conditions a steep slope could carry a fire. However, with reasonable care there should be no danger during exploration, particularly if the drill crew has been provided with a fire plan. Such a plan approved by the Forest Service is outlined in Appendix A.

If a wildfire broke out at some time in the future the former drill site access roads could provide ready access and possibly fire breaks to facilitate suppression.

6.4 SOIL

The soils of the claims area have been severely abused in the past through overgrazing. Erosion is still occurring over much of the area at rates in excess of geologic weathering.

Some of the small valley bottoms along stream channels have deep soils that support a vigorous plant cover and appear to be stable. The soils on

the slopes, however, are thin and actively eroding in places. Transect measurements indicate about 43 percent of the slope areas are bare ground with no vegetative protection. Of this, 64 percent is rock and the remainder soil material. Only on about 25 percent of the area having some vegetative cover is the cover dense enough to provide adequate protection.

Even in those areas where the vegetation is providing stabilization, the soils are in delicate balance with the environment. Properly engineered, roads and drill sites will minimize the disturbance to the soil balance and erosional affects. But regardless of the care taken in road building or drill site construction, the soils will have been disturbed and the potential for erosion increased.

Rehabilitation is difficult due to steep slopes, shallow soils, variable rainfall, and the presence of livestock. These difficulties are compounded partially by the limited choice of commercial species that might be suitable for revegetation but primarily because of the lack of previous research to guide rehabilitation in areas such as this (see section 6.17).

6.5 NATURAL BEAUTY

If natural beauty is assumed to apply to "an area where the earth and its community of life are untrammled by man", then the natural beauty of the claims area would be affected by the exploratory operation. However, all of the area is within 3 miles of U.S. Highway 60 and 70.

The drill sites will be visible from neighboring ridges but because of the rugged terrain, will seldom be seen from any appreciable distance. Some of the access roads used, however, follow paths of least resistance. They sometimes lead across slopes or follow ridges and may be visible for considerable distances. Vegetation is sparse in these situations and offers little concealment (see Appendix B).

The establishment of a drilling site requires a moderately level, clear area of about 1/2 acre. Normally, an area is chosen nearest the target that requires the least effort to clear. Thus, disturbance is minimized to some extent.

The drilling activity itself would bring a temporary distraction to the natural beauty of the area. A single exploratory drill hole may require 3 months to complete.

The drill site is occupied 24 hours a day by contract drillers who are not always conscious of the effects of littering in the remote areas where they work. Even occasional carelessness during the drilling period could result in considerable unsightliness. Spilled oil, abandoned equipment and drill mud will be removed or covered over (see Appendix C).

It is also possible to mar the natural beauty during the site restoration process itself. Slopes disturbed by the drill sites can be restored to grade and reseeded. Guidelines to minimize disturbance can be followed in road construction, and erosion may be held in check by reseeded. However, when the local rock material is broken, scraped or overturned the faces exposed are in lasting contrast to the surrounding weathered material. If slopes are restored it is possible to disturb more rock in the process and worsen the situation. Similarly, it is possible to select plants for reseeded that might contrast with the native vegetation (see section 6.17).

6.6 SOCIAL AND CULTURAL

In our expanding society the need for open spaces is well recognized. Open spaces and wide uncluttered vistas are one of the chief attractions of our state. A visitor driving through the claims area might view a drilling operation, were it visible from route 70, as being in direct conflict with his needs and desires.

It should also be pointed out, however, that the route 70 traverses one of the richest mineral areas in the state. The claims area is in fact surrounded by intense mining activity. A traveler on route 70 passes within view of Magma's operations at Superior with their new shaft near Oak Flat, Cities Services operations at Pinto Valley and Miami Inspiration's operations at OxHide-Live Oak-Thornton, and Rancher's operations at Bluebird.

The claims area is scenic with occasional picturesque rock formations sculptured by water and wind. It is also dry and rugged. Trails and primitive roads that might offer access are few. With the exception of hunters it is unlikely that the area much beyond the highway is used by many people on foot. Nevertheless, an occasional hiker might find evidence of a former drill site or access road. On the other hand, these roads sometimes open onto particularly scenic vistas and could offer the opportunity for enjoyment by a larger public.

6.7 ECONOMICS

Continuing mineral exploration in the U.S. is necessary to assure adequate mineral reserves in the coming decades and is required by NEPA.

The environmental impact of mining must be weighed against the Nation's requirements for minerals, National security, and balance of payments.

Should an economic ore body be discovered and mining take place, the value of open natural spaces would be reduced. The mining development would create wealth, provide jobs and enhance the economic environment.

6.8 RANGE

The claims area has been used for cattle range continuously since the 1870's. Heavy overgrazing in the past is evidenced by the depleted condition of the range and pointed up by buried soil profiles in some of the low areas and deep scouring in others. The area surrounding the Oak Flat recreation site was the scene of intensive erosion control activity by the Civilian Conservation Corps in the 1930's (Figure 3). The area today is still eroding, but it is undetermined whether this is natural or the effects of grazing.

The drilling operation should have only a slight effect on grazing since domestic cattle are normally accustomed to man's activities. However, when the sites are rehabilitated grazing habits might be changed.

In traveling over rugged country cattle tend to take the easiest route. This could result in excessive grazing along the access roads (particularly if the reseeding is successful) which could increase the "natural" erosion rate.

6.9 TIMBER

Since there is no timber in the claims area, none would be affected by the drilling projects.

6.10 INSECT AND DISEASE

The proposed project should not have any effect on insects and disease.

6.11 LAND OWNERSHIP

Seventy percent of the mining claim area, as indicated in Figure 1, is on Federal land of the Tonto National Forest. The remaining is privately held by the State of Arizona and other individuals.

The Devils Canyon Allotment Grazing Leases are held by the D Land & Cattle Co.

6.12 HISTORY AND ARCHAEOLOGY

There is no surficial evidence nor are there inventoried historical or archaeological sites in the claim area. However, in the event of any major development an archaeological survey conducted by a knowledgeable party would be in the public interest.

6.13 LAND USE

The claim area receives very little use except by the grazing permittees.

6.14 WILDLIFE

There is no published research on the effects of machinery noise and the presence of vehicles on the habits of large mammals in the Southwest. However, noise from service vehicles, drilling equipment and the human activity involved in the exploratory operation will probably cause a temporary movement of any larger resident animals, e.g. deer, coyotes, javalina, from the immediate vicinity of the operation. After completion of the proposed work and subsequent withdrawal of human activity the sites should be quickly reinhabited.

Small mammals and reptiles are not expected to be affected. In the Sonoran desert results were inconclusive in an informal study conducted by Cockrum (mammalogist, University of Arizona) designed to test the effect of the presence of exploratory drilling machinery on small mammal habits.

Since there are no outstanding bird nesting sites on the claims area, due to the sparse vegetative cover and the scarcity of permanent water sources, bird populations should not be affected.

Fish life should not be affected by the activity on that portion of the claims area draining toward Queens Creek which is ephemeral and discharges onto the desert. The activity on the portion of the area that drains toward Roosevelt Lake should also have a negligible effect (see section 6.2).

6.15 TRANSPORTATION

The drilling equipment used in exploratory work is large and heavy and requires a substantial truck road for transport to the drill site.

A properly engineered access road will minimize environmental effects. However, in the present era of off-road recreational vehicles, any access offers a challenge to a variety of users and without an integrated plan of construction, maintenance and closure an abandoned road could become a hazard to the unwary or careless public, a nuisance to the land manager and a source of potential erosion.

Whenever possible, ASARCO utilizes the existing 46 odd miles of trails in the area. Over the past 3 years 5.6 miles of reconstructed trails and new roads have been constructed. This practice will continue in the future and where new roads must be constructed the methods outlined in Appendix B will be followed insofar as practical.

6.16 RECREATION

The Oak Flat Recreation Area, where mineral activity is excluded, is surrounded by mining claims. Since there is no water on the site most visitors use the area as a rest stop or for one night camping. The site is not outstandingly scenic and is towered over by Magma's shaft.

There are no records of recreation use for the claims area. It is doubtful if the area receives much use except by hunters.

6.17 SITE RESTORATION

A plan for site rehabilitation will be made after the drill site target area is selected to minimize impact and facilitate rehabilitation.

A poor job of restoration can have almost as adverse an effect, at least visually, as the drilling operation itself. Since each site is unique, each will require special treatment, but in general the guidelines listed below will be followed to minimize the impact of the entire exploratory operation.

1. Cap drill holes.
2. Carry out all trash and other foreign material from the drill site premises and along the access road. Do not burn or bury trash.
3. Fill in all cuts and drill sumps.
4. Clean up (but rather avoid) all oil spills.
5. Restore grade of drill site where feasible if unsightliness or erosion will not be increased thereby.
6. Reseed all roads and drill sites with species that do not clash with the native vegetation.

A seed mixture such as a combination of several species of lovegrass should be used rather than a single species to greater assure establishment.

The drill site should not be graded smooth during restoration. Depressions created by occasionally dropping the bulldozer blade will help trap water and lend a more natural appearance to the site.

The sites should be seeded just before or during the early part of the rainy season.

Survival chances can be improved by two or three supplemental waterings beginning no later than 7 days after the first rainfall and at no greater than 7 day intervals thereafter.

6.18 INFORMATION AND EDUCATION

The mineral industry provided the materials for the industrial revolution and is at the roots of our present technological society, a society in danger of burial in the accumulated wastes of its own labor. The industry as the producer and society as the user must be listed together as polluters. The users do not expect the industry to stop producing but will expect that it produce under conditions of the least practicable amount of damage to the environment.

Rational feedback obtained through constructive exchange between land managers, miners, scientists, environmentalists and the general public is needed to maintain the alignment between optimum production and minimum impact on the total environment.

APPENDIX A

FIRE PLAN

Smoking and Warming Fire Restrictions

The American Smelting and Refining Company shall prohibit smoking and building of warming fires by persons engaged in the exploratory drilling operation except in areas that Forest Service may designate. After all inflammable material has been cleared away smoking may be permitted. All fires and smoking materials shall be completely extinguished at any time the drill site is left unattended.

Tool Boxes

ASARCO shall furnish, and maintain in serviceable condition, fire tools to be used only for suppressing forest fires. Each drilling crew shall be provided with a sufficient number of firefighting tools of a kind and type satisfactory to Forest Service to equip 100 percent of the personnel engaged in the drilling operation. Fire tools shall be immediately accessible for firefighting purposes by personnel engaged in all phases of the exploratory operation.

Burning of Refuse

No refuse or slash or other debris, such as that resulting from clearing around drill sites or from access road construction, shall be burned without the written consent of Forest Service.

Spark Arresters

ASARCO and its contractors shall maintain a spark arrester upon the exhaust of each tractor, truck, or other machine powered by an internal combustion engine used in connection with the drilling operations; except that good mufflers shall be considered satisfactory arresters on trucks.

Fire Tools on Equipment

Each truck and tractor shall be provided with one round-pointed, size 0 or larger, shovel. Shovels shall be so mounted as to be readily reached from ground and shall be satisfactory to Forest Service.

Inspection Requirements for Internal-Combustion Engines

Each internal-combustion motor vehicle or item of equipment shall be inspected and approved in advance of use by Forest Service. ASARCO shall require that all persons engaged in the drilling operation submit all equipment with internal-combustion motors, except those specifically excluded by Forest Service, for inspection and approval prior to use in the operation. If approved, a colored sticker shall be affixed to the machine to indicate approval for use during a specified period or season. Vehicles and equipment not approved for use shall be repaired to meet existing standards, reinspected, and approved by Forest Service prior to use.

Blasting.

During high or above high fire danger, a watchman shall be used where blasting is done, who shall remain on duty for at least one hour after blasting

is finished and who shall be equipped with at least a round-pointed, size 0 or larger, shovel and a backpack pump filled with water.

Patrolmen

ASARCO representatives shall acquaint the drilling and road construction contractors with their place in the fire plan and will endeavor to keep their own and contracted personnel properly interested and constantly alert to the fire situation.

The foreman of each drill crew shift will be designated as the person responsible to see that the fire rules are observed. He will be trained to detect and report any fires and to promptly and efficiently take suppression action with available required fire fighting equipment on any fire that starts on or near the drill site area.

Emergency Precautions

When the measured or predicted fire danger is extreme, open fires and smoking will be prohibited in the claims area. Any other restrictions imposed by the Forest Service on the general public when fire danger is high, very high or extreme will apply equally as well to personnel engaged in the exploratory operation.

PLAN FOR DRILL SITE ACCESS ROAD CONSTRUCTION

The method of truck trail system developed by Hewlett and Douglas¹⁾ for mountainous terrain in the east will be utilized whenever applicable in constructing new drill site access roads. The system "recognizes the need for continuing, essentially maintenance free access for all potential uses and protection needs - a road system which will never need relocation or reconstruction."

Two types of truck trails are recognized, the climbing trail, necessary to give elevation access, and the more or less horizontal, contour trail.

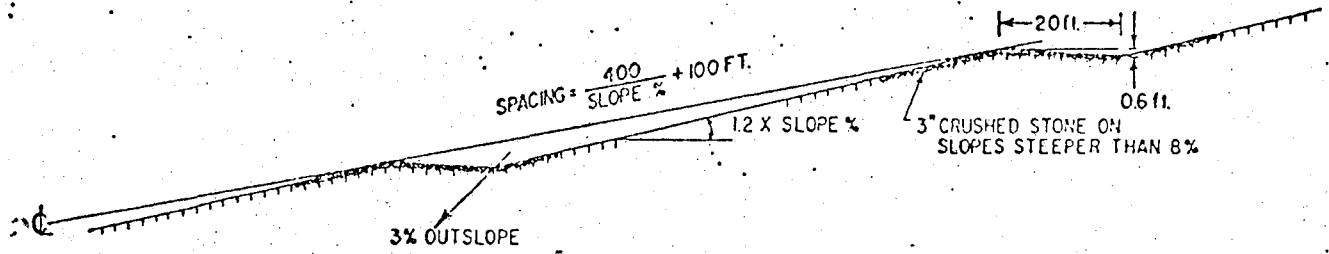
The method is quoted with some paraphrasing as follows:

Because of the minimum maintenance requirement, broad-based dips are a key feature of the truck trail system. They prevent destruction of the roadbed by intercepting surface water and turning it out of trails before it gains sufficient volume and velocity to cause serious erosion. They must be deeper than is usually considered adequate for water bars, because water bars fill up quickly or are cut through by heavy trucks. These broad-based dips were designed especially for Southern Appalachian conditions, but they should serve well elsewhere. Specifications for constructing dips are new and are illustrated in the figure below.

A dip is made by building a 20-foot-long, 3-percent reverse grade (0.6 foot dip in elevation) into the truck trail. The trough of the dip is outsloped at 3 percent to keep water from standing in the bottom. There should be at least 100 feet of undisturbed soil between the dip and any stream channel to absorb water and to trap the silt it carries. Dip spacing is made a function of the basic grade of the truck trail--the steeper the grade, the closer the spacing of dips. However, experience has shown that trucks have difficulty negotiating dips constructed on basic grades steeper than 13 percent. Also, since the grade between dips increases by a factor of 1.2 times the basic grade, erosion on steep pitches of a climbing contour truck trail becomes a problem. On grades steeper than 8 percent, a thin layer of 3-inch crushed stone over the peak and trough of the dip provides an effective erosion pavement which prevents rutting and soil movement. On contour trails, dips may be much less frequent and the dozer operator can vary dip spacing to take advantage of natural depressions in topography. Inspection and occasional repair of these dips becomes one of the few road maintenance jobs, but experience has shown that little maintenance is necessary when the basic grade is limited to 13 percent.

The method is illustrated in the figure below and summarized as follows:

<u>Specifications</u>	<u>Climbing Truck Trails</u>	<u>Contour Truck Trails</u>
Route layout	Forest Officer approval	Same
Stream Crossings	Avoid	At right angles on dipping grades
Grades	13 percent maximum	Least practical
Right-of-way	Clear 24 feet	Same
Slash disposal	Pile at toe of fill slope	Same
Backslopes	Leave vertical	Same
Curves	Not less than 25-foot radius	Same
Cut and fill	Wheel track on cut soil	Least practical
Broad based dips	Spacing = $400/\text{slope percent} + 100$ (in feet)	Take advantage of local terrain
Outsloping	3 percent	Same
Surface	Coarse gravel on steep pitches (dips)	Shoulders grassed
Inside ditching	Usually none	Only at stream crossings
Traffic control	Gated	Same
Maintenance	Inspect annually; repair dips; fertilize as needed	Inspect annually; fertilize as needed



APPENDIX C

GUIDE FOR CONDUCT IN THE CLAIMS AREA

Following are 11 rules* of conduct that ASARCO personnel and their contractors should adhere to at all times.

1. Know and observe local Forest Service rules and regulations. Understand the activities that require Special Use Permits, and do not engage in such activities until permits are obtained.
2. Know the "Public Lands Policy" of ASARCO and its subsidiaries.
3. Know the special stipulations in each Special Use Permit and see that they are observed.
4. Get acquainted with and maintain contact with local Forest Service representatives, supplying information as necessary to aid them in their administrative duties, including matters related to forest uses by others and to future forest plans as they may be affected by our activities.
5. Observe Fire Plan. Be aware of fire hazard levels and take positive steps to prevent the starting of fires. Report fires and suspected fires immediately. Make men and equipment available to the Forest Service in case of fire emergency. Be especially careful of cigarettes. Cigarettes should always be safely extinguished and field stripped before throwing away.
6. Bring back and deposit in receptacles all trash, garbage or abandoned materials--from lunch bags and cans to tools and pipes, both employees' and contractors', as well as that left by others. Drill sites should be regularly policed of refuse. Always leave the area cleaner than when you found it.

7. Minimize the use of plastic flagging or other markers, and retrieve these materials whenever possible. Discarded flagging is a lasting reminder of our passage through an area.
8. Keep excavations to a minimum. When no longer needed, level and revegetate to the extent that it is practicable.
9. Avoid stream pollution, particularly from drilling fluids and oils, but also from soaps, detergents, garbage, etc.
10. All drilling activities should be conducted with proper regards for good standards of safety. First aid equipment should always be available.
11. Contractors and their employees should be briefed thoroughly on their activities, conduct and responsibilities in wilderness areas. ASARCO should enforce rules and monitor contractors' activities. Keep in mind at all times that these contractors are representatives of ASARCO and their activities do reflect on ASARCO and the mining industry.

*The basic ideas in A Guide to Responsible Wilderness Use developed by the Bear Creek Mining Company of Utah were liberally borrowed.

RÉSUMÉ -- John L. Thames

1. Born September 29, 1924 in Richmond Virginia.

2. Present Position - Professor Watershed Hydrology
Watershed Management Specialist
Coordinator, International Biological Program

3. Education

<u>Degree</u>	<u>Institution</u>	<u>Year</u>	<u>Major</u>	<u>Minor</u>
B.S.	University of Florida	1950	Forestry	--
M.S.	University of Mississippi	1960	Biology	Plant Physiology
Ph.D.	University of Arizona.	1966	Watershed Mgmt.	Soil Physics

4. Employment

1950-51 Forest Fire Control, State of Florida.

1951-52 Assigned to Corps of Engineers, Waterway Experiment Station, Vicksburg, Mississippi from US Forest Service for research in off road vehicle trafficability.

1952-55 Lake States Forest Experiment Station Research Forester in charge of soil-site survey in 4 midwest states.

1955-66 Southern Forest Experiment Station - Research in land rehabilitation, erosion and flood control, watershed hydrology and plant-soil-water relations.

1966 -- University of Arizona - Research and teaching in hydrologic modeling. Systems analysis of watershed management and ecology.

5. Professional Organizations

Society of American Foresters, American Society of Agronomy, Soil Conservation Society of America and American Geophysical Union.

6. Honorary Societies

Sigma Xi, Gamma Sigma Delta, Alpha Zeta.

7. Publications

Published over 35 papers in the related fields of Forestry, ecology, plant physiology, soils and hydrology. During the past 3 years has authored or co-authored 9 scientific papers presented at professional meetings.

8. Grants

Is presently the principal or co-principal investigator on research projects funded by the National Science Foundation, Office of Water Resources, U.S. Forest Service and Industry.

* *Perm. Seel*
Permittee

United States Department of Agriculture Forest Service AMENDMENT FOR SPECIAL USE PERMIT Ref: FSM 2714	a. Record no. (1-2)	b. Region (3-4)	c. Forest (5-6)
	d. District (7-8)	e. Use number (9-12)	f. Kind of use (13-15)
THIS AMENDMENT IS ATTACHED TO AND MADE A PART OF THE <input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT	g. State (16-17)	h. County (18-20)	k. Card no. (21)

For Road Right-of-Way issued to _____
(KIND OF PERMIT)
American Smelting and Refining Company, on 5-20-71
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

1. Improving and using existing access roads on Forest land, as shown on attached maps #1, 2, and 3 in red, prepared by American Smelting and Refining Company, November 1973, dated by H. L. Lance 12-7-73, and approved by FRED J. WIRTH on 1-10-74.

2. Construct approximately 3.6 miles of new minimum duty road, 12 feet wide, as shown on the maps described in item 1 in green.

3. All specifications and conditions of this amendment are the same as those shown in the original permit, multiple use report, and letter of understanding.

This Amendment is accepted subject to the conditions set forth herein, and to conditions _____ to _____ attached hereto and made a part of this Amendment.

PERMITTEE	NAME OF PERMITTEE American Smelting and Refining Company	SIGNATURE OF AUTHORIZED OFFICER <i>Robert B. Crut</i>	DATE 2/6/74
ISSUING OFFICER	NAME AND SIGNATURE <i>Fred Wirth</i> FRED J. WIRTH	TITLE FOREST SUPERVISOR	DATE 1-10-74

EXPLANATION [FOR THREE (3) ACCOMPANYING MAPS]



EXISTING ROAD



EXISTING TRAIL OR BADLY
WASHED ROAD



PROPOSED ROAD



NOT APPROVED

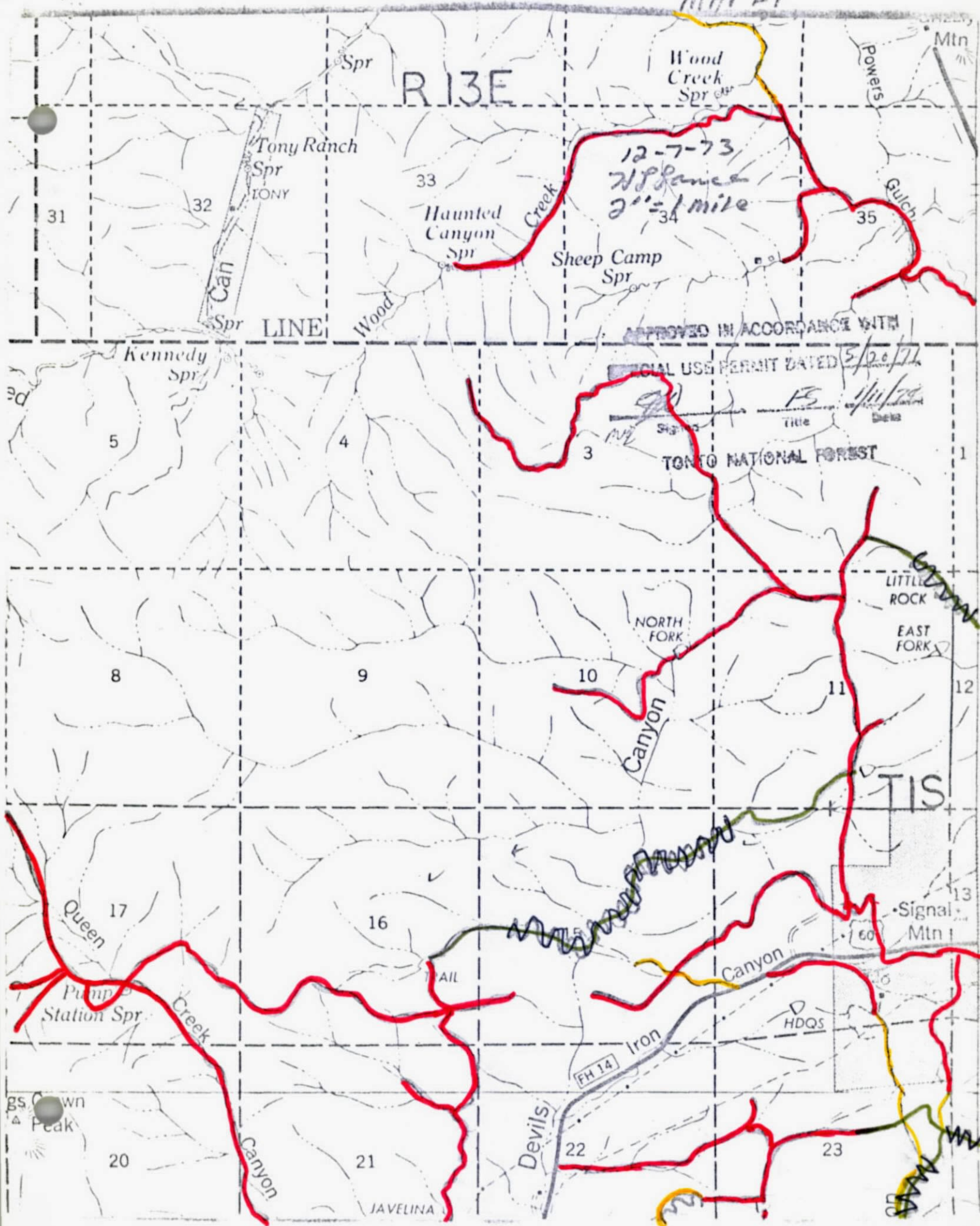
ASARCO
ROAD MAPS
GLOBE-SUPERIOR DISTRICT

NOV. 1973

R.B.C.

MAP #1

R 13E



GILA

Hills

AND MAP #2

12-7-73
W. Spence
2" = 1 mile
1387



YO TAMBIE
TUNNEL

Hairpin
Spr

BM4201

APPROVED IN ACCORDANCE WITH
SPECIAL USE PERMIT DATED 5/21/71

TONTO NATIONAL FOREST

TIS

Five
Point
Mtn

TELEPHONE

Savage
Tunnel

Creek

Mead

THE WATERSHED

Mercer Tunnel

BELLEVUE
(OLD SITE)

Hutton
Peak

Lost
Horse
Spr

Iron
Canyon Spr

Creek

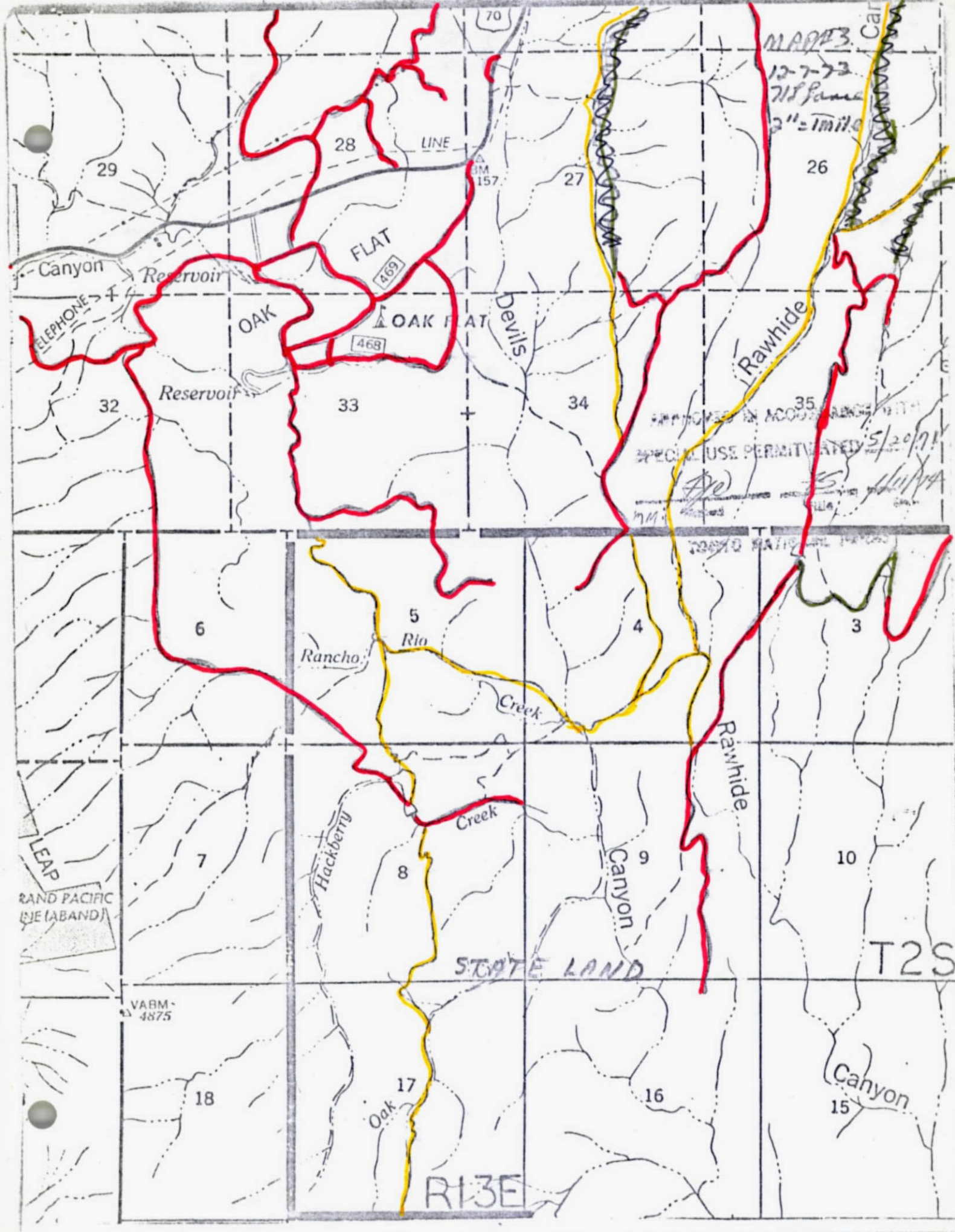
Twin
Tunnel
Spr

R13E

R14E

Upper
Mud

Mineral
Canyon



MAP #3
12-7-73
718 Same
2" = 1 mile

APPROVED & ACCORDANCE WITH
SPECIAL USE PERMITTED 5/20/71
(Signature)

20070 NATIONAL PARKS

STATE LAND

T2S

R13E

VARM-4875

LEAP
RAND PACIFIC
(E (ABAND))

TELEPHONE →

Car

Canyon

Canyon

Devils

FLAT

OAK FLAT

OAK

Reservoir

Reservoir

Rancho

Rio

Creek

Creek

Hackberry

Oak

29

28

70

27

26

32

33

34

35

6

5

4

3

7

8

9

10

18

17

16

15

157

LINE

469

468



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DIVISION
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

May 7, 1974

Mr. H. L. Lance
U.S. Forest Service
1100 N. Broad Street
Globe, Arizona 85501

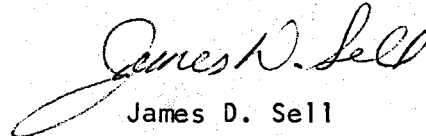
Dear Mr. Lance:

During the week of May 6th, a drill rig will move onto the drill site in Sec. 5, T.2S., R.13E., to continue the annual assessment work necessary. The access route will follow the road as noted on the attachments to the "Amendment for Special Use Permit" dated January 10, 1974. The equipment will probably be in the area for a period of 10 to 14 days.

Following completion of the work, the equipment is scheduled to move onto the site in Sec. 4, T.2S., R.13E., and follow a similar procedure.

The contractor is Copper State Exploration Company.

Sincerely,

A handwritten signature in cursive script that reads "James D. Sell".
James D. Sell

JDS:lb

cc: WLKurtz
RBCrist
NPWhaley

AMERICAN SMELTING AND REFINING COMPANY
TUCSON ARIZONA

December 9, 1974

Memorandum for R. B. Crist

Superior East

Please arrange to have a land agent determine what private land (USFS Class 1:11) within the Tonto National Forest is available for purchase and at about what price. This should be strictly on an inquiry basis, Asarco's name should not be used.

W. L. Kurtz
W. L. Kurtz

WLK:lb

cc: JDSell ✓

MINING IN NATIONAL FORESTS

RT1 Box 33

Globe
85501



Regulations to Protect Surface Resources



Forest Service / U.S. Department of Agriculture
Current Information Report No. 14 / January 1975

MINING IN NATIONAL FORESTS

Regulations to Protect Surface Resources

Introduction

The 187-million-acre National Forest System is an important part of the Nation's natural resource base. As directed by the Organic Administration Act of 1897 and the Multiple Use-Sustained Yield Act of 1960, the National Forests are managed by USDA's Forest Service for continuous production of their renewable resources--timber, clean water, wildlife habitat, forage for livestock, and outdoor recreation.

Although not renewable, minerals are important resources of the National Forests. They are in fact vital to the Nation's welfare. By accident of geography and geology, the National Forests and much of the country's remaining unexplored stores of minerals occupy the same lands--prime examples being the Rocky Mountains, the Basin and Range Province, the Cascade-Sierra Nevada Ranges, the Alaska Coast Range, and National Forest lands in Missouri, Minnesota, and Wisconsin. Less known but apparently good mineral potential exists in the southern and eastern National Forests.

About 85 percent of the lands in the National Forest System are open to mineral exploration and development. National Forest System lands contain some of the geologically most favorable host mineral deposits. In addition, approximately 6½ million acres are known to be underlain by coal. Approximately 45 million acres or one-quarter of the National Forest System lands have potential for oil and gas, while 300,000 acres have oil shale potential. Another 300,000 acres have known phosphate potential.

Within the past year, the energy crisis in this country has brought home to many people the reality that many of the Nation's mineral resources exist as limited or finite supplies. And, as with oil supplies, there will undoubtedly be a considerable tightening of world supplies of many minerals. Such a trend is leading to considerable expansion of domestic mineral prospecting exploration and development. And much of this increased activity is on the National Forests.

The Forest Service fully recognizes the importance of National Forest System mineral resources to the future well being of the Nation and encourages bonafide mineral development. But it also recognizes its responsibilities to protect the surface natural resources of the lands under its care. Thus, the Forest Service is faced with a double task: to make minerals from National Forest lands available to the national economy and, at the same time, to minimize the adverse impacts of mining activities on the renewable and non-renewable forest and grassland resources.

Minerals management, moreover, has a unique place among National Forest resources. Although the Forest Service, which is in the Department of Agriculture, is responsible for the management of the surface resources of the National Forests, the responsibility for the management of the actual mineral resource lies with the U.S. Department of the Interior. In addition, mining and related activities on National Forest System lands are governed by specific laws which identify procedures and conditions under which prospecting, exploration and development of minerals can be carried out.

The United States Mining Laws of 1872. The 1872 Mining Laws, as amended, govern the prospecting for, locating and claiming of metallic and related nonmetallic minerals on the 140 million acres of National Forest set up by proclamation from the public domain. Under this 1872 law, and its principal amendment of July 23, 1955, any prospector who discovers what he believes to be a valuable mineral deposit may locate a mining claim on these "public domain" National Forests. The 1872 Laws do not require the miner or prospector to notify the Forest Service of his plans. Once a prospector or miner has filed a claim at the local courthouse, there again is no requirement in the 1872 Laws that he notify the Forest Service before removing materials. A mining claimant, as is any private party owning property within the National Forests, is entitled to access to his claim for mining and mining related activities. The claimant, once he has met rather vigorous requirements of the law, may file for patent with the Department of the Interior at any time to obtain legal title to both the surface and sub-surface of his claim.

By inter-Departmental agreement, the Forest Service conducts a mineral examination to determine if a valuable deposit has been found, and on the basis of that determination, recommends whether or not a patent should be granted. Based on this report of examination, the Department of the Interior determines whether patent should be issued. If a patent is granted, full legal title is conveyed and thereafter the Forest Service has no authority over the lands conveyed.

Mineral Leasing. Some minerals in National Forest System lands are disposable only by leases issued by the Bureau of Land Management of the Department of the Interior. Operations under such leases are administered by the U.S. Geological Survey, also an Interior agency. Three basic laws govern Federal mineral leasing.

The Mineral Lands Leasing Act of February 25, 1920, as amended and supplemented, is commonly known as the "1920 Leasing Act." It applies to the public domain and to National Forest lands reserved from the public domain. Mineral deposits subject to this act include the fossil fuels, such as coal, oil, gas and oil shale, other bitumens, potassium, sodium, phosphate, and in Louisiana and New Mexico, sulphur. Applications for prospecting permits and leases under this act that involve National Forest lands are referred to the Forest Service for its recommendations and prescription of reasonable measures to be taken to protect the surface resource and reclaim disturbed lands. The Forest Service analyzes the possible environmental impacts which might be caused by mineral development. If significant environmental impacts are predicted, the Forest Service and the Bureau of Land Management may cooperate in preparing a comprehensive environmental statement as required by the National Environmental Policy Act.

The Mineral Leasing Act for Acquired Lands of August 7, 1947, governs the disposal from acquired National Forest System lands, most of which are in the East, of deposits of coal, phosphate, sodium, potassium, oil, oil shale, gas and sulphur. Leases are issued by the Bureau of Land Management of the Department of the Interior and lease operations are administered by the U.S. Geological Survey. However, acquired lands mineral leases may only be issued with the consent of the Secretary of Agriculture and subject to such terms and conditions as he may require to insure the adequate utilization of the lands for the purposes for which they were acquired. The Secretary of Agriculture has delegated his authority to the Chief of the Forest Service. Other minerals in acquired lands, and in certain public lands in Minnesota, are subject to lease by the Secretary of the Interior under the President's Reorganization Plan of 1946. These are the so-called "hard rock minerals" which in public domain lands are subject to the 1872 mining laws. "Hard rock" mineral leasing is subject to the consent of the Secretary of Agriculture, through the Forest Service, similar to leasing under the Acquired Lands Leasing Act. Provisions of the Mineral Leasing Act for Acquired Lands are similar to those of the 1920 Leasing Act, except that all leases under the former are subject to Forest Service consent.

The Geothermal Steam Act of 1970 provides for the leasing of geothermal resources by the Secretary of the Interior. As under the Acquired Lands Leasing Act, such leases are subject to the consent of the Forest Service for National Forest System lands.

Additionally, minerals in certain National Forest System lands of limited extent are subject to disposal under special acts that apply only to those lands.

Common Varieties of Mineral Materials. The Forest Service has the authority to dispose of common varieties from lands under its jurisdiction and to specify the terms and conditions of operations. Common varieties include sand, stone, gravel, pumice and other minerals of low unit value. A Forest Service permit is required prior to any exploration activity for these minerals. If a potential site is located, the Forest Service weighs the relative values of the surface and mineral resources and determines if the site should be operated. If the decision is that it should be, the Forest Service sets the terms and conditions of operation, appraises the value of the resource, and enters into sale contracts. Most disposals are by free use permits to Federal, State and local units of government for use in constructing and maintaining roads.

Development of Regulations

From the time the National Forest System was established until the mid-1960's there was no great public outcry against mining activities in the National Forests. But in the 1970's a heightened public awareness of environmental matters developed, and concern began to be expressed that mining and prospecting activities were "ruining" the National Forests.

In particular, the unrestricted operations permitted under the 1872 Mining Laws caused widespread concern because of adverse impacts on other resources and on the environment. Although the majority of miners and prospectors took steps to insure that surface resources were damaged as little as possible, there were numerous instances where careless and thoughtless prospecting and mining activities resulted in unnecessary road building; erosion and muddy streams because of inadequate surface drainage controls, or none at all; careless disposal of garbage; abandoned equipment; scattered and poorly located piles of waste rock and mill tailings; and dangerous shafts and portals left uncovered, unfenced and unmarked on National Forest lands.

While public concern built up over the adverse effects of unregulated mining and prospecting in the National Forests, looming prospects of mineral shortages promised increasing prospecting and mining activities. Congress in 1969 had passed the National Environmental Policy Act "to promote efforts which will prevent or eliminate damage to the environment" and further ordered that "to the fullest extent possible the...public laws of the United States shall be interpreted and administered in accordance with the policies set forth in the Act."

In line with this direction from Congress and the long identified need for surface resource protection, the Department of Agriculture began to re-examine existing laws. It determined that the Organic Administration Act of 1897 provided sufficient authority to bring about some positive regulation of mineral activities taking place on National Forest lands under the 1872 Mining Laws. The Organic Act provides that persons entering the National Forests for purposes of prospecting, locating and developing mineral resources under the 1872 Mining Law must comply with the rules and regulations covering the National Forests.

Accordingly, in December 1973, the Secretary of Agriculture published in the Federal Register proposed regulations to protect the surface resources of the National Forests during mining and prospecting operations. The proposed regulations were open to public comment and were revised in accordance with the many responsible comments received. An Environmental Impact Statement on the proposed regulations was then filed with the Council on Environmental Quality in July 1974, and revised proposed regulations were again published in the Federal Register, both open to public comment. Slightly revised again, the Regulations were published in the Federal Register August 28, and became effective September 1, 1974.

Highlights of Regulations

The regulations apply to the 140 million acres of National Forest lands subject to location and entry under the Mining Laws of 1872, that is, to the mining and prospecting of metallic and related nonmetallic minerals subject to those laws. They have no effect on the development of fossil fuels and other minerals subject to and already regulated under the mineral leasing laws or the laws governing the disposal of the "common variety" minerals.

The regulations provide the Forest Service and the mining community with the means of meeting their mutual environmental responsibilities to protect the surface resources of National Forest System lands. Among the main points covered by the regulations are the following:

- * Anyone proposing prospecting or mining operations under the 1872 mining laws in the National Forest System which might cause disturbance of surface resources must give the local Forest Service office a "notice of intention to operate." If the authorized forest officer determines that such operations will cause a significant disturbance to the environment, the operator must submit a proposed plan of operations. Of course, if an operator knows he will cause significant surface disturbance he should immediately submit a proposed plan. District Rangers can be helpful in preparing it, if necessary. The plan must describe such things as the type of operation proposed and how it will be conducted; proposed roads or access routes and means of transportation; and the time period during which the proposed activities will take place.
- * All operations must be conducted, so far as feasible, to minimize adverse environmental impacts on the National Forests, and take into consideration requirements for meeting Federal, State and local air and water quality standards and solid waste disposal, harmony with scenic values, protection of fish and wildlife habitats, and minimization of road construction damage.
- * The plan of operations must also show what steps the operator will take for feasible rehabilitation of the area when the prospecting or mining is completed.
- * Upon filing the plan of operations, the operator may be required to furnish a bond commensurate with the expected cost of rehabilitating the area.
- * The plan of operations must be approved by the authorized forest officer before any operations are conducted.

In analyzing each plan for approval, the forest officer will consider the economics of the operation along with other factors in determining the reasonableness of the requirements for surface resource protection. The Forest Service will assess the environmental impacts of the proposed operation and make any Environmental Impact Statements that might be required under the National Environmental Policy Act.

Any operator who disagrees with the decision of the authorized forest officer in connection with administration of the regulations, may appeal that decision, up to the Regional Forester. The decision of the Regional Forester will be the final administrative appeal decision. Aggrieved parties are thus provided quick access to the courts to seek redress.

Application to Wilderness

The regulations apply also to mining in wildernesses. The Act which created the National Wilderness Preservation System in 1964 specified that the laws pertaining to mining and mineral leasing on Federal lands should extend to wildernesses until 1983. The continued prospecting for minerals is authorized, but it must be conducted in a manner as compatible as possible with preservation of the wilderness environment.

Thus, operations within wildernesses are subject to the requirement of an approved operating plan to a greater extent than on National Forest land in general. The standards under which the regulations will be applied in wildernesses will be somewhat stiffer than on other lands. Special limitations and restrictions have been placed on the use of mechanized equipment because of its potential for causing surface disturbance and other impacts on the wilderness environment. Previously, the Forest Service required permits or other authorization for prospecting and mining in wildernesses. These requirements are now superseded by the Regulations, and an approved plan of operations is required.

In addition to designated wildernesses and primitive areas the Forest Service has inventoried nearly 56 million acres of roadless and undeveloped National Forest lands. A total of 274 of these areas, covering 12.3 million acres, have been selected as having high priority for detailed study to evaluate their suitability and availability for possible addition to the Wilderness System. Until recommendations are made as to which of these areas should become Wilderness units, they will be managed to protect them from activities which would dequalify them from Wilderness designation. Activities under the 1872 Mining Law are not precluded in these areas, but care will be taken to keep man's impact to a minimum so as not to foreclose possible Wilderness designation.

Administration

The regulations will not be easy to administer since much depends on judgment, or the reasonableness of a decision. Effective administration will depend on the reasonableness and good faith of both mineral operators and forest officers. It is the hope of the Forest Service that it and mining operators can work together to make these regulations operate to the mutual benefit of the parties directly involved and, above all, to the benefit of the American public. The goal is to assure that Americans have both minerals and a quality environment from their National Forests.

QUESTIONS AND ANSWERS

- Q: What is the purpose of the regulations enacted by the Forest Service concerning mining and prospecting operations in National Forests?
- A: The regulations are intended to protect the non-mineral surface resources of National Forest System lands against unnecessary or unreasonable damages from prospecting, exploration, development, mining and processing operations carried out under the authority of the U.S. Mining Laws of 1872, as amended. They are intended to provide that protection without unreasonably inhibiting or restricting the activities of prospectors and miners.
- Q: Does the Forest Service have the authority to issue these regulations?
- A: Yes. The Organic Administration Act of June 4, 1897, authorizes the Secretary of Agriculture to regulate occupancy and use of the National Forests for the protection and management of their surface resources. All National Forest users, including prospectors and miners, are required to observe these regulations.
- Q: Why has the Forest Service issued regulations at this time, when mineral operations have been carried out in National Forests for 70 years without them?
- A: The Forest Service was given added direction through the National Environmental Policy Act of 1969 to promote efforts to prevent or eliminate damage to the environment. Recently, there has been increased prospecting and mining activity on the National Forests because of present or anticipated future world mineral shortages. All indications are that such mineral activities on National Forests will increase intensively in the future, and with them, increased possibilities for surface resource damage.

Q: Do the regulations affect the mining laws and mining regulations of the Department of the Interior or Interior's management of the mineral resources?

A: No. Those laws and regulations relate to the search for minerals, their discovery, extraction and processing. The Forest Service regulations apply to the protection of non-mineral resources affected by mineral-related activities. The Department of the Interior manages federally owned, locatable and leasable minerals on National Forest lands. The Forest Service is charged with the management and protection of the surface resources only.

Q: Do these regulations apply on all lands administered by the Forest Service?

A: No. They apply only to National Forest System lands open to operation under the U.S. Mining Laws of 1872, as amended, and to operations conducted under those laws. They cover those lands reserved from the public domain for National Forest purposes and not otherwise withdrawn from their operation. They also apply to a very small portion of lands acquired by the Federal Government for National Forest purposes. Nearly all National Forest lands open to the mining laws, and thus subject to these regulations, are west of the Mississippi River, including Alaska.

Q: Are there any laws or regulations which cover mining activities on the remaining National Forest lands?

A: Yes. The Mineral Lands Leasing Act of 1920, as amended and supplemented, provides for the disposal of the fossil fuels, such as coal, oil, gas, oil shale and related bitumens, as well as sodium, potassium and sulfur (the latter in only certain States) from public domain National Forests. The Mineral Leasing Act for Acquired lands of 1947 provides for the disposal of federally owned minerals in generally all acquired National Forest System lands, including not only the described leasing act minerals, but also the minerals subject to the 1872 mining laws in public domain lands.

Q: Just exactly what is meant by an operating plan?

A: An operating plan, as required by these regulations, is a document by which a mineral operator identifies himself, describes the work he intends to do, where and when he intends to do it, the nature of this proposed disturbance of surface resources, and the steps he will take to protect those resources. An approved operating plan is basically an agreement between the Forest Service and the operators. The operator agrees to observe necessary and reasonable precautions, spelled out in this plan, to reduce damage to surface resources during his activities and to rehabilitate disturbed areas as and when feasible. In turn, the Forest Service agrees that protection of surface resources will be adequate if operations are carried out in accordance with the approved plan.

Q: When is an operating plan necessary?

A: A plan of operations is required when anyone whose proposed operations under the 1872 mining laws could cause "significant disturbance of the surface resources." An operator who is unsure whether his proposed operations might disturb surface resources should file a "notice of intention to operate" with the Forest Service. It should describe briefly what he intends to do, where and when it is to be done, and how he intends to get himself and his equipment to the site. The Forest Service will analyze the proposal and within 15 days notify the operator as to whether or not an operating plan will be necessary.

Q: What is meant by a "significant" disturbance of surface resources?

A: In general, operations using mechanized earthmoving equipment would be expected to cause significant disturbance. Pick and shovel operations normally would not. Nor would explosives used underground, unless caving to the surface could be expected. Use of explosives on the surface would generally be considered to cause significant disturbance. Almost without exception, road and trail construction and tree-clearing operations would cause significant surface disturbance.

Disturbance by a particular type of operation on flat ground covered by sagebrush, for example, might not be considered significant. But, that same sort of operation in a high alpine meadow or near a stream could cause highly significant surface resource disturbance. The determination of what is significant, thus depends on a case-by-case evaluation of proposed operations and the kinds of lands and other surface resources involved.

Q: What is the purpose of the bond requirement in the regulations?

A: The requirement for a bond is to assure compliance with the reclamation provisions of the regulations and operating plans. The amount of the bond will be determined by the estimated cost of the work needed to reasonably reclaim surface resources disturbed by operations. If the operators fail to do the work, the bond or deposit will be used by the Forest Service to do the work or have it done.

Q: What action will the Forest Service take if miners and prospectors conduct operations on National Forest lands without an approved operating plan?

A: If the operators cause significant surface resource disturbance, a Forest Service officer will contact the operators, seeking cooperation to work up an operating plan. In cases where operators refuse to cooperate, the Forest Service will, as a last resort, take whatever legal action may be required to end unnecessary or unreasonable damage to surface resources, to reclaim disturbed areas, and seek payment for damages when appropriate. The Forest Service will first, however, make every effort to secure the cooperation of the operators.

Q: Will most proposed operations require preparation of Environmental Impact Statements?

A: No. It is expected that environmental statements will not be necessary often. When they are, they will most likely be for new roads that may be needed across National Forest lands for access to mines, mills and similar operations. The Forest Service will prepare any environmental statements that might be necessary.

Q: Do these regulations apply to National Forest wildernesses?

A: Yes. However, Congress has given special status to wildernesses, to protect their wilderness character. The standards under which the regulations will be applied in wildernesses will be somewhat stronger than on other lands. Operators may enter a wilderness and prospect for minerals under the Wilderness Act of 1964, but such activities must be carried out in a manner compatible with the preservation of the wilderness environment and in conformance with the applicable regulations. For example, special limitations and restrictions have been placed on the use of mechanized equipment because of its potential for causing surface disturbance and other impacts on the wilderness environment.

Title 36—Parks, Forests, and Public Property

CHAPTER II—FOREST SERVICE,
DEPARTMENT OF AGRICULTURE
NATIONAL FORESTS SURFACE USE
UNDER U.S. MINING LAWS

Regulations are hereby adopted concerning the use of the surface of National Forest System lands by persons operating under the United States mining laws of 1872, as amended. Parts 251 and 293 are amended and a new Part 252 is added.

The public was afforded an opportunity to comment on proposed rulemaking published on December 19, 1973 (38 FR 34817) and on July 16, 1974 (39 FR 28038). Respondents included Government agencies (National, State, and local), conservation organizations, mining associations, United States Senators and Congressmen, and individuals directly or indirectly concerned with mineral operations. The proposed regulations were also the subject of oversight hearings by the Public Lands Subcommittee of the Committee on Interior and Insular Affairs of the House of Representatives.

Comments ranged from total opposition to unqualified support of the proposals. Critical comments were in the majority. Many persons suggested changes or improvements in both wording and substance.

Although many respondents objected to the operating plan requirement, the essence of adequate regulation is development of operating plans which reflect both the necessities for environmental protection and for the use of surface resources in connection with mineral operations. A provision for operating plans is part of the regulations.

A major concern expressed by the mining industry, and noted by the Public Lands Subcommittee of the House Committee on Interior and Insular Affairs, is the possibility of unreasonable enforcement of the regulations, with resulting cost increases that could make otherwise viable mineral operations prohibitively expensive. The Forest Service recognizes that prospectors and miners have a statutory right, not mere privilege, under the 1872 mining law and the Act of June 4, 1897, to go upon and use the open public domain lands of the National Forest System for the purposes of mineral exploration, development and production. Exercise of that right may not be unreasonably restricted. Specific provision has been made in the operating plan approval section of the regulations charging Forest Service administrators with the responsibility to consider the economics of operations, along with the other factors, in determining the reasonableness of the requirements for surface resource protection.

Many comments objected to the time provided for Forest Service response to proposed operating plans. No change has

been made in these provisions since the time allowances are reasonable as outside limits. Even so, Forest Service administrators are expected to process operating plans promptly with the objective of responding, on the average, in half of the time allowed.

The requirement for a minimum bond of \$2,000 for any activities subject to operating plans was the provision most heavily criticized. Many respondents pointed to the discriminatory effect and negative impact on small miners and prospectors having relatively limited means. The bond provision has been changed to reduce discriminatory effects and to be more specific as to coverage, but remain responsive to the need to maintain the responsibilities of operators for reclamation and mitigation of the effects of surface disturbing operations.

Some respondents felt that all information and data submitted on proposed operations should be subject to full public disclosure. The rule of reasonableness is particularly applicable since proprietary data and competitive rights are involved. The section on availability of information to the public recognizes these factors.

Language has been modified to make more clear that the intent of these regulations is protection of the surface resources on National Forest System lands.

A number of comments noted the lack of a provision for a "notice of intent to operate." Such a provision has been included in the regulations.

The provision concerning data to be furnished in an operating plan has been simplified and is clarified to state that the Forest Service, rather than the operator, has the responsibility for analyzing the environmental impacts that may be expected from proposed operations.

Many respondents criticized the language about environmental impact statements and appeals procedures. Those sections have been clarified. The number of levels of appeal provided is small in order to allow aggrieved parties quick access to the courts to seek redress.

Seasonal factors in most of the western mountains preclude prospecting and exploration during winter and early spring. A 120-day grace period is provided within which to file required operating plans in the case of operations underway on the effective date of the regulations. Under the circumstances, the regulations should not have significant effect on ongoing operations during the remainder of this operating season.

A Final Environmental Statement, prepared in accordance with section 102(2)(c) of the National Environmental Policy Act of January 1, 1970 (42 U.S.C. 4332(2)(C)), was filed with the Council on Environmental Quality on July 18, 1974. The statement discussed the environmental impact of issuing the regulations as proposed.

Reprinted from

RULES AND REGULATIONS

The regulations will be effective September 1, 1974.

The amendment of Chapter II follows:

PART 251—LAND USES

§ 251.12 [Revoked]

1. Part 251 is amended by revoking § 251.12.

PART 252—MINERALS

2. A new Part 252 is added to read as follows:

Sec.	
252.1	Purpose.
252.2	Scope.
252.3	Definitions.
252.4	Plan of operations—notice of intent—requirements.
252.5	Plan of operations—approval.
252.6	Availability of information to the public.
252.7	Inspection, noncompliance.
252.8	Requirements for environmental protection.
252.9	Maintenance during operations, public safety.
252.10	Cessation of operations, removal of structures and equipment.
252.11	Prevention and control of fire.
252.12	Access.
252.13	Bonds.
252.14	Appeals.
252.15	Operations within National Forest Wilderness.

AUTHORITY: 30 Stat. 35 and 36, as amended (16 U.S.C. 478, 551), unless otherwise noted.

§ 252.1 Purpose.

It is the purpose of these regulations to set forth rules and procedures through which use of the surface of National Forest System lands in connection with operations authorized by the United States mining laws (30 U.S.C. 21-54), which confer a statutory right to enter upon the public lands to search for minerals, shall be conducted so as to minimize adverse environmental impacts on National Forest System surface resources. It is not the purpose of these regulations to provide for the management of mineral resources; the responsibility for managing such resources is in the Secretary of the Interior.

§ 252.2 Scope.

These regulations apply to operations hereafter conducted under the United States mining laws of May 10, 1872, as amended (30 U.S.C. 22 et seq.), as they affect surface resources on all National Forest System lands under the jurisdiction of the Secretary of Agriculture to which such laws are applicable: *Provided, however*; That any area of National Forest lands covered by a special Act of Congress (16 U.S.C. 482a-482q) is subject to the provisions of this part and the provisions of the special act, and in the case of conflict the provisions of the special act shall apply.

§ 252.3 Definitions.

For the purposes of this part the following terms, respectively, shall mean

(a) *Operations*. All functions, work and activities in connection with pros-

pecting, exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto, including roads and other means of access on lands subject to the regulations in this part, regardless of whether said operations take place on or off mining claims.

(b) *Operator*. A person conducting or proposing to conduct operations.

(c) *Person*. Any individual, partnership, corporation, association, or other legal entity.

(d) *Mining claim*. Any unpatented mining claim or unpatented millsite authorized by the United States mining laws of May 10, 1872, as amended (30 U.S.C. 22 et seq.).

(e) *Authorized officer*. The Forest Service officer to whom authority to review and approve operating plans has been delegated.

§ 252.4 Plan of Operations—Notice of Intent—Requirements.

(a) Except as provided in paragraph (2) of this section, a notice of intention to operate is required from any person proposing to conduct operations which might cause disturbance of surface resources. Such notice of intention shall be submitted to the District Ranger having jurisdiction over the area in which the operations will be conducted. If the District Ranger determines that such operations will likely cause significant disturbance of surface resources, the operator shall submit a proposed plan of operations to the District Ranger.

(1) The requirements to submit a plan of operations shall not apply (i) to operations which will be limited to the use of vehicles on existing public roads or roads used and maintained for National Forest purposes, (ii) to individuals desiring to search for and occasionally remove small mineral samples or specimens, (iii) to prospecting and sampling which will not cause significant surface resource disturbance and will not involve removal of more than a reasonable amount of mineral deposit for analysis and study, (iv) to marking and monumenting a mining claim and (v) to subsurface operations which will not cause significant surface resource disturbance.

(2) A notice of intent need not be filed (i) where a plan of operations is submitted for approval in lieu thereof, (ii) for operations excepted in paragraph (1) of this section from the requirement to file a plan of operations, (iii) for operations which will not involve the use of mechanized earthmoving equipment such as bulldozers or backhoes and will not involve the cutting of trees. Each notice of intent to operate shall provide information sufficient to identify the area involved, the nature of the proposed operations, the route of access to the area of operations and the method of transport. If a notice of intent is filed, the District Ranger will, within 15 days of receipt thereof, notify the operator whether a plan of operations is required.

(b) Any person conducting operations on the effective date of these regulations, who would have been required to submit a plan of operations under § 252.4 (a), may continue operations but shall within 120 days thereafter submit a plan of operations to the District Ranger having jurisdiction over the area within which operations are being conducted: *Provided, however*, That upon a showing of good cause the authorized officer will grant an extension of time for submission of a plan of operations, not to exceed an additional 6 months. Operations may continue according to the submitted plan during its review, unless the authorized officer determines that the operations are unnecessarily or unreasonably causing irreparable damage to surface resources and advises the operator of those measures needed to avoid such damage. Upon approval of a plan of operations, operations shall be conducted in accordance with the approved plan. The requirement to submit a plan of operations shall not apply (1) to operations excepted in § 252.4(a) or (2) to operations concluded prior to the effective date of the regulations in this part.

(c) The plan of operations shall include:

(1) The name and legal mailing address of the operators (and claimants if they are not the operators) and their lessees, assigns, or designees.

(2) A map or sketch showing information sufficient to locate the proposed area of operations on the ground, existing and/or proposed roads or access routes to be used in connection with the operations as set forth in § 252.12 and the approximate location and size of areas where surface resources will be disturbed.

(3) Information sufficient to describe or identify the type of operations proposed and how they would be conducted, the type and standard of existing and proposed roads or access routes, the means of transportation used or to be used as set forth in § 252.12, the period during which the proposed activity will take place, and measures to be taken to meet the requirements for environmental protection in § 252.8.

(d) The plan of operations shall cover the requirements set forth in paragraph (c) of this section, as foreseen for the entire operation for the full estimated period of activity: *Provided, however*, That if the development of a plan for an entire operation is not possible at the time of preparation of a plan, the operator shall file an initial plan setting forth his proposed operation to the degree reasonably foreseeable at that time, and shall thereafter file a supplemental plan or plans whenever it is proposed to undertake any significant surface disturbance not covered by the initial plan.

(e) At any time during operations under an approved plan of operations, the authorized officer may ask the operator to furnish a proposed modification of the plan detailing the means of minimiz-

ing unforeseen significant disturbance of surface resources. If the operator does not furnish a proposed modification within a time deemed reasonable by the authorized officer, the authorized officer may recommend to his immediate superior that the operator be required to submit a proposed modification of the plan.

The recommendation of the authorized officer shall be accompanied by a statement setting forth in detail the supporting facts and reasons for his recommendations. In acting upon such recommendation, the immediate superior of the authorized officer shall determine (1) whether all reasonable measures were taken by the authorized officer to predict the environmental impacts of the proposed operations prior to approving the operating plan, (2) whether the disturbance is or probably will become of such significance as to require modification of the operating plan in order to meet the requirements for environmental protection specified in § 252.8 and (3) whether the disturbance can be minimized using reasonable means. Lacking such determination that unforeseen significant disturbance of surface resources is occurring or probable and that the disturbance can be minimized using reasonable means, no operator shall be required to submit a proposed modification of an approved plan of operations. Operations may continue in accordance with the approved plan until a modified plan is approved, unless the immediate superior of the authorized officer determines that the operations are unnecessarily or unreasonably causing irreparable injury, loss or damage to surface resources and advises the operator of those measures needed to avoid such damage.

(f) Upon completion of an environmental analysis in connection with each proposed operating plan, the authorized officer will determine whether an environmental statement is required. Not every plan of operations, supplemental plan or modification will involve the preparation of an environmental statement. Environmental impacts will vary substantially depending on whether the nature of operations is prospecting, exploration, development, or processing, and on the scope of operations (such as size of operations, construction required, length of operations and equipment required), resulting in varying degrees of disturbance to vegetative resources, soil, water, air, or wildlife. The Forest Service will prepare any environmental statements that may be required.

§ 252.5 Plan of Operations—Approval.

(a) Operations shall be conducted in accordance with an approved plan of operations, except as provided in section (b) of this section and in § 252.4(a), (b), and (e). A proposed plan of operation shall be submitted to the District Ranger, who shall promptly acknowledge receipt thereof to the operator. The authorized officer shall, within thirty

(30) days of such receipt, analyze the proposal, considering the economics of the operation along with the other factors in determining the reasonableness of the requirements for surface resource protection, and;

(1) Notify the operator that he has approved the plan of operations, or

(2) Notify the operator that the proposed operations are such as not to require an operating plan; or

(3) Notify the operator of any changes in, or additions to, the plan of operations deemed necessary to meet the purpose of the regulations in this part; or

(4) Notify the operator that the plan is being reviewed, but that more time, not to exceed an additional sixty (60) days, is necessary to complete such review, setting forth the reasons why additional time is needed: *Provided, however,* That days during which the area of operations is inaccessible for inspection shall not be included when computing the sixty (60) day period; or

(5) Notify the operator that the plan cannot be approved until a final environmental statement has been prepared and filed with the Council on Environmental Quality as provided in § 252.4(f).

(b) Pending final approval of the plan of operations, the authorized officer will approve such operations as may be necessary for timely compliance with the requirements of Federal and State laws, so long as such operations are conducted so as to minimize environmental impacts as prescribed by the authorized officer in accordance with the standards contained in § 252.8.

(c) A supplemental plan or plans of operations provided for in § 252.4(d) and a modification of an approved operating plan as provided for in § 252.4(e) shall be subject to approval by the authorized officer in the same manner as the initial plan of operations: *Provided, however,* That a modification of an approved plan of operations under § 252.4(e) shall be subject to approval by the immediate superior of the authorized officer in cases where it has been determined that a modification is required.

(d) In the provisions for review of operating plans, the Forest Service will arrange for consultation with appropriate agencies of the Department of the Interior with respect to significant technical questions concerning the character of unique geologic conditions and special exploration and development systems, techniques, and equipment, and with respect to mineral values, mineral resources, and mineral reserves. Further, the operator may request the Forest Service to arrange for similar consultations with appropriate agencies of the U.S. Department of the Interior for a review of operating plans.

§ 252.6 Availability of information to the public.

Except as provided herein, all information and data submitted by an opera-

tor pursuant to the regulations in this part shall be available for examination by the public at the Office of the District Ranger in accordance with the provisions of 7 CFR 1.1-1.6 and 36 CFR 200.5-200.10. Specifically identified information and data submitted by the operator as confidential concerning trade secrets or privileged commercial or financial information will not be available for public examination. Information and data to be withheld from public examination may include, but is not limited to, known or estimated outline of the mineral deposits and their location, attitude, extent, outcrops, and content, and the known or planned location of exploration pits, drill holes, excavations pertaining to location and entry pursuant to the United States mining laws, and other commercial information which relates to competitive rights of the operator.

§ 252.7 Inspection, noncompliance.

(a) Forest Officers shall periodically inspect operations to determine if the operator is complying with the regulations in this part and an approved plan of operations.

(b) If an operator fails to comply with the regulations or his approved plan of operations and the noncompliance is unnecessarily or unreasonably causing injury, loss or damage to surface resources the authorized officer shall serve a notice of noncompliance upon the operator or his agent in person or by certified mail. Such notice shall describe the noncompliance and shall specify the action to comply and the time within which such action is to be completed, generally not to exceed thirty (30) days: *Provided, however,* That days during which the area of operations is inaccessible shall not be included when computing the number of days allowed for compliance.

§ 252.8 Requirements for Environmental Protection.

All operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources, including the following requirements:

(a) *Air Quality.* Operator shall comply with applicable Federal and State air quality standards, including the requirements of the Clean Air Act, as amended (42 U.S.C. 1857 et seq.).

(b) *Water Quality.* Operator shall comply with applicable Federal and State water quality standards, including regulations issued pursuant to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.).

(c) *Solid Wastes.* Operator shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes. All garbage, refuse, or waste, shall either be removed from National Forest lands or disposed of or treated so as to minimize, so far as is practicable, its impact on the en-

RULES AND REGULATIONS

vironment and the forest surface resources. All tailings, dumpage, deleterious materials or substances and other waste produced by operations shall be deployed, arranged, disposed of or treated so as to minimize adverse impact upon the environment and forest surface resources.

(d) *Scenic Values.* Operator shall, to the extent practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape.

(e) *Fisheries and Wildlife Habitat.* In addition to compliance with water quality and solid waste disposal standards required by this section, operator shall take all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations.

(f) *Roads.* Operator shall construct and maintain all roads so as to assure adequate drainage and to minimize or, where practicable, eliminate damage to soil, water, and other resource values. Unless otherwise approved by the authorized officer, roads no longer needed for operations (1) shall be closed to normal vehicular traffic, (2) bridges and culverts shall be removed, (3) cross drains, dips, or water bars shall be constructed, and (4) the road surface shall be shaped to as near a natural contour as practicable and be stabilized.

(g) *Reclamation.* Upon exhaustion of the mineral deposit or at the earliest practicable time during operations, or within 1 year of the conclusion of operations, unless a longer time is allowed by the authorized officer, operator shall, where practicable, reclaim the surface disturbed in operations by taking such measures as will prevent or control on-site and off-site damage to the environment and forest surface resources including:

- (1) Control of erosion and landslides;
- (2) Control of water runoff;
- (3) Isolation, removal or control of toxic materials;
- (4) Reshaping and revegetation of disturbed areas, where reasonably practicable; and
- (5) Rehabilitation of fisheries and wildlife habitat.

(h) Certification or other approval issued by State agencies or other Federal agencies of compliance with laws and regulations relating to mining operations will be accepted as compliance with similar or parallel requirements of these regulations.

§ 252.9 Maintenance during operations, public safety.

During all operations operator shall maintain his structures, equipment, and other facilities in a safe, neat and workmanlike manner. Hazardous sites or con-

ditions resulting from operations shall be marked by signs, fenced or otherwise identified to protect the public in accordance with Federal and State laws and regulations.

§ 252.10 Cessation of operations, removal of structures and equipment.

Unless otherwise agreed to by the authorized officer, operator shall remove within a reasonable time following cessation of operations all structures, equipment and other facilities and clean up the site of operations. Other than seasonally, where operations have ceased temporarily, an operator shall file a statement with the District Ranger which includes (1) verification of intent to maintain the structures, equipment and other facilities, (2) the expected reopening date, and (3) an estimate of extended duration of operations. A statement shall be filed every year in the event operations are not reactivated. Operator shall maintain the operating site, structures, equipment and other facilities in a neat and safe condition during nonoperating periods.

§ 252.11 Prevention and control of fire.

Operator shall comply with all applicable Federal and State fire laws and regulations and shall take all reasonable measures to prevent and suppress fires on the area of operations and shall require his employees, contractors and subcontractors to do likewise.

§ 252.12 Access.

An operator is entitled to access in connection with operations, but no road, trail, bridge, landing area for aircraft, or the like, shall be constructed or improved, nor shall any other means of access, including but not limited to off-road vehicles, be used until the operator has received approval of an operating plan in writing from the authorized officer when required by § 252.4(a). Proposals for construction, improvement or use of such access as part of a plan of operations shall include a description of the type and standard of the proposed means of access, a map showing the proposed route of access, and a description of the means of transportation to be used. Approval of the means of such access as part of a plan of operations shall specify the location of the access route, design standards, means of transportation, and other conditions reasonably necessary to protect the environment and forest surface resources, including measures to protect scenic values and to insure against erosion and water or air pollution.

§ 252.13 Bonds.

(a) Any operator required to file a plan of operations shall, when required by the authorized officer, furnish a bond conditioned upon compliance with § 252.8(g), prior to approval of such plan of operations. In lieu of a bond, the operator may deposit into a Federal deposi-

tory, as directed by the Forest Service, and maintain therein, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having market value at the time of deposit of not less than the required dollar amount of the bond. A blanket bond covering nationwide or statewide operations may be furnished if the terms and conditions thereof are sufficient to comply with the regulations in this part.

(b) In determining the amount of the bond, consideration will be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.

(c) In the event that an approved plan of operations is modified in accordance with § 252.4 (d) and (e) of this part, the authorized officer will review the initial bond for adequacy and, if necessary, will adjust the bond to conform to the operations plan as modified.

(d) When reclamation has been completed in accordance with § 252.8(g), the authorized officer will notify the operator that performance under the bond has been completed: *Provided, however,* That when the Forest Service has accepted as completed any portion of the reclamation, the authorized officer shall notify the operator of such acceptance and reduce proportionally the amount of bond thereafter to be required with respect to the remaining reclamation.

§ 252.14 Appeals.

(a) Any operator aggrieved by a decision of the authorized officer in connection with the regulations in this part may file with the authorized officer a written statement setting forth in detail the respects in which the decision complained of is contrary to, or in conflict with, the facts, the law, or the regulations of the Secretary, or is otherwise in error. No such appeal will be considered unless it is filed with the authorized officer within thirty (30) days after the date of notification to the operator of the action or decision complained of. Upon receipt of appellant's statement, the authorized officer shall promptly prepare his own statement explaining his decision and the reasons therefor and forward the statements and record to his immediate superior for review and decision. The decision of the Regional Forester shall be the final administrative appeal decision.

(b) At the time appellant files his written statement of appeal he may request and shall be afforded an opportunity to present his views orally to the reviewing Forest Service officer.

(c) If the reviewing Forest Service officer considers the record inadequate to support a decision on the appeal, he may provide for the production of such additional evidence or information as may be appropriate or may remand the case with appropriate instructions for further action.

(d) The official files of the Forest Service relating to these appeals and any testimony and documents submitted by the parties on which the decision of the authorized officer was based constitute the record in the appeal. The authorized officer shall maintain the record under separate cover and shall certify that it is the record on which his decision was based at the time it is forwarded to his immediate superior for review. The Forest Service shall make the record available to the appellant upon request.

(e) On or before the expiration of forty-five (45) days after his receipt of the record the reviewing officer shall make his decision: *Provided, however*, That if more than forty-five (45) days are required for a decision after the record is received, the reviewing officer shall notify the parties to the appeal and specify the reason for delay. The decisions of reviewing officers shall include (1) a statement of facts, (2) conclusions, and (3) reasons upon which the conclusions are based.

(f) A decision of the authorized officer from which an appeal is taken shall not be automatically stayed by the filing of a statement of appeal. A request for a stay may accompany the statement of appeal or may be directed to the reviewing officer. The reviewing officer shall promptly rule on requests for stays. The decision of the Regional Forester on requests for stays shall constitute the final administrative appeal decision.

§ 252.15 Operations within national forest wilderness.

(a) The United States mining laws shall extend to each National Forest Wilderness for the period specified in the Wilderness Act and subsequent establishing legislation to the same extent they were applicable prior to the date the Wilderness was designated by Congress as a part of the National Wilderness Preservation System. Subject to valid existing rights, no person shall have any right or interest in or to any mineral deposits which may be discovered through prospecting or other information-gathering activity after the legal date on which the United States mining laws cease to apply to the specific Wilderness.

(b) Holders of unpatented mining claims validly established on any National Forest Wilderness prior to inclusion of such unit in the National Wilderness Preservation System shall be accorded the rights provided by the United States mining laws as then applicable to the National Forest land involved. Persons locating mining claims in any National Forest Wilderness on or after the date on which said Wilderness was included in the National Wilderness Preservation System shall be accorded the rights provided by the United States mining laws as applicable to the National Forest land involved and subject to provisions specified in the establishing legislation. Persons conducting operations as

defined in § 252.3 in National Forest Wilderness shall comply with the regulations in this part. Operations shall be conducted so as to protect National Forest surface resources in accordance with the general purposes of maintaining the National Wilderness Preservation System unimpaired for future use and enjoyment as wilderness and to preserve its wilderness character, consistent with the use of the land for mineral location, exploration, development, drilling, and production and for transmission lines, water lines, telephone lines, and processing operations, including, where essential, the use of mechanized transport, aircraft or motorized equipment.

(c) Persons with valid mining claims wholly within National Forest Wilderness shall be permitted access to such surrounded claims by means consistent with the preservation of National Forest Wilderness which have been or are being customarily used with respect to other such claims surrounded by National Forest Wilderness. No operator shall construct roads across National Forest Wilderness unless authorized in writing by the Forest Supervisor in accordance with § 252.12.

(d) On all mining claims validly established on lands within the National Wilderness Preservation System, the operator shall take all reasonable measures to remove any structures, equipment and other facilities no longer needed for mining purposes in accordance with the provisions in § 252.10 and restore the surface in accordance with the requirements in § 252.8(g).

(e) The title to timber on patented claims validly established after the land was included within the National Wilderness Preservation System remains in the United States, subject to a right to cut and use timber for mining purposes. So much of the mature timber may be cut and used as is needed in the extraction, removal, and beneficiation of the mineral deposits, if needed timber is not otherwise reasonably available. The cutting shall comply with the requirements for sound principles of forest management as defined by the National Forest rules and regulations and set forth in stipulations to be included in the plan of operations, which as a minimum incorporate the following basic principles of forest management:

(1) Harvesting operations shall be so conducted as to minimize soil movement and damage from water runoff; and

(2) Slash shall be disposed of and other precautions shall be taken to minimize damage from forest insects, disease, and fire.

(f) The Chief, Forest Service, shall allow any activity, including prospecting, for the purpose of gathering information about minerals in National Forest Wilderness except that any such activity for gathering information shall be carried on in a manner compatible with the preservation of the wilderness

environment as specified in the plan of operations.

(78 Stat. 890) (16 U.S.C. 1131-1136)

PART 293—WILDERNESS-PRIMITIVE AREAS

3. The regulations of Part 293 were transferred from Part 251 on March 5, 1973 (38 FR 5851). The new Part 293 is further amended by revising §§ 293.13, 293.14 and 293.15. Regulations applicable to activities under the 1872 mining law in National Forest Wilderness now appear in Part 252 rather than Part 293.

Sections 293.13-293.15 are revised to read as follows:

§ 293.13 Access to valid occupancies.

Persons with valid occupancies wholly within National Forest Wilderness shall be permitted access to such surrounded occupancies by means consistent with the preservation of National Forest Wilderness which have been or are being customarily used with respect to other such occupancies surrounded by National Forest Wilderness. The Forest Service will, when appropriate, issue permits which shall prescribe the routes of travel to and from the surrounded occupancies, the mode of travel, and other conditions reasonably necessary to preserve the National Forest Wilderness.

§ 293.14 Mineral leases and mineral permits.

(a) All laws pertaining to mineral leasing shall extend to each National Forest Wilderness for the period specified in the Wilderness Act or subsequent establishing legislation to the same extent they were applicable prior to the date the Wilderness was designated by Congress as a part of the National Wilderness Preservation System. No person shall have any right or interest in or to any mineral deposits which may be discovered through prospecting or other information-gathering activity after the legal date on which the laws pertaining to mineral leasing cease to apply to the specific Wilderness, nor shall any person after such date have any preference in applying for a mineral lease, license, or permit.

(b) Mineral leases, permits, and licenses covering lands within National Forest Wilderness will contain reasonable stipulations for the protection of the wilderness character of the land consistent with the use of the land for purposes for which they are leased, permitted, or licensed. The Chief, Forest Service, shall specify the conditions to be included in such stipulations.

(c) Permits shall not be issued for the removal of mineral materials commonly known as "common varieties" under the Minerals Act of July 31, 1947, as amended and supplemented (30 U.S.C. 601-604).

§ 293.15 Gathering Information about Resources other than Minerals.

(a) The Chief, Forest Service, shall allow any activity, for the purpose of gathering information about resources, other than minerals, in National Forest Wilderness, except that any such activity for gathering information shall be carried on in a manner compatible with the preservation of the wilderness environment. Prospecting for minerals or any activity for the purpose of gathering information about minerals in National Forest Wilderness is subject to the regulations in Part 252 of this title.

(b) No overland motor vehicle or other form of mechanical overland transport may be used in connection with any activity for the purpose of gathering information about resources, other than minerals, except as authorized by the Chief, Forest Service.

(c) Any person desiring to use motorized equipment, to land aircraft, or to make substantial excavations for the purpose of gathering information about resources, other than minerals, shall apply in writing to the Office of the Forest Supervisor or District Ranger having jurisdiction over the land involved. Excavations shall be considered "substantial" which singularly or collectively exceed 200 cubic feet within any area which can be bounded by a rectangle containing 20 surface acres. Such use or excavation may be authorized by a permit issued by the Forest Service. Such permits may provide for the protection of National Forest resources, including wilderness values, protection of the public, and restoration of disturbed areas, including the posting of performance bonds.

(d) Prospecting for water resources and the establishment of new reservoirs, water-conservation works, power projects, transmission lines, and other facilities needed in the public interest and the subsequent maintenance of such facilities, all pursuant to section (4) (d) (4) (1) of the Wilderness Act, will be permitted when and as authorized by the President.

(30 Stat. 35, as amended (16 U.S.C. 551); 78 Stat. 890 (16 U.S.C. 1131-1136).

PAUL A. VANDER MYDE,
*Deputy Assistant Secretary for
Conservation, Research and
Education.*

AUGUST 23, 1974.

[FR Doc. 74-19865 Filed 8-27-74; 8:45 am]

CURRENT INFORMATION REPORTS

- No. 1 MINERAL KING February 1969
- No. 2 LUMBER & PLYWOOD SUPPLY. March 1969
- No. 3 GRAZING FEES ON NATIONAL FOREST RANGE . . June 1969
(out-of-print)
- No. 4 FOREST SERVICE TIMBER APPRAISALS. . . . July 1969
- No. 5 MEETING FUTURE NEEDS FOR SOFTWOOD LUMBER
AND PLYWOOD. September 1970
- No. 6 TIMBER MANAGEMENT FOR A QUALITY
ENVIRONMENT (out-of-print). May 1971
- No. 7 FOREST SERVICE RESPONSE TO RECOMMENDATIONS
OF FORESTRY DEANS. June 1972
- No. 8 OUTLOOK FOR MEETING FUTURE TIMBER DEMANDS. December 1972
- No. 9 PROPOSED NEW WILDERNESS STUDY AREAS. . . January 1973
(out-of-print)
- No. 10 FOREST-RANGE ENVIRONMENTAL STUDY. . . . May 1973
- No. 11 NEW WILDERNESS STUDY AREAS. October 1973
(Supercedes CI Report NO. 9)
- No. 12 NEW NATIONAL FORESTS FOR ALASKA February 1974
- No. 13 HIGHLIGHTS OF THE ENVIRONMENTAL PROGRAM
FOR THE FUTURE (out-of-print) August 1974
- No. 14 MINING IN NATIONAL FORESTS. January 1975

MINING IN NATIONAL FORESTS--Regulations to Protect Surface Resources is No. 14 in a series of Current Information Reports prepared to keep Forest Service employees informed on topics of Servicewide interest. Extra copies may be obtained from Regional Offices or from the W.O.

~~WLR~~
~~JDS~~

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Tonto National Forest
Globe Ranger District
Globe, Arizona

2810 Mining Claims
2730 Road Right-of-Way

January 20, 1975

Mr. R. B. Crist
American Smelting and Refining Co.
P. O. Box 5747
Tucson, Arizona 85703



Dear Mr. Crist:

Since all of ASARCO's exploration work on the Globe District of the Tonto National Forest at present consists of exploratory drilling only and all surface disturbance results from access roads which are covered by permit, it will not be necessary for ASARCO to submit any further operating plans until the situation changes.

If active mining is anticipated in the future, we will of course need to work out a plan of operations together, which will be in the best interest of all concerned.

The Forest Service will be primarily interested in the preservation and reclamation of areas which have to be disturbed.

The bond you submitted is more than adequate to cover your present activities.

Sincerely,

H. L. LANCE
Acting District Ranger

ASARCO

Exploration Department
Southwestern United States Division
R. B. Crist
Property Manager

June 30, 1976

Mr. Wallace Rutledge
District Ranger
Tonto National Forest
Globe Ranger District
Globe, Arizona 85501

Superior East Project
Re: 2810 Mining Claims
2730 Road Right-of-way

Dear Mr. Rutledge:

Enclosed please find a copy of Access Map #1 dated 12/7/73 and approved on 1/11/74.

The new drill site will be located in the vicinity of quarter corner between Sections 22 and 23, T.1S., R.13E. - as indicated on Map #1 - west of Big Tank.

All of Asarco's work is exploratory drilling and the only surface disturbance results from access which is confined to the roads as approved on Maps #1, #2 and #3. (Excepting the drill site pad).

As I understand no operating plans will be necessary until the situation changes.

Sincerely,

R. B. Crist
R.B. Crist

RBC:vh
Enclosure
cc: Walter E. Lockhart
James D. Sell

MONDAY, DECEMBER 6, 1976



PART IV:

**DEPARTMENT OF
THE INTERIOR**

Bureau of Land Management

**SURFACE MANAGEMENT
OF PUBLIC LAND UNDER
U.S. MINING LAWS**

**Proposed Procedures to Minimize
Adverse Environmental Impacts**

FTG
Federal Register

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[43 CFR Part 3800]

SURFACE MANAGEMENT OF PUBLIC LAND UNDER U.S. MINING LAWS

Proposed Procedures to Minimize Adverse Environmental Impacts

This proposed rule-making sets forth rules and procedures to minimize adverse environmental impacts on the surface resources of public domain and other lands from operations authorized by the United States mining laws (30 U.S.C. 22-54). The regulations cover only actions which cause significant surface disturbance. In addition, the proposed rules would better facilitate multiple-use management. They also insure a greater degree of safety for the various public land user groups.

The proposed rules are designed to insure consistency with the spirit and intent of (a) The Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a); (b) The National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347); (c) Executive Order No. 11514 (35 FR 4247 (1970)) relating to protection and enhancement of environmental quality; (d) Executive Order No. 11593 (36 FR 8921 (1971)) relating to protection and enhancement of the cultural environment; (e) Executive Order No. 11752 (38 FR 34793 (1973)) relating to prevention, control and abatement of environmental pollution of Federal facilities; and (f) Sections 4-7 of the Act of July 23, 1955 (30 U.S.C. 612-615), providing for multiple-use of the surface of mining claims on the public lands. They are also designed to implement section 302(b) of the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579; 90 Stat. 2743; 43 U.S.C. 1701) which requires that the Secretary take any action necessary to prevent unnecessary or undue degradation of the public lands. They are issued pursuant to section 2319 of the Revised Statutes (30 U.S.C. 22) which provides that the exploration, location, and purchase of valuable mineral deposits shall be "under regulations prescribed by law," and section 2478 of the Revised Statutes, as amended.

The rules would add a new subpart (3809) to the regulations to provide for surface management.

It is recognized that NEPA did not abrogate the Secretary's mandate under the Mining Law of 1872, and that without these proposed regulations, prospecting, exploration, and mining, which have non-discretionary authorization under the Mining Law of 1872, will continue with resultant impacts on the environment.

The proposed regulations do not authorize or commit the Federal Government to a course of action leading to disturbance of the environment. The proposed rules merely establish procedures for administering the non-discretionary requirements of existing law and mitigating impacts therefrom in keeping with the policy of the United States as ex-

pressed in the Mining and Minerals Policy Act of 1970 and the National Environmental Policy Act of 1969. The proposed rules also establish procedures for compliance with the non-discretionary requirements of the Endangered Species Act of 1973, the National Historic Sites Act of 1935, and the American Antiquities Act of 1906.

It is hereby determined that the publication of this proposed rulemaking is not a major Federal action significantly affecting the quality of the human environment and that no detailed statement pursuant to section 102(2) (c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2) 9c) is required. An environmental analysis will be prepared on individual or groups of related actions where significant impacts on the quality of the human environment are identified a statement pursuant to section 102(2) (c) of the National Environmental Policy Act of 1969 will be prepared.

In accordance with the requirements of section 310 of the Federal Land Policy and Management Act of 1976 in rule-making, interested parties may submit written comments, suggestions, or objections with respect to the proposed rules to the Director (210), Bureau of Land Management, Washington, D.C. 20240 on or before January 5, 1977.

Copies of comments, suggestions, or objections made pursuant to the notice will be available for public inspection in the Division of Legislation and Regulatory Management, Bureau of Land Management, Room 5555, Interior Building, Washington, D.C. during regular business hours (7:45 a.m.-4:15 p.m.).

The Department of the Interior has determined that this document does not contain a major proposal requiring preparation of an Inflation Impact Statement under Executive Order 11821 and OMB Circular A-107.

Chapter II of Title 43 of the Code of Federal Regulations is amended as follows:

1. Part 3800 is added to read:

PART 3800—MINING CLAIMS UNDER THE GENERAL MINING LAWS:

GENERAL

Subpart 3809—Surface Management

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GENERAL

Subpart 3809—Surface Management

§ 3809.0-1 Purpose.

The purpose of the rules is to set procedures to minimize adverse environmental impacts on the surface resources of public lands from operations authorized by the United States mining laws (30 U.S.C. 22-54). The regulations cover only those actions which cause significant surface disturbance.

§ 3809.0-2 Objectives.

The objectives of these regulations are to:

(a) Allow and not unduly hinder location, entry, and operations pursuant to the United States mining laws, and

(b) Insure maximum consistency with the spirit and intent of the Mining and Minerals Policy Act of 1970, the National Environmental Policy Act of 1969, the Act of July 23, 1955, Executive Orders 11593, 11514, and 11752.

§ 3809.0-3 Authority.

These regulations are issued pursuant to the authority vested in the Secretary of the Interior by the General Mining Law (30 U.S.C. 22-54); sections 4-7 of the Act of July 23, 1955 (30 U.S.C. 612-615) providing for multiple use of the public lands; 43 U.S.C. 2 and 1201 relating to the general authority of the Secretary; the National Historic Preservation Act of 1966 (16 U.S.C. 470); the Historic Sites Act of 1935 (16 U.S.C. 461); Endangered Species Act of 1973 (16 U.S.C. 1531-1543); sections 3 and 5 of the Alaska Public Sales Act of August 30, 8921 (1971) relating to protection and enhancement of the cultural environment; Executive Order No. 11514 (35 FR 4247 (1970)), relating to protection and enhancement of the environment; Executive Order No. 11752 (38 FR 34793 (1973)) relating to prevention, control and abatement of environmental pollution at Federal facilities; and sections 302(b) and 310 of the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579; 90 Stat. 2743; 43 U.S.C. 1701), requiring the Secretary to take action, by regulation, to prevent unnecessary or undue degradation of the public lands and carry out the purposes of the Federal Land Policy and Management Act.

§ 3809.0-4 Responsibilities.

(a) Bureau of Land Management is responsible for the administration of these regulations as to (i) public domain lands

and other lands, except where such lands are included in paragraphs (b) or (c) of this section, and (ii) lands where the surface has been patented and the locatable minerals have been reserved by the United States.

(b) *U.S. Forest Service* is responsible for administration of similar regulations in 36 CFR 252 as to National Forest lands.

(c) *Other surface management agencies* are responsible for administration of these regulations as to Public Domain Lands, the surface of which is managed by those agencies; except that mining operations conducted on land within any area of the National Park System shall be subject to regulations issued by the National Park Service in Title 36 of the Code of Federal Regulations pursuant to section 2 of the Act of September 28, 1976 (16 U.S.C. 1902).

§ 3809.0-5 Definitions.

As used in this subpart:

(a) "Mining Operations" means all functions, work, facilities and activities in connection with prospecting, exploration, surveying, development, mining or processing of mineral resources locatable under the United States mining laws and all uses reasonably incident thereto, including roads and other means of access on lands subject to the regulations in this subpart, regardless of whether the operations take place on or off unpatented mining claims.

(b) "Exploration" or "prospecting" means the search for minerals, by geological, geophysical, geochemical or other techniques, including, but not limited to, sampling, drilling, or any surface or underground works needed to determine the type, extent, or quantity of minerals present.

(c) "Operator" means a person or his successor in interest conducting or proposing to conduct mining operations.

(d) "Person" means any individual, partnership, corporation, association, or other legal entity.

(e) "Mining claim" means any unpatented mining claim, unpatented mill-site or tunnel site authorized by the United States mining laws of May 10, 1872 (30 U.S.C. 22, et seq.).

(f) "Significant disturbance" means any disturbance to the environment other than casual use as determined by the authorized officer.

(g) "Casual use" means activities that involve practices which do not ordinarily lead to any appreciable disturbance or damage to the environment and improvements. For example, activities are considered "casual use" if they do not involve cutting of vegetation, use of heavy equipment or explosives, or do not involve use of motorized vehicles. However, use of motorized vehicles over established and open roads, as defined in 43 CFR 6290.0-5, is considered "casual use" so long as the vehicles conform to the operating regulations and vehicle standards contained in 43 CFR 6291.1 and 6293. (Also see § 3809.2-2 (a), (b) and (c).)

(h) "Reclamation" means the process of returning affected lands to a stable

condition and form consistent with their premining productivity or other approved post-mining land use.

(i) "Bureau" means the Bureau of Land Management.

(j) "Authorized officer" means any employee of the Bureau of Land Management to whom has been delegated the authority to perform the duties described in this part.

(k) "Environment" means surface and subsurface resources, both tangible and intangible including air, water, scenic, cultural, vegetative, soil, wildlife, and fish resources.

(l) "Proper BLM office" means the Bureau of Land Management office having jurisdiction over the lands subject to these regulations.

(m) "Plan of Operations" means a detailed plan submitted to the authorized officer before operations commence showing the location and type of work to be conducted, environmental protection procedures, roads, and reclamation procedures to be followed.

(n) "Contemporaneously as practicable" means with respect to reclamation of mineral or otherwise disturbed areas, the commencement, conduct and completion of reclamation activity as soon after disturbance as possible, without undue physical interference with ongoing operations, leaving a minimum of land unreclaimed, consistent with the requirements for surface protection set forth in this subpart.

§ 3809.0-6 Policy.

It is the policy of this Department to encourage the development of the mineral resources under its jurisdiction where mining operations are authorized. Under the 1872 mining law, prospectors, locators, claimants and miners have a statutory right consistent with Departmental regulations, to go upon the open (unappropriated and unreserved) public domain lands for the purposes of geological reconnaissance, mineral prospecting, exploration, development and production. Departmental statutory responsibilities and the public interest require that mining operations pursuant to the 1872 mining law include adequate and reasonable measures to avoid, minimize, or control damage to the environment and to avoid, minimize, or control hazards to the public health and safety. The regulations in this subpart prescribe procedures to that end.

§ 3809.0-7 Scope.

(a) These regulations apply to mining operations conducted under the United States mining laws (30 U.S.C. 22-54), as they effect surface resources on all "Public Domain lands" and "other lands" (See 43 CFR 3000), whether managed by the Bureau or by another surface management agency, except those within units of the National Park System. These regulations also apply to lands where the surface has been patented and the locatable mineral rights have been reserved by the United States. "Other lands" include, but are not lim-

ited to, lands on which the following take place:

(1) Mining operations under a right of entry granted by section 9 of the Act of December 29, 1916 (39 Stat. 864; 43 U.S.C. 299), commonly referred to as the Stock-Raising Homestead Act;

(2) Mining operations on lands within stock driveway withdrawals pursuant to the Act of January 29, 1929 (45 Stat. 1144; 43 U.S.C. 300);

(3) Mining operations on lands under the general mining law in reclamation withdrawals pursuant to the Act of April 23, 1932 (47 Stat. 136; 43 U.S.C. 154);

(4) Mining operations conducted on the reverted Oregon and California Railroad and Reconveyed Coos Bay Wagon Road Grant Lands conducted pursuant to the Act of April 8, 1949 (62 Stat. 162); or

(5) Mining Operations under the provisions of the Alaska Public Sales Act of August 30, 1949 (63 Stat. 679, 48 U.S.C. 364a-364e).

(b) Mining operations conducted on National Forest System lands under the jurisdiction of the Department of Agriculture pursuant to the United States Mining laws, and areas of the National Forest lands covered by a Special Act of Congress (16 U.S.C. 482a-482q) are subject to the regulations of the U.S. Forest Service, 36 CFR Part 252.

(c) In cases of conflict between this subpart and Part 3820, pertaining to lands subject to special mining laws, the more stringent rule shall apply.

(d) Mining operations conducted on units within the National Park System shall be subject to such regulations as are issued by the National Park Service in Title 36 of the Code of Federal Regulations under section 2 of the Act of September 28, 1976 (16 U.S.C. 1902).

§ 3809.0-3 Cross references.

(a) Regulation of off-road vehicles 43 CFR Part 6290.

(b) Trespass actions 43 CFR Part 9230, 43 CFR Part 3602.

(c) Preservation of American antiquities including archaeological sites, ruins, and historic monuments 43 CFR Part 3.

(d) U.S. Forest Service regulations on Surface Management requirements 36 CFR Part 252.

(e) Areas subject to special mining laws 43 CFR Part 3820.

(f) Procedures for the protection of historic and cultural properties 36 CFR Part 800.

§ 3809.1 Notice of intent.

§ 3809.1-1 Filing of notice of intent.

(a) No mining operations which might cause significant disturbance of surface resources shall be conducted or initiated on lands subject to these regulations until the operator has filed a Notice of intent in the proper BLM office and action has been taken under § 3809.1-3. The authorized officer shall make the final determination concerning mining operations which might cause significant

disturbance of surface resources. A Plan of Operations may be filed in lieu of the Notice.

(b) When the Notice concerns lands the surface of which is managed by another agency, the authorized officer shall immediately upon receipt of the Notice forward it to that agency for comment. Comments of the other surface management agency must be returned to the authorized officer within 15 days of receipt thereof by that agency. Comments not received by the authorized officer in time to permit notification of the operator within the time prescribed by the regulations in this subpart may not be considered by the authorized officer.

§ 3809.1-2 Contents of Notice of intent.

(a) No specific form is required.

(b) Notice will include, if not already on file in the proper BLM office, the following information:

(1) The name and legal mailing address of each operator or person intending to enter the public domain;

(2) If surveyed, a legal description of the area of operations by subdivision, section, township, range, and meridian. If unsurveyed, a description of the area of operations by legal subdivision in accordance with an approved protraction diagram, or, if no such diagram exists, by metes and bounds, giving courses and distances between successive angle points, and connected by course and distances to an official corner of the public land surveys;

(3) A map or maps with a scale of not less than 1"=1 mile delineating the area of mining operations and showing the topography of the land, drainage patterns, present roads and trails location, proposed road and trail locations and other surface areas to be disturbed by mining operations;

(4) A statement describing the nature of the proposed mining operation, the method of transport and the measures proposed to protect the environment and improvements;

(5) The approximate dates of commencement and termination of operations; and

(6) The serial number(s) assigned to the claim or claims by the authorized officer upon filing the official copy of the notice or certificate of location of the mining claim(s), mill site(s) or tunnel site(s) pursuant to the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579; 90 Stat. 2743; 43 U.S.C. 1701) and 43 CFR Subpart 3833.

§ 3809.1-3 Action on Notice.

(a) After a Notice of Intent has been filed, the authorized officer will, within 15 working days or, in the case of a Notice concerning lands the surface of which is managed by another agency, 30 working days of receipt thereof, notify the operator whether a Plan of Operations is required.

(b) Failure of the authorized officer to notify the operator within 15 working days (30 working days where the surface of the lands involved are managed by another agency) shall constitute no-

tice that a Plan of Operations is not required by the operator for only those mining operations described in the Notice of Intent. (c) Mining operations that might cause significant disturbance of surface resources shall not begin until a Notice has been acted on or 15 working days (30 working days in the case of lands the surface of which is managed by another agency) after the authorized officer is notified.

§ 3809.2-1 Plan of Operations.

§ 3809.2-1 When Plan of Operations required.

(a) Prior to commencing mining operations which will cause significant surface resource disturbance the operator will have an approved Plan of Operations.

(b) Any operator who intends to construct or improve roads, trails, bridges, landing area for aircraft, (or the like), or other facilities for any other means of access, is required to have an approved Plan of Operations.

(c) No operator shall construct or place any structure on a mining claim without first obtaining an approved Plan of Operations.

§ 3809.2-2 When Plan not required.

A Plan of Operations shall not be required for:

(a) Individuals desiring to search for and occasionally remove small mineral samples or specimens such as provided for in 43 CFR 6010.2 (this allows only hobby or recreational scale mineral collecting and does not authorize use of motorized vehicles),

(b) Prospecting and sampling which will not cause significant surface resource disturbance and will not involve removal of more than a reasonable amount of the mineral deposit for analysis and study,

(c) Marking and monumenting a mining claim and

(d) Subsurface mining operations which will not cause significant surface resource disturbance.

§ 3809.2-3 Contents of Plan.

(a) No special form shall be required in connection with the submission of a Plan of Operations.

(b) The Plan of Operations submitted by the operator shall include, if not already on file in the proper BLM office, the following information:

(1) The name and legal mailing address of each operator, person or agent who proposes to conduct surface disturbing mining operations. Any change of operator or change in legal mailing address of the operator shall be reported promptly to the authorized officer;

(2) A map, preferably a topographic map, with a scale of not less than 1"=1 mile, showing drainage patterns, present road and trail locations, proposed road and trail locations, and location and size of areas where surface resources will be disturbed;

(3) Information sufficient to describe or identify either the entire operation proposed (See paragraph (c) of this section) or reasonably foreseeable opera-

tions (See § 3809.2-5) and how they would be conducted, i.e., drilling, shaft sinking, trenching, blasting, etc.;

(4) The type and standard of existing and proposed roads or access routes, the means of transportation used or to be used as set forth in § 3809.4-4, and the period during which the proposed activity will take place;

(5) If surveyed, a legal description of the area of operations, i.e., section, township, range, meridian, and State. If unsurveyed, a description of the area of operations by legal subdivision in accordance with an approved protraction diagram, or, if no such diagram exists, by metes and bounds, giving courses and distances between successive angle points, and connected by courses and distances to an official corner of the public land surveys;

(6) Measures to be taken to meet the requirements for environmental protection in § 3808.3; and

(7) The serial number(s) assigned to the claim or claims by the authorized officer upon filing in the proper BLM office a copy of the official notice or certificate of location of the mining claim(s), mill site(s) or tunnel site(s) pursuant to the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579; 90 Stat. 2743; 43 U.S.C. 1701) and 43 CFR Subpart 3833.

(c) The Plan of Operations submitted by the operator shall cover the entire operation for the full estimated period of activity except as provided for in § 3809.2-5.

§ 3809.2-4 Plan approval.

(a) In those instances when a Plan of Operations is required, mining operations shall be conducted in accordance with an approved Plan of Operations and the regulations in this subpart.

(b) Within 30 working days of receipt of the Plan of Operations, the authorized officer shall review the proposal and:

(1) Notify the operator in writing that the Plan of Operations is approved, or rejected and the reasons therefore; or

(2) Notify the operator in writing that the proposed operations will not cause significant surface disturbance and thus will not require a Plan of Operations; or

(3) Notify the operator in writing of any changes in, or additions to, the Plan of Operations deemed necessary to meet the purpose of the regulations in this subpart; or

(4) Notify the operator in writing that the plan is being reviewed, but that more time, not to exceed an additional 60 working days, is necessary to complete such review, setting forth the reasons why additional time is needed. Periods during which the area of operations is inaccessible for inspection due to climatic conditions, fire hazards, or other physical conditions, or legal impediments, shall not be included when computing the 60 day period.

(c) If the authorized officer does not act on the Plan of Operations within the 30 day period or the 60 day extension provided in paragraph (b) of this section, the plan will be considered approved.

(d) Pending final approval of the Plan of Operations, the authorized officer will approve such operations as may be necessary for timely compliance with requirements of Federal and State laws. Such operations shall be conducted so as to minimize environmental impacts as prescribed by the authorized officer in accordance with the standards contained in § 3809.3-2.

(e) **Cultural Resources.** A Plan of Operations will not be approved, except as to operations conducted in accordance with paragraph (d) of this section, until a cultural resources inventory of the area to be disturbed has been made by the authorized officer under the provisions of the National Historic Preservation Act of 1966 (80 Stat. 915, 16 U.S.C. 470) and the Antiquities Act of 1906 (34 Stat. 1225; 431-433). An appropriate level of cultural resources inventory consists of a review of existing cultural resource data. If the data reviewed reveals the potential existence of cultural resources in the area or that the data available is not sufficient to make an accurate assessment of the potential existence of the cultural resources, a field sampling of the area to be disturbed shall be conducted. The cultural resources inventory shall be completed within the time allowed by the regulations in this subpart for approval of the Plan. If National Register or eligible National Register cultural resources might be affected, no actions will be authorized until compliance with section 106 of the National Historic Preservation Act and section 2(b) of Executive Order 11593 has been accomplished. Should it be determined that significant cultural resources exist, no operations will be permitted until appropriate avoidance, salvage, or other mitigation measures are accomplished by the Government. Nothing herein shall be interpreted as requiring the operator to do or to pay for a cultural resources inventory.

§ 3809.2-5 Modification of Plan.

(a) If the development of a plan for an entire operation is not possible, the operator shall file an initial plan setting forth his proposed operation to the degree reasonably foreseeable at that time. Thereafter, he shall file a supplemental plan or plans prior to undertaking any significant surface disturbance not covered by the initial plan.

(b) At any time during operations under an approved Plan of Operations, the authorized officer may require the operator to furnish a modification of the plan detailing the means of minimizing significant disturbance of the surface resources that was unforeseen at the time of filing the Plan of Operations. If the operator does not furnish a modification within a time deemed reasonable by the authorized officer, appropriate action, including suspension of operations, will be initiated to assure compliance with these regulations and protection of the environment.

(1) The authorized officer's request for a modification of a Plan of Operation must include a statement setting forth in detail the facts and reasons why it is believed such a modification is required.

(2) Operations may continue in accordance with the approved plan until either a modified or supplemental plan(s) is approved. If the authorized officer determines that operations, which were not covered by an initial plan or were unforeseen at the time of filing of an approved plan, are unnecessarily or unreasonably causing irreparable damage to the environment, he shall order a suspension of only the operations that caused the damage.

(c) A supplemental Plan of Operations or a modification of an approved Plan of Operations shall be subject to approval by the authorized officer in the same manner as the initial Plan of Operations.

§ 3809.2-6 Existing operations.

(a) Persons conducting mining operations on the effective date of these regulations, who would be required to submit a Plan of Operations under § 3809.2-1 may continue operations but shall within 90 days thereafter submit a Plan of Operations. Upon a showing of good cause, the authorized officer will grant an extension of time for submission of a Plan of Operations, not to exceed an additional 180 days.

(b) Operations may continue according to the submitted plan during its review. If the authorized officer determines that the operations are unnecessarily or unreasonably causing irreparable damage to the environment, he shall advise the operator of those measures needed to avoid such damage. If such immediate damage cannot be avoided, the authorized officer shall order the suspension of only the operations that caused the damage.

(c) Upon approval of a Plan of Operations, mining operations shall be conducted in accordance with the approved plan.

§ 3809.2-7 Bond requirements.

(a) Any operator required to file a Plan of Operations shall furnish a bond prior to the commencement of such operations.

(b) In lieu of a bond, the operator may deposit and maintain in a Federal depository, as directed by the authorized officer, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having market value at the time of deposit of not less than the required dollar amount of the bond.

(c) A blanket bond covering nationwide or statewide operations may be furnished if the terms and conditions as determined by the authorized officer are sufficient to comply with the regulations in this part. The minimum statewide bond shall be \$100,000. The minimum nationwide bond shall be \$300,000.

(d) In determining the amount of the bond, the authorized officer will consider the estimated cost of stabilizing, rehabilitating, and reclaiming all areas disturbed by the operations consistent with § 3809.3-2(h).

(e) In the event that an approved Plan of Operations is modified in accordance with § 3809.2-5, the authorized officer will review the initial bond for ade-

quacy and, if necessary, will adjust the amount of bond required to conform to the Plan of Operations, as modified.

(f) When a mining claim is patented, the authorized officer shall release the operator from any performance bond and Plan of Operations.

(g) (1) When all or any portion of the reclamation has been completed in accordance with § 3809.3-2 (g) and (h), the operator will notify the authorized officer, and the authorized officer shall promptly make a joint inspection with the operator. After inspection of the operations, the authorized officer will notify the operator whether the performance under the Plan of Operations is accepted. When the authorized officer has accepted as completed any portion of the reclamation, he shall reduce proportionally the amount of bond thereafter to be required with respect to the remaining reclamation; *Provided, however,* That the operator will not be released from responsibility and liability under the bond for the amount necessary for revegetation of each planting area for a minimum period of at least five years, not to exceed 10 years, after the first vegetative planting, as determined by the authorized officer.

(2) When during such period of extended liability, the authorized officer determines that because of natural conditions the potential for successful vegetation is uncertain, he may further extend liability of the operator for a period of up to five years beyond the period initially established, if the financial liability that would be incurred by the operator as a result is reasonably commensurate with the probability of successful revegetation.

(3) When during the minimum five year period of extended liability, the authorized officer determines that natural conditions favor rapid revegetation and that revegetation is likely to occur before the expiration of such minimum period, he may release the operator from the extended liability under the bond for revegetation of the planting area.

§ 3809.3 Environmental protection.

§ 3809.3-1 Technical examination/environmental analysis.

(a) When a Plan of Operations or significant modification is filed, the authorized officer shall make a technical examination/environmental analysis. The technical examination shall identify the resources and land uses within the general area. The environmental analysis shall identify the impact of the proposed mining operations upon the living and non-living components of the environment. Following completion of the technical examination/environmental analysis, the authorized officer shall recommend stipulations to be included in the Plan of Operations for the protection of the environment and for reconciliation of conflicts between identified uses and the proposed mining Operations.

(b) The authorized officer may solicit comments and suggestions from the public and governmental agencies as part of the preparation of the technical exami-

nation. Comments will be solicited immediately after the filing of a Plan of Operations or significant modification.

(c) If the surface resources of the lands involved are administered by an agency other than the Bureau, that agency will be responsible for the technical examination. In cases of mixed administration, the agencies will make a joint technical examination.

§ 3809.3-2 Requirements for surface protection.

All operations shall be conducted so as to minimize adverse environmental impacts, including, but not limited to, the following requirements:

(a) *Air Quality.* The operators shall comply with applicable Federal and State air quality standards, including the requirements of the Clean Air Act (42 U.S.C. 1857 et. seq.);

(b) *Water Quality.* The operator shall comply with applicable Federal and State water quality standards, including regulations issued pursuant to the Federal Water Pollution Control Act (33 U.S.C. 1151 et seq.). These regulations include:

(1) Effluent guidelines and standards for mineral mining and processing point source category (40 CFR 436; 40 FR 48652 and 48665 (1975)), and

(2) Effluent guidelines for ore mining (40 CFR 440, 40 FR 51722 (1975));

(c) *Solid Wastes.* The operator shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes. All garbage, refuse, or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the environment and the surface resources. All tailings, waste rock, trash, deleterious materials or substances and other waste produced by operations shall be deployed, arranged, disposed of or treated to minimize adverse impact upon the environment and surface resources;

(d) *Visual Resources.* The operator shall, to the extent practicable, harmonize operations with the visual resources through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements to blend with the landscape;

(e) *Fisheries, Wildlife and Plant Habitat.* In addition to compliance with water quality and solid waste disposal standards required by this section, the operator shall take such action as may be needed to minimize, control or prevent adverse impact upon plants, fish, and wildlife, especially threatened or endangered species, and their habitat which may be affected by the operations;

(f) *Cultural Resources.* (1) The operator shall not injure, alter, destroy, or collect any site, structure, object, or other value of historical, archaeological, paleontological, or other cultural scientific importance.

(2) The operator shall immediately bring to the attention of the authorized officer any cultural and/or scientific resource that might be altered or destroyed by his operation and shall leave such dis-

covery intact until told to proceed by the authorized officer. The authorized officer will evaluate the discoveries brought to his attention, and will determine within five working days what action will be taken with respect to such discoveries.

(3) The responsibility for, and cost of investigations and salvage of such values that are discovered during operations will be that of (i) the operator if discovered during the conduct of extraction or processing of mineral resources or (ii) the Government if discovered during any other type of mining operation.

(4) Failure to comply with this stipulation may constitute a violation of the Antiquities Act (16 U.S.C. 431-433).

(g) *Roads.* Roads that are constructed by the operator shall be constructed and maintained so as to assure adequate drainage and to minimize or eliminate damage to soil, water, and other resource values. Unless otherwise approved by the authorized officer, roads no longer needed for operations shall be closed to normal vehicular traffic, bridges and culverts shall be removed, cross drains, dips or water bars shall be constructed and the road surface shall be shaped to as near a natural contour as practicable, be stabilized, and revegetated as required in the Plan of Operations;

(h) *Reclamation.* (1) Unless a longer time is allowed by the authorized officer, the operator will perform reclamation of the surface pursuant to his approved plan as contemporaneously as practicable with operations.

(2) Reclamation will include: (i) Control of erosion and landslides, (ii) control of water runoff, (iii) isolation, removal or control of toxic materials, (iv) reshaping and revegetation of disturbed areas so as to provide a diverse vegetative cover, native to the area and capable of self-regeneration, at least equal in density and permanence to the natural vegetation, and (v) rehabilitation of fisheries and wildlife habitat; and

(i) *Protection of survey monuments.* The operator shall protect all survey monuments, witness corners, reference monuments and bearing trees against destruction, obliteration, or damage from mining operations. If any monuments, corners or accessories are destroyed, obliterated, or damaged by such mining operations, the operator shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners, or accessories using surveying procedures in accordance with the "Manual of Instructions for the Survey of the Public Lands of the United States" and shall record such survey in appropriate county records. The authorized officer may prescribe in writing additional requirements for the protection of monuments, corners, and bearing trees.

§ 3809.3-3 Certification by other agencies.

Certification or other approval issued by State agencies or other Federal agencies of compliance with laws and regulations relating to mining operations will be generally accepted as compliance with

similar or parallel requirements of these regulations. Such certification will not relieve the surface management agency of its responsibilities.

§ 3809.4 General provisions.

§ 3809.4-1 Suspension of operations.

If mining operations are ordered suspended to avoid irreparable damage to the environment in accordance with § 3809.2-5(b) and § 3809.2-6(b), the authorized officer will work promptly with the operator to determine those measures required to minimize or prevent damage and end the suspension.

§ 3809.4-2 Noncompliance.

(a) Mining operations which cause significant disturbance and that are undertaken either before the operator has filed a Notice of Intent and action taken under § 3809.1-3, or if required, without having an approved Plan of Operations or are continued after ordered suspended in accordance with §§ 3809.2-5(b), 3809.2-6(b) and paragraph (d) of this section, will be considered a trespass against the United States. Trespassers will be liable for damages and be subject to prosecution for such unlawful acts. (See 43 CFR Part 9230).

(b) Whenever the authorized officer determines that an operator is failing or has failed to comply with the requirements of an approved Plan of Operations, or with the provisions of applicable regulations in this subpart, he shall serve a notice of noncompliance upon the operator by delivery in person to him or his authorized agent, or by certified mail addressed to his last known address.

(c) A notice of noncompliance shall specify in what respects the operator is failing or has failed to comply with the requirements of the Plan of Operations or the provisions of applicable regulations, and shall specify the actions which are in violation of the plan or regulations and the actions which must be taken to correct the noncompliance and the time limits, usually 30 days, within which corrective action must be taken.

(d) If the operator fails to take action in accordance with the notice of noncompliance, the authorized officer may order the forfeiture of all or a portion of the performance bond and shall order suspension of only those operations specified in the notice of noncompliance as not in compliance with the approved plan or the provisions of applicable regulations.

§ 3809.4-3 Access.

(a) An operator will be granted access to his mining operations consistent with provisions of the United States Mining Laws and Departmental regulations.

(b) Proposals for construction, improvement or use of such access as part of a Plan of Operations shall include a description of the type and standard of the proposed means of access, a map, preferably a topographic map, showing the proposed route of access, and a description of the means of transportation to be used.

(c) Approval of the means of such access as part of a Plan of Operations

shall specify the location of the access route, design standards, means of transportation, and other conditions necessary to protect the environment and surface resources, including measures to protect scenic values and to insure against erosion and water or air pollution.

(d) The operator shall permit free and unrestricted public access to lands subject to the regulations in this subpart for all lawful and proper purposes except in areas where such access would unduly interfere with authorized operations or would constitute a hazard to health and safety. Restrictions by the operator on use of public access will not be allowed without prior approval from the authorized officer.

§ 3809.4-4 Multiple-use conflicts.

In the event that uses under any lease, license, permit or other authorization, pursuant to the provisions of any other Act, shall conflict, interfere with or endanger operations in plans approved under this subpart, the conflicts shall be reconciled, as much as practicable, by the authorized officer.

§ 3809.4-5 Fire prevention and control.

The operator shall comply with all applicable Federal and State fire laws and regulations and shall take all reasonable measures to prevent and suppress fires on the area of mining operations.

§ 3809.4-6 Maintenance and public safety.

During all mining operations, the operator shall maintain his structures, equipment, and other facilities in a safe and neat manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to protect the public in accordance with applicable Federal and State laws and regulations.

§ 3809.4-7 Inspection.

The authorized officer shall periodically inspect mining operations to determine if the operator is complying with the regulations in this subpart and the approved Plan of Operations.

§ 3809.4-8 Notice of suspension of operations.

(a) Except for seasonal suspension, the operator shall notify the authorized officer of any suspension of mining operations within 30 days of such suspension. This notice shall include:

(1) Verification of intent to maintain structures, equipment, and other facilities, and

(2) The expected reopening date. A notice shall be filed every year in the event operations are not reactivated.

(b) The operator shall maintain the operating site, structure and other facilities in a neat and safe condition during nonoperating periods.

(c) The operator shall comply with the Plan of Operations during nonoperating periods.

(d) The name and address of the operator shall be clearly posted and maintained in a prominent place within the limits of the area of mining operations during periods of nonoperation.

§ 3809.5 Cessation of operations.

The operator shall within one year following cessation of mining operations, remove all structures, equipment and other facilities and clean up the site of mining operations. Additional time may be granted by the authorized officer upon a showing of good cause by the operator.

§ 3809.6 Appeals.

(a) A person adversely affected by a decision of the authorized officer made pursuant to the provisions of this subpart shall have a right of appeal to the

Board of Land Appeals, Office of Hearings and Appeals pursuant to 43 CFR Part 4.

(b) In any case involving lands under the jurisdiction of any agency other than the Department of the Interior, or an office of the Department of the Interior other than the Bureau, the officer rendering a decision shall designate the authorized officer of such agency as an adverse party on whom a copy of any notice of appeal and any statement of reasons, written arguments, or briefs must be served.

§ 3809.7 Public availability of information.

(a) Except as provided herein, all information and data submitted by the operator shall be available for examination by the public at the office of the authorized officer in accordance with the provisions of the Freedom of Information Act (F.O.I.A.).

(b) Information and data submitted by the operator and specifically identified as and containing trade secrets or confidential or privileged commercial or financial information will not be available for public examination as long as disclosure of the material is not required under the F.O.I.A.

(c) The determination concerning specific information which may be withheld from public examination will be made in accordance with the rules in 43 CFR Part 2.

(d) Plans of Operations submitted under § 3809.2 of this subpart will be made available for public inspection in the office of the authorized officer.

JACK HORTON,
Assistant Secretary
of the Interior.

NOVEMBER 30, 1976.

[FR Doc.76-35734 Filed 12-3-76; 8:45 am]

ASARCO

123C - JAS - NFW : please comment

Exploration Department
Western USA

December 20, 1976

To BLM
if so
moved on/
before
Jan 5, 1977

TO: F. T. Graybeal ✓
J. C. Balla
S. Von Fay
D. P. Cadwell

FROM: W. L. Kurtz

Attached is a copy of the Proposed Procedures to Minimize Adverse Environmental Impacts — Surface Management of Public Lands Under U.S. Mining Laws.

Note you have only until January 5, 1977 to present written comments. Please send me a copy of any written comments you submit.

By copy of this memorandum and attachment to Messrs. Osborne and Hecox I am requesting them to ascertain whether Asarco will carry a nationwide bond -- see Section 3009.2-7.

Your attention is also directed to Section 3809.2-6 -- "Existing Operations."

W. L. Kurtz/lb
W. L. Kurtz

WLK:lb

cc: TCOsborne - w/att.
MBHecox, Jr. - w/att.

12/14/76

Wallace Ruthledge
District Ranger

Tonto Nat'l Forest
Superior East

Dave ~~Hutchins~~ Catches

Took H.L. Lance's place.

Jim Spear - Mining Engr. (Environmentalist)
- works for Hutchins

Wed. Dec. 15th 9:00 A.M.

Rendezvous at J I Ranch Hdqrs.

Jim Tell

Paul Bryant

Walt Lockhart *

Jim Spear

* Walt has allotment meeting with
Forest Service at 1:00 P.M. (Ruthledge)

800' ENE

1000 - 500' W.

ASARCO

J. D. Seil

Exploration Department
Southwestern United States Division
R. B. Crist
Property Manager

December 22nd, 1976.

Mr. Wallace Rutledge
District Ranger
Tonto National Forest
Globe Ranger District
Rt.#1, Box 33
Globe, Arizona

Superior East Project
Re: 2810 Mining Claim,
2730 Road Right-of-Way

Dear Mr. Rutledge:

Enclosed please find a copy of Access Map #1 dated December 7, 1973 and approved on January 10, 1974.

Two additional drill sites have been proposed and field inspected in the vicinity of the quarter corner between Sections 22 and 23, T.1S, R.13E, as indicated on Access Map #1 and Attachment A, west of the Big Tank.

All of Asarco's work will be exploratory drilling and the surface disturbance confined to access travel.

The site in Section 23 will largely be built on the old access road which was by-passed in favor of road grade and drainage control. As in the past, ample use of sediment silt from Big Tank will be incorporated in the rock work for stabilization and seeding of slopes and pad areas.

The site in Section 22 will incorporate approximately 800 feet of new road to be constructed beyond the present terminus of the road. As noted by your fieldman Ranger Jim Spear on the visit of December 15th, 1976, the flagged route will utilize bench areas within the dacite rock mass as much as possible. Elimination of the heavy manzanita growth within the area of road and site building will enhance the forage use of the land. As with the present site and road terminus, the new extension will not be visible from the existing Highway 60-70. Use of sediment silt will be incorporated within the rock road and site preparation with grade and outslope stability. These features were discussed at the Forest Service office with Rangers David Hutchin and Jim Spear.

All specifications and conditions of the work will be in accordance as in the original permits, amendments, multiple use report, and letter of understanding.

...continued

Mr. Wallace Rutledge
Superior East Project
page 2...

December 22nd, 1976.

As I understand, no operating plans will be necessary until the situation changes.

Three additional copies are enclosed.

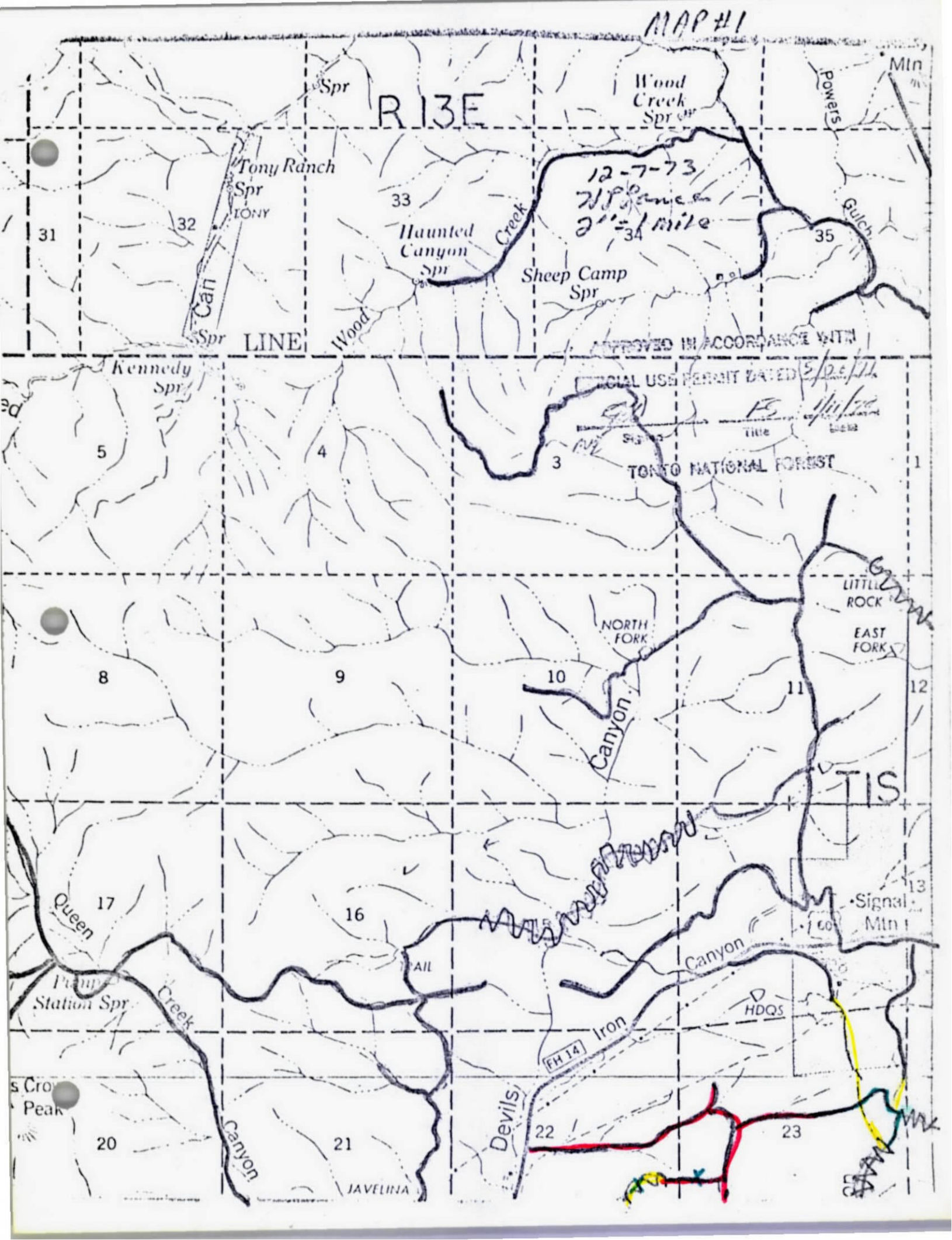
Sincerely,

Robert B. Crist
Robert B. Crist

JDS:jlh
encls. two plat maps
c.c. Dave Hutchin, F.S.
Walter E. Lockhart
James D. Sell

MAP #1

R 13E



31

32

33

35

LINE

APPROVED IN ACCORDANCE WITH

SPECIAL USE PERMIT DATED 5/28/77

TONTO NATIONAL FOREST

LITTLE ROCK

EAST FORK

TIS

Signal Mtn

D HDQS

FH 14

Iron

Devils

22

23

JAVELINA

Queen

17

16

AIL

Canyon

Pump Station Spr

20

21

Canyon

s Cro Peak

NORTH FORK

10

11

Canyon

8

9

5

4

3

Spr

Title

Date

Kennedy Spr

Spr

Tony Ranch

Spr TONY

Spr

Wood Creek Spr

POWERS

Mtn

Gulch

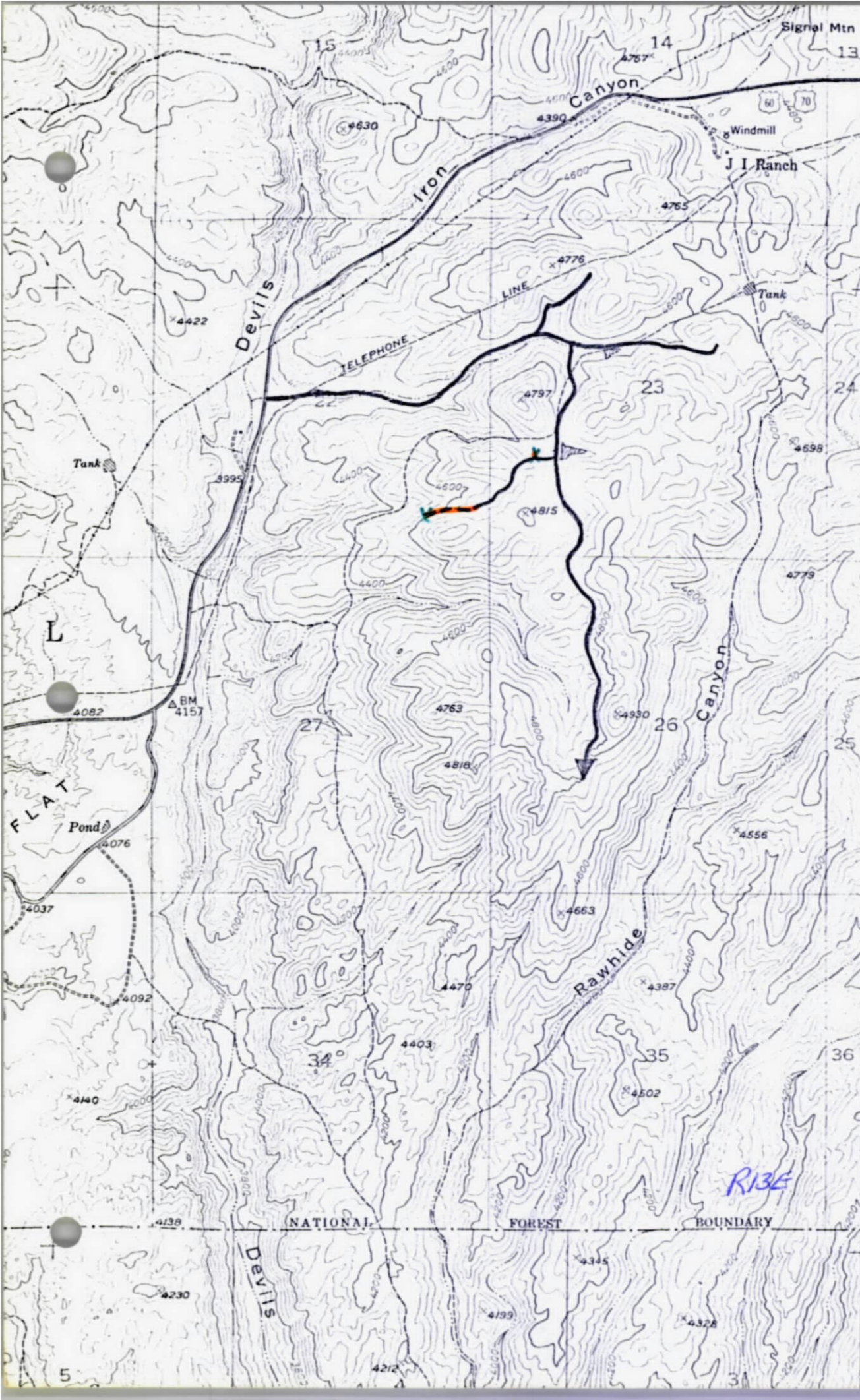
Sheep Camp Spr

Haunted Canyon Spr

Wood

Creek

Attachment A



ROADS
 ~~~~~  
 — Present  
 — To be constructed  
 x ltr

1" = 2000'  
 Superior 7 1/2'  
 Quad/vangle

(PINAL RANCH)

T. 1 S.

17'30"

T. 2 S.

RIBE

JDD 12/22/76

JDS

Superior East  
Tonto Nat'l Forest

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

TONTO NATIONAL FOREST  
Globe Ranger District  
Globe, Arizona

2730 Right-of-Way Grants  
American Smelting and Refining Co  
Road 5/20/71

January 31, 1977

RECEIVED  
FEB 7 - 1977  
EXPLORATION DEPT.



American Smelting and Refining Company  
P. O. Box 5747  
Tucson, Arizona 85703

L  
Dear Mr. Crist:

→ In answer to your letter, dated 12/22/76, I agree that no operating plan will be required at this time. Since you have a special use permit, dated 5/20/71, to cover this type of work, we will send you an amendment to sign and return.

→ The original environmental analysis report is sufficient to analyze the impact of amount and type of work you propose.

If you have any further questions or require any additional information, please feel free to call Dave Cutchen or Jim Spear for assistance.

Sincerely,

*Wallace S. Rutledge*

WALLACE S. RUTLEDGE  
District Forest Ranger

Enclosure

AMENDMENT #3

A

|                                                                                                                                                                                       |                                  |                                      |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| United States Department of Agriculture<br>Forest Service<br><br><b>AMENDMENT<br/>                 FOR<br/>                 SPECIAL USE PERMIT<br/>                 Ref: FSM 2714</b> | a. Record no. (1-2)<br><u>70</u> | b. Region (3-4)<br><u>03</u>         | c. Forest (5-6)<br><u>12</u>         |
|                                                                                                                                                                                       | d. District (7-8)<br><u>02</u>   | e. User number (9-12)<br><u>2730</u> | f. Kind of use (13-15)<br><u>720</u> |
| THIS AMENDMENT IS ATTACHED TO AND MADE A PART<br>OF THE<br><input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT                                            | g. State (16-17)<br><u>04</u>    | h. County (18-20)<br><u>021</u>      | k. Card no. (21)<br><u>1</u>         |

For Road Right-of-Way issued to \_\_\_\_\_  
(KIND OF PERMIT)  
American Smelting and Refining Company, on 5-20-71  
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

1. Extend an access road an additional 800 feet to reach a proposed drill pad, as shown on the attached map.
2. All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analysis report, and letter of understanding.

This Amendment is accepted subject to the conditions set forth herein, and to conditions \_\_\_\_\_ to \_\_\_\_\_ attached hereto and made a part of this Amendment.

|                 |                                                                 |                                                       |                 |
|-----------------|-----------------------------------------------------------------|-------------------------------------------------------|-----------------|
| PERMITTEE       | NAME OF PERMITTEE<br>American Smelting and Refining Company     | SIGNATURE OF AUTHORIZED OFFICER<br><i>George Sest</i> | DATE<br>3/30/77 |
| ISSUING OFFICER | NAME AND SIGNATURE<br><i>Bruce B. Hronek</i><br>Bruce B. Hronek | TITLE<br>Forest Supervisor                            | DATE<br>2/28/77 |

UNITED STATES NATIONAL FORESTS

*GPO 12/22/76*



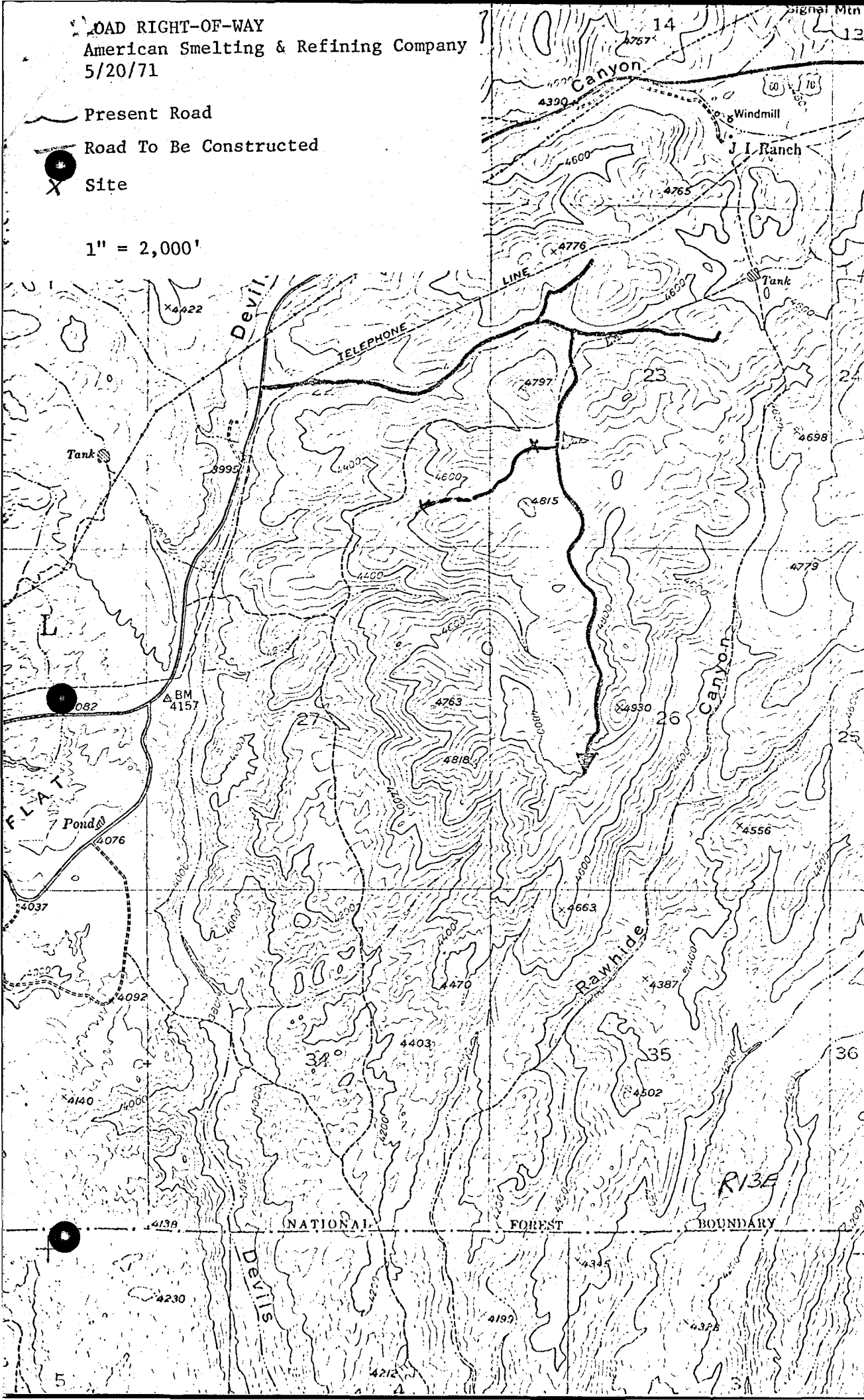
ROAD RIGHT-OF-WAY  
 American Smelting & Refining Company  
 5/20/71

Present Road

Road To Be Constructed

Site

1" = 2,000'



*Attachment A*

ROADS

— Present

- - - To be constructed

x Site

1" = 2000'  
 Superior 7 1/2'  
 Quadrangle

(FINAL RANCH)

APPROVED IN ACCORDANCE WITH

SPECIAL USE PERMIT DATED Feb. 28, 1977

Eruce E. Monck Forest

Supervisor 2/28/77

Signed \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

TONIO NATIONAL FOREST

T. 1 S.

17'30"

T. 2 S.

*JOP 12/22/76*

# ASARCO

Southwestern Exploration Division

April 1, 1977

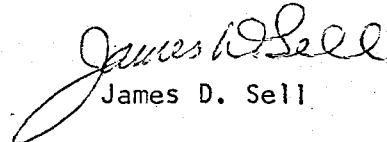
TO: F. T. Graybeal

FROM: J. D. Sell

Forest Service  
Superior East Project  
Pinal County, Arizona

When I picked up and signed the recent Amendment #3 of the Special Use Permit, Jim Spears, the mineral man for the Globe office, stated that they were trying to get permission to handle all Special Use Permits on existing claims, and especially amendments to existing permits, locally at the district office. At present, all paper work goes through the local district to Phoenix and/or Albuquerque and up to two months' time.

Note that we sent in the map and request in late December and it was late February before the local signed it and another month before we were notified.

  
James D. Sell

JDS:1b

cc: RBCrist



Jim Spear called (April 5 - 11:45 am)

- got a tip that there is a proposed wilderness study planned on an area involving the Gila/Pinal county line (north Devil's Canyon) including land Asarco has claims on; specifically:-

Pinal Co: T.1N., R.13E  
Sections 4, 6, 8, 9, 10,  
15, 16, 17, 18, 19,  
20, 21, 22  
-also parts of  
27, 28, 29  
up to county line.

- says we will probably be contacted about this in near future, but if inquiries, call Walt Taylor (261-3205) or Pete Weini (261-4167) of the Forest Service in Phoenix.

- Jim Spear asked to be left anonymous... he fell on this by accident.

:jlh  
c.c. J.D.Sell  
R.B.Crist

*also called 5/17/77 1:15 PM.  
Apparently above study now expanded to cover  
parts of T1N R13E Sec. W/2 of 23 & 26 plus sec 32  
also in T1S, R13E, Sec. 4 & 5.*

*JDS*

JDS

6-21-77

JIM :

THIS MAY OR MAY NOT BE IN  
EFFECT WHEN YOU GET BACK.

IF IT IS, YOU WILL NEED AN  
ACCESS PERMIT TO APPROACH  
A-10 SITE.

LOIS HAS COPIES OF PERMIT.

APU

ALL FORESTS  
FSEZ

6-21-77  
NPD

ALBUQUERQUE, N.M.—BECAUSE OF THE EXTREME FIRE DANGER THROUGHOUT THE SOUTHWEST THE FOREST SERVICE ANNOUNCED TODAY THE CLOSING OF ALL NATIONAL FORESTS IN ARIZONA AND NEW MEXICO EFFECTIVE SUNDAY.

REGIONAL FORESTER M.J. HASSELL SAID THE CLOSURE WOULD REMAIN IN EFFECT AS LONG AS THE EXPLOSIVELY DRY CONDITIONS CONTINUE.

THE CLOSURE MEANS, HASSELL SAID, THAT ALL NATIONAL FOREST LANDS ARE CLOSED TO ENTRY AND ALL OPEN FIRE AND SMOKING ARE PROHIBITED. DEVELOPED CAMP AND PICNIC GROUNDS WILL REMAIN OPEN BUT FIRES AND SMOKING ARE PROHIBITED.

HASSELL SAID THE ONLY AREAS THAT WOULD REMAIN OPEN WERE THE PECOS AND WHEELER PEAK WILDERNESSES IN NORTHERN NEW MEXICO. FIRE MAY NOT BE USED IN THOSE AREAS, HOWEVER, HE SAID.

THE ORDER FORBIDDING FIRES INCLUDES CHARCOAL GRILLS BUT DOES NOT INCLUDE PERTROLEUM-FUELED STOVES. VIOLATORS OF THE ORDER COULD FACT FINES AND/OR JAIL TERMS.

HASSELL SAID THE ACTION HAD THE CONCURRENCE OF STATE AND FEDERAL LAND MANAGEMENT AGENCIES AND GAME AND FISH DEPARTMENTS.

PERSONS WITH PERMANENT HOMES OR BUSINESSES WITHIN FORESTED AREAS MAY TRAVEL TO OR FROM THEM WITHOUT RESTRICTION, HASSELL SAID.

MALONEY 6/18/77 1750

*John Hart  
John Water  
Hassell*

*Maloney  
6/18/77  
1750*

AMENDMENT #4

|                                                                                                                                                                                       |                                  |                                      |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| United States Department of Agriculture<br>Forest Service<br><br><b>AMENDMENT<br/>                 FOR<br/>                 SPECIAL USE PERMIT<br/>                 Ref: FSM 2714</b> | a. Record no. (1-2)<br><u>70</u> | b. Region (3-4)<br><u>03</u>         | c. Forest (5-6)<br><u>12</u>         |
|                                                                                                                                                                                       | d. District (7-8)<br><u>02</u>   | e. User number (9-12)<br><u>2730</u> | f. Kind of use (13-15)<br><u>220</u> |
| THIS AMENDMENT IS ATTACHED TO AND MADE A PART<br>OF THE<br><input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT                                            | g. State (16-17)<br><u>04</u>    | h. County (18-20)<br><u>021</u>      | k. Card no. (21)<br><u>1</u>         |

For Road Right-of-Way issued to \_\_\_\_\_  
(KIND OF PERMIT)  
American Smelting and Refining Company, on 5-20-71  
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

1. Extend an access road an additional 1,100 feet to reach a proposed drill pad, as shown on the attached map.
2. All specifications and conditions of the Amendment are the same as those shown in the original permit, Environmental Analysis Report, and Letter of Understanding.

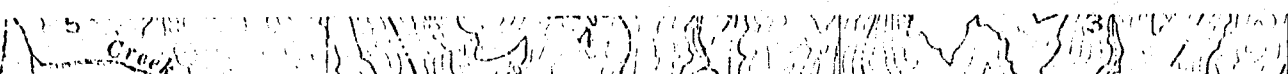
This Amendment is accepted subject to the conditions set forth herein, and to conditions \_\_\_\_\_ to \_\_\_\_\_ attached hereto and made a part of this Amendment.

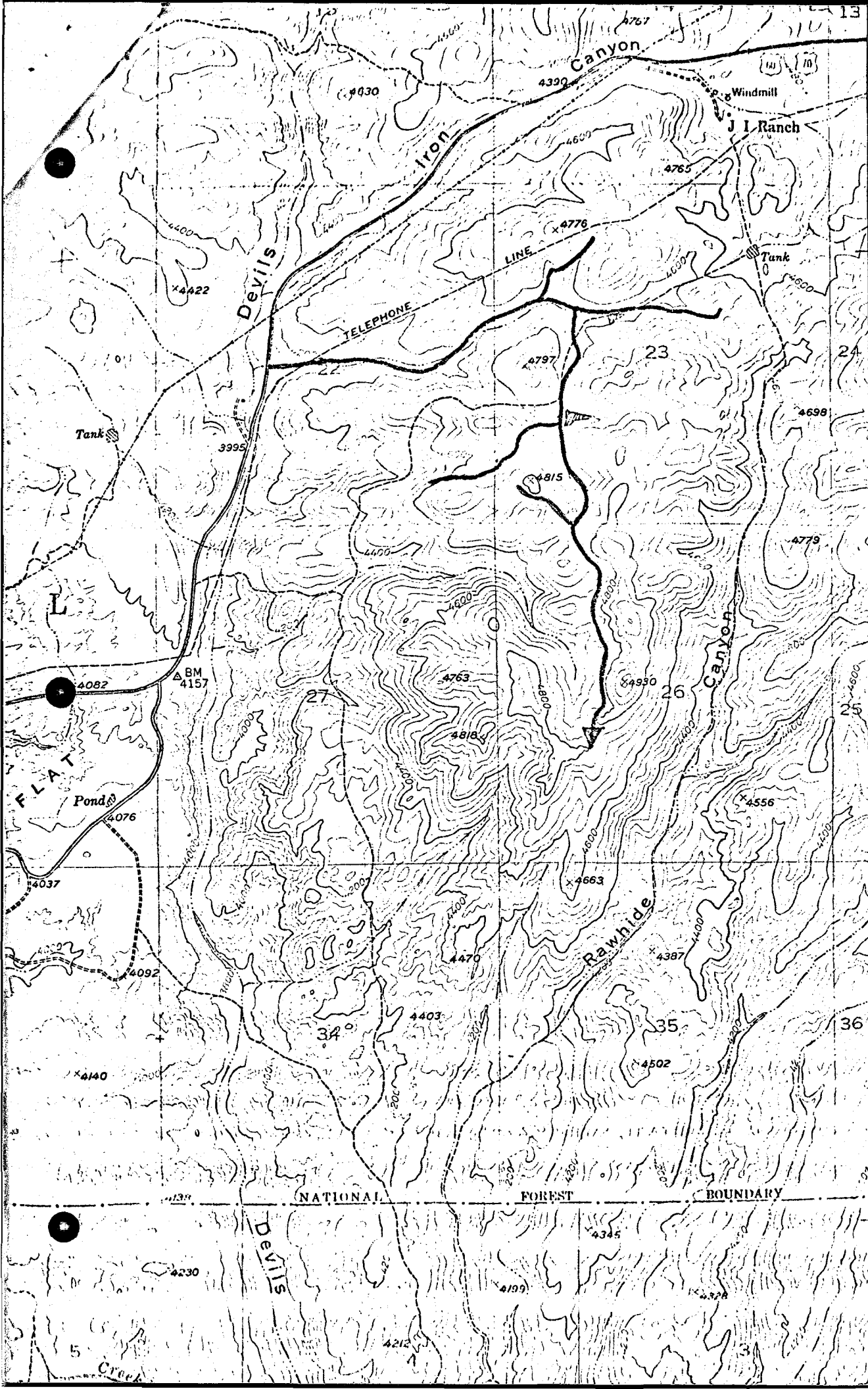
|                 |                                                               |                                                       |                        |
|-----------------|---------------------------------------------------------------|-------------------------------------------------------|------------------------|
| PERMITTEE       | NAME OF PERMITTEE<br>American Smelting and Refining Company   | SIGNATURE OF AUTHORIZED OFFICER<br><i>Amesh Sethi</i> | DATE<br><u>7/24/77</u> |
| ISSUING OFFICER | NAME AND SIGNATURE<br><i>Walter Hronek</i><br>Bruce B. Hronek | TITLE<br><i>Acting</i><br>Forest Supervisor           | DATE<br><u>7/14/77</u> |

F-NTS  
ting  
epar

head

g/e





**2730 RIGHT-OF-WAY GRANTS**  
**American Smelting & Refining Company**

**ROADS**  
 ~~~~~ Present  
 ——— To be constructed

1" = 2000'
 Superior 7 1/2' Quadrangle.

SPINAL RANCH

17'30"

July 27, 1977

FILE MEMORANDUM


Oak Flat Picnic Area
Superior East Project
Pinal County, Arizona

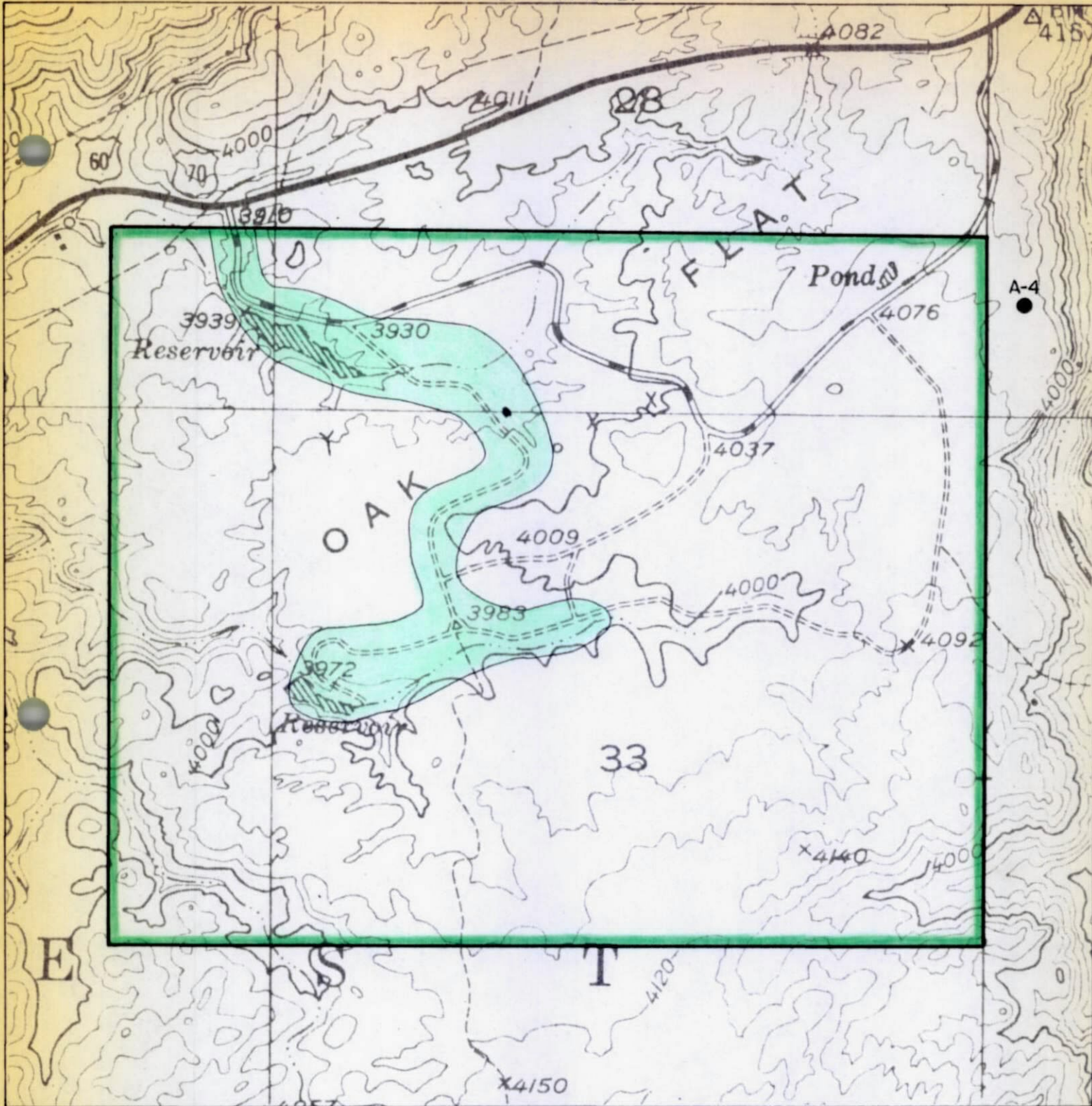
The attached map at 1" = 1000 ft. shows the outline of the current Oak Flat Picnic Area and a proposed residual picnic area. The proposed picnic area covers 74 acres and includes the most desirable (trees, access, existing picnic facilities) and the most heavily used portions of Oak Flat.

The surface of the proposed smaller picnic area would not be required for exploration drill sites, although it would be convenient to use the existing roads for access.

F. T. Graybeal
F. T. Graybeal

FTG:lb
Att.

cc: TCOsborne - w/att.
WLKurtz - w/att.
JDSell - w/att. 



Base from USGS Superior 7.5 Quad.

EXPLANATION



Current Oak Flat Area



Proposed Oak Flat Area

| | |
|--------------|----------------------|
| TO ACCOMPANY | <i>File Memo</i> |
| DATED | <i>July 27, 1977</i> |
| BY | <i>F.T. Gray</i> |

PROPOSED AREA
for
NEW OAK FLAT PICNIC AREA

PINAL COUNTY, ARIZONA

Scale: 1" = 1000'

FTG

July, 1977

October 26, 1977

FILE MEMORANDUM

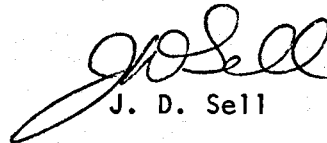
Globe District
U.S. Forest Service
Superior East Project
Pinal-Gila Counties, Arizona

Mr. Jim Spears, Mineral Examiner out of the Globe Forest Service Office, is being transferred to the Boise National Forest, Idaho as of 10/28/77.

Dave "Crutchen", his boss, will be retained in Globe to handle the permits, etc.

Spears was very helpful to us and knowledgeable to the problems as he is a Mining Engineer and had worked at San Manuel for a short period.

I mentioned that John Balla ran our office in Spokane and that their territory extended into the Idaho area.



J. D. Sell

JDS:lb

ASARCO

JDS

Exploration Department
Southwestern United States Division
R. B. Crist
Property Manager

December 2, 1977.

Mr. Wallace G. Rutledge
Globe District Ranger
Rt.#1, Box 33
Globe, Arizona 85501

2730 Right-of-Way Grants
ASARCO Incorporated
Road 2/20/71
Ref: FSM 2714

Dear Mr. Rutledge:

Enclosed please find four copies of a plat map which outlines a proposal for a fifth amendment to the Special Use Permit issued to Asarco on May 20th, 1971.

1. To extend the access road an additional 1000 feet to reach a proposed drill pad, as shown on the attached map.
2. All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analysis report and letter of understanding.

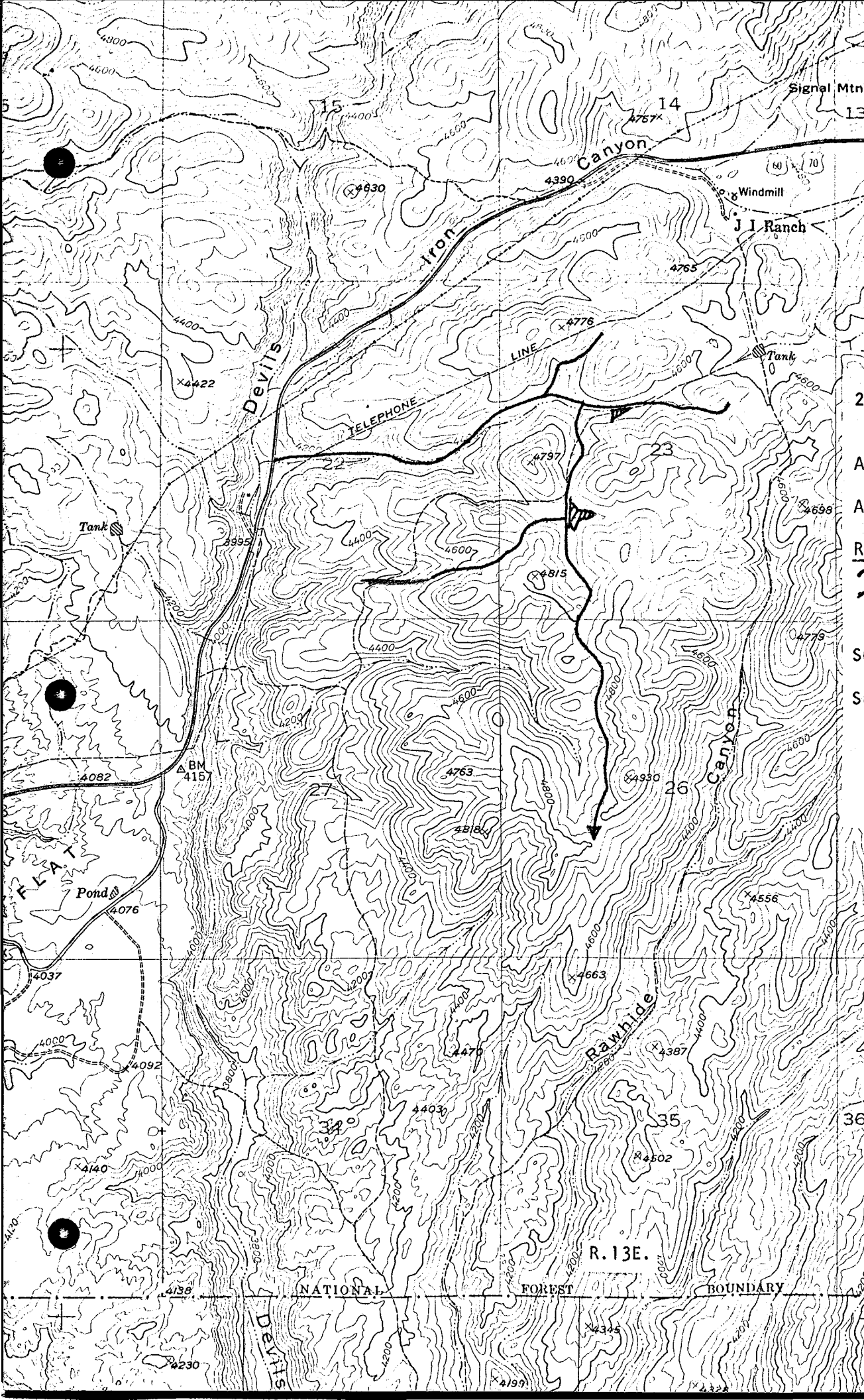
The proposed extension has been flagged on the ground and is available for inspection. The road and site will not be visible from US 60-70.

Very sincerely,

R B Crist
R. B. Crist.

RBC:jlh
encls plats (4)
c.c. Dave Cutchen, w/attmt
J.D.Sell —

*They apparently visited & walked out
the site in mid-Dec. Vals. drill crews*



2730 Right-of-Way Grants
 American Smelting & Refining Company
 Amendment # 5

ROADS
 ~ Present
 ~ To be constructed

SCALE:
 1" = 2000 ft.
 Superior 7-1/2' Quadrangle

12/2/77 Date
JOS

13

14

Signal Mtn

Iron Canyon

J I Ranch

Devils

TELEPHONE LINE

Rawhide Canyon

Rawhide

NATIONAL FOREST BOUNDARY

R. 13E.

20'

T. 1 S.

17'30"

T. 2 S.

(FINAL)

December 2, 1977

FILE MEMORANDUM

Oak Flat
Superior East Project
Pinal County, Arizona

On November 21, 1977 R. B. Crist and I met with Wallace Rutledge, District Ranger for the Tonto National Forest, and his assistant, David Cutchen, in Globe, Arizona. The purpose was to discuss an exchange involving Oak Flat. Rutledge had assumed Asarco wanted to talk about exchanging land in the A-8 area and was not aware that we wanted to exchange for Oak Flat. When so informed he noted that Asarco was "near the top of the list" and, among others, Magma and a Mr. Tom Brown, a promoter with land along the Buffalo River in Arkansas, were also interested. Rutledge noted that he was not aware what the new rules would have to say regarding exchanges of Withdrawn Areas.

The current U.S. Forest Service (USFS) feelings on Oak Flat appear ambivalent. They have retained a landscape architect to design improvements on the present picnic area, but at the same time are holding internal discussions concerning whether Oak Flat should be moved. Factors which have caused the USFS to consider moving Oak Flat are aesthetic and involve a power line on the east boundary, the Magma #9 shaft, a power line substation which may be built along the north boundary, and a possible future mining operation by Asarco near A-8. These features are or would all be visible from Oak Flat and would detract from the natural beauty of the area. The type of area they are looking for as a replacement for Oak Flat would be near a highway, closer to Superior than Miami, have large shade trees, and cover at least 200 acres.

Our meeting then centered around what Asarco's next step should be. Rutledge said we could write them a letter asking if the USFS was interested in an exchange of Oak Flat, that they would answer in the negative, but that we would be on the record as having asked. He didn't seem to think being on the record would mean much in terms of who ultimately wound up with Oak Flat. He said that if we proposed an exchange and made a concrete offer of what land we would exchange for Oak Flat then serious consideration would be given, but it was clear that before the USFS will initiate action on a written proposal they want to know what Asarco would offer in exchange.

Mr. Crist has previously noted that if Asarco did acquire land of high USFS priority we would have alternate trade routes should Oak Flat fail such as Hardshell or the A-8 area; thus the purchase of trading land would not leave Asarco with a white elephant. However, in our meeting I pointed out that Asarco didn't want to spend option money on land before we knew whether or not the USFS would consider an exchange. Rutledge then indicated that before the end of 1977 the USFS will have a much better idea of what will become of Oak Flat because the site for the power line substation will be picked and the new rules for land exchanges will be available. It was mutually agreed that we will meet in early January 1978 regarding our next step.

December 2, 1977

It appears that the USFS wants to maintain some type of picnic-camping area of the type already described and unless a suitable alternate area can be found Oak Flat will probably remain as is. If an alternate area can be found and if the less-than-pristine nature of Oak Flat continues to deteriorate I think the USFS would be interested in an exchange.

I have attached a flow sheet showing the steps to be taken for land exchanges under the new regulations. Rutledge estimates roughly three years would be required for the paperwork to move through this maze to the point where an exchange would look reasonably certain, although he indicated some uncertainty because Oak Flat is a Withdrawn Area. He noted that if exchange proceedings were started that Asarco might be able to speed the paperwork somewhat, presumably by working with various government personnel in one way or other. However, this time estimate may serve as an initial estimate of what minimum length option period would be required were Asarco to acquire land for an exchange, but still be able to dispose of if exchange proceedings fell through.

Aside from the obvious problem of acquiring Oak Flat, I question whether Asarco should make the considerable expenditure to acquire Oak Flat before drilling. The potential for high grade limestone replacement is obvious; however, an intersection of possible ore grade and thickness has yet to be drilled. Rutledge mentioned previous discussions which involved the possibility that Asarco might drill a water well for the USFS on Oak Flat to whatever depth we wish, but stated that the information would have to be made public. Perhaps an angle hole or an in-hole wedge should be considered from the A-4 site to test for replacement mineralization, unless there is a possibility that the Government could force an inspection of our data to help them evaluate the mineral potential of Oak Flat.

It has been suggested several times that Asarco should join with Magma on an exchange for Oak Flat, but no decision has been made. Mr. Crist feels that Magma might fall back on the apex law to claim down dip extensions of the replacement ore which they are currently mining. I do not regard this as a problem, although others might disagree, and I feel the entry of Magma as a partner should be decided on other factors such as sharing the expense in what will clearly be a costly venture.

A problem not discussed involves the ultimate disposition of the mineral rights and this may be spelled out in the new regulations (see page 2 of attached land exchange flow sheet). According to a review by Mr. Kelly addressed to Mr. Dolph if the U.S. Geological Survey reports that Oak Flat contains valuable or potentially valuable minerals, such minerals must be reserved to the Government or their value appraised and considered in the equity of the exchange.

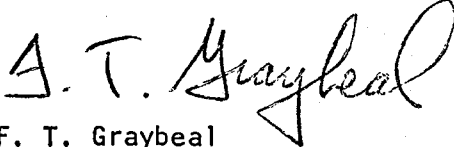
One of the sites which the USFS would consider as an alterante for Oak Flat is the Clary and Shoecraft property which lies east of the J-1 Ranch. Although neither property is listed on the USFS priority list they have verbally indicated such land would be given a high priority consideration if offered in trade. The Shoecraft land is available, although at an excessively high price. The Clary property is presently the subject of hearings before the Pinal County Planning and Zoning Commission and the

December 2, 1977


Board of Supervisors to determine if Clary will be able to subdivide the area for relatively high density housing. Asarco has been closely following these hearings and has offered written commentary, through our water consultant, concerning possible groundwater contamination. If Clary is ultimately denied permission to subdivide, this property might be available at a reasonable price. The resulting devaluation of the Clary property would probably make the Shoecraft property available at a more reasonable price.

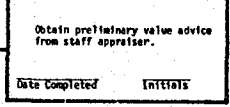
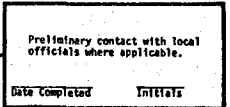
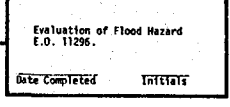
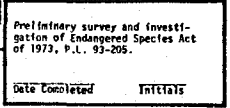
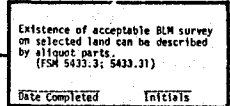
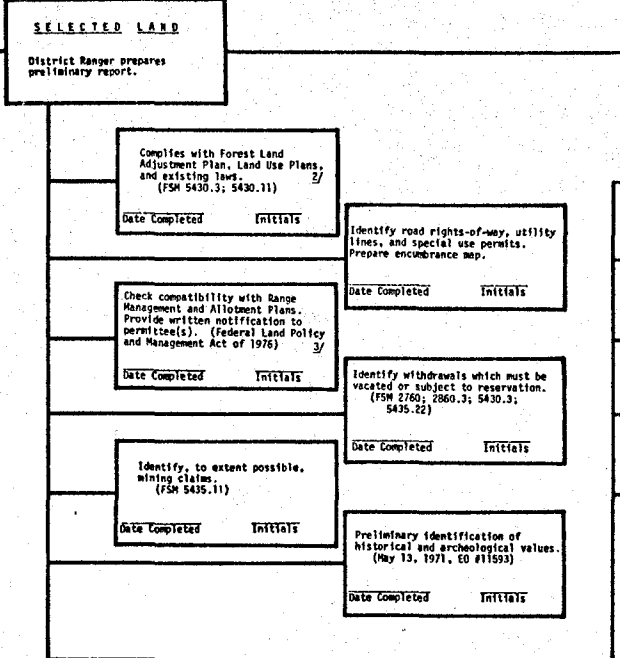
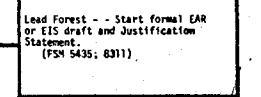
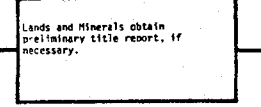
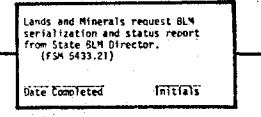
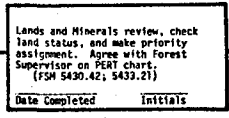
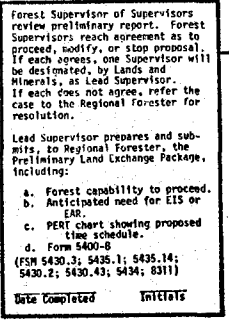
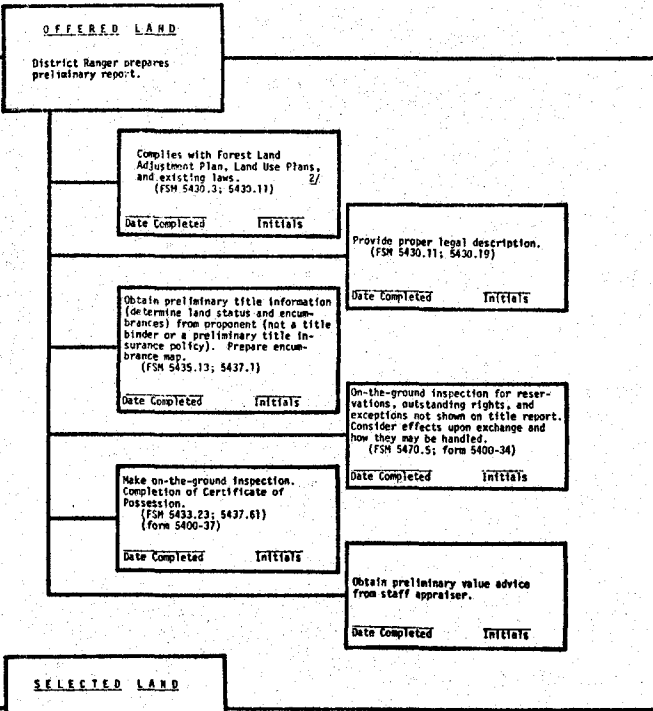
The above discussion is summarized as follows:

- 1) Asarco personnel will attempt to locate an alternate location for Oak Flat with acceptable characteristics
- 2) the USFS will be approached in early January 1978 to determine whether an Oak Flat exchange might be attractive
- 3) if an exchange for Oak Flat appears possible, Asarco will have to obtain options to purchase high priority land (USFS classification) and make a written proposal with a firm offer to exchange optioned land for Oak Flat and, if necessary, with the USFS retaining a residual 74-acre picnic facility on Oak Flat
- 4) consideration should be given to drilling an angle hole from A-4 to explore Oak Flat; legal advice on this would seem warranted,
- 5) consideration should be given to joint venturing an Oak Flat land exchange and drill program with Magma, and
- 6) the Clary hearings will be closely followed.

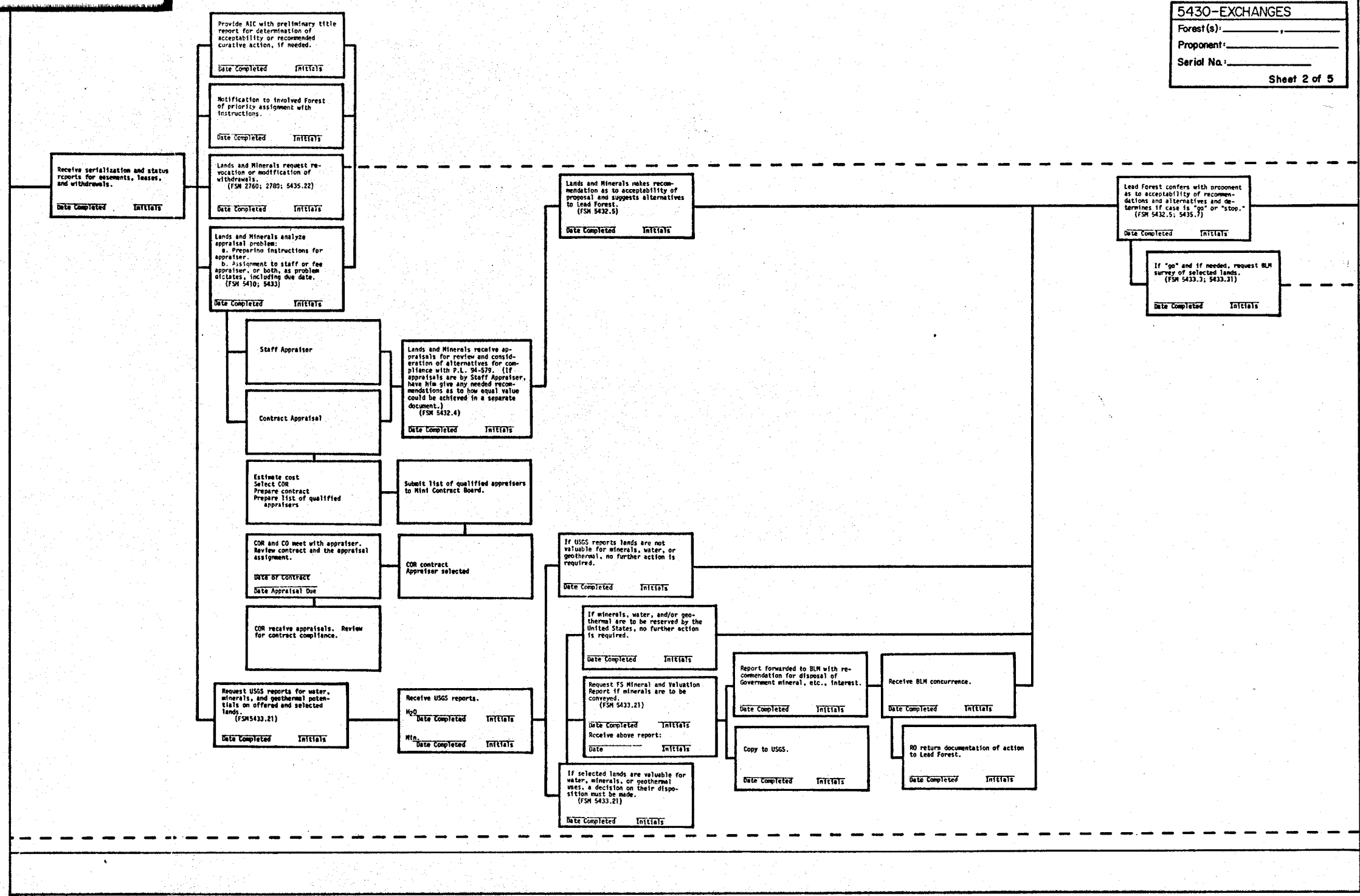

F. T. Graybeal

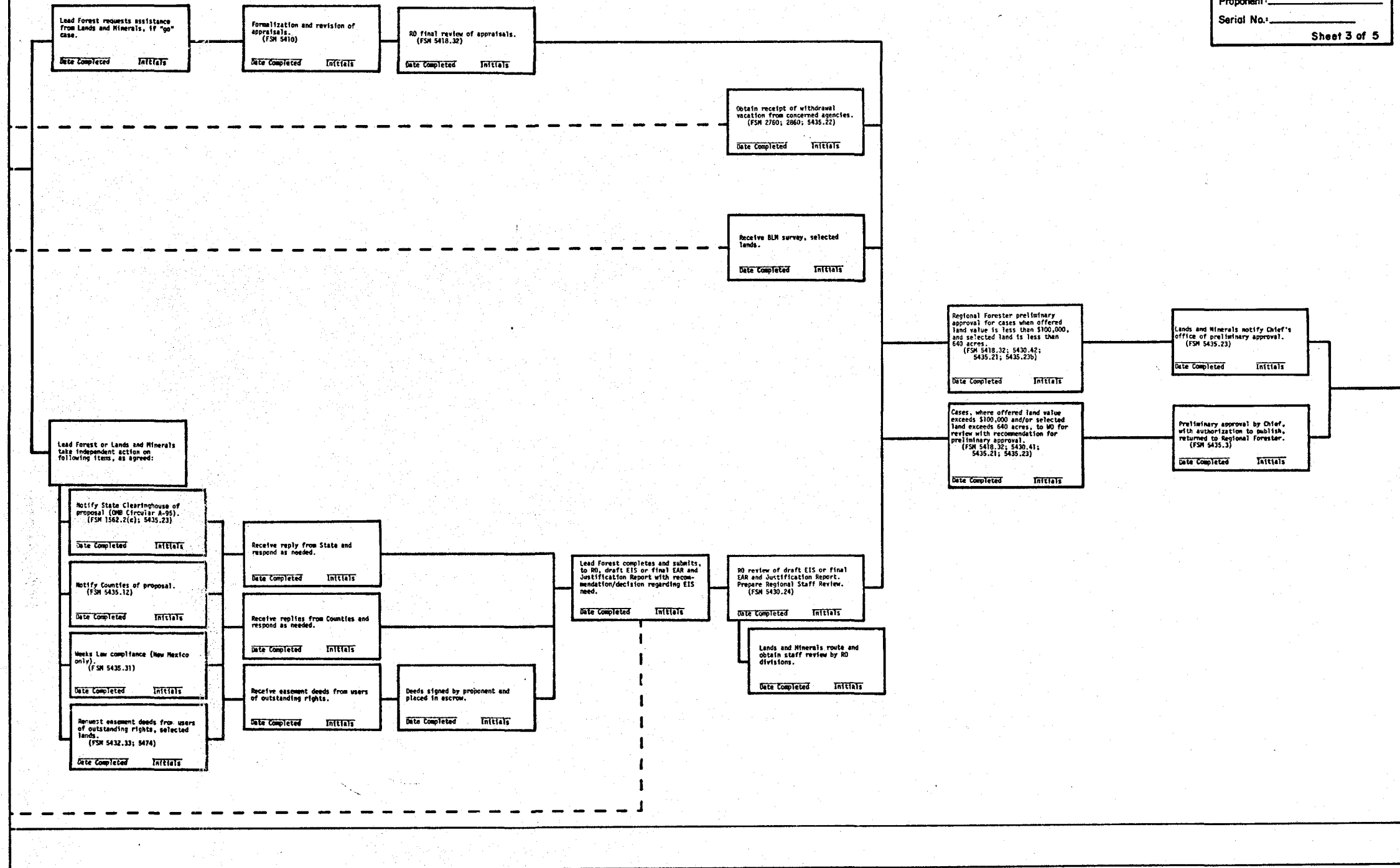
FTG:lb
Att.

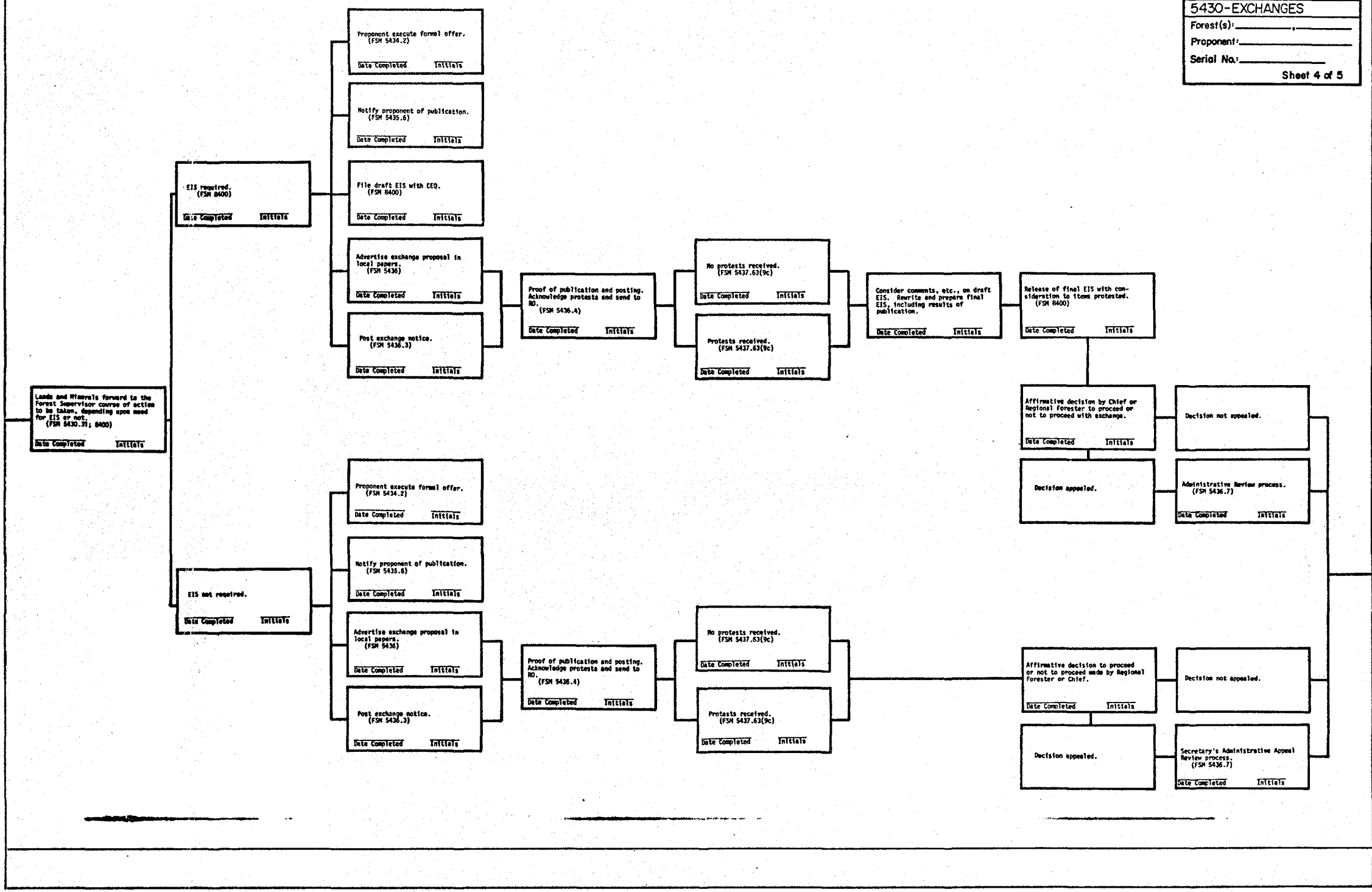
cc: TCOsborne
WLKurtz
RBCrist
JDSell 
SJSorensen

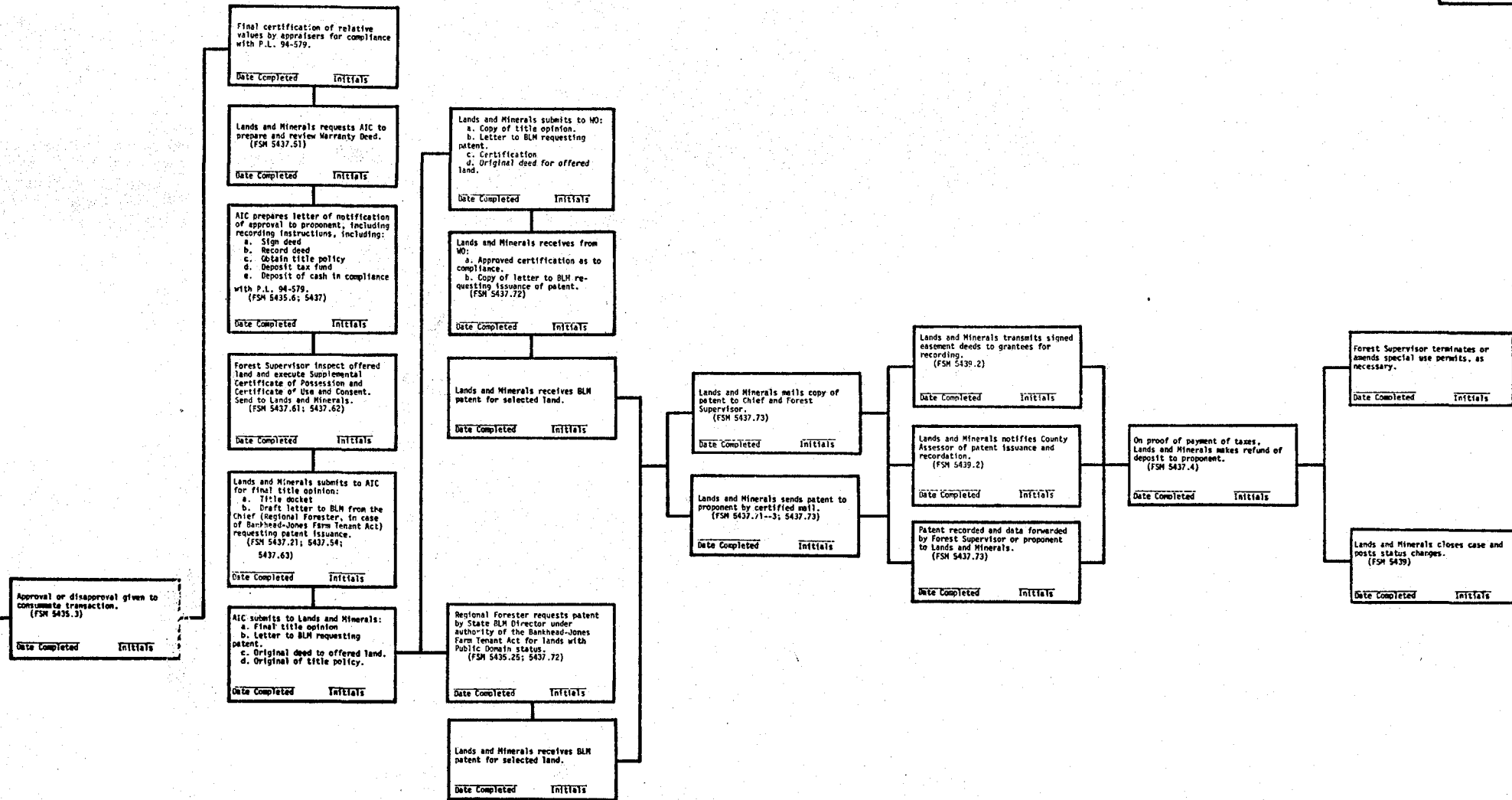


1/ Public Domain Origin Lands.
 2/ If offer does not comply, but District Ranger believes it is in the public interest to proceed, take separate Land Classification Action resulting in modified Land Adjustment Plan, Land Use Plans, etc.
 3/ Do this after concurrence by Forest Supervisor and Regional Forester that it is a "go" case.









December 30, 1977

TO: F. T. Graybeal

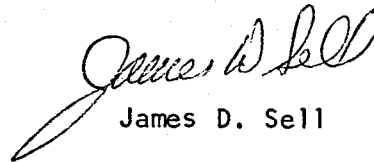
FROM: J. D. Sell

Road W. of A-10
Superior East Project
Pinal County, Arizona

Dave Cutchens of the Globe Office USFS called 12/30/77 AM to say that he had inspected the road area as requested in our supplemental road building application and found it to be OK for approval.

He will recommend the approval and submit it to the Phoenix office. He expects the paper work to take 2 weeks.

As you recall, we also have approval for a road-drill site to be located south of A-8.



James D. Sell

JDS:1b

cc: NPWhaley
RBCrist

AMENDMENT #5

| | | | |
|---|----------------------------------|--------------------------------------|--------------------------------------|
| United States Department of Agriculture
Forest Service

AMENDMENT
 FOR
 SPECIAL USE PERMIT
 Ref: FSM 2714 | a. Record no. (1-2)
<u>70</u> | b. Region (3-4)
<u>03</u> | c. Forest (5-6)
<u>12</u> |
| | d. District (7-8)
<u>02</u> | e. User number (9-12)
<u>2730</u> | f. Kind of use (13-15)
<u>220</u> |
| THIS AMENDMENT IS ATTACHED TO AND MADE A PART
OF THE
<input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT | g. State (16-17)
<u>04</u> | h. County (18-20)
<u>021</u> | k. Card no. (21)
<u>1</u> |

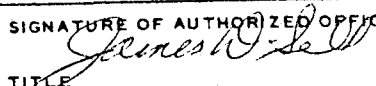

For Road Right-of-Way issued to _____
(KIND OF PERMIT)
American Smelting and Refining Company, on 5-20-71
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

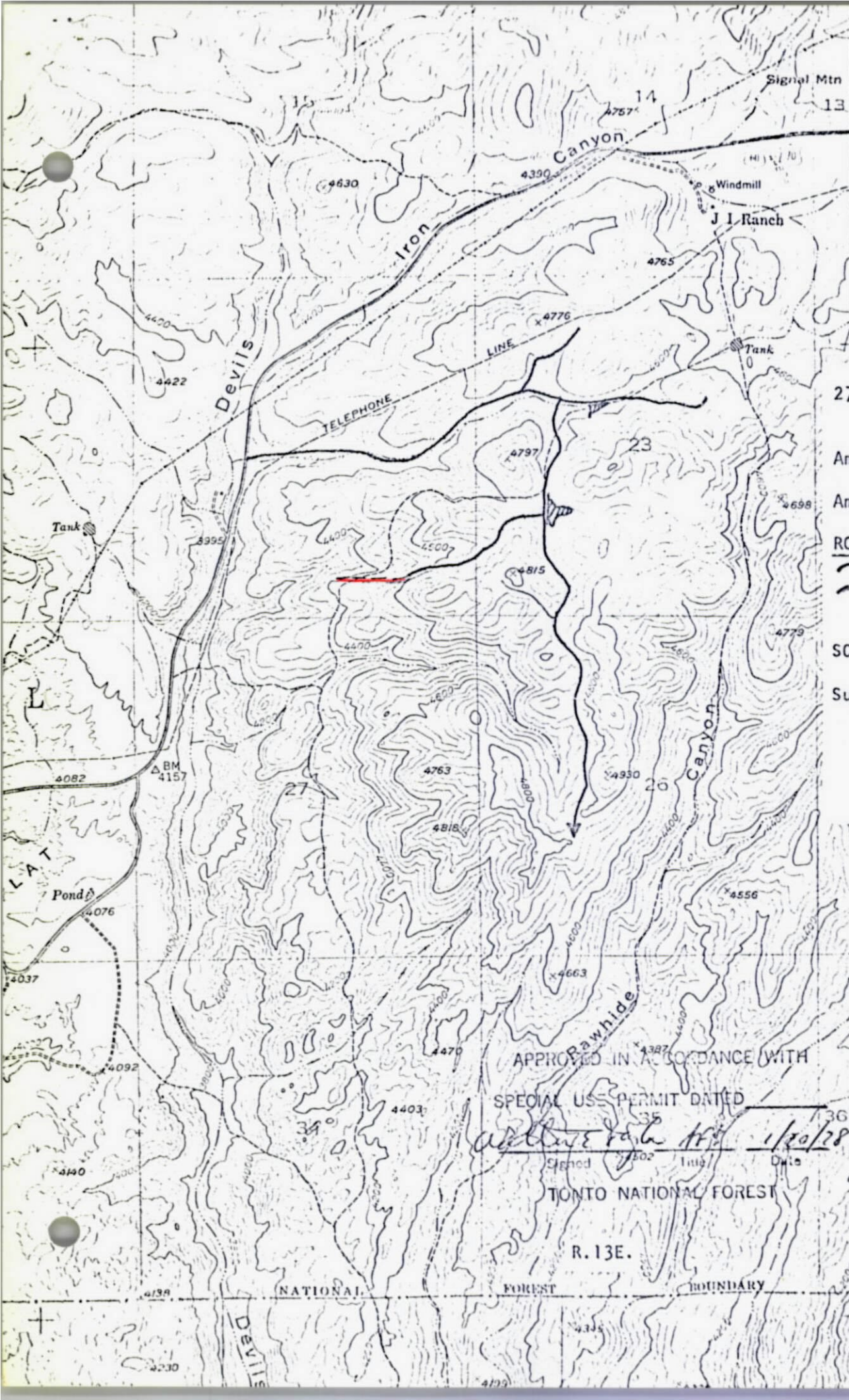
1. Extend access road an additional 1,000 feet to reach a proposed drill pad, as shown on the attached map.
2. All specifications and conditions of this amendment are the same as those shown in the original permit, Environmental Analysis Report, and Letter of Understanding.

Terms Discussed With Permittee
 On 2-13-78 DUC

This Amendment is accepted subject to the conditions set forth herein, and to conditions _____ to _____ attached hereto and made a part of this Amendment.

| | | | |
|-----------------|---|--|-----------------|
| PERMITTEE | NAME OF PERMITTEE
American Smelting and Refining Company | SIGNATURE OF AUTHORIZED OFFICER

TITLE | DATE
2/13/78 |
| ISSUING OFFICER | NAME AND SIGNATURE
 | TITLE
AFS | DATE
1/20/78 |





2730 Right-of-Way Grants

American Smelting & Refining Company
Amendment # 5

ROADS

— Present
 ~~~~~ To be constructed

**SCALE:**

1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

12/2/77 Date

*[Handwritten signature]*

APPROVED IN ACCORDANCE WITH  
 SPECIAL USE PERMIT DATED

*[Handwritten signature]* 1/20/28  
 Signed \_\_\_\_\_ Date \_\_\_\_\_

TONTO NATIONAL FOREST

R. 13E.

NATIONAL FOREST BOUNDARY

T. 1 S.

17'30"

T. 2 S.



# ASARCO

Southwestern Exploration Division

February 17, 1978

TO: F. T. Graybeal

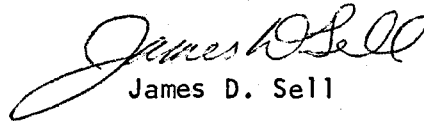
FROM: J. D. Sell

Road Right-of-Way  
Superior East Project  
Pinal County, Arizona

Attached are the original and two Xerox copies of Amendment #5, road right-of-way permit to extend the road from the A-10 drill site westward for an additional thousand feet.

As noted, the turn-around time was approximately six weeks through the Phoenix office and an additional three weeks in the Globe office.

In talking with Dave Cutchens, they hope to hire a new Mining Engineer/Geologist for the Globe district within the next several months. This should shorten the turn-around time somewhat.

  
James D. Sell

JDS:lb  
Atts.

JOS - WETS  
cc  
4/26/78  
Jal

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Tonto National Forest  
102 South 28th Street  
P. O. Box 13705  
Phoenix, AZ 85002

2230  
April 19, 1978

American Smelting and Refining  
P. O. Box 5747  
Tucson, Arizona 85703

RECEIVED

APR 20 1978

EXPLORATION DEPT.



Gentlemen:

I'm sure you have been applauding, along with me, the generous amount of precipitation received this winter and are rejoicing at the luxurious growth of herbage appearing this spring in some areas on the Tonto. I hope you are also concerned with me about the prospects for a severe fire season as the drying period approaches. I would like to add my request for your cooperation to that you no doubt will be receiving from your District Ranger, in the prevention of wild fires resulting from escaped branding fires, smoking by employees, etc.

The primary reason for writing you, however, is to apprise you of the Tonto's policy for rehabilitation of burned areas should these occur despite our best prevention and suppression efforts.

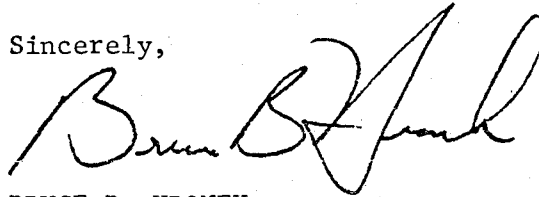
Rehabilitation needs and treatments to be employed will be determined for each significant burned area by a team of staff specialists. The team will be comprised of soils, hydrology, wildlife, range and, as appropriate, other resource specialists. Each area will be evaluated on its own merits for needed rehabilitation measures such as salvage logging, reseeding, channel clearing, erosion control structures, drainage and blocking of fire lines and fire access routes and reconstruction of structural facilities such as damaged range improvements. In many cases the prescription will, out of necessity, include fencing of all or a portion of the burned area for the protection of investments in burn rehabilitation and to permit fire weakened forage species the needed period of time to recover to the point they can once again sustain grazing pressure.

Depending on such factors as size of the burn, and effect on grazing capacity, its position on the landscape and probability of significant enticement to livestock, severity of burn, rehabilitation measures prescribed, etc., it might prove necessary for you to take some nonuse of your permit for range protection for a period of two or more years. Again, primarily as a function of the size of the burned area and effect on the allotment's grazing capacity, this assessment will be made on an allotment by allotment basis. Of course to the extent that it is practical to do so, we would attempt to locate needed protection fences on an alignment where they could later serve as pasture management fences.

I am advising you of the protection policy at this time so that the Ranger's contact with you regarding needed protection and possible nonuse will not take you completely by surprise should the exigency arise. Hopefully, we will luck out as we did last year and it will be a moot consideration.

Thank you in advance for your cooperation.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce B. Hronek". The signature is written in dark ink and is positioned above the typed name.

BRUCE B. HRONEK  
Forest Supervisor

# ASARCO

JDS

Exploration Department  
Southwestern United States Division  
R. B. Crist  
Property Manager

May 12, 1978

Mr. Wallace C. Rutledge  
Globe District Ranger  
Route #1, Box 33  
Globe, Arizona 85501

2730 Right-of-Way Grants  
ASARCO Incorporated  
Road 2/20/71  
Ref: FSM 2714

Dear Mr. Rutledge:

Enclosed please find four copies of a plat map which outlines a proposal for a seventh amendment to the Special Use Permit issued to Asarco on May 20th, 1971.

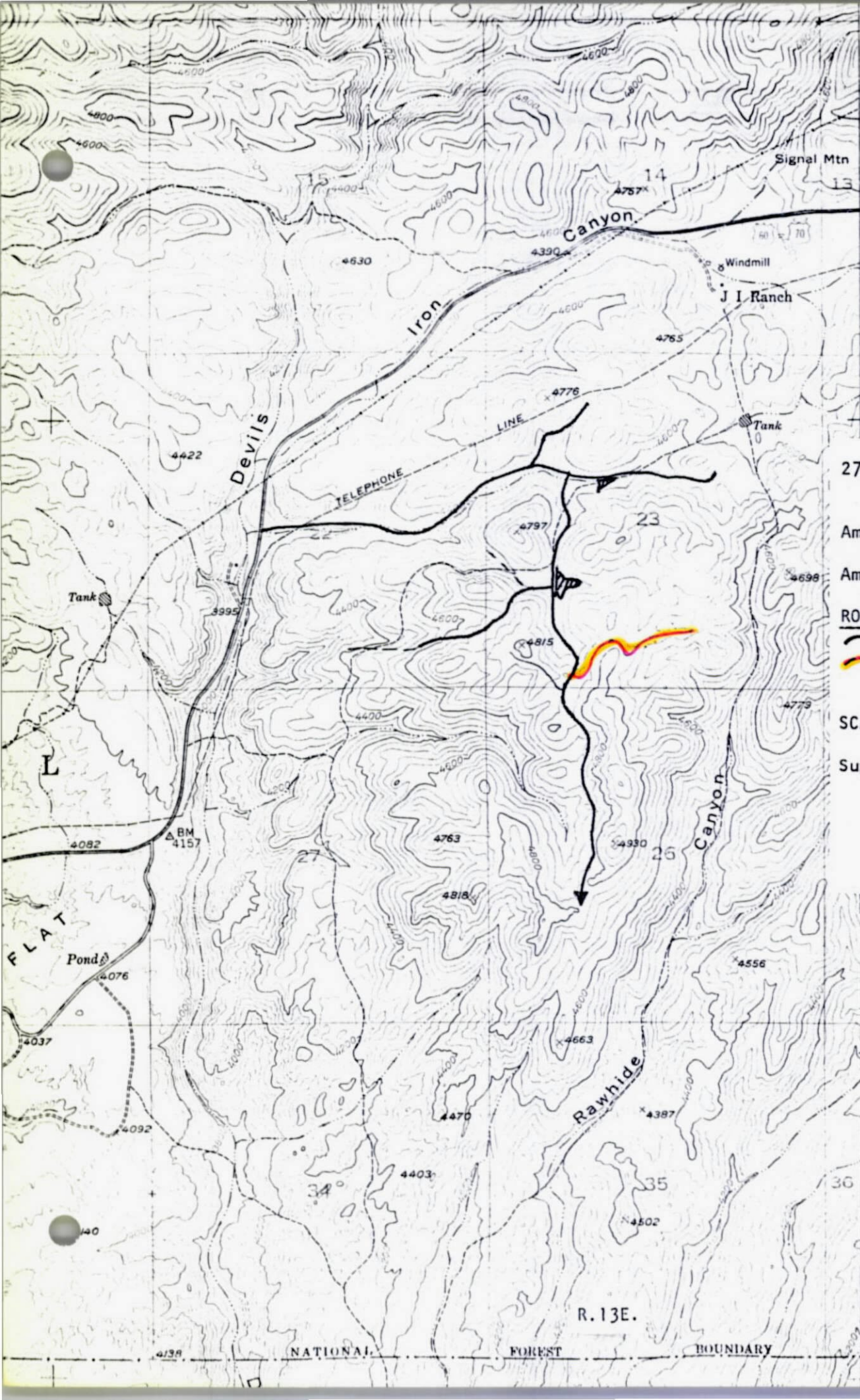
1. To revamp a hillside road presently in use and to extend by construction a road with drill pad some 2,600 feet in length, as shown on the attached map.
2. All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analysis report and letter of understanding.

The proposed extension has been field-checked by a contractor and has been flagged on the ground and is available for inspection. The road and site will not be visible from US.60-70.

Very sincerely,

*R. B. Crist*  
R. B. Crist.

JDS:jlh  
encls, plats (4)  
c.c. Dave Crutchen, w/attmt  
J.D.Sell ✓  
N.P.Whaley



2730 Right-of-Way Grants  
 American Smelting & Refining Company  
 Amendment # 7

**ROADS**  
 ~ Present  
 ~ To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

5/12/78 Date  
*J. J. Jell*

W. 1/2 - 7.50  
 G.L.B.: 76.50

20'

(PINAL)

T 15 S

17'30"

R. 13 E.

NATIONAL FOREST BOUNDARY

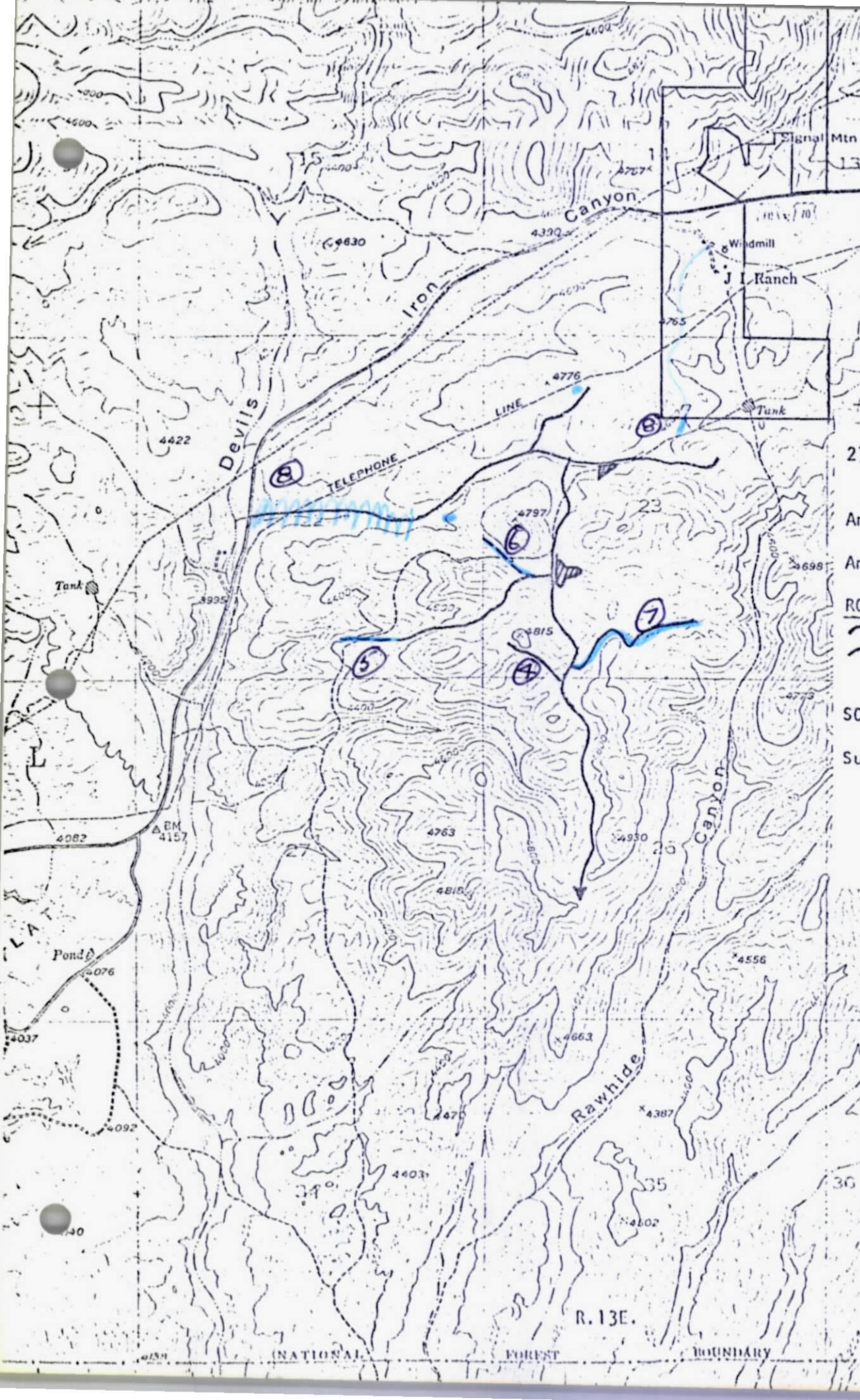
Jim Peck

The Forest Service  
has approved Amendment #5,  
W. R. Lodge has given verbal  
approval on both #6 and #7.  
Written approval should be in  
next week.

I am requesting permission to (Amendment #8)  
put present <sup>grill</sup> <sup>road</sup> access from East side  
of Devil's Canyon to Bad and replace  
it with access thru Ranch Hgway.  
and approx 200' on Forest land.



J. Sell  
Don. West



2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment #

ROADS  
— Present  
- - - To be constructed

SCALE:  
1" = 2000 ft.  
Superior 7-1/2' Quadrangle

Date

NATIONAL FOREST BOUNDARY

R. 13E.

17'30"



AMENDMENT #6

United States Department of Agriculture  
Forest Service

|                                                                                                                                            |                                  |                                      |                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| AMENDMENT<br>FOR<br>SPECIAL USE PERMIT<br>Ref: FSM 2714                                                                                    | a. Record no. (1-2)<br><u>70</u> | b. Region (3-4)<br><u>03</u>         | c. Forest (5-6)<br><u>12</u>         |
|                                                                                                                                            | d. District (7-8)<br><u>02</u>   | e. User number (9-12)<br><u>2130</u> | f. Kind of use (13-15)<br><u>220</u> |
| THIS AMENDMENT IS ATTACHED TO AND MADE A PART<br>OF THE<br><input type="checkbox"/> TERM <input checked="" type="checkbox"/> ANNUAL PERMIT | g. State (16-17)<br><u>04</u>    | h. County (18-20)<br><u>021</u>      | k. Card no. (21)<br><u>1</u>         |

For Road Right-of-Way issued to \_\_\_\_\_  
(KIND OF PERMIT)  
American Smelting & Refining Company, on 5-20-71  
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

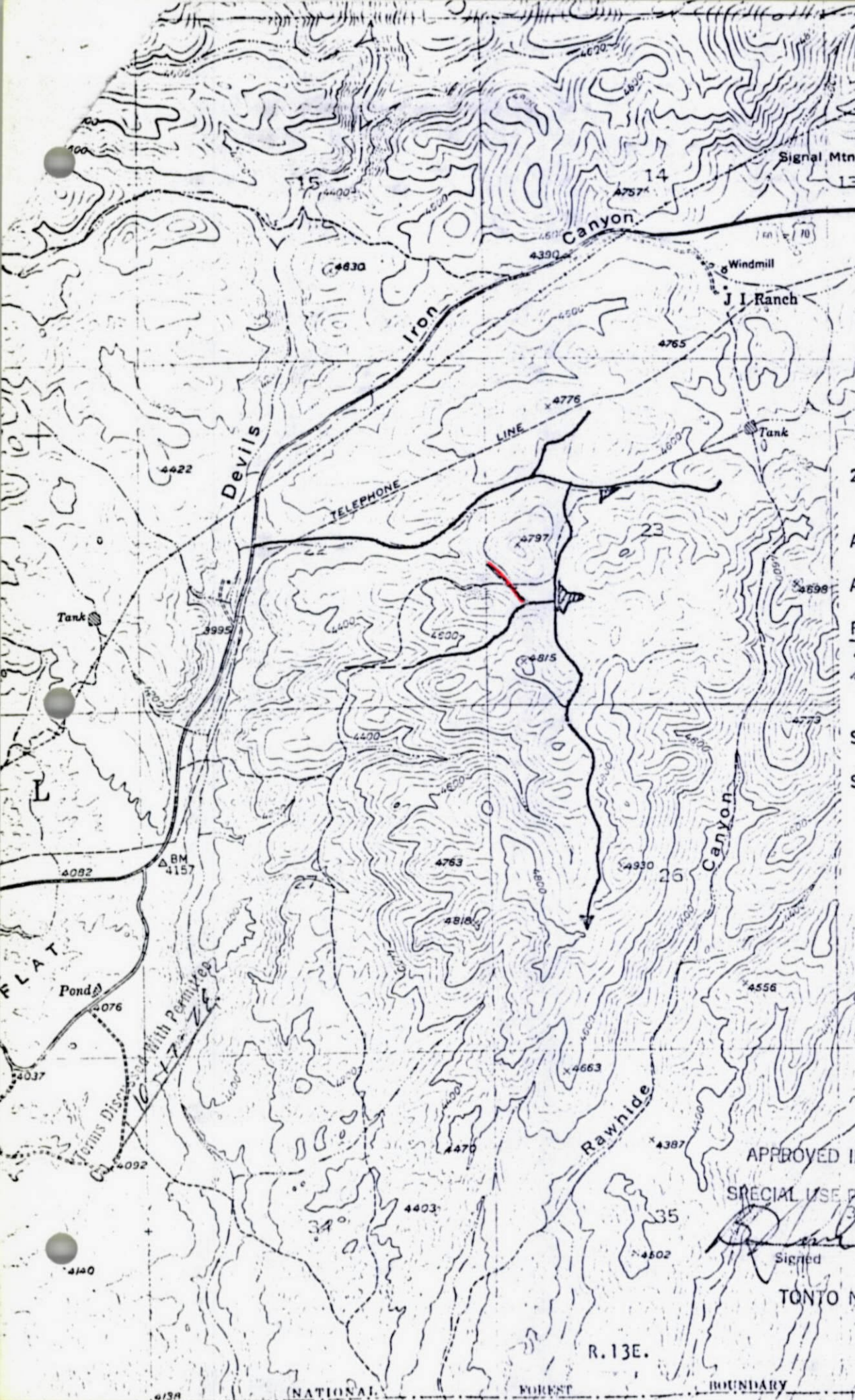
- To extend the access road, starting from an existing drill pad an additional 900 feet to prepare a proposed drill pad as shown on the attached map.
- All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analysis report and letter of understanding.

"Terms Discussed With Permittee  
On 10-17-78."

This Amendment is accepted subject to the conditions set forth herein, and to conditions \_\_\_\_\_ to \_\_\_\_\_ attached hereto and made a part of this Amendment.

|                 |                                                             |                                                       |                         |
|-----------------|-------------------------------------------------------------|-------------------------------------------------------|-------------------------|
| PERMITTEE       | NAME OF PERMITTEE<br>ASARCO                                 | SIGNATURE OF AUTHORIZED OFFICER<br><i>[Signature]</i> | DATE<br><u>10/17/78</u> |
| ISSUING OFFICER | NAME AND SIGNATURE<br><i>[Signature]</i><br>BRUCE B. HROVER | TITLE<br>FOREST SUPERVISOR                            | DATE<br><u>9-15-78</u>  |





2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 6

**ROADS**  
 Present  
 To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

5/12/78 Date  
*JW Bell*

APPROVED IN ACCORDANCE WITH  
 SPECIAL USE PERMIT DATED SEP 15 1978  
*R. J. [Signature]*  
 Signed Title Date

TONTO NATIONAL FOREST

R. 13E.

NATIONAL FOREST BOUNDARY



AMENDMENT #7

United States Department of Agriculture  
Forest Service

AMENDMENT  
FOR  
SPECIAL USE PERMIT  
Ref: FSM 2714

THIS AMENDMENT IS ATTACHED TO AND MADE A PART  
OF THE

TERM

ANNUAL PERMIT

a. Record no. (1-2)

70

b. Region (3-4)

03

c. Forest (5-6)

12

d. District (7-8)

02

e. User number (9-12)

2730

f. Kind of use (13-15)

220

g. State (16-17)

04

h. County (18-20)

021

k. Card no. (21)

1

For Road Right-of-Way issued to \_\_\_\_\_  
(KIND OF PERMIT)  
American Smelting & Refining Company, on 5-20-71  
(NAME OF PERMITTEE) (DATE OF PERMIT)

which is hereby amended as follows:

1. To revamp a hillside road presently in use and to extend by construction a road with drill pad some 2,600 feet in length, as shown on the attached map.
2. All specifications and conditions of the amendment are the same as those in the original permit, environmental analysis report and letter of understanding.

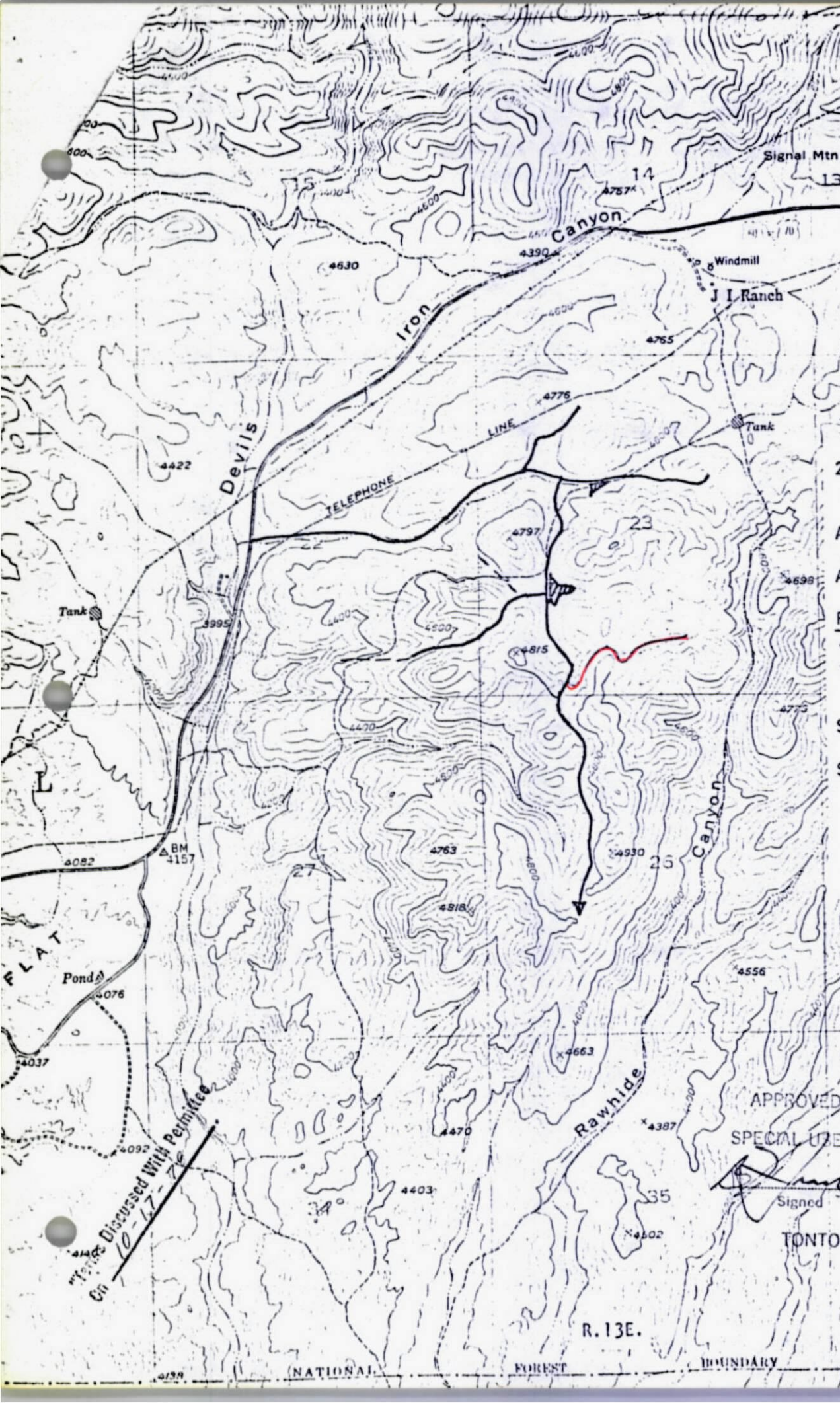
"Terms Discussed With Permittee  
On 10-17-78"

This Amendment is accepted subject to the conditions set forth herein, and to conditions \_\_\_\_\_ to  
attached hereto and made a part of this Amendment.

|                 |                                                               |                                                                                    |                  |
|-----------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|------------------|
| PERMITTEE       | NAME OF PERMITTEE<br>ASARCO                                   | SIGNATURE OF AUTHORIZED OFFICER<br><i>ASARCO</i><br>TITLE <i>Geologist, Jewell</i> | DATE<br>10/17/78 |
| ISSUING OFFICER | NAME AND SIGNATURE<br><i>Bruce B. Irons</i><br>BRUCE B. IRONS | TITLE<br>FOREST SUPERVISOR                                                         | DATE<br>9-15-78  |

2700-23 (3/72)





2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 7

**ROADS**  
 Present  
 To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

Date  
 5/12/78  
*[Signature]*

"Permit Discussed With Permittee"  
 On 10-17-78

APPROVED IN ACCORDANCE WITH  
 SPECIAL USE PERMIT DATED SEP 15 1978  
 Forest Supervisor 9-15-78  
 Signed *[Signature]* Title Date

TONTO NATIONAL FOREST

R. 13E.

(NATIONAL) FOREST BOUNDARY

Oct 1975

Use the new Operating Plan form 2810  
for work on N.F. (Tonto).

The Mineral Engineer states that on complex  
type jobs w/ multiple aspects, it is best to submit  
individual plans so that if one "sticky" plan is  
involved then it will not slow up all the others.

He will be glad to go along & help fill out  
sheet so that all can be approved at the  
local District level & not have to go to  
Phoenix.

JDS- 4/24/79  
Globe District  
Tonto NAT'L Forest

WALLACE RUTLEDGE

- Resigned

DAVE CUTCHEM

- Transf. Flagstaff

DAVE STEWART

- New District Ranger

off. MAY 1<sup>st</sup>.

U. of A. Graduate

Rge Mgmt.



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Tonto National Forest  
102 South 28th Street  
P. O. Box 29070  
Phoenix, AZ 85038

*Have not yet  
discussed cost etc  
w/ Pleasant for FTG  
Jed. 10/15/79*

2730  
(2810)

October 12, 1979

ASARCO Incorporated

OCT 15 1979

SW Exploration



Mr. R.B. Crist  
Property Manager  
ASARCO Inc.  
P.O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Crist:


We have reviewed your proposed Amendment #8 to the Special Use Permit dated May 20, 1971. Please excuse the delay in resolving this matter.

It is our understanding that the short piece of road you wish to construct is located on one of your mining claims. As such, the new mining regulations provide that this activity be approved by an Operating Plan submitted to the District Ranger.

We are enclosing a standard Tonto Operating Plan for your convenience. Please submit it to the Globe District Ranger at your earliest convenience. It is our intention to place all roads on mining claims under Operating Plans rather than Special Use Permits.

You also indicated your company desired to give up and put to bed a section of road on the east side of Devils Canyon, located in the middle of Section 22. If you no longer need this right-of-way, you should submit a specific request for termination of that part of the Special Use Permit dated May 20, 1971. It will then be up to the District Ranger to recommend whether the road should be put to bed, or whether maintenance should be assumed by the Forest Service in the public interest. We will attempt to expedite this determination so there will be no further delay.

Your cooperation in this matter is much appreciated, and we feel sure it can be resolved in an equitable manner.

*Jed*  
  
JOHN C. BEDELL  
Acting Forest Supervisor

Enclosure

**OPERATING PLAN**

Tonto National Forest

Date Received \_\_\_\_\_

\_\_\_\_\_ Ranger District

\_\_\_\_\_ County

\_\_\_\_\_ Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

**A. OPERATOR**

Name of Operator \_\_\_\_\_ Telephone No. \_\_\_\_\_

Address of Operator \_\_\_\_\_  
\_\_\_\_\_

Name of Field Representative \_\_\_\_\_  
(if other than Operator)

Address and phone of Field Representative \_\_\_\_\_  
\_\_\_\_\_

**B. CLAIM IDENTIFICATION**

The name(s) of the claim(s) on which the operation will be conducted are:

| NAME OF CLAIM TO BE WORKED<br>( ) Lode ( ) Tunnel Site<br>( ) Placer ( ) Mill Site | LOCATION<br>(Sec., Township & Range) | LOCATION<br>DATE | Recorded |      |
|------------------------------------------------------------------------------------|--------------------------------------|------------------|----------|------|
|                                                                                    |                                      |                  | Docket   | Page |
|                                                                                    |                                      |                  |          |      |



C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

|        |           |         |
|--------|-----------|---------|
| _____  | _____     | _____   |
| _____  | _____     | _____   |
| _____  | _____     | _____   |
| (Name) | (Address) | (Phone) |

The above owner has authorized this operation through (check one): ( ) lease, ( ) contract, ( ) direct employment, ( ) Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: \_\_\_\_\_  
 (describe access from point of  
 entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle | License or Serial No.<br>(where known) | Location |
|------------------------|----------------------------------------|----------|
|                        |                                        |          |

G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

I. PERIOD OF OPERATION

This operation will begin on \_\_\_\_\_ (a date not prior to date of approval. This operation will be completed on \_\_\_\_\_ (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

1. Exhibit A - map
- 2.

Submitted by:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



# ASARCO

J.D. Sell

Exploration Department  
Southwestern United States Division  
R. B. Crist  
Property Manager

June 29, 1978

Mr. Wallace C. Rutledge  
Globe District Ranger  
Route #1, Box 33  
Globe, Arizona 85501

2730 Right-of-Way Grants  
ASARCO Incorporated  
Road 2/20/71  
Ref: FSM 2714

Dear Mr. Rutledge:

Enclosed please find four copies of a plat map which outlines a proposal for an eighth amendment to the Special Use Permit issued to Asarco on May 20th, 1971.

1. To remove the gate, fence off and scarify the existing drill access road on the east side of Devils Canyon, located in the middle of Section 22, as shown on the attached map.
2. To replace the road access in 1 above, with approximately 200 feet on Forest land from the J.I. Ranch headquarters, in the NE $\frac{1}{4}$  of Section 23, as shown on the attached map.
3. All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analysis report and letter of understanding.

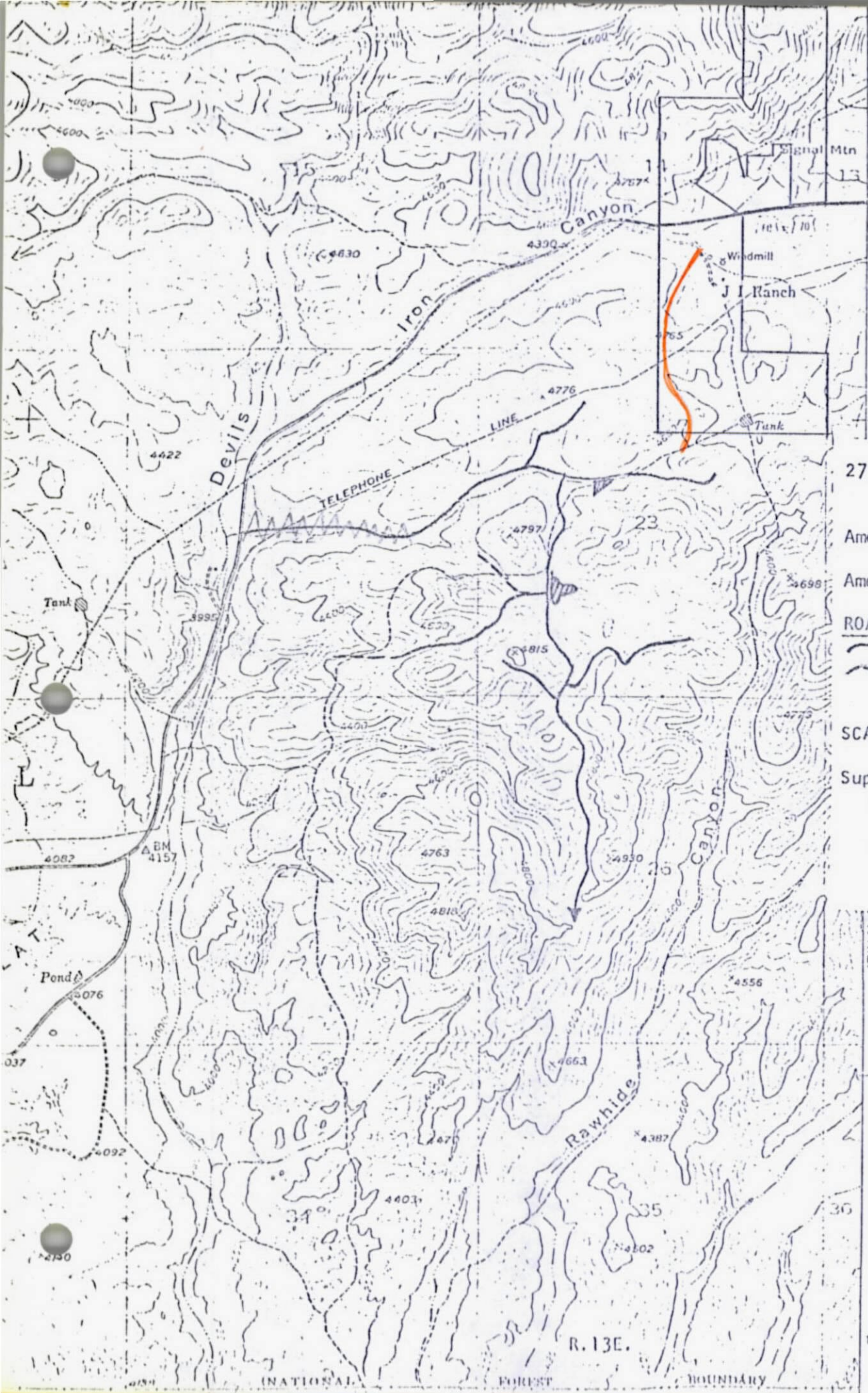
The proposed extension has been field-checked by a contractor and has been flagged on the ground and is available for inspection. The road and site will not be visible from U.S. 60-70.

Very sincerely,

  
R. B. Crist.



RBC:jlh  
encls plats (4)  
c.c. Dave Crutchen, w/attmt  
J.D. Sell  
N.P. Whaley





2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 8.

ROADS  
 Present  
 To be constructed

SCALE:  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

6/30/78 Date



M. Mc Swat, New Wells  
bid on the total road job  
and compare their footage-  
hourly costs, with Bryant's -  
if indeed they would  
ever bid on it.

~~FTG~~  
JD Sell  
I'd have to see  
on map, \$20,000 for  
convenience.

I brought up subject of  
Bryant and road building with  
Paul ~~would do a~~  
~~cost plus?~~ and told him that  
probably the best thing to  
do with Paul Bryant is  
put him on a cost plus  
contract - he's worked  
long enough for us to know  
that he won't screw us and  
contract price puts him under the  
gun with potentially putting him  
out of business.  
One way of checking  
would be to have

JD Sell

Superior E

We should get started immediately ~~to~~ on road work for P-2, 6, and 7. Any added confirmations needed from USFS for road permits should be acquired now. Bryant can start any time.

FTG

cc: EBCrist  
NPUhaley

1/10/80

Bryant Construction Company  
843 Spray Street  
Superior, Az. 85273

*ELG. JDS-APW*  
*12-26-79*  
*WLockhart: Any thoughts?*  
*FTG*

Dec. 20, 1979

ASARCO Incorporated

DEC 26 1979

SW Exploration

Mr. R. B. Crist  
Asarco Incorporated  
P.O. Box 5747  
Tucson, Arizona 85703

Dear Bob:

In response to your request for an estimate of cost for the construction of a new road from the JI Ranch headquarters area to a point of tie in with your existing road system— an alignment which Walt Lockhart and I walked out around the middle of November. I can only say that you are probably looking at something in the realm of \$20,000.

Please understand that this does not represent a guaranteed cost. Uncertainties Principally in the type of blasting which will be involved, make it difficult to give you more than this realm figure.

This price does not include any culverts if installed and I recommend culverts if this is going to be a permanent road.

If this new road work could be combined with other work in the same area it would minimize costs for both of us.

Very Truly Yours

*Paul Bryant*

4  
Rod Byers

Mineral-Special Use-Recreation Ranger

Globe

2/1/80 →

actually came in June of 79

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Tonto National Forest  
Globe Ranger District  
Globe, Arizona

2730 Right-of-Way Grants  
Road 5/20/71

March 4, 1980

ASARCO Incorporated

MAR - 5 1980

Sr. Exploration



Mr. R.B. Crist  
ASARCO, Inc.  
P. O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Crist:

Enclosed is your approved Operating Plan, Amendment #9, Rod Byers discussed with you consolidation of all ~~current~~ and planned road construction and drilling operations on one updated operating plan and closing the old permit and 'Letter of Understanding'. Since you need to be working on the drill site indicated on Amendment #9, I have approved it for the interim while we work out the provisions for the updated operating plan.

We are in agreement that an updated copy will be much easier to work with than is the unwieldy package of current permits. I appreciate your cooperation.

Sincerely,

*George C. Martinez*

GEORGE MARTINEZ  
Acting District Forest Ranger

Enclosure

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of blanket bond posted in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

Rodney E Byers  
Signature of Forest Service  
Evaluator

3/13/80  
Date

Approved by:

George C Martz ADR  
Signature of Authorized  
Officer

3/3/80  
Date

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
Signature of Operator

\_\_\_\_\_  
Date



*Red. Byers*

OPERATING PLAN  
AMENDMENT No.9  
Tonto National Forest

Date Rec'd \_\_\_\_\_

Globe Ranger District  
Pinal County  
Pioneer Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

A. OPERATOR

Name of Operator ASARCO Incorporated 792-3010  
Telephone No.

Address of Operator P. O. Box 5747  
Tucson, Arizona 85703

Name of Field Representative \_\_\_\_\_  
(if other than Operator)  
Address and phone of Field Representative \_\_\_\_\_

B. CLAIM IDENTIFICATION

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br>(X) Lode ( ) Tunnel Site<br>( ) Placer ( ) Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|-----------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                             |                                          |                  | Book or<br>Docket | Page |
| Margaret No.251                                                             | T1S, R13E,<br>Sec.23                     | 2/15/69          | 561               | 580  |

C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

|                               |                                       |                       |
|-------------------------------|---------------------------------------|-----------------------|
| <u>ASARCO Incorporated</u>    | <u>P.O.Box 5747, Tucson, Az 85703</u> | <u>(602) 792-3010</u> |
| <u>with lease-option from</u> | _____                                 | _____                 |
| <u>CanUS and</u>              | _____                                 | _____                 |
| <u>Continental Materials</u>  | _____                                 | _____                 |
| (Name)                        | (Address)                             | (Phone)               |

The above owner has authorized this operation through (check one): (X) lease, ( ) contract, ( ) direct employment, ( ) Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: along side of USFS Right-of-Way,  
(describe access from point of  
Grant Amendments #2 (approved) and #7 (approved) to Asarco.  
entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle                                                                                                     | License or Serial No. | Location                                                           |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------|
| D-8 Cat w/dozer & ripper<br>H-60E front-end loader<br>600 cfm air compressor<br>L-900, 12-yd dump truck<br>580-BRC backhoe | A-43332               | Paul Bryant Construc-<br>tion; 843 Spray St;<br>Superior, Az 85273 |

Paul Bryant Construction Company  
843 Spray Street  
Superior, Arizona 85273  
Tel: 689-2627

Lic.#A-43332

---

| <u>Unit</u>                            | <u>Serial Number</u> |
|----------------------------------------|----------------------|
| Kenworth, 12-yd dump truck             | 11 50 76             |
| Ford, L-900, 12-yd dump truck          | S-909 VM 94356       |
| Case, 580-C, backhoe                   | 89 66 39 3           |
| Ingersol, 160 cfm air compressor       | 7 35 71 U 73-250     |
| Gardner Denver, 600 cfm air compressor | GD 211 627           |
| Hough, 2½-yd, H-60E front-end loader   | 2771                 |
| Catapiller, D-8H, dozer and ripper     | 46 A 62 32           |

G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

Drill site location approximately 60 feet by 200 feet with tie in access. Work to be performed as under previous amendments and supplements.

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analyses report, and letter of understanding.

I. PERIOD OF OPERATION

This operation will begin on or near date of approval (a date not prior to date of approval. This operation will be completed on or within 60 days. (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

- 1. Exhibit A - map of claims
- 2. Exhibit B - map of location
- 3. Exhibit C - BLM plat

Submitted by:

R. B. Crut  
Signature

1/24/80  
Date

APPROVAL

## 1. Approval of this Operating Plan:

- (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
- (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

\_\_\_\_\_  
Signature of Forest Service  
Evaluator\_\_\_\_\_  
Date

Approved by:

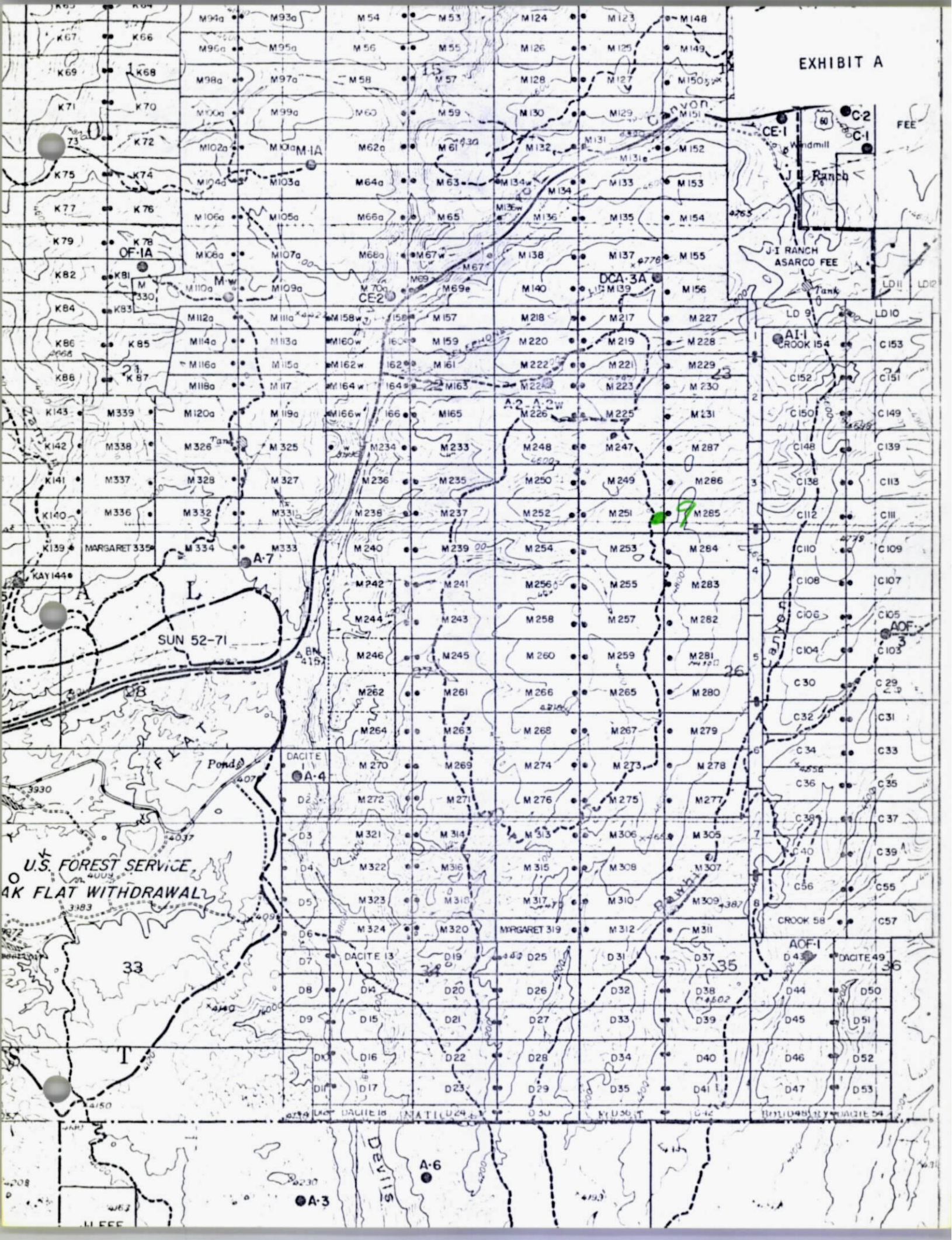
\_\_\_\_\_  
Signature of Authorized  
Officer\_\_\_\_\_  
DateACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
Signature of Operator\_\_\_\_\_  
Date



EXHIBIT A



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CE-1  
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Tank  
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LD12

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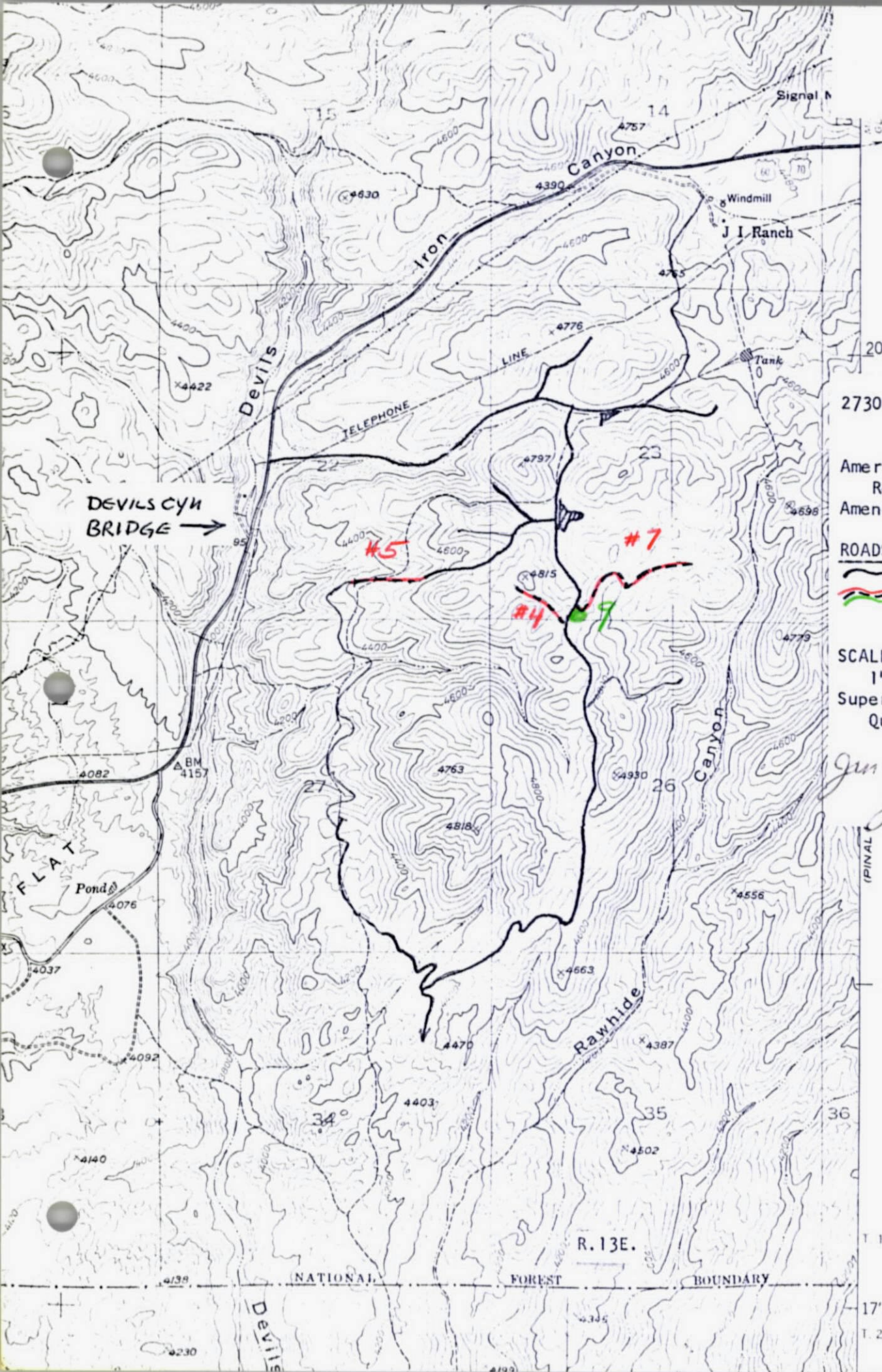
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D26  
D32  
D38  
D44  
D50  
D16  
D22  
D28  
D34  
D40  
D46  
D52  
D17  
D23  
D29  
D35  
D41  
D47  
D53  
DACITE 16  
D24  
D30  
D36  
D42  
D48  
D54  
A-3  
A-6  
DEWIS

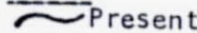

C30  
C29  
C32  
C31  
C34  
C33  
C36  
C35  
C38  
C37  
C40  
C39  
C56  
C55  
CROOK 58  
C57  
AOF-1  
D43  
DACITE 49  
D44  
D50  
D45  
D51  
D46  
D52  
D47  
D53  
DACITE 54





2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 9

ROADS  
 Present  
 To be constructed

SCALE:  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

*Jun. 23, 80* Date  
*JRS*

(FINAL)

T 1 S  
 17'30"  
 T 2 S

NATIONAL FOREST BOUNDARY

R. 13E.

DEVLIS CYN BRIDGE →

FLAT Pond

J I Ranch

Signal

Windmill

Tank

TELEPHONE LINE

Iron Canyon

Rawhide Canyon

Devils Canyon

Devils

630

4390

4757

4422

4776

20'

4797

#5

#7

#4

#6

4082

BM 4157

4815

SCALE:

1" = 2000 ft.

Superior 7-1/2'

Quadrangle

Date

4076

4763

4930

26

Canyon

4818

4556

4663

4387

4470

Rawhide

34

4403

35

4502

36

4140

4138

NATIONAL

FOREST

BOUNDARY

4230

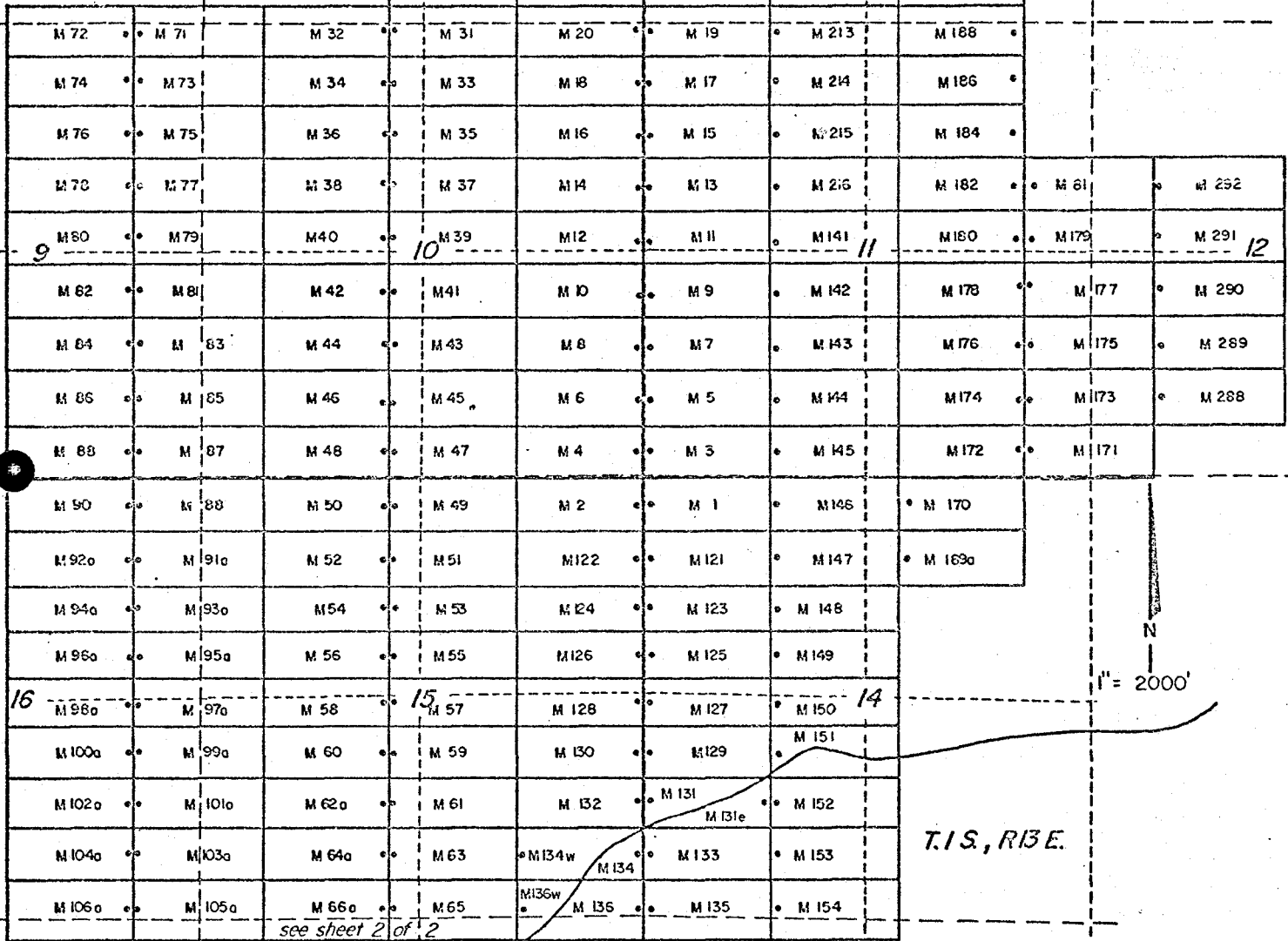
4345

4192

C

|       |              |       |       |
|-------|--------------|-------|-------|
| M 329 | MARGARET 304 | M 303 | M 298 |
|       | M 302        | M 301 | M 296 |
|       | M 300        | M 299 | M 168 |
|       | M 202        | M 201 | M 200 |

All claim bearings north-south x east-west. All claims claim an area 600 x 600 having wood posts, with a cross section greater than 1.5" in each corner and for each monument.



THE MARGARET LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

CLAIMS

**LODE CLAIM**

MARGARET 1-16  
MARGARET 17-46  
MARGARET 47-58, 91-105  
MARGARET 169-212 (excl. 190, 192)  
MARGARET 59-66, 121-132, 141-146  
MARGARET 133-136  
MARGARET 147-152  
MARGARET 288-292  
MARGARET 153, 154  
MARGARET 299-304  
MARGARET 297  
MARGARET 329  
MARGARET 83-90  
MARGARET 71-82  
MARGARET 131e, 134w, 136w  
MARGARET 91a-106a  
MARGARET 62a, 64a, 66a

**ORIG. LOCATION NOTICE / DATE**

Can. U.S. Ltd. 1-19-69  
5326 E. 7th Street 1-25-69  
Tucson, Az. 85711 1-27-69  
1-29-69  
1-30-69  
1-31-69  
2-1-69  
2-22-69  
3-4-69  
3-26-69  
3-27-69  
4-11-69  
4-17-69  
4-18-69  
4-29-69  
5-28-69  
6-2-69

**AMENDED LOCATION NOTICE / DATE**

MARGARET 28, 24, 59, 126, 128, 134, 134w, 171, 177, 180, 186, 192, 205, 214 Continental Copper Inc. 6-25-69  
P.O. Box 662  
Oracle, Az. 85623  
MARGARET 64a, 177 11-13-69  
MARGARET 184, 186, 188, 213-215 ASARCO Incorporated 4-11-74  
P.O. Box 5747  
Tucson, Az. 85703  
MARGARET 184, 186, 188 11-15-75  
MARGARET 190, 192, 194, 196, 198 11-16-75  
MARGARET 200, 206, 298 11-17-75  
MARGARET 296, 298 3-24-76  
MARGARET 177, 178, 179, 180 3-31-76  
MARGARET 171-176 4-1-76

**OWNERSHIP HELD BY**

ASARCO Incorporated  
P.O. Box 5747  
Tucson, Az. 85703  
And  
Continental Copper Inc.  
P.O. Box 662  
Oracle, Az. 85623

BETH 1 & 2

Continental Copper Inc.  
P.O. Box 662  
Oracle, Az. 85623  
ASARCO Incorporated  
P.O. Box 5747  
Tucson, Az. 85703

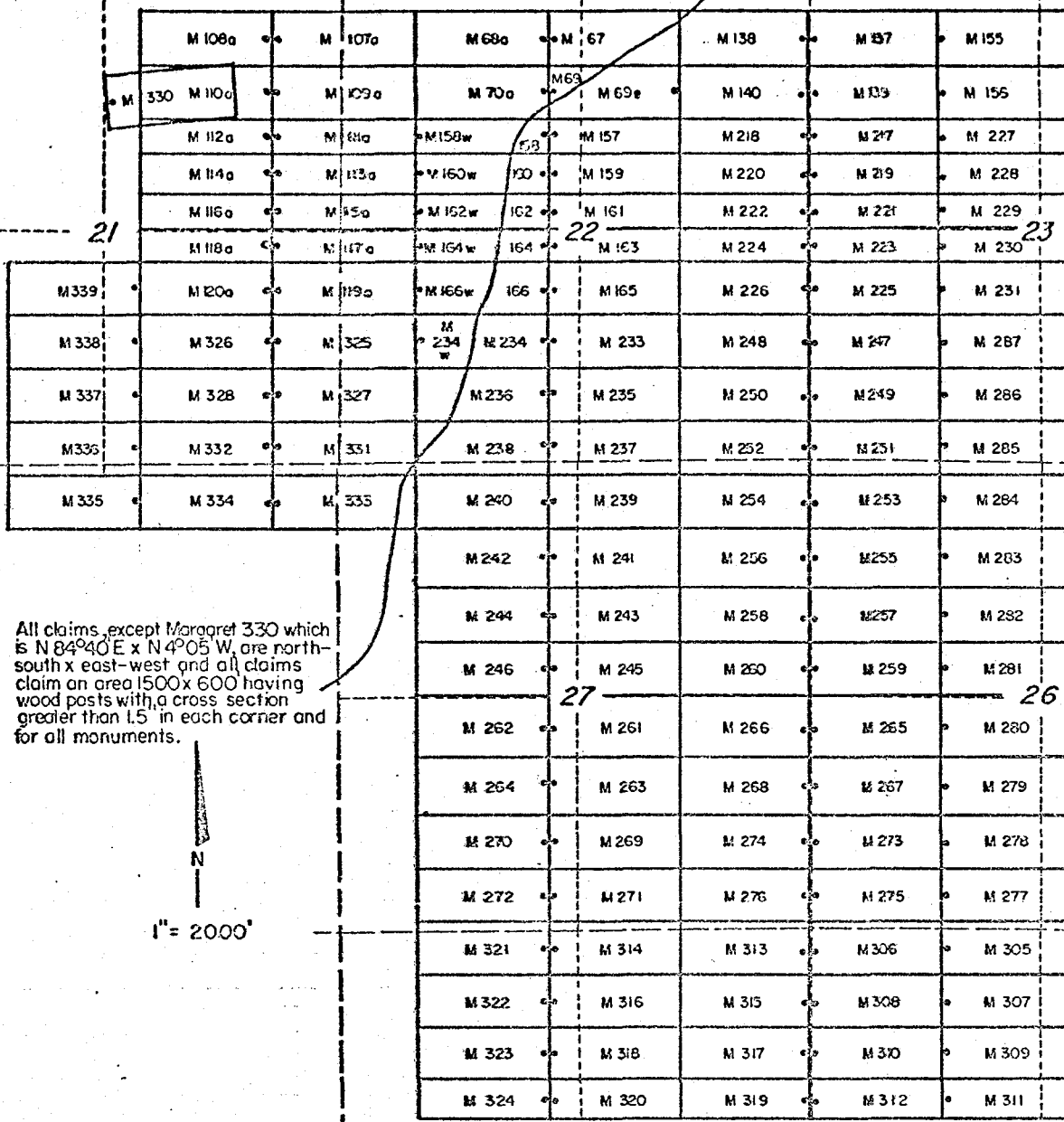
SHEET 1 OF 2

LODE CLAIMS  
IN  
PINAL COUNTY

ASARCO Incorporated  
150 NORTH 7TH AVENUE  
TUCSON, ARIZONA 85703



see sheet 1 of 2



All claims, except Margaret 330 which is N 84°40' E x N 4°05' W, are north-south x east-west and all claims claim an area 1500x 600 having wood posts with a cross section greater than 1.5 in each corner and for all monuments.



THE MARGARET \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST. CLAIMS

| LODE CLAIM                                             | ORIG. LOCATION NOTICE / DATE   | AMENDED LOCATION NOTICE / DATE                       | OWNERSHIP HELD BY       |
|--------------------------------------------------------|--------------------------------|------------------------------------------------------|-------------------------|
| MARGARET 107-116                                       | Can. U.S. Ltd. 1-27-69         | MARGARET 133, 140, 225, 226, 236, 242, 244, 248, 330 | ASARCO Incorporated     |
| MARGARET 67, 68                                        | 5326 E. 7th Street 1-30-69     | MARGARET 332, 335, 70a, 164, 225, 330                | P.O. Box 5747           |
| MARGARET 137-140, 159-166, 217-226, 233, 234, 247, 248 | Tucson, Az 65711 1-31-69       | MARGARET 331                                         | Tucson, Az. 85703       |
| MARGARET 69, 70, 117-120, 157, 158                     | 2-1-69                         |                                                      | and                     |
| MARGARET 261-264, 269-272, 235-246                     | 2-6-69                         |                                                      | Continental Copper Inc. |
| MARGARET 249-260, 265-268, 273-282                     | 2-15-69                        |                                                      | P.O. Box 662            |
| MARGARET 155, 156                                      | 3-4-69                         |                                                      | Oracle, Az 85623        |
| MARGARET 227-231, 287                                  | 3-14-69                        |                                                      |                         |
| MARGARET 305-320                                       | 3-19-69                        |                                                      |                         |
| MARGARET 325-328                                       | 3-20-69                        |                                                      |                         |
| MARGARET 283-286, 321-324                              | 4-10-69                        |                                                      |                         |
| MARGARET 330                                           | 4-15-69                        |                                                      |                         |
| MARGARET 69e, 162w, 164w, 166w, 159w, 160w, 234w       | 4-29-69                        |                                                      |                         |
| MARGARET 66a, 70a, 117a-120a                           | Continental Copper Inc. 6-2-69 |                                                      |                         |
| MARGARET 331-339                                       | P.O. Box 662 6-3-69            |                                                      |                         |
|                                                        | Oracle, Az 85623               |                                                      |                         |

SHEET 2 OF 2  
 LODE CLAIMS  
 IN  
 PINAL COUNTY  
 ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703

10

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by: Rodney S. Byers 3/28/80  
 Signature of Forest Service Evaluator Date

Approved by: David M. Stewart 3/28/80  
 Signature of Authorized Officer Date

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
 Signature of Operator Date

Date Rec'd \_\_\_\_\_

Globe Ranger District  
Pinal County  
Pioneer Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

**A. OPERATOR**

Name of Operator ASARCO Incorporated Telephone No. 792-3010  
 Address of Operator P. O. Box 5747  
Tucson, Arizona 85703  
 Name of Field Representative \_\_\_\_\_  
 (if other than Operator)  
 Address and phone of Field Representative \_\_\_\_\_

**B. CLAIM IDENTIFICATION**

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br>(X) Lode ( ) Tunnel Site<br>( ) Placer ( ) Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|-----------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                             |                                          |                  | Book or<br>Docket | Page |
| Margaret No. 247                                                            | T1S, R13E,<br>Sec. 22 & 23               | 1/31/69          | 559               | 896  |
| Margaret No. 248                                                            | " "                                      | "                | "                 | 897  |

**C. CLAIM OWNER**

The owner(s) of the above claim(s) are as follows:

ASARCO Incorporated \_\_\_\_\_ P.O.Box 5747, Tucson, Az 85703 (602) 792-3010  
 with lease-option from  
 Canlis and Continental Materials \_\_\_\_\_

(Name)

(Address)

(Phone)

The above owner has authorized this operation through (check one):  lease,  
 contract,  direct employment,  Other (explain)

**D. MAPS**

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

**E. ACCESS**

The proposed route of access is: from road covered in USFS Amendment #2  
 (describe access from point of  
 (approved).

entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

**F. VEHICLES AND EQUIPMENT**

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle                                                                                                        | License or Serial No. | Location                                                            |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------|
| D-8 Cat w/dozer & ripper<br>H-60E front-end loader<br>600 cfm air compressor<br>L-900, 12-yd dump truck<br>580 - BRC backhoe. | A-43332               | Paul Bryant Construction;<br>843 Spray Street<br>Superior, Az 85273 |



Paul Bryant Construction Company  
843 Spray Street  
Superior, Arizona 85273  
Tel: 689-2627

Lic.#A-43332

---

| <u>Unit</u>                            | <u>Serial Number</u> |
|----------------------------------------|----------------------|
| Kenworth, 12-yd dump truck             | 11 50 76             |
| Ford, L-900, 12-yd dump truck          | S-909 VM 94356       |
| Case, 580-C, backhoe                   | 89 66 39 3           |
| Ingersol, 160 cfm air compressor       | 7 35 71 U 73-250     |
| Gardner Denver, 600 cfm air compressor | GD 211 627           |
| Hough, 2½-yd, H-60E front-end loader   | 2771                 |
| Catapiller, D-8H, dozer and ripper     | 46 A 62 32           |

Page 3 of 3  
G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

Drilling and blasting drill road access of approximately 1,000 feet to site on ridge. Work to be performed as under previous amendments and supplements.

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analyses report, and letter of understanding.

I. PERIOD OF OPERATION

This operation will begin on or near date of approval (a date not prior to date of approval. This operation will be completed on or within 120 days (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

- 1. Exhibit A - map of claims
- 2. Exhibit B - map of location
- 3. Exhibit C - BLM plat

Submitted by:

*R. B. Cunt*

Signature

*1/24/80*

Date

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

|                                       |      |
|---------------------------------------|------|
|                                       |      |
| Signature of Forest Service Evaluator | Date |

Approved by:

|                                 |      |
|---------------------------------|------|
|                                 |      |
| Signature of Authorized Officer | Date |

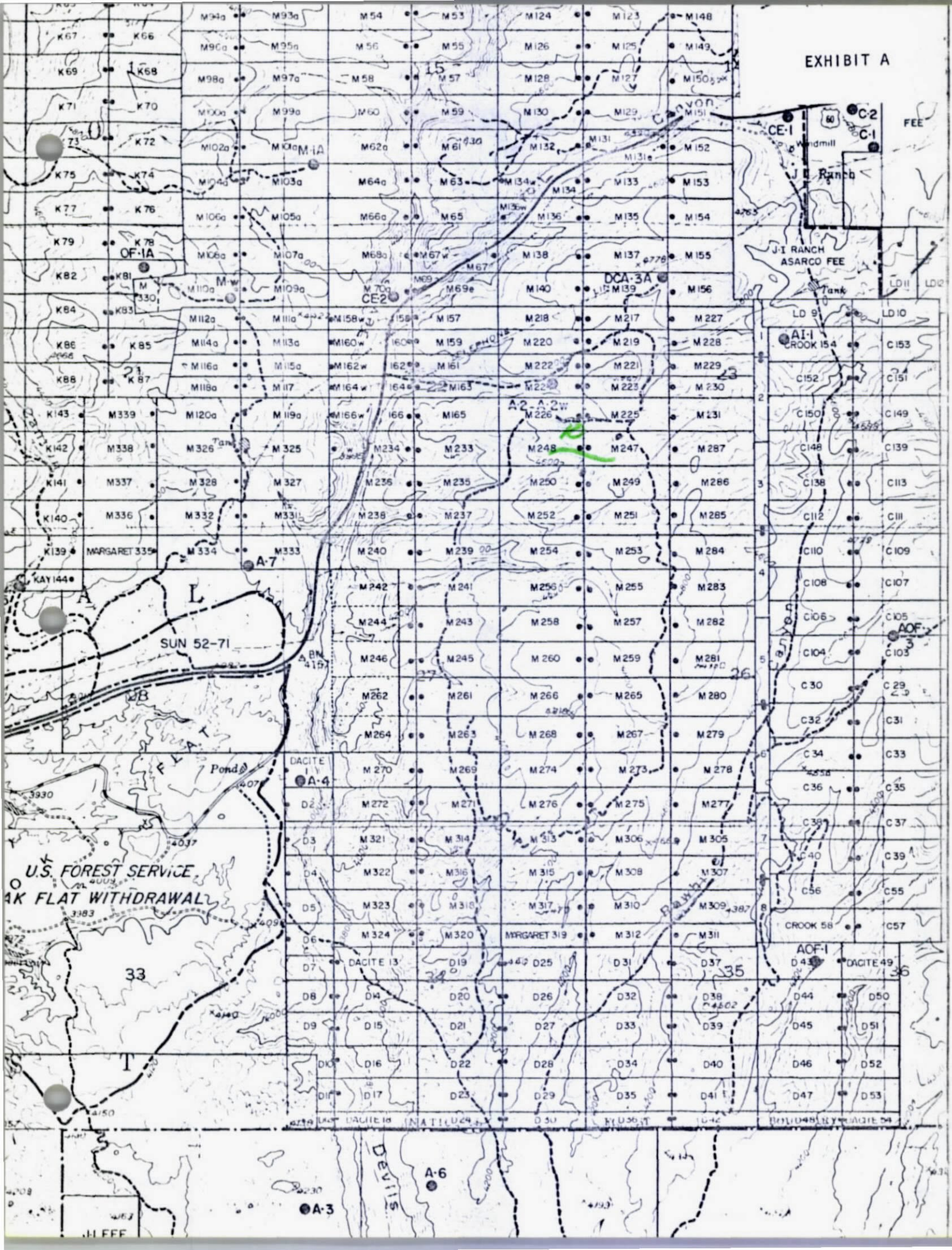
ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

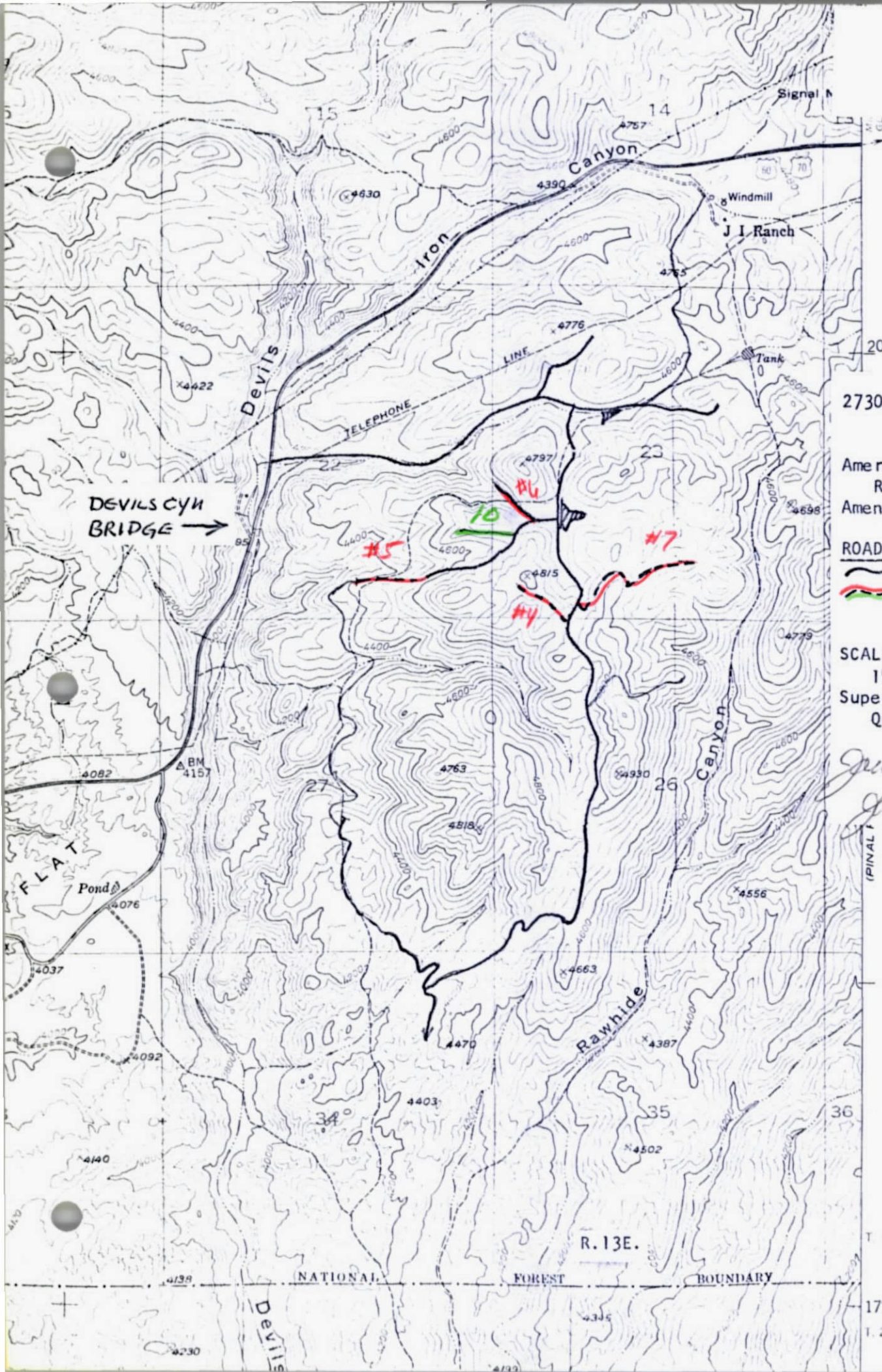
|                       |      |
|-----------------------|------|
|                       |      |
| Signature of Operator | Date |



EXHIBIT A









2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 10

ROADS

 Present  
 To be constructed

SCALE:

1" = 2000 ft.  
Superior 7-1/2' Quadrangle

*Jan. 23, 80* Date

*J.P.S.*

(FINAL)

R. 13E.

NATIONAL FOREST BOUNDARY

T 1 S

17'30"

T 2 S



|       |              |       |       |
|-------|--------------|-------|-------|
| M 329 | MARGARET 304 | M 303 | M 298 |
|       | M 302        | M 301 | M 296 |
|       | M 300        | M 299 | M 168 |
|       | M 202        | M 201 | M 200 |

All claim bearings north-south x east-west. All claims claim an area 600x600 having wood posts, with a cross section greater than 1.5" in each corner and for each monument.

|        |        |       |      |        |       |       |        |       |       |  |  |
|--------|--------|-------|------|--------|-------|-------|--------|-------|-------|--|--|
| M 72   | M 71   | M 32  | M 31 | M 20   | M 19  | M 213 | M 188  |       |       |  |  |
| M 74   | M 73   | M 34  | M 33 | M 18   | M 17  | M 214 | M 186  |       |       |  |  |
| M 76   | M 75   | M 36  | M 35 | M 16   | M 15  | M 215 | M 184  |       |       |  |  |
| M 78   | M 77   | M 38  | M 37 | M 14   | M 13  | M 216 | M 182  | M 81  | M 252 |  |  |
| M 80   | M 79   | M 40  | M 39 | M 12   | M 11  | M 141 | M 180  | M 179 | M 291 |  |  |
| M 82   | M 81   | M 42  | M 41 | M 10   | M 9   | M 142 | M 178  | M 177 | M 290 |  |  |
| M 84   | M 83   | M 44  | M 43 | M 8    | M 7   | M 143 | M 176  | M 175 | M 269 |  |  |
| M 86   | M 85   | M 46  | M 45 | M 6    | M 5   | M 144 | M 174  | M 173 | M 288 |  |  |
| M 88   | M 87   | M 48  | M 47 | M 4    | M 3   | M 145 | M 172  | M 171 |       |  |  |
| M 90   | M 88   | M 50  | M 49 | M 2    | M 1   | M 146 | M 170  |       |       |  |  |
| M 92a  | M 91a  | M 52  | M 51 | M 122  | M 121 | M 147 | M 169a |       |       |  |  |
| M 94a  | M 93a  | M 54  | M 53 | M 124  | M 123 | M 148 |        |       |       |  |  |
| M 96a  | M 95a  | M 56  | M 55 | M 126  | M 125 | M 149 |        |       |       |  |  |
| M 98a  | M 97a  | M 58  | M 57 | M 128  | M 127 | M 150 |        |       |       |  |  |
| M 100a | M 99a  | M 60  | M 59 | M 130  | M 129 | M 151 |        |       |       |  |  |
| M 102a | M 101a | M 62a | M 61 | M 132  | M 131 | M 152 |        |       |       |  |  |
| M 104a | M 103a | M 64a | M 63 | M 134w | M 134 | M 153 |        |       |       |  |  |
| M 106a | M 105a | M 66a | M 65 | M 136w | M 136 | M 135 | M 154  |       |       |  |  |

N  
1" = 2000'

T. I. S., R. 13 E.

see sheet 2 of 2

THE MARGARET CLAIMS LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

**LODE CLAIM**  
 MARGARET 1-16  
 MARGARET 17-46  
 MARGARET 47-58, 91-106  
 MARGARET 169-212 (excl. 190, 192)  
 MARGARET 59-66, 121-132, 141-146  
 MARGARET 133-136  
 MARGARET 147-152  
 MARGARET 283-292  
 MARGARET 153, 154  
 MARGARET 299-304  
 MARGARET 297  
 MARGARET 329  
 MARGARET 83-90  
 MARGARET 71-82  
 MARGARET 131a, 134w, 136w  
 MARGARET 91a-106a  
 MARGARET 62a, 64a, 66a

**ORIG. LOCATION NOTICE / DATE**  
 Con. U.S. Ltd. 1-19-69  
 5326 E. 7th Street 1-25-69  
 Tucson, Az. 85711 1-27-69  
 1-29-69  
 1-30-69  
 1-31-69  
 2-1-69  
 2-22-69  
 3-4-69  
 3-26-69  
 3-27-69  
 4-11-69  
 4-17-69  
 4-18-69  
 4-29-69  
 5-28-69  
 6-2-69  
 Continental Copper Inc. P.O. Box 662  
 Oracle, Az. 85623  
 ASARCO Incorporated P.O. Box 5747  
 Tucson, Az. 85703

**AMENDED LOCATION NOTICE / DATE**  
 MARGARET 28, 24, 59, 126, 128, 134, 134w, 171, 177, 180, 186, 192, 205, 214  
 MARGARET 64a, 177  
 MARGARET 184, 186, 188, 213-215  
 MARGARET 184, 186, 188, 190, 198  
 MARGARET 200, 296, 298  
 MARGARET 296, 298  
 MARGARET 177, 170, 179, 160  
 MARGARET 171-176  
 Continental Copper Inc. P.O. Box 662  
 Oracle, Az. 85623  
 ASARCO Incorporated P.O. Box 5747  
 Tucson, Az. 85703

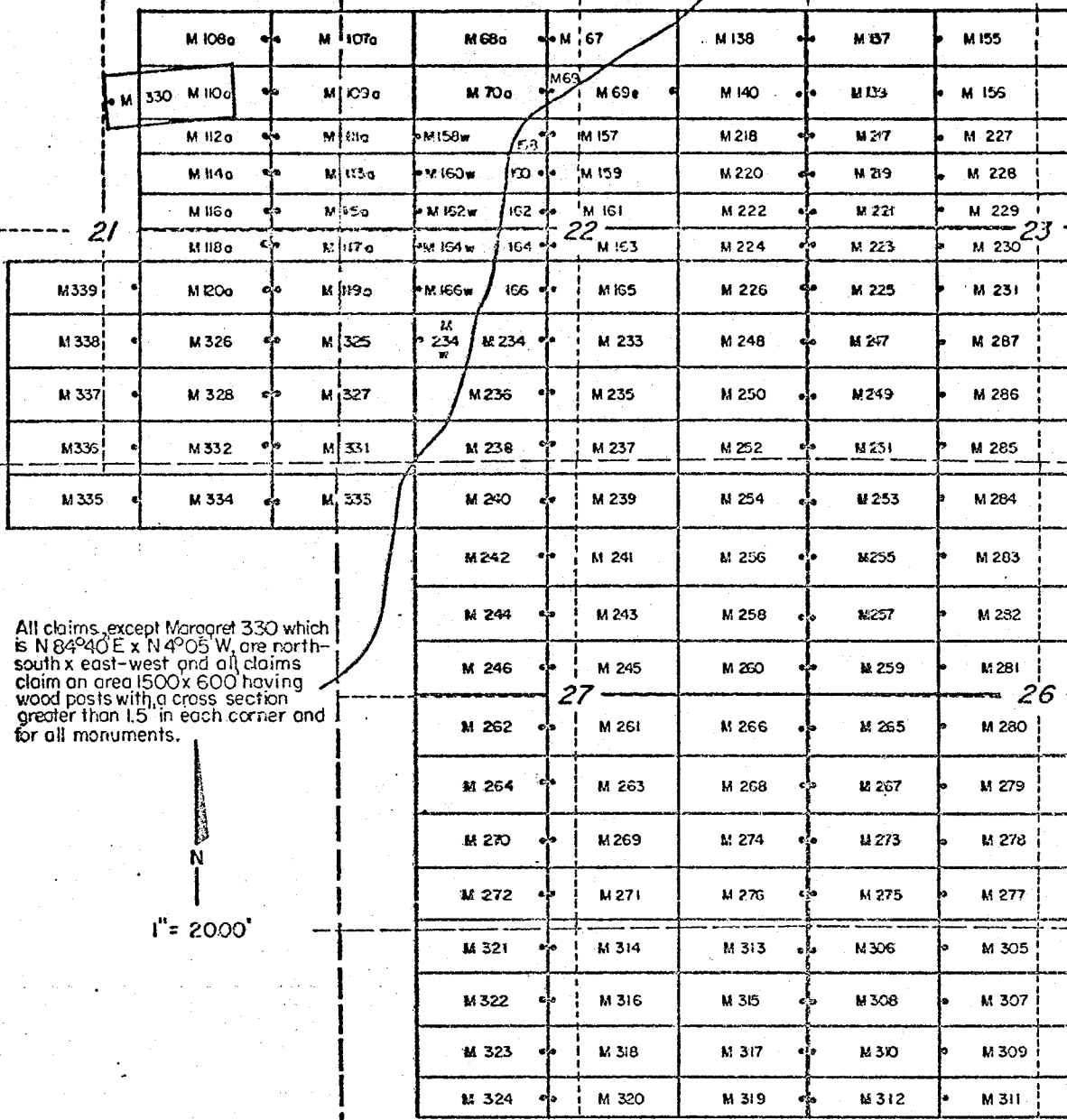
**OWNERSHIP HELD BY**  
 ASARCO Incorporated  
 P.O. Box 5747  
 Tucson, Az. 85703  
 And  
 Continental Copper Inc.  
 P.O. Box 662  
 Oracle, Az. 85623

BETH I & 2

SHEET 1 OF 2

LODE CLAIMS  
 IN  
 PINAL COUNTY

ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703



THE MARGARET \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST. CLAIMS

| LODE CLAIM                                             | ORIG. LOCATION NOTICE / DATE            | AMENDED LOCATION NOTICE / DATE                       | OWNERSHIP HELD BY                                                    |
|--------------------------------------------------------|-----------------------------------------|------------------------------------------------------|----------------------------------------------------------------------|
| MARGARET 107-116                                       | Con. U.S. Ltd. 1-27-69                  | MARGARET 138, 140, 225, 226, 236, 242, 244, 248, 330 | ASARCO Incorporated<br>P.O. Box 5747<br>Tucson, Az. 85703            |
| MARGARET 67, 68                                        | 5326 E. 7th Street 1-30-69              | MARGARET 332, 335, 70a, 164, 225, 330                | Continental Copper Inc. 6-25-69<br>P.O. Box 662<br>Oracle, Az. 85623 |
| MARGARET 137-140, 159-166, 217-226, 233, 234, 247, 248 | Tucson, Az. 6/7/11 1-31-69              | MARGARET 331                                         | Oracle, Az. 85623 11-13-69                                           |
| MARGARET 69, 70, 117-120, 157, 158                     | 2-1-69                                  |                                                      | 11-25-70                                                             |
| MARGARET 261-264, 269-272, 235-246                     | 2-6-69                                  |                                                      | Continental Copper Inc.<br>P.O. Box 662<br>Oracle, Az 85623          |
| MARGARET 249-260, 265-268, 273-282                     | 2-15-69                                 |                                                      |                                                                      |
| MARGARET 155, 156                                      | 3-4-69                                  |                                                      |                                                                      |
| MARGARET 227-231, 287                                  | 3-14-69                                 |                                                      |                                                                      |
| MARGARET 305-320                                       | 3-19-69                                 |                                                      |                                                                      |
| MARGARET 325-328                                       | 3-20-69                                 |                                                      |                                                                      |
| MARGARET 283-286, 321-324                              | 4-10-69                                 |                                                      |                                                                      |
| MARGARET 330                                           | 4-15-69                                 |                                                      |                                                                      |
| MARGARET 69e, 162w, 164w, 166w, 159w, 160w, 234w       | 4-29-69                                 |                                                      |                                                                      |
| MARGARET 60a, 70a, 117a-120a                           | Continental Copper Inc. 6-2-69          |                                                      |                                                                      |
| MARGARET 331-339                                       | P.O. Box 662 6-3-69<br>Oracle, Az 85623 |                                                      |                                                                      |

SHEET 2 OF 2  
 LODE CLAIMS  
 IN  
 PINAL COUNTY  
 ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703

APPROVAL

16

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

Adney E. Byers      3/26/80  
 Signature of Forest Service      Date  
 Evaluator

Approved by:

David M. Stewart      3/28/80  
 Signature of Authorized      Date  
 Officer

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
Signature of Operator\_\_\_\_\_  
Date

OPERATING PLAN  
 AMENDMENT No. 11  
 Tonto National Forest

Date Rec'd \_\_\_\_\_

Globe Ranger District  
Pinal County  
Pioneer Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

A. OPERATOR

Name of Operator ASARCO Incorporated 792-3010  
 Telephone No.  
 Address of Operator P. O. Box 5747  
Tucson, Arizona 85703

Name of Field Representative \_\_\_\_\_  
 (if other than Operator)  
 Address and phone of Field Representative \_\_\_\_\_

B. CLAIM IDENTIFICATION

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br>(X) Lode ( ) Tunnel Site<br>( ) Placer ( ) Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|-----------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                             |                                          |                  | Book or<br>Docket | Page |
| Margaret No. 235                                                            | T1S, R13E;<br>Sec. 22                    | 2/6/69           | 560               | 729  |
| Margaret No. 237                                                            | Sec. 22 & 27                             | "                | "                 | 731  |
| Margaret No. 239                                                            | Sec. 27                                  | "                | "                 | 733  |

C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

|                              |                                       |                       |
|------------------------------|---------------------------------------|-----------------------|
| <u>ASARCO Incorporated,</u>  | <u>P.O.Box 5747, Tucson, Az 85703</u> | <u>(602) 792-3010</u> |
| <u>Continental Materials</u> | _____                                 | _____                 |
| _____                        | _____                                 | _____                 |
| (Name)                       | (Address)                             | (Phone)               |

The above owner has authorized this operation through (check one):  lease,  contract,  direct employment,  Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: from the end of USFS Amendment#5 (approved)  
(describe access from point of

entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle                                                                                                       | License or Serial No. | Location                                                               |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|
| D-8 Cat w/dozer & ripper<br>H-60E front-end loader<br>600 cfm air compressor<br>L-900, 12-yd dump truck<br>580 - BRC backhoe | A-43332               | Paul Bryant Contruc-<br>tion<br>843 Spray Street<br>Superior, Az 85273 |

Paul Bryant Construction Company  
843 Spray Street  
Superior, Arizona 85273

Lic.#A-43332

Tel: 689-2627

---

| <u>Unit</u>                            | <u>Serial Number</u> |
|----------------------------------------|----------------------|
| Kenworth, 12-yd dump truck             | 11 50 76             |
| Ford, L-900, 12-yd dump truck          | S-909 VM 94356       |
| Case, 580-C, backhoe                   | 89 66 39 3           |
| Ingersol, 160 cfm air compressor       | 7 35 71 U 73-250     |
| Gardner Denver, 600 cfm air compressor | GD 211 627           |
| Hough, 2½-yd, H-60E front-end loader   | 2771                 |
| Catapiller, D-8H, dozer and ripper     | 46 A 62 32           |



G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

Drilling and blasting drill road access of approximately 1,500 feet to site on saddle. Work to be performed as under previous amendments and supplements.

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analyses report, and letter of understanding.

I. PERIOD OF OPERATION

This operation will begin on or near date of approval (a date not prior to date of approval. This operation will be completed on or within 180 days (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

- 1. Exhibit A - map of claims
- 2. Exhibit B - map of location
- 3. Exhibit C - BLM plat

Submitted by:

R. B. Cunt

Signature

1/24/80

Date

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

|                                       |      |
|---------------------------------------|------|
| Signature of Forest Service Evaluator | Date |
|---------------------------------------|------|

Approved by:

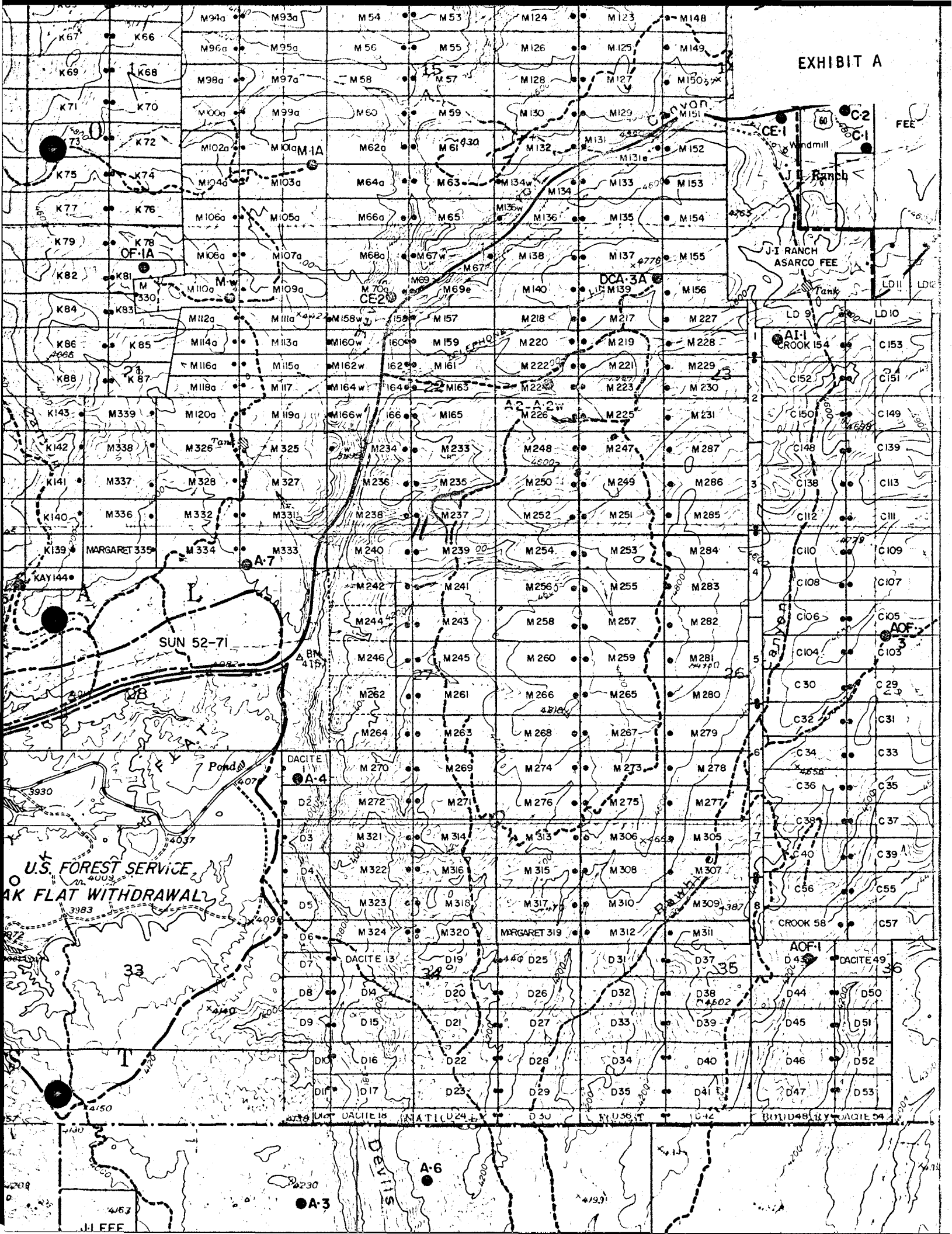
|                                 |      |
|---------------------------------|------|
| Signature of Authorized Officer | Date |
|---------------------------------|------|

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

|                       |      |
|-----------------------|------|
| Signature of Operator | Date |
|-----------------------|------|

EXHIBIT A



M94a M93a M54 M53 M124 M123 M148

M96a M95a M56 M55 M126 M125 M149

M98a M97a M58 M57 M128 M127 M150

M100a M99a M60 M59 M130 M129 M151

M102a M101a M101A M62a M61 M132 M131 M152

M104a M103a M64a M63 M134w M134 M133 M153

M106a M105a M66a M65 M135w M136 M135 M154

M108a M107a M68a M67w M67 M138 M137 M155

M110a M110w M109a M69 M69e M140 M139 M156

M112a M111a M158w M158 M157 M218 M217 M227

M114a M113a M160w M160 M159 M220 M219 M228

M116a M115a M162w M162 M161 M222 M221 M229

M118a M117 M164w M164 M163 M224 M223 M230

M120a M119a M166w M166 M165 M226 M225 M231

M339 M338 M326 M325 M234 M233 M248 M247 M287

M337 M328 M327 M236 M235 M250 M249 M286

M336 M332 M331 M238 M237 M252 M251 M285

M334 M333 M240 M239 M254 M253 M284

M242 M241 M256 M255 M283

M244 M243 M258 M257 M282

M246 M245 M260 M259 M281

M262 M261 M266 M265 M280

M264 M263 M268 M267 M279

M270 M269 M274 M273 M278

M272 M271 M276 M275 M277

M321 M314 M313 M306 M305

M322 M316 M315 M308 M307

M323 M318 M317 M310 M309

M324 M320 MARGARET 319 M312 M311

DACITE 13 D19 D25 D31 D37

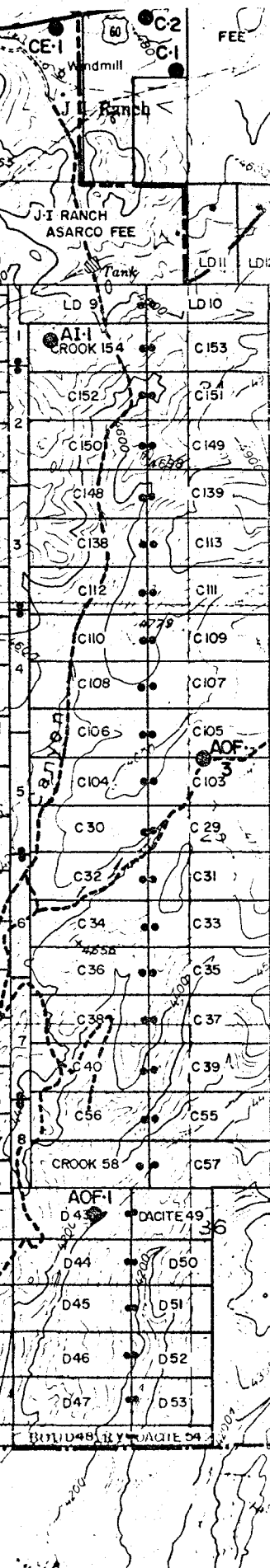
D8 D4 D20 D26 D32 D38

D9 D15 D21 D27 D33 D39

D10 D16 D22 D28 D34 D40

D11 D17 D23 D29 D35 D41

DACITE 18 D24 D30 D36 D42



U.S. FOREST SERVICE  
PAK FLAT WITHDRAWAL

SUN 52-71

CROOK 58

AO F-1  
D 43

DACITE 49

D44 D50

D45 D51

D46 D52

D47 D53

DACITE 54

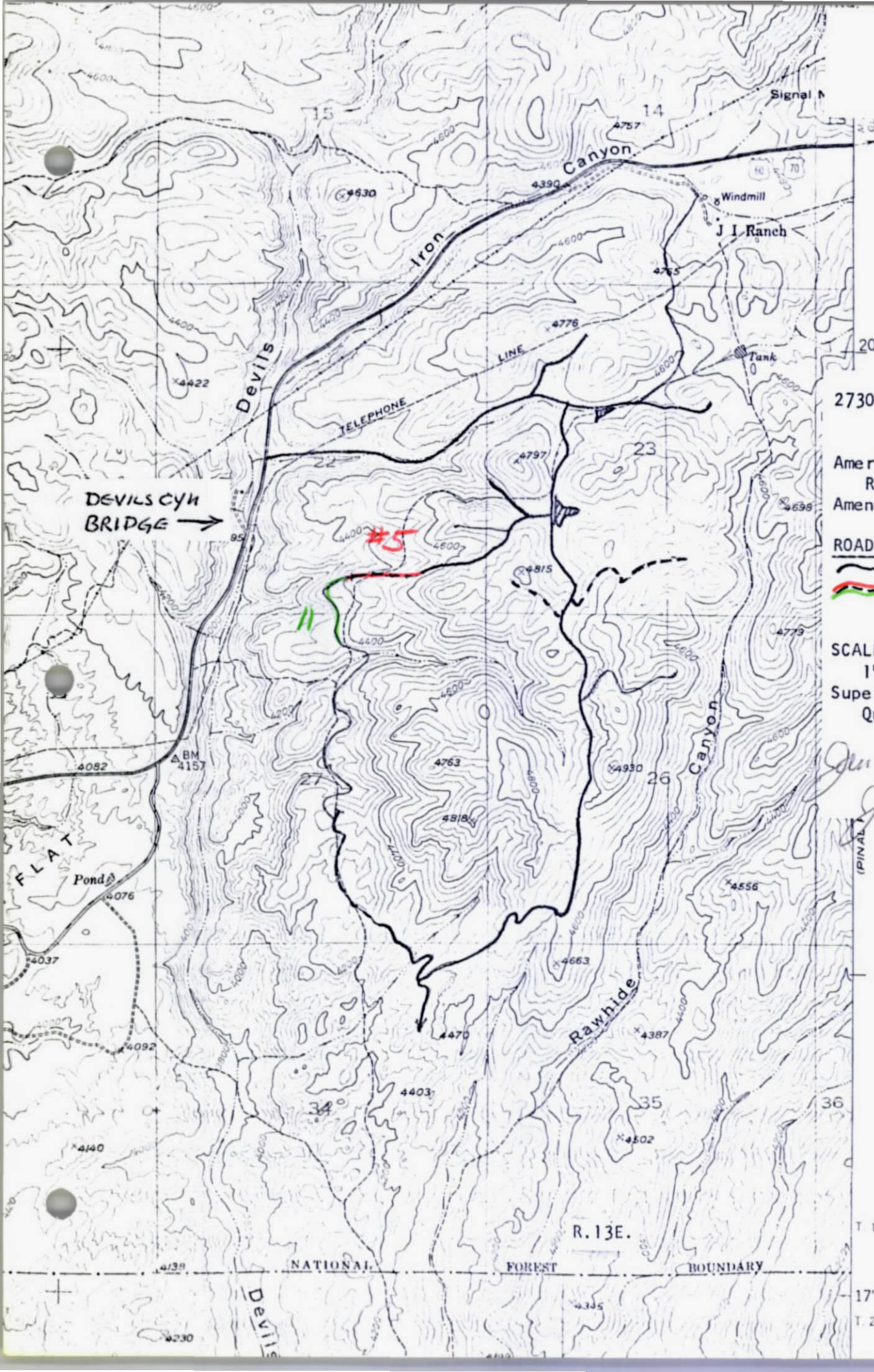
DAVIS

A-6

A-3

J. FEE







DEVILS CYN BRIDGE →

#5

11

2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 11

**ROADS**  
 Present  
 To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

*Jan 23, 80* Date

*[Signature]*

(FINAL)

R. 13E.

NATIONAL FOREST BOUNDARY

T 1 S.

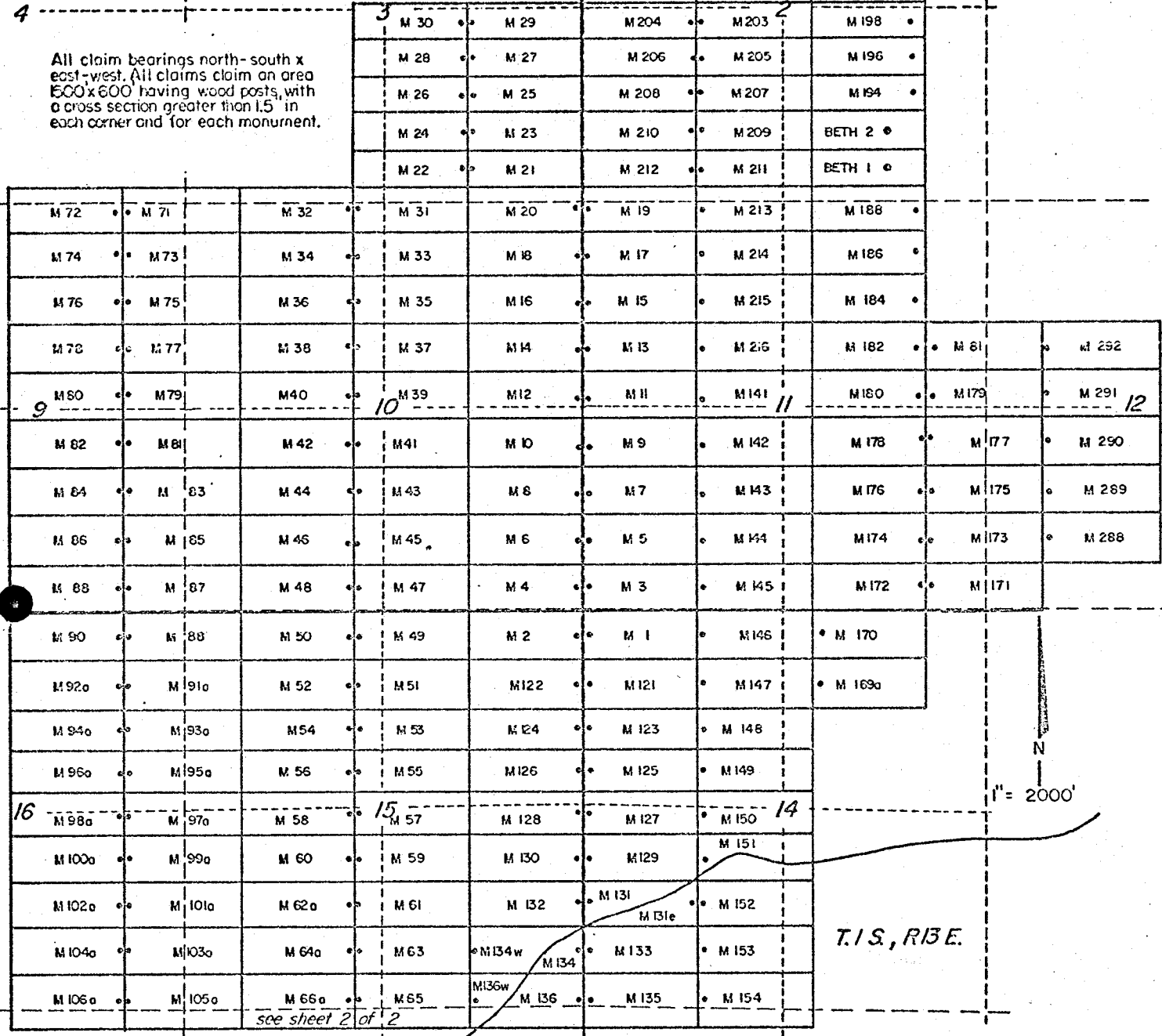
17'30"

T 2 S.

C

|       |              |       |       |
|-------|--------------|-------|-------|
| M 329 | MARGARET 304 | M 303 | M 298 |
|       | M 302        | M 301 | M 296 |
|       | M 300        | M 299 | M 168 |
|       | M 202        | M 201 | M 200 |

All claim bearings north-south x east-west. All claims claim an area 600'x600' having wood posts, with a cross section greater than 1.5" in each corner and for each monument.



THE MARGARET LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

CLAIMS

| LODE CLAIM                        | ORIG. LOCATION NOTICE / DATE                                                                                       | AMENDED LOCATION NOTICE / DATE                            | OWNERSHIP HELD BY       |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------|
| MARGARET 1-16                     | Can. U.S. Ltd. 1-19-69                                                                                             | MARGARET 28, 24, 59, 135, Continental Copper Inc. 6-25-69 | ASARCO Incorporated     |
| MARGARET 17-46                    | 5326 E. 7th Street 1-25-69                                                                                         | 128, 134, 134w, 171, 177, 180, P.O. Box 662               | P.O. Box 5747           |
| MARGARET 47-58, 91-106            | Tucson, Az. 85711 1-27-69                                                                                          | 106, 192, 205, 214                                        | Tucson, Az. 85703       |
| MARGARET 159-212 (excl. 190, 192) | 1-29-69                                                                                                            | MARGARET 64a, 177                                         | And                     |
| MARGARET 59-66, 121-132, 141-146  | 1-30-69                                                                                                            | MARGARET 184, 186, 188, 213-215                           | Continental Copper Inc. |
| MARGARET 133-136                  | 1-31-69                                                                                                            |                                                           | P.O. Box 662            |
| MARGARET 147-152                  | 2-1-69                                                                                                             | MARGARET 184, 186, 188                                    | Oracle, Az. 85623       |
| MARGARET 288-292                  | 2-22-69                                                                                                            | MARGARET 190, 192, 194, 196, 198                          |                         |
| MARGARET 153, 154                 | 3-4-69                                                                                                             |                                                           |                         |
| MARGARET 299-304                  | 3-26-69                                                                                                            | MARGARET 200, 296, 298                                    |                         |
| MARGARET 297                      | 3-27-69                                                                                                            | MARGARET 296, 298                                         |                         |
| MARGARET 329                      | 4-11-69                                                                                                            | MARGARET 177, 178, 179, 180                               |                         |
| MARGARET 83-90                    | 4-17-69                                                                                                            | MARGARET 171-176                                          |                         |
| MARGARET 71-82                    | 4-18-69                                                                                                            |                                                           |                         |
| MARGARET 131e, 134w, 136w         | 4-29-69                                                                                                            |                                                           |                         |
| MARGARET 91a-106a                 | 5-28-69                                                                                                            |                                                           |                         |
| MARGARET 62a, 64a, 66a            | 6-2-69                                                                                                             |                                                           |                         |
| BETH 1 & 2                        | Continental Copper Inc. P.O. Box 662 Oracle, Az. 85623 ASARCO Incorporated P.O. Box 5747 Tucson, Az. 85703 8-17-71 |                                                           |                         |

T.I.S., R13E.

1" = 2000'

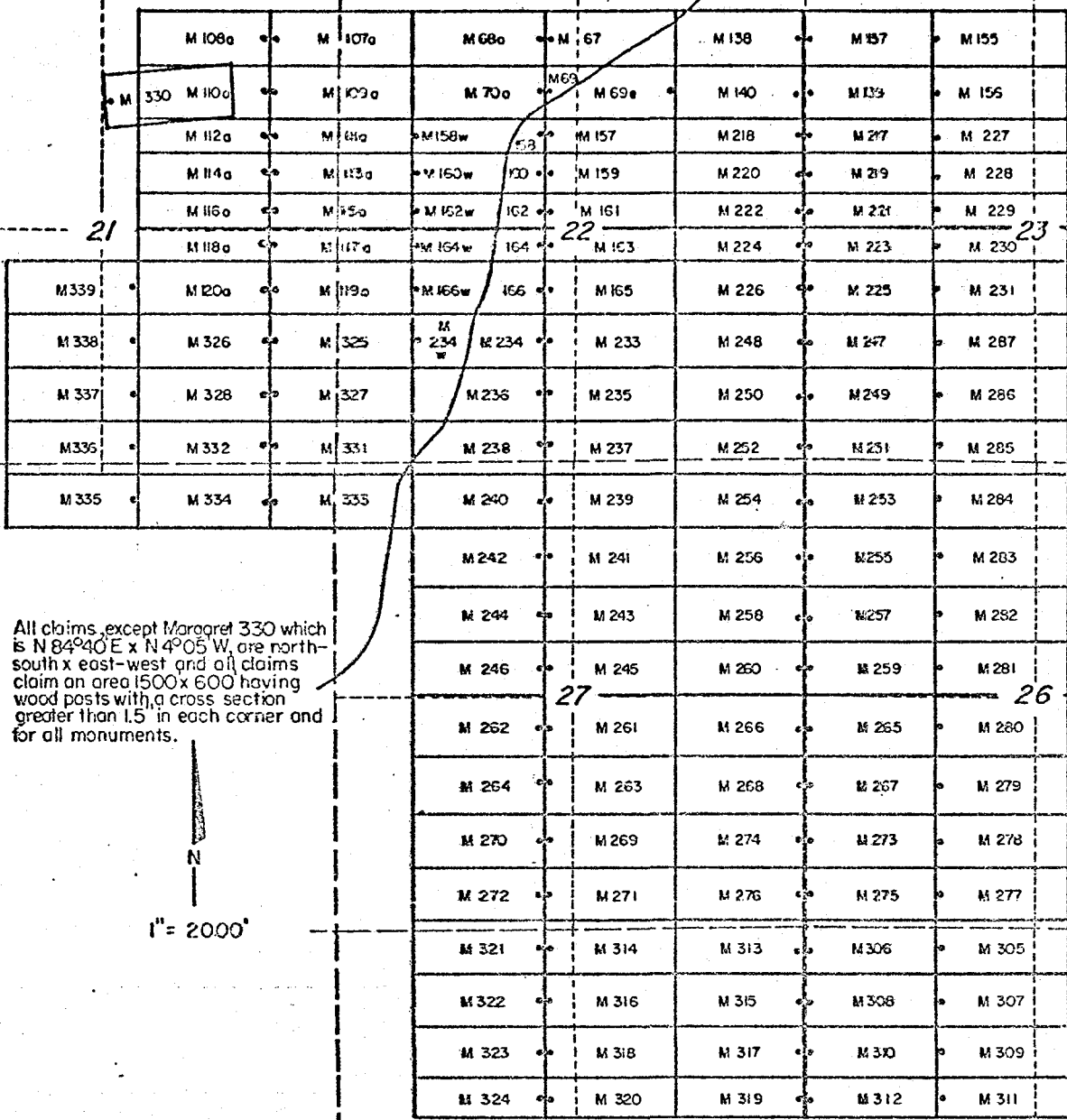
SHEET 1 OF 2

LODE CLAIMS IN PINAL COUNTY

ASARCO Incorporated  
150 NORTH 7TH AVENUE  
TUCSON, ARIZONA 85703



see sheet 1 of 2



All claims, except Margaret 330 which is N 84°40' E x N 4°05' W, are north-south x east-west and all claims claim an area 1500x 600 having wood posts with a cross section greater than 1.5" in each corner and for all monuments.



THE MARGARET \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST. CLAIMS

| LODE CLAIM                                             | ORIG. LOCATION NOTICE / DATE            | AMENDED LOCATION NOTICE / DATE                       | OWNERSHIP HELD BY                                                  |
|--------------------------------------------------------|-----------------------------------------|------------------------------------------------------|--------------------------------------------------------------------|
| MARGARET 107-116                                       | Can. U.S. Ltd. 1-27-69                  | MARGARET 133, 140, 225, 226, 236, 242, 244, 248, 330 | ASARCO Incorporated<br>P.O. Box 5747<br>Tucson, Az. 85703          |
| MARGARET 67, 68                                        | 5326 E. 7th Street 1-30-69              | MARGARET 332, 335, 70a, 164, 225, 330                | and<br>Continental Copper Inc.<br>P.O. Box 662<br>Oracle, Az 85623 |
| MARGARET 137-140, 159-166, 217-226, 233, 234, 247, 248 | Tucson, Az. 65711 1-31-69               | MARGARET 331                                         |                                                                    |
| MARGARET 69, 70, 117-120, 157, 158                     | 2-1-69                                  |                                                      |                                                                    |
| MARGARET 261-264, 269-272, 235-246                     | 2-6-69                                  |                                                      |                                                                    |
| MARGARET 249-260, 265-268, 273-282                     | 2-15-69                                 |                                                      |                                                                    |
| MARGARET 155, 156                                      | 3-4-69                                  |                                                      |                                                                    |
| MARGARET 227-231, 287                                  | 3-14-69                                 |                                                      |                                                                    |
| MARGARET 305-320                                       | 3-19-69                                 |                                                      |                                                                    |
| MARGARET 325-328                                       | 3-20-69                                 |                                                      |                                                                    |
| MARGARET 283-286, 321-324                              | 4-10-69                                 |                                                      |                                                                    |
| MARGARET 330                                           | 4-15-69                                 |                                                      |                                                                    |
| MARGARET 69e, 162w, 164w, 166w, 159w, 160w, 234w       | 4-29-69                                 |                                                      |                                                                    |
| MARGARET 60a, 70a, 117a-120a                           | Continental Copper Inc. 6-2-69          |                                                      |                                                                    |
| MARGARET 331-339                                       | P.O. Box 662 6-3-69<br>Oracle, Az 85623 |                                                      |                                                                    |

SHEET 2 OF 2  
LODE CLAIMS  
IN  
PINAL COUNTY  
ASARCO Incorporated  
1150 NORTH 7TH AVENUE  
TUCSON, ARIZONA 85703

APPROVAL

12

1. Approval of this Operating Plan:

- (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
- (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.

2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.

3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.

4. Other stipulations (explain or attach).

Proposal Evaluated by:

Johnny E. Byers      3/28/80  
 Signature of Forest Service      Date  
 Evaluator

Approved by:

David M. Stewart      3/28/80  
 Signature of Authorized      Date  
 Officer

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
 Signature of Operator      Date

OPERATING PLAN  
 AMENDMENT No. 12  
 Tonto National Forest

Page 1 of 8  
 2810

Date Rec'd \_\_\_\_\_

Globe Ranger District  
Pinal County  
Pioneer Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

A. OPERATOR

Name of Operator ASARCO Incorporated 792-3010  
 Telephone No.  
 Address of Operator P. O. Box 5747  
Tucson, Arizona 85703

Name of Field Representative \_\_\_\_\_  
 (if other than Operator)  
 Address and phone of Field Representative \_\_\_\_\_

B. CLAIM IDENTIFICATION

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br><input checked="" type="checkbox"/> Lode <input type="checkbox"/> Tunnel Site<br><input type="checkbox"/> Placer <input type="checkbox"/> Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                                                                                                                            |                                          |                  | Book or<br>Docket | Page |
| Margaret No. 255                                                                                                                                                           | all in T1S, R13E,<br>Sec. 26             | 2/15/69          | 561               | 584  |
| Margaret No. 283                                                                                                                                                           |                                          | 4/10/69          | 567               | 542  |
| LD#4                                                                                                                                                                       |                                          | 11/2/72          | 688               | 398  |
| " " Amended                                                                                                                                                                |                                          | "                | 693               | 558  |
| Conto#108                                                                                                                                                                  |                                          | 2/3/67           | 490               | 363  |

C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

ASARCO Incorporated, P.O.Box 5747, Tucson, Az 85703 (602) 792-3010

Continental Materials, and \_\_\_\_\_

Inspiration Consolidated Copper Company \_\_\_\_\_

(Name)

(Address)

(Phone)

The above owner has authorized this operation through (check one): (X) lease, ( ) contract, ( ) direct employment, ( ) Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: from USFS Amendment #2 (approved).  
(describe access from point of

entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle                                                                                                       | License or Serial No. | Location                                                           |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------|
| D-8 Cat w/dozer & ripper<br>H-60E front-end loader<br>600 cfm air compressor<br>L-900, 12-yd dump truck<br>580 - BRC backhoe | A-43332               | Paul Bryant Construction<br>843 Spray Street<br>Superior, Az 85273 |

Paul Bryant Construction Company  
843 Spray Street  
Superior, Arizona 85273  
Tel: 689-2627

Lic.#A-43332

---

| <u>Unit</u>                            | <u>Serial Number</u> |
|----------------------------------------|----------------------|
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| Ford, L-900, 12-yd dump truck          | S-909 VM 94356       |
| Case, 580-C, backhoe                   | 89 66 39 3           |
| Ingersol, 160 cfm air compressor       | 7 35 71 U 73-250     |
| Gardner Denver, 600 cfm air compressor | GD 211 627           |
| Hough, 2½-yd, H-60E front-end loader   | 2771                 |
| Catapiller, D-8H, dozer and ripper     | 46 A 62 32           |

G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

Drilling and blasting drill road access of approximately 2,500 feet to site. Work to be performed as under previous amendments and supplements.



H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analyses report, and letter of understanding.

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J. ANTIQUITIES

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K. ENCLOSURES (list as appropriate)

- 1. Exhibit A - map of claims
- 2. Exhibit B - map of location
- 3. Exhibit C - BLM plat

Submitted by:

R. B. Cunt  
Signature

1/24/80  
Date

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

|                                       |      |
|---------------------------------------|------|
|                                       |      |
| Signature of Forest Service Evaluator | Date |

Approved by:

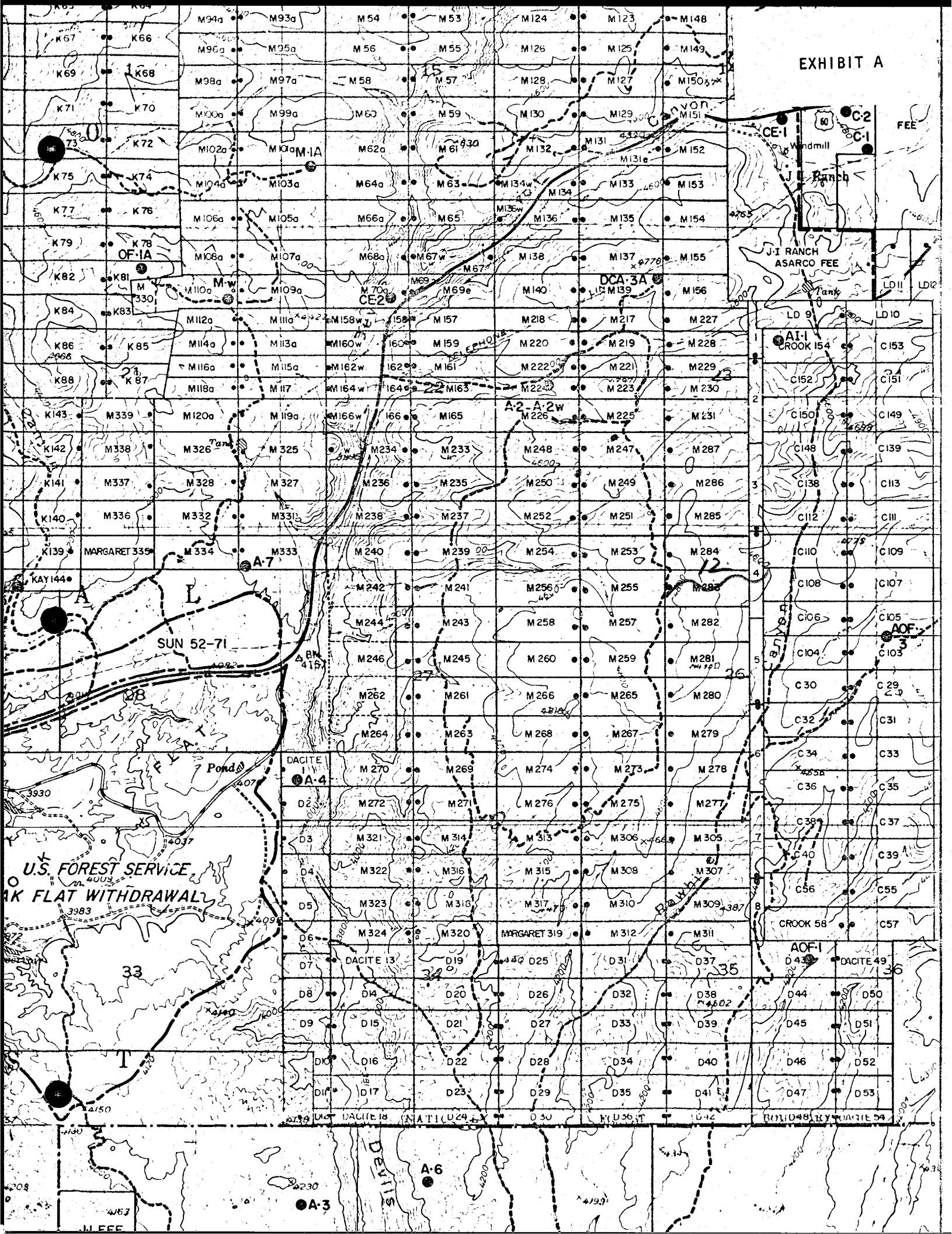
|                                 |      |
|---------------------------------|------|
|                                 |      |
| Signature of Authorized Officer | Date |

ACCEPTANCE OF STIPULATIONS

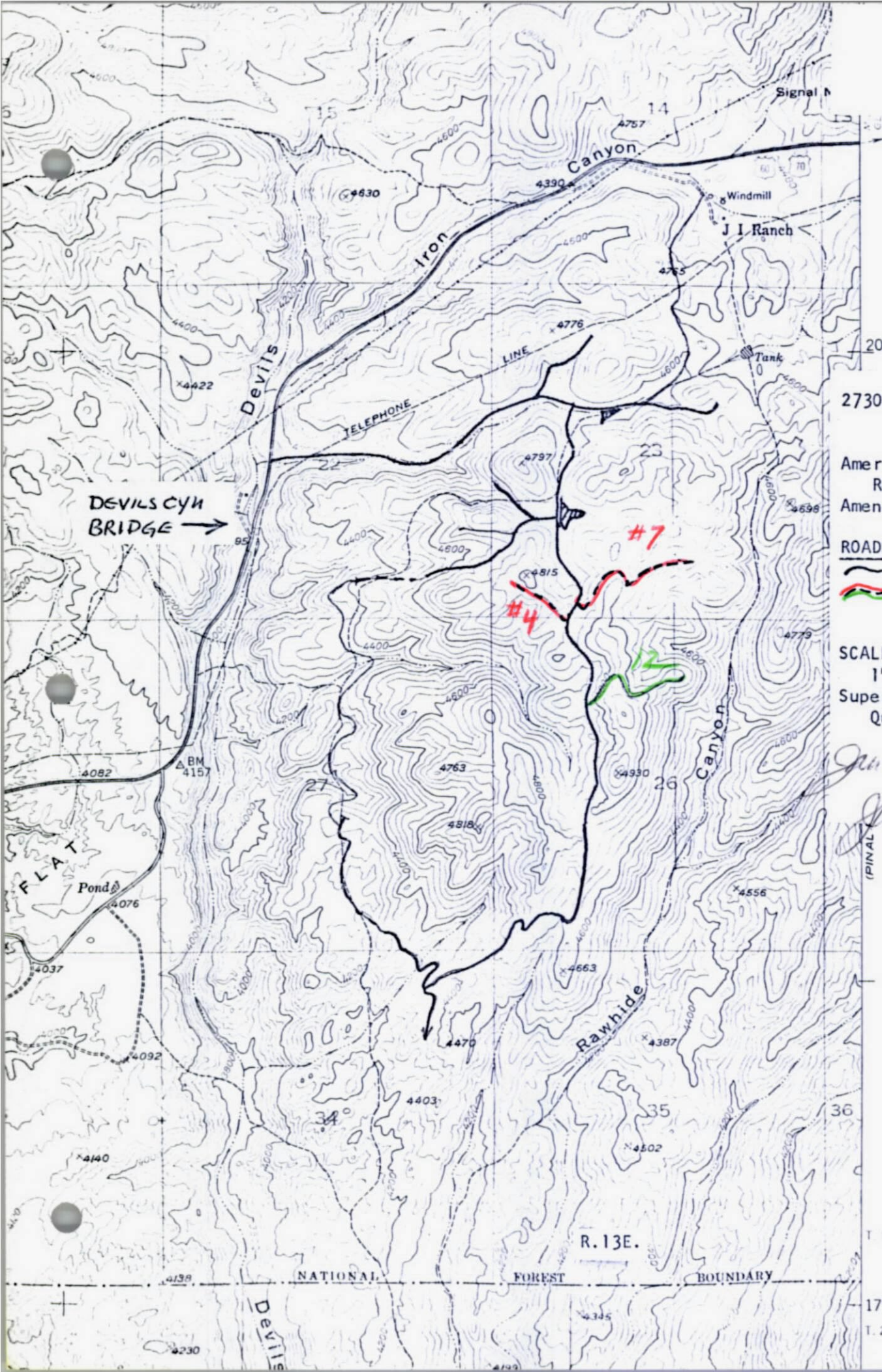
The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

|                       |      |
|-----------------------|------|
|                       |      |
| Signature of Operator | Date |

EXHIBIT A









DEVILS CYN BRIDGE →

2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment # 12

**ROADS**  
 Present  
 To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

Jan. 23, 80 Date

(FINAL) JCS

NATIONAL FOREST BOUNDARY

R. 13E.

T 1 S.

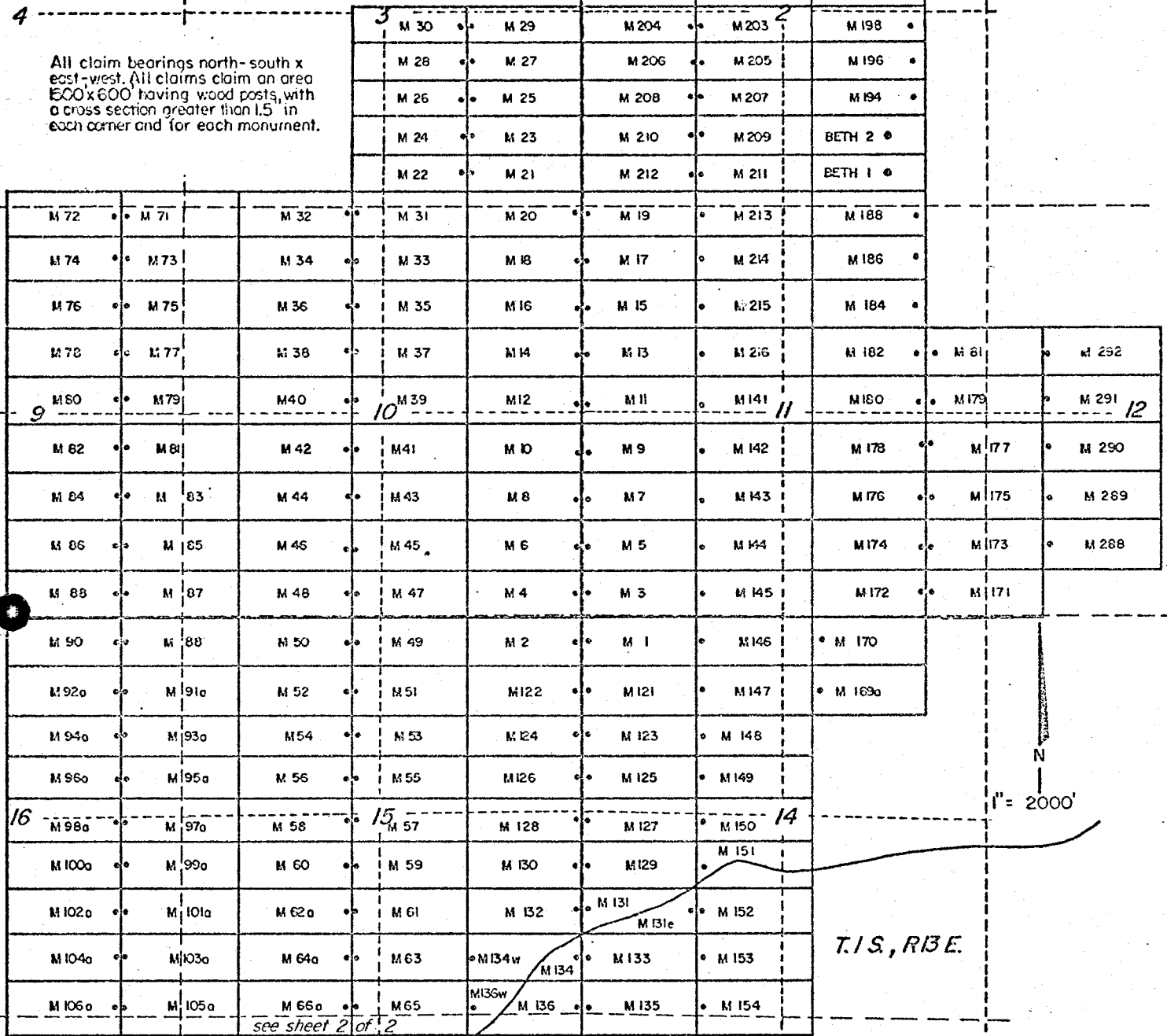
17'30"

T. 2 S.



|       |              |       |       |
|-------|--------------|-------|-------|
| M 329 | MARGARET 304 | M 303 | M 298 |
|       | M 302        | M 301 | M 296 |
|       | M 300        | M 299 | M 168 |
|       | M 202        | M 201 | M 200 |

All claim bearings north-south x east-west. All claims claim an area 600x600 having wood posts, with a cross section greater than 1.5" in each corner and for each monument.



THE MARGARET CLAIMS LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

**LODE CLAIM**

MARGARET 1-16  
 MARGARET 17-46  
 MARGARET 47-58, 91-106  
 MARGARET 169-212 (excl. 190, 192)  
 MARGARET 59-66, 121-132, 141-146  
 MARGARET 133-136  
 MARGARET 147-152  
 MARGARET 288-292  
 MARGARET 153, 154  
 MARGARET 299-304  
 MARGARET 297  
 MARGARET 329  
 MARGARET 83-90  
 MARGARET 71-82  
 MARGARET 131e, 134w, 136w  
 MARGARET 91a-106a  
 MARGARET 162a, 164a, 166a

**ORIG. LOCATION NOTICE / DATE**

Con. US. Ltd. 1-19-69  
 5326 E. 7th Street 1-25-69  
 Tucson, Az. 85711 1-27-69  
 1-29-69  
 1-30-69  
 1-31-69  
 2-1-69  
 2-22-69  
 3-4-69  
 3-26-69  
 3-27-69  
 4-11-69  
 4-17-69  
 4-18-69  
 4-29-69  
 Continental Copper Inc. 5-28-69  
 P.O. Box 662 6-2-69  
 Oracle, Az. 85623  
 ASARCO Incorporated 8-17-71  
 P.O. Box 5747  
 Tucson, Az. 85703

**AMENDED LOCATION NOTICE / DATE**

MARGARET 28, 24, 59, 135, 128, 134, 134w, 171, 177, 180, 106, 192, 205, 214  
 MARGARET 64a, 177  
 MARGARET 184, 186, 188, 213-215  
 MARGARET 184, 186, 188  
 MARGARET 190, 192, 194, 196, 198  
 MARGARET 200, 296, 298  
 MARGARET 296, 298  
 MARGARET 177, 178, 179, 180  
 MARGARET 171-176  
 Continental Copper Inc. 6-25-69  
 P.O. Box 662  
 Oracle, Az. 85623  
 ASARCO Incorporated 11-13-69  
 P.O. Box 5747 4-11-74  
 Tucson, Az. 85703  
 11-15-75  
 11-16-75  
 11-17-75  
 3-24-76  
 3-31-76  
 4-1-76

**OWNERSHIP HELD BY**

ASARCO Incorporated  
 P.O. Box 5747  
 Tucson, Az. 85703  
 And  
 Continental Copper Inc.  
 P.O. Box 662  
 Oracle, Az. 85623

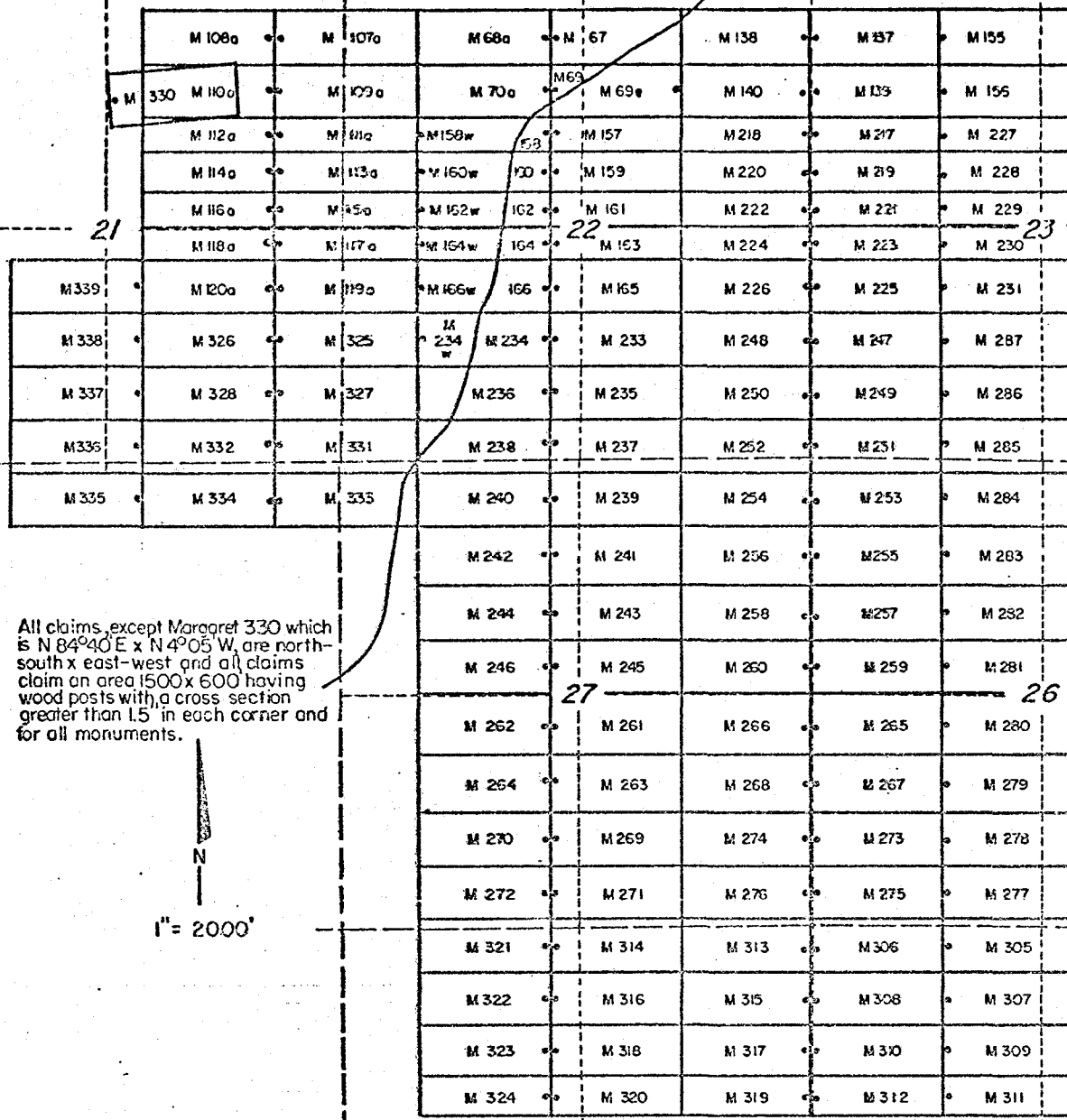
BETH 1 & 2

SHEET 1 OF 2

LODE CLAIMS  
 IN  
 PINAL COUNTY

ASARCO Incorporated  
 1150 NORTH 17TH AVENUE  
 TUCSON, ARIZONA 85703

see sheet 1 of 2



C

All claims, except Margaret 330 which is N 84°40' E x N 4°05' W, are north-south x east-west and all claims claim an area 1500x 600 having wood posts with a cross section greater than 1.5" in each corner and for all monuments.



T. 1 S.,  
R. 13 E.

THE MARGARET CLAIMS LOCATED IN THE \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

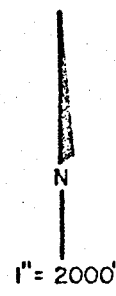
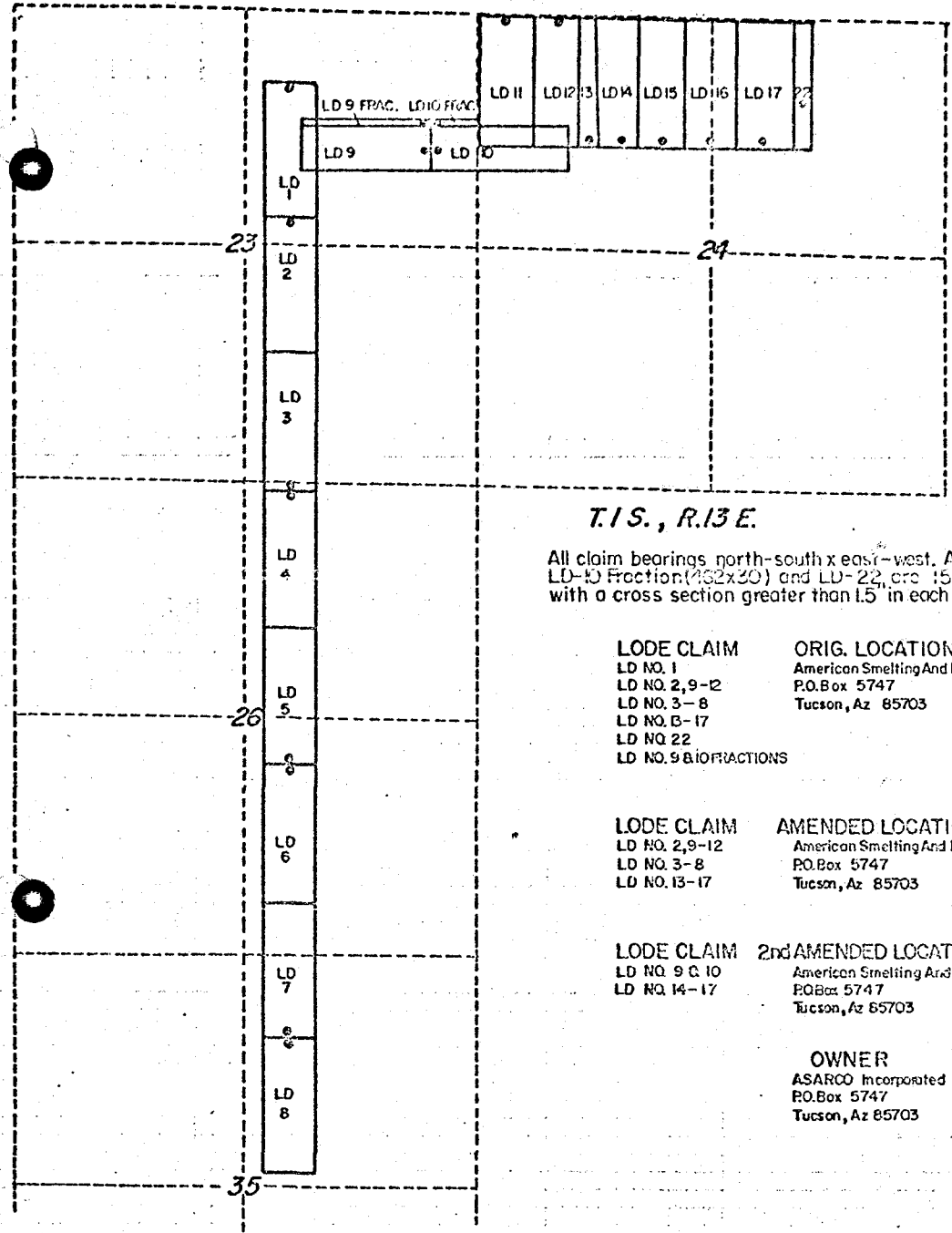
| LODE CLAIM                          | ORIG. LOCATION NOTICE / DATE   | AMENDED LOCATION NOTICE           | DATE                            | OWNERSHIP HELD BY       |
|-------------------------------------|--------------------------------|-----------------------------------|---------------------------------|-------------------------|
| MARGARET 107-116                    | Can. U.S. Ltd. 1-27-69         | MARGARET 133, 140, 225, 226, 236, | Continental Copper Inc. 6-25-69 | ASARCO Incorporated     |
| MARGARET 67, 68                     | 5326 E. 7th Street 1-30-69     | 242, 244, 248, 330                | P.O. Box 662                    | P.O. Box 5747           |
| MARGARET 137-140, 159-166, 217-226, | Tucson, Az 85711 1-31-69       | MARGARET 332, 335, 70a, 164, 225, | Oracle, Az. 85623 11-13-69      | Tucson, Az. 85703       |
| 233, 234, 247, 248                  |                                | 330                               |                                 | and                     |
| MARGARET 69, 70, 117-120, 157, 158  | 2-1-69                         | MARGARET 331                      | 11-25-70                        | Continental Copper Inc. |
| MARGARET 261-264, 269-272,          | 2-6-69                         |                                   |                                 | P.O. Box 662            |
| 235-246                             |                                |                                   |                                 | Oracle, Az 85623        |
| MARGARET 249-260, 265-268, 273-282  | 2-15-69                        |                                   |                                 |                         |
| MARGARET 155, 156                   | 3-4-69                         |                                   |                                 |                         |
| MARGARET 227-231, 287               | 3-14-69                        |                                   |                                 |                         |
| MARGARET 305-320                    | 3-19-69                        |                                   |                                 |                         |
| MARGARET 325-328                    | 3-20-69                        |                                   |                                 |                         |
| MARGARET 283-286, 321-324           | 4-10-69                        |                                   |                                 |                         |
| MARGARET 330                        | 4-15-69                        |                                   |                                 |                         |
| MARGARET 69a, 162w, 164w, 166w,     | 4-29-69                        |                                   |                                 |                         |
| 159w, 160w, 234w                    |                                |                                   |                                 |                         |
| MARGARET 60a, 70a, 117a-120a        | Continental Copper Inc. 6-2-69 |                                   |                                 |                         |
| MARGARET 331-339                    | P.O. Box 662 6-3-69            |                                   |                                 |                         |
|                                     | Oracle, Az 85623               |                                   |                                 |                         |

SHEET 2 OF 2  
LODE CLAIMS  
IN  
PINAL COUNTY

ASARCO Incorporated  
1150 NORTH 7111 AVENUE  
TUCSON, ARIZONA 85703



C



**T. 1 S., R. 13 E.**

All claim bearings north-south x east-west. All claims except LD-9 Fraction (1500' x 30'), LD-10 Fraction (152' x 30') and LD-22, are 1500' x 600'. All claims have a wooden post with a cross section greater than 1.5" in each corner and for each monument.

| LODE CLAIM              | ORIG. LOCATION NOTICE / DATE                |
|-------------------------|---------------------------------------------|
| LD NO. 1                | American Smelting And Refining Co. / 6-6-73 |
| LD NO. 2, 9-12          | P.O. Box 5747 / 10-12-72                    |
| LD NO. 3-8              | Tucson, Az 85703 / 11-2-72                  |
| LD NO. 13-17            | / 11-3-72                                   |
| LD NO. 22               | / 6-6-73                                    |
| LD NO. 9 & 10 FRACTIONS | / 7-4-73                                    |

| LODE CLAIM     | AMENDED LOCATION NOTICE / DATE                |
|----------------|-----------------------------------------------|
| LD NO. 2, 9-12 | American Smelting And Refining Co. / 10-12-72 |
| LD NO. 3-8     | P.O. Box 5747 / 11-2-72                       |
| LD NO. 13-17   | Tucson, Az 85703 / 11-3-72                    |

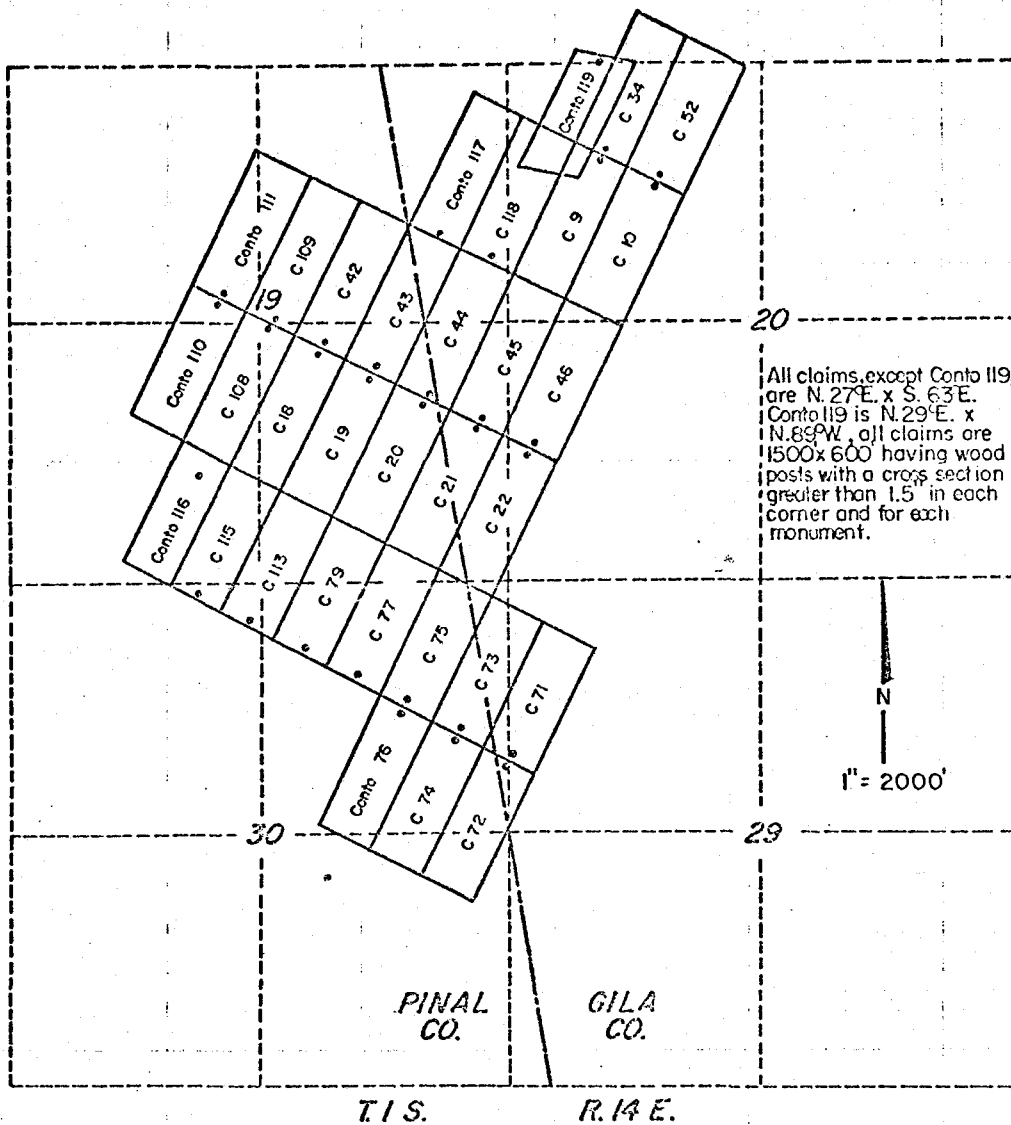
| LODE CLAIM    | 2nd AMENDED LOCATION NOTICE / DATE          |
|---------------|---------------------------------------------|
| LD NO. 9 & 10 | American Smelting And Refining Co. / 7-4-73 |
| LD NO. 14-17  | P.O. Box 5747 / 6-6-73                      |
|               | Tucson, Az 85703                            |

**OWNER**  
 ASARCO Incorporated  
 P.O. Box 5747  
 Tucson, Az 85703

THE LD NO. \_\_\_\_\_ CLAIMS  
 LOCATED IN THE \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

LODE CLAIMS IN  
 PINAL COUNTY

ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703



THE \_\_\_\_\_ CLAIMS  
 LOCATED IN THE \_\_\_\_\_ 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH,  
 RANGE 14 EAST, PINAL GILA COUNTY, ARIZONA.

| LODE CLAIMS                          | ORIG. LOCATION NOTICE / DATE                                                       | OWNERSHIP HELD BY                                 |
|--------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------|
| Conto 9, 10, 18-22, 42-46, 71-77, 79 | Inspiration Consolidated Copper Co. / 1-16-67<br>P.O. Box 1321, Claypool, Az 85532 | ASARCO Incorporated<br>P.O. Box 5747, Tucson, Az. |
| Conto 103, 109                       |                                                                                    | and                                               |
| Conto 113, 115, 116                  |                                                                                    | Inspiration Consolidated Copper Co.               |
| Conto 110, 111                       |                                                                                    | P.O. Box 1321, Claypool, Az 85532                 |
| Conto 117, 118                       |                                                                                    |                                                   |
| Conto 119                            |                                                                                    |                                                   |

LODE CLAIMS  
 IN  
 GILA & PINAL COUNTIES  
 ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703

APPROVAL

13

1. Approval of this Operating Plan:

- (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
- (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.

2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.

3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.

4. Other stipulations (explain or attach).

Proposal Evaluated by: Rodney E Byers 3/28/80  
 Signature of Forest Service Evaluator Date

Approved by: David M. Stewart 3/28/80  
 Signature of Authorized Officer Date

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
 Signature of Operator Date

Date Rec'd \_\_\_\_\_

Globe Ranger District  
Pinal County  
Pioneer Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

**A. OPERATOR**

Name of Operator ASARCO Incorporated 792-3010  
 Telephone No.  
 Address of Operator P. O. Box 5747  
Tucson, Arizona 85703

Name of Field Representative \_\_\_\_\_  
 (if other than Operator)  
 Address and phone of Field Representative \_\_\_\_\_

**B. CLAIM IDENTIFICATION**

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br>(X) Lode ( ) Tunnel Site<br>( ) Placer ( ) Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|-----------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                             |                                          |                  | Book or<br>Docket | Page |
| Margaret#239                                                                | all in T1S,R13E<br>Sec.27                | 2/6/69           | 560               | 733  |
| Margaret#241                                                                |                                          | "                | "                 | 735  |
| Margaret#243                                                                |                                          | "                | "                 | 737  |
| Margaret#245                                                                |                                          | "                | "                 | 739  |
| Margaret#261                                                                |                                          | "                | "                 | 741  |
| Margaret#263                                                                |                                          | "                | "                 | 743  |
| Margaret#269                                                                |                                          | "                | "                 | 745  |
| Margaret#271                                                                |                                          | "                | "                 | 747  |

C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

|                              |                                       |                       |
|------------------------------|---------------------------------------|-----------------------|
| <u>ASARCO Incorporated,</u>  | <u>P.O.Box 5747, Tucson, Az 85703</u> | <u>(602) 792-3010</u> |
| <u>Continental Materials</u> | _____                                 | _____                 |
| _____                        | _____                                 | _____                 |
| (Name)                       | (Address)                             | (Phone)               |

The above owner has authorized this operation through (check one):  lease,  contract,  direct employment,  Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: from end of Amendment#11 (proposed) to  
(describe access from point of  
minimize visual impact rather than proceed from part of USFS Amendment#2  
entry into National Forest, using road numbers when available)  
(approved).

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle                                                                                                       | License or Serial No. | Location                                                               |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|
| D-8 Cat w/dozer & ripper<br>H-60E front-end loader<br>600 cfm air compressor<br>L-900, 12-yd dump truck<br>580 - BRC backhoe | A-43332               | Paul Bryant Contruc-<br>tion<br>843 Spray Street<br>Superior, Az 85273 |

Paul Bryant Construction Company  
843 Spray Street  
Superior, Arizona 85273  
Tel: 689-2627

Lic.#A-43332

---

| <u>Unit</u>                            | <u>Serial Number</u> |
|----------------------------------------|----------------------|
| Kenworth, 12-yd dump truck             | 11 50 76             |
| Ford, L-900, 12-yd dump truck          | S-909 VM 94356       |
| Case, 580-C, backhoe                   | 89 66 39 3           |
| Ingersol, 160 cfm air compressor       | 7 35 71 U 73-250     |
| Gardner Denver, 600 cfm air compressor | GD 211 627           |
| Hough, 2½-yd, H-60E front-end loader   | 2771                 |
| Catapiller, D-8H, dozer and ripper     | 46 A 62 32           |



G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

Drilling and blasting drill road access of approximately one mile to sites. Work to be performed as in previous amendments and supplements.

This access minimizes the visual impact, rather than coming in by the west embankment having a higher visual impactment as allowed in USFS Amendment#2 (approved).

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

All specifications and conditions of the amendment are the same as those shown in the original permit, environmental analyses report, and letter of understanding.

I. PERIOD OF OPERATION

This operation will begin on or near date of approval (a date not prior to date of approval. This operation will be completed on or within 12 months (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

1. Exhibit A - map of claims
2. Exhibit B - map of location
3. Exhibit C - BLM plat

Submitted by:

R. B. Oint

Signature

1/24/80

Date

APPROVAL

## 1. Approval of this Operating Plan:

- (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
- (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.

2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.

3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.

4. Other stipulations (explain or attach).

Proposal Evaluated by:

\_\_\_\_\_  
Signature of Forest Service  
Evaluator

\_\_\_\_\_  
Date

Approved by:

\_\_\_\_\_  
Signature of Authorized  
Officer

\_\_\_\_\_  
Date

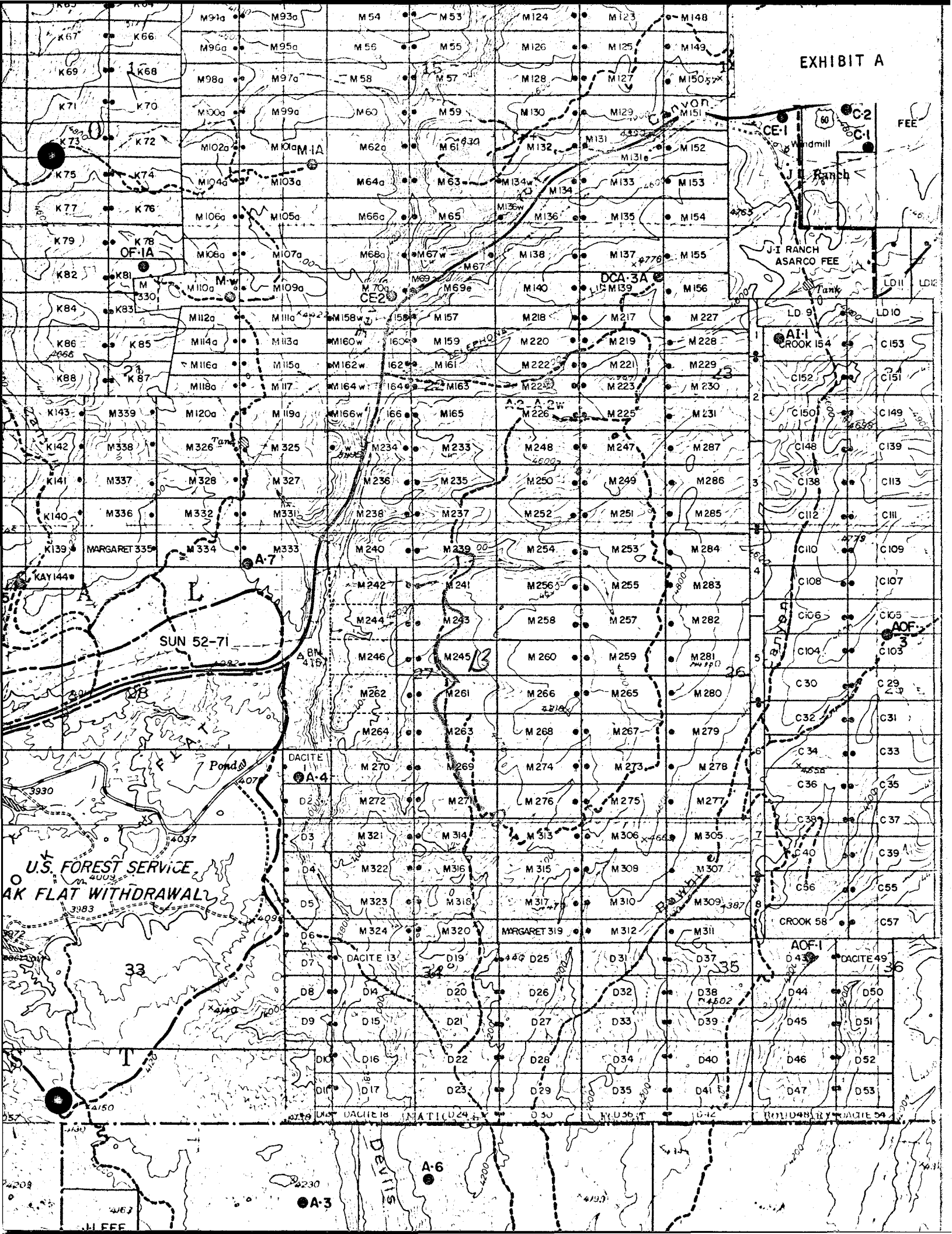
ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
Signature of Operator

\_\_\_\_\_  
Date

EXHIBIT A



K67 K66  
K69 K68  
K71 K70  
K73 K72  
K75 K74  
K77 K76  
K79 K78  
K82 K81  
K84 K83  
K86 K85  
K88 K87  
K143 M339  
K142 M338  
K141 M337  
K140 M336  
K139 MARGARET 335  
KAY 144

M91a M93a M54 M53 M124 M123 M148  
M96a M95a M55 M55 M126 M125 M149  
M98a M97a M58 M57 M128 M127 M150  
M100a M99a M60 M59 M130 M129 M151  
M102a M101a M1A M62a M61 M132 M131 M152  
M104a M103a M64a M63 M134w M134 M133 M153  
M106a M105a M66a M65 M135w M135 M136 M154  
M108a M107a M68a M67 M138 M137 M155  
M110a M109a M70a M69e M140 M139 M156

M112a M111a M158w M158 M157 M218 M217 M227  
M114a M113a M160w M160 M159 M220 M219 M228  
M116a M115a M162w M162 M161 M222 M221 M229  
M118a M117 M164w M164 M163 M224 M223 M230  
M120a M119a M166w M166 M165 M226 M225 M231  
M326 M325 M234 M233 M248 M247 M287  
M328 M327 M236 M235 M250 M249 M286  
M332 M331 M238 M237 M252 M251 M285  
M334 M333 M240 M239 M254 M253 M284  
M242 M241 M256 M255 M283  
M244 M243 M258 M257 M282  
M246 M245 M260 M259 M281  
M262 M261 M266 M265 M280  
M264 M263 M268 M267 M279

M120a M119a M166w M166 M165 M226 M225 M231  
M326 M325 M234 M233 M248 M247 M287  
M328 M327 M236 M235 M250 M249 M286  
M332 M331 M238 M237 M252 M251 M285  
M334 M333 M240 M239 M254 M253 M284  
M242 M241 M256 M255 M283  
M244 M243 M258 M257 M282  
M246 M245 M260 M259 M281  
M262 M261 M266 M265 M280  
M264 M263 M268 M267 M279

M270 M269 M274 M273 M278  
M272 M271 M276 M275 M277  
M321 M314 M313 M306 M305  
M322 M316 M315 M308 M307  
M323 M318 M317 M310 M309  
M324 M320 MARGARET 319 M312 M311

DACITE 11 A-4  
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J-I Ranch  
Tank  
LD11 LD12

LD 9 LD 10  
AI-1 CROOK 154 C153  
C152 C151  
C150 C149  
C148 C139  
C138 C113  
C112 C111  
C110 C109  
C108 C107  
C106 C105  
C104 C103  
C30 C29  
C32 C31  
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C36 C35  
C38 C37  
C40 C39  
C56 C55  
CROOK 58 C57

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D47 D53  
D48 D54  
DACITE 54

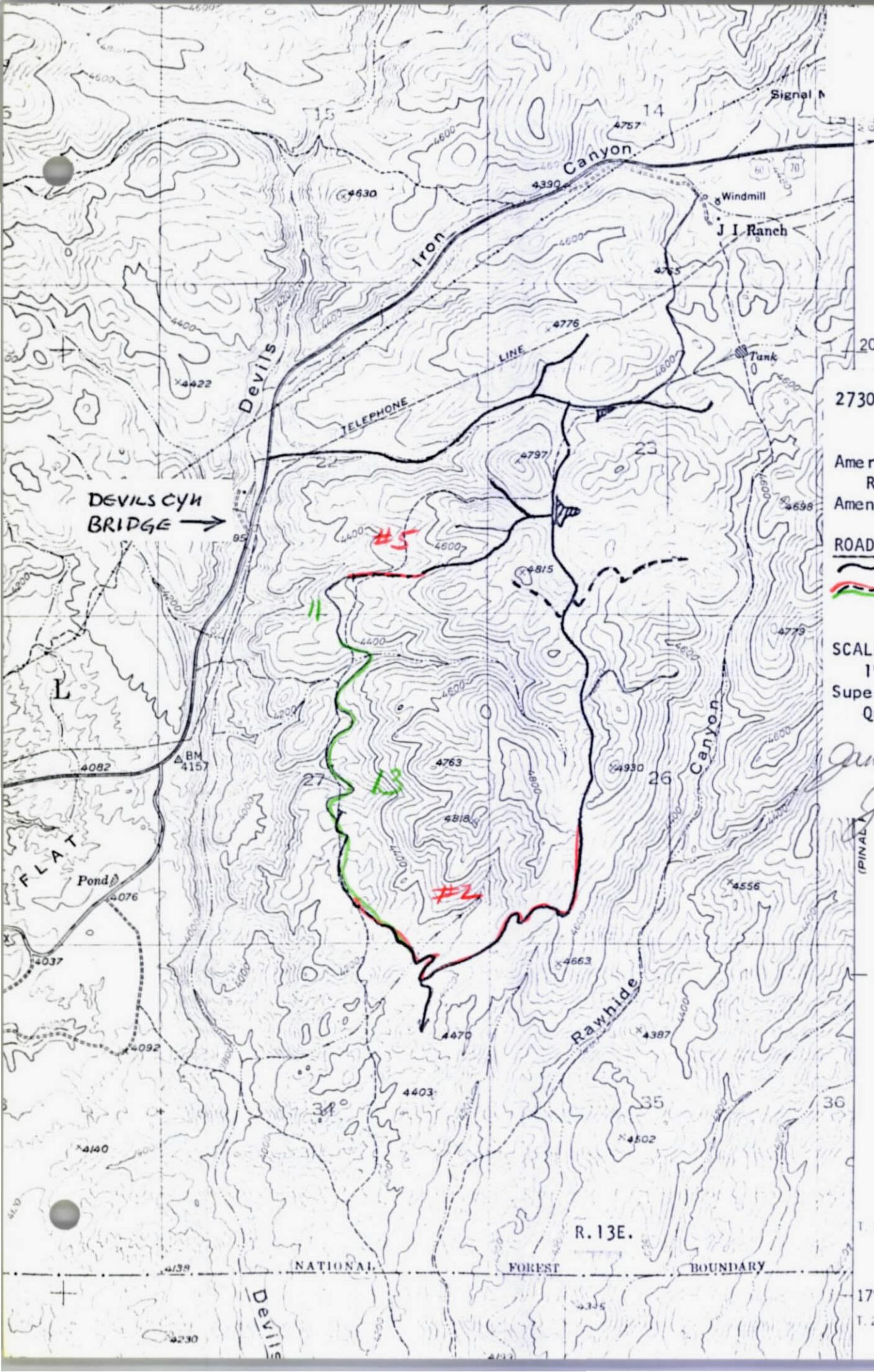
U.S. FOREST SERVICE  
AK FLAT WITHDRAWAL

SUN 52-71

J L FEE

DEVILS  
A-6  
A-3





DEVILS CYN BRIDGE →

2730 Right-of-Way Grants

American Smelting & Refining Company  
Amendment #13

**ROADS**  

 Present  
 To be constructed

**SCALE:**  
 1" = 2000 ft.  
 Superior 7-1/2' Quadrangle

Jan 23, 80 Date

*JOS*

(FINAL)

R. 13E.

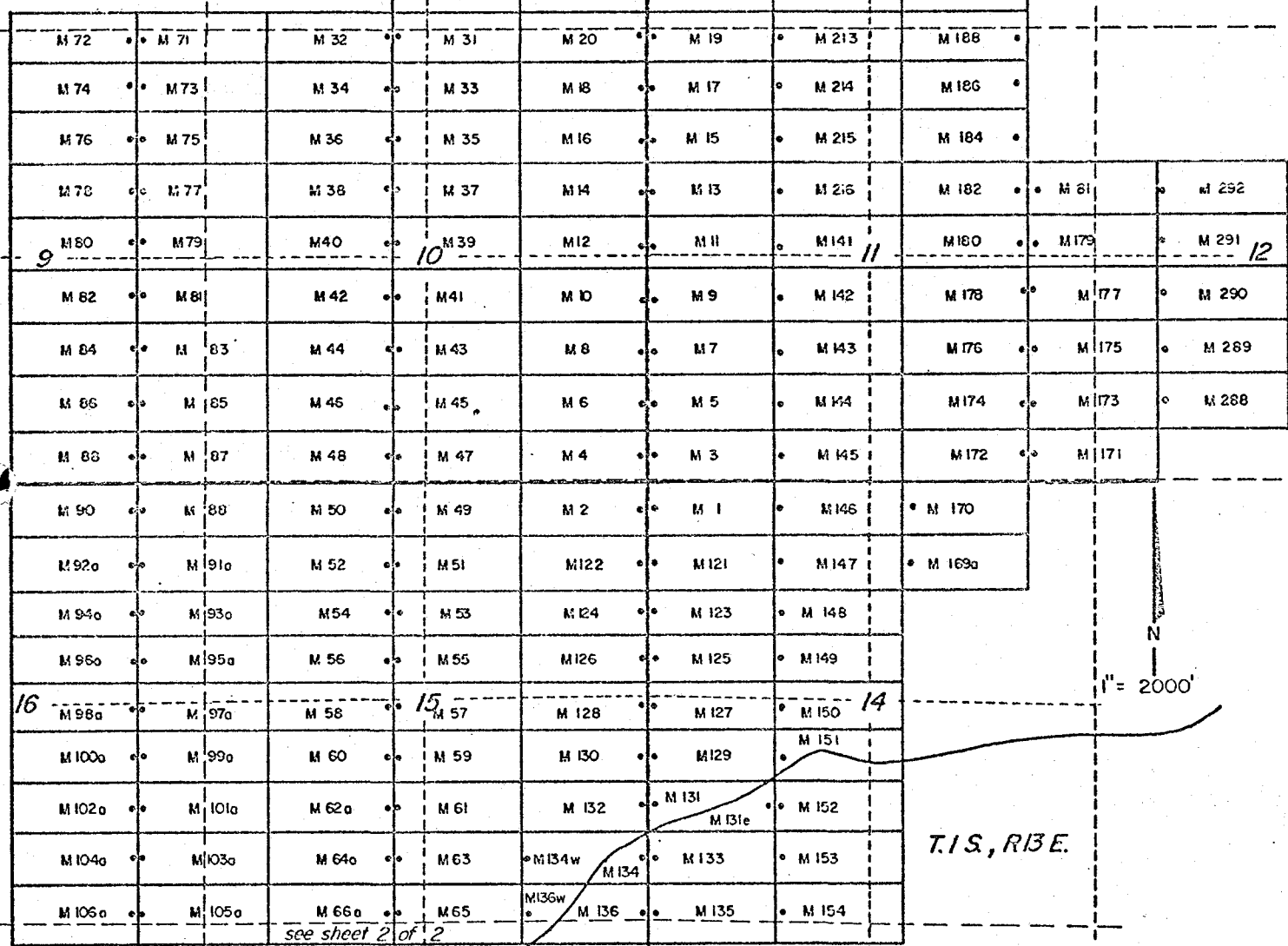
NATIONAL FOREST BOUNDARY

T. 15 S.  
T. 2 S.

C

|       |              |       |       |
|-------|--------------|-------|-------|
| M 329 | MARGARET 304 | M 303 | M 298 |
|       | M 302        | M 301 | M 296 |
|       | M 300        | M 299 | M 168 |
|       | M 202        | M 201 | M 200 |

All claim bearings north-south x east-west. All claims claim an area 600x600 having wood posts, with a cross section greater than 1.5" in each corner and for each monument.



THE MARGARET CLAIMS LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST.

| LODE CLAIM                        | ORIG. LOCATION NOTICE / DATE |
|-----------------------------------|------------------------------|
| MARGARET 1-16                     | Can. US. Ltd. 1-19-69        |
| MARGARET 17-46                    | 5326 E. 7th Street 1-25-69   |
| MARGARET 47-58, 91-106            | Tucson, Az. 85711 1-27-69    |
| MARGARET 169-212 (excl. 190, 192) | 1-29-69                      |
| MARGARET 59-66, 121-132, 141-146  | 1-30-69                      |
| MARGARET 133-136                  | 1-31-69                      |
| MARGARET 147-152                  | 2-1-69                       |
| MARGARET 288-292                  | 2-22-69                      |
| MARGARET 153, 154                 | 3-4-69                       |
| MARGARET 299-304                  | 3-26-69                      |
| MARGARET 297                      | 3-27-69                      |
| MARGARET 329                      | 4-11-69                      |
| MARGARET 83-90                    | 4-17-69                      |
| MARGARET 71-82                    | 4-18-69                      |
| MARGARET 131e, 134w, 136w         | 4-29-69                      |
| MARGARET 91a-106a                 | 5-28-69                      |
| MARGARET 62a, 64a, 66a            | 6-2-69                       |

| ORIG. LOCATION NOTICE / DATE                           | AMENDED LOCATION NOTICE / DATE                                                      |
|--------------------------------------------------------|-------------------------------------------------------------------------------------|
| Continental Copper Inc. P.O. Box 662 Oracle, Az. 85623 | MARGARET 28, 24, 59, 135, 128, 134, 134w, 171, 177, 180, 106, 192, 206, 214 6-25-69 |
| ASARCO Incorporated P.O. Box 5747 Tucson, Az. 85703    | MARGARET 64a, 177 11-13-69                                                          |
|                                                        | MARGARET 184, 186, 188, 213-215 4-11-74                                             |
|                                                        | MARGARET 184, 186, 188 11-15-75                                                     |
|                                                        | MARGARET 190, 192, 194, 196, 198 11-16-75                                           |
|                                                        | MARGARET 200, 206, 298 11-17-75                                                     |
|                                                        | MARGARET 296, 298 3-24-76                                                           |
|                                                        | MARGARET 177, 178, 179, 180 3-31-76                                                 |
|                                                        | MARGARET 171-176 4-1-76                                                             |

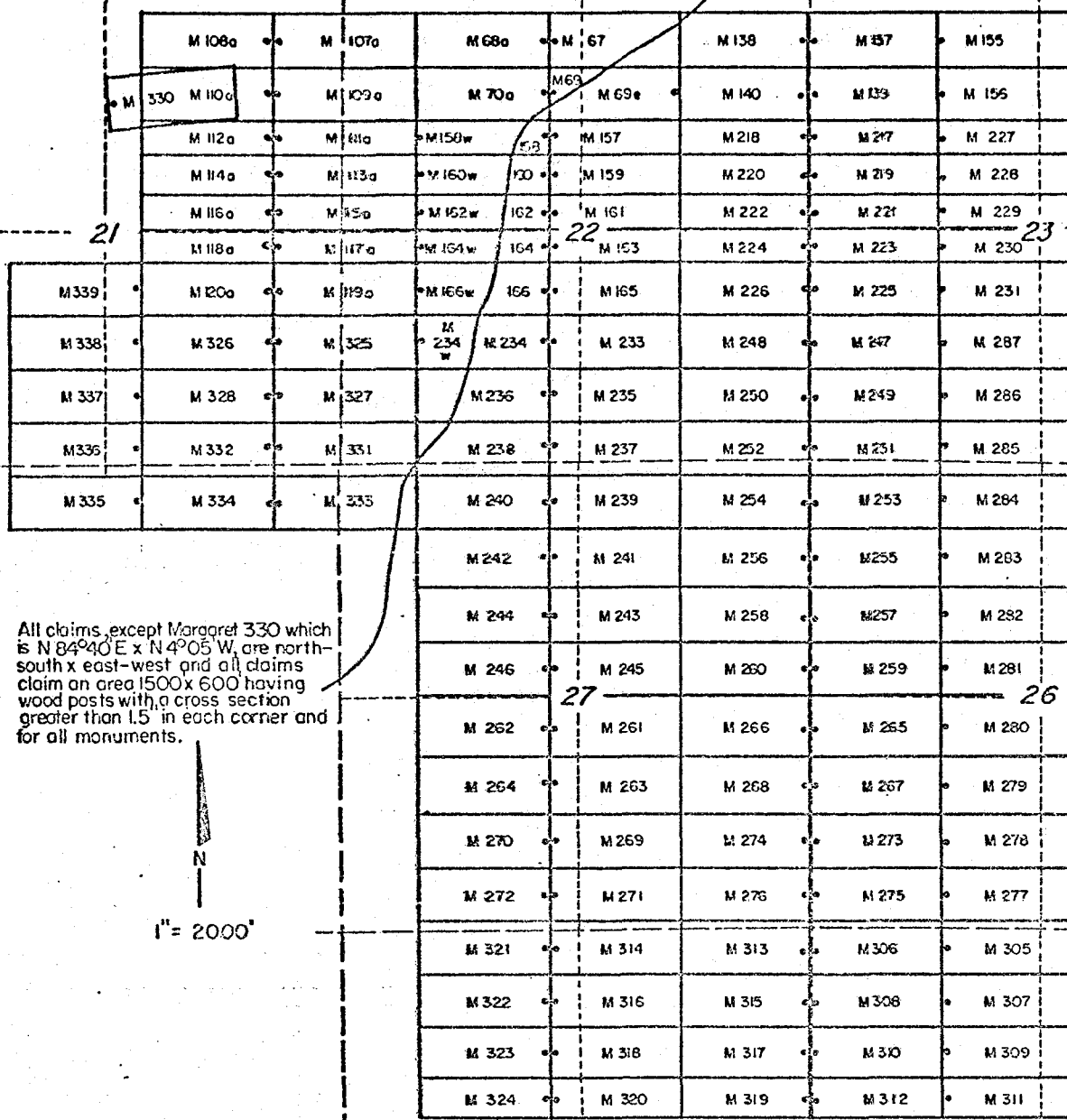
| OWNERSHIP HELD BY                                          |
|------------------------------------------------------------|
| ASARCO Incorporated P.O. Box 5747 Tucson, Az. 85703        |
| And Continental Copper Inc. P.O. Box 662 Oracle, Az. 85623 |

|            |                                                     |         |
|------------|-----------------------------------------------------|---------|
| BETH 1 & 2 | ASARCO Incorporated P.O. Box 5747 Tucson, Az. 85703 | 8-17-71 |
|------------|-----------------------------------------------------|---------|

SHEET 1 OF 2  
 LODE CLAIMS IN PINAL COUNTY  
 ASARCO Incorporated  
 1150 NORTH 7TH AVENUE  
 TUCSON, ARIZONA 85703



see sheet 1 of 2



THE MARGARET LOCATED IN THE 1/4 OF SECTION \_\_\_\_\_, TOWNSHIP 1 SOUTH, RANGE 13 EAST. CLAIMS

| LODE CLAIM                                             | ORIG. LOCATION NOTICE / DATE            | AMENDED LOCATION NOTICE / DATE                       | OWNERSHIP HELD BY                                                  |
|--------------------------------------------------------|-----------------------------------------|------------------------------------------------------|--------------------------------------------------------------------|
| MARGARET 107-116                                       | Can. U.S. Ltd. 1-27-69                  | MARGARET 133, 140, 225, 226, 236, 242, 244, 248, 330 | ASARCO Incorporated<br>P.O. Box 5747<br>Tucson, Az. 85703          |
| MARGARET 67, 68                                        | 5326 E. 7th Street 1-30-69              | MARGARET 332, 335, 70a, 164, 225, 330                | and<br>Continental Copper Inc.<br>P.O. Box 662<br>Oracle, Az 85623 |
| MARGARET 137-140, 159-166, 217-226, 233, 234, 247, 248 | Tucson, Az. 65711 1-31-69               | MARGARET 331                                         |                                                                    |
| MARGARET 69, 70, 117-120, 157, 158                     | 2-1-69                                  |                                                      |                                                                    |
| MARGARET 261-264, 269-272, 235-246                     | 2-6-69                                  |                                                      |                                                                    |
| MARGARET 249-260, 265-268, 273-282                     | 2-15-69                                 |                                                      |                                                                    |
| MARGARET 155, 156                                      | 3-4-69                                  |                                                      |                                                                    |
| MARGARET 227-231, 287                                  | 3-14-69                                 |                                                      |                                                                    |
| MARGARET 305-320                                       | 3-19-69                                 |                                                      |                                                                    |
| MARGARET 325-328                                       | 3-20-69                                 |                                                      |                                                                    |
| MARGARET 283-286, 321-324                              | 4-10-69                                 |                                                      |                                                                    |
| MARGARET 330                                           | 4-15-69                                 |                                                      |                                                                    |
| MARGARET 69e, 162w, 164w, 166w, 159w, 160w, 234w       | 4-29-69                                 |                                                      |                                                                    |
| MARGARET 66a, 70a, 117a-120a                           | Continental Copper Inc. 6-2-69          |                                                      |                                                                    |
| MARGARET 331-339                                       | P.O. Box 662 6-3-69<br>Oracle, Az 85623 |                                                      |                                                                    |

SHEET 2 OF 2  
LODE CLAIMS  
IN  
PINAL COUNTY  
ASARCO Incorporated  
1150 NORTH 71TH AVENUE  
TUCSON, ARIZONA 85703

## Special Use Permits

USFS Amendments to ASARCO Inc.

- # 2, signed 1/10/74 to improve & use existing roads.
- # 3, signed 2/28/77
- # 4, signed 7/14/77
- # 5, signed 1/20/78
- # 6, signed 9/15/78
- # 7, signed 9/15/78
- # 8 (Proposed, but not submitted to Tentative Operating Plan, suggested in letter from Bedell of USFS, Phoenix, dated 10/12/79.

PBC

Fed 13 Sep East

① Range Management Plan was approved (last week; TCO didn't notify us).

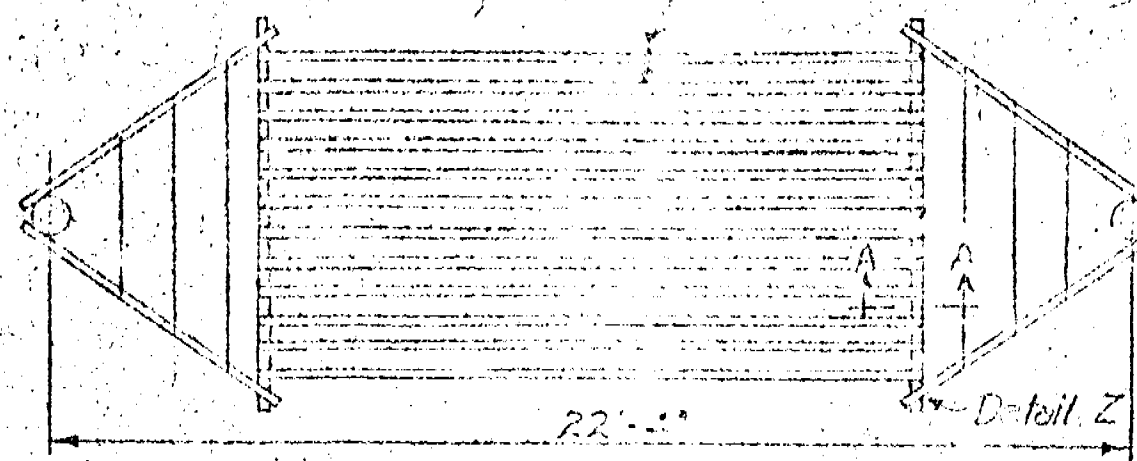
You may sign for Araco.

② I would like to write a letter to Roger & Forest Supervisor concerning Oak Flat — simple letter referring to my letter of March 27, 1982 and reconfirming Araco's interest.

Let me know when you have made verbal contact so I can write the letter — that is if you still plan to call Hazelton(?).

cc RTG, JDS

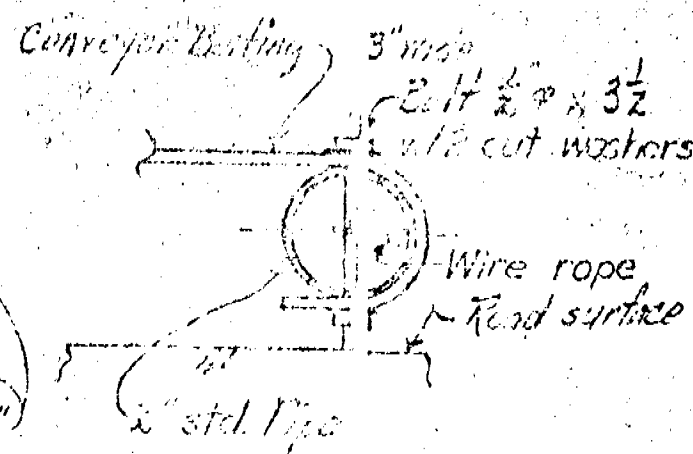
Conveyor Belting 12 strips @ 7" ea.



PLAN

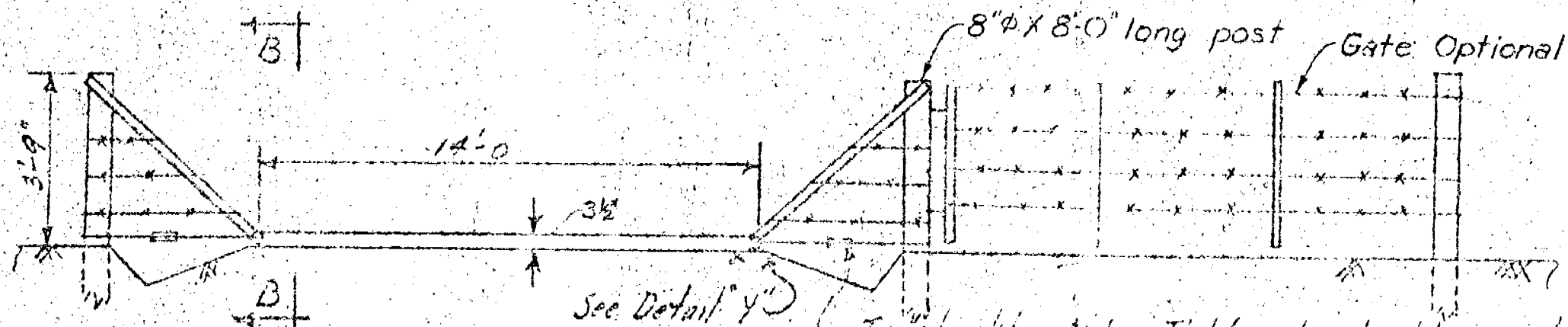
Install lag screws  $\frac{5}{8}'' \times 4''$  w/ lock washer, after belts are tensioned.

DETAIL "X"



SECTION A-A

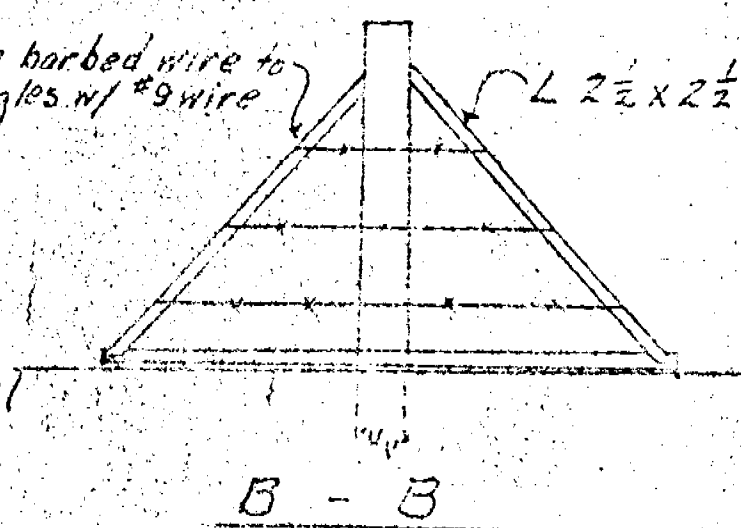
| BILL OF MATERIAL |      | DESCRIPTION                                         |
|------------------|------|-----------------------------------------------------|
| 12               | pos. | Conveyor Belting 3" wide 15' long (or 150 lin. ft.) |
| 2                | pos. | Pipe, std. iron 2" x 8'-0"                          |
| 2                | pos. | Wire rope $\frac{1}{2}'' \times 22$ ft. ea.         |
| 7                | ea.  | Turnbuckles, $\frac{1}{2}''$ eye ends               |
| 12               | ea.  | Wire rope clips (7)                                 |
| 4                | pos. | L 2 1/2" x 2 1/2" x 3/16"                           |
| 2                | ea.  | Posts 8" x 8'-0"                                    |
| 24               | ea.  | Bolts $\frac{1}{2}'' \times 3\frac{1}{2}''$         |
| 48               |      | Washers $\frac{1}{2}''$                             |
| 4                |      | Bolts $\frac{5}{8}'' \times 3\frac{1}{2}''$         |
| 8                |      | Lock washers, $\frac{5}{8}''$                       |
| 4                |      | Lag screws $\frac{5}{8}'' \times 4''$ long          |



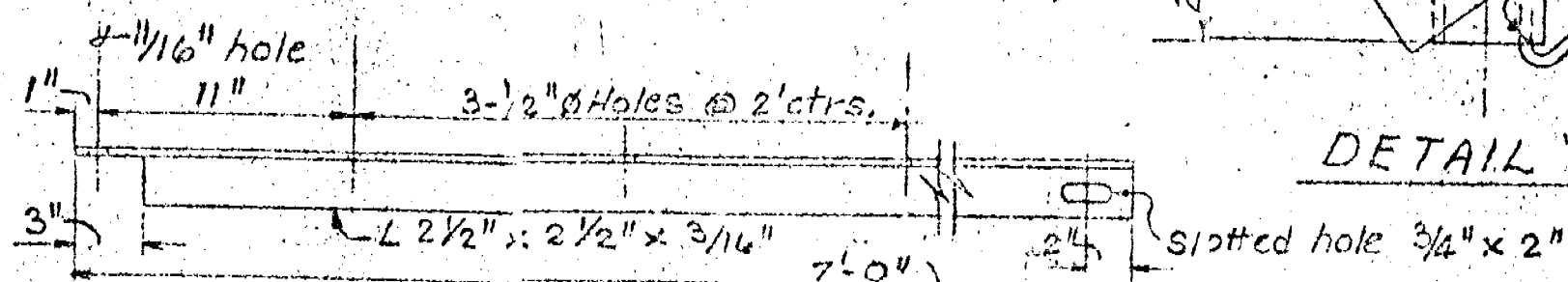
ELEVATION

Turnbuckle Nts: Tighten turnbuckle enough to keep belting about  $\frac{3}{4}''$  above road surface. Keep tension test.

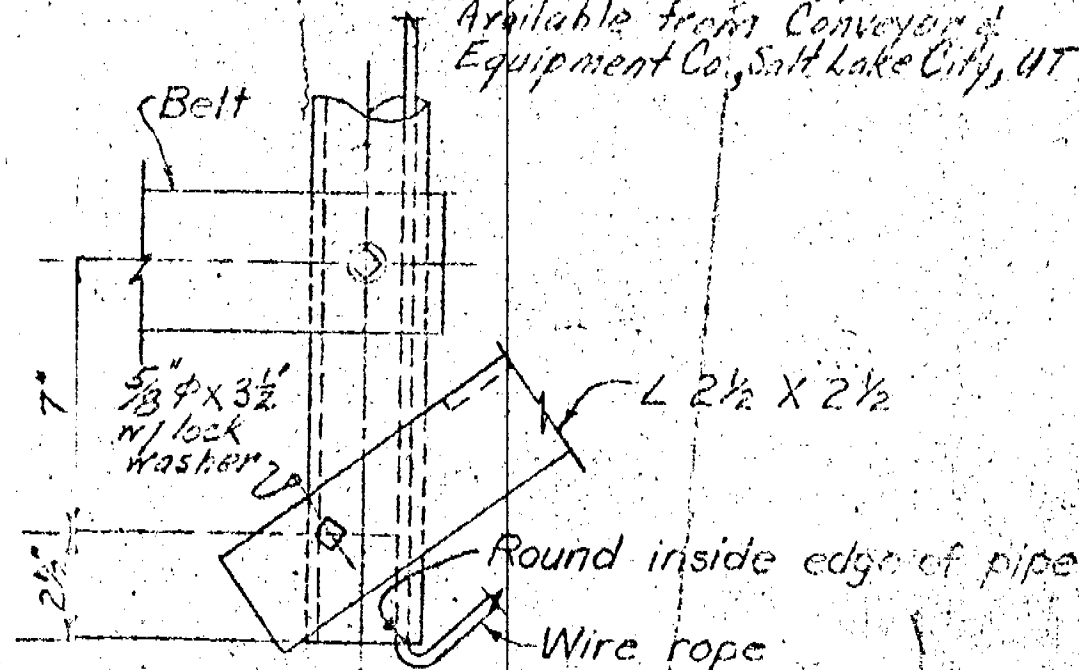
Tie barbed wire to angles w/ #9 wire



B - B



GUARD ANGLE DETAIL



DETAIL "Z"

BELT CHARACTERISTICS

From  
Roger Anderson  
Conecdo Nat'l Forest  
USFS  
3/12/80

APPROVAL

1. Approval of this Operating Plan:
  - (a) Does not constitute recognition or certification of ownership by any person named as owner herein.
  - (b) Does not constitute now or in the future recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.
2. When another party asserts a title interest in the area covered by this plan, it will be the sole responsibility of the concerned parties to resolve such conflict before proceeding with claim development.
3. A bond ( ) is, ( ) is not required. This bond in the amount of \_\_\_\_\_ in the form of cash or surety is required to assure reclamation of the disturbed area.
4. Other stipulations (explain or attach).

Proposal Evaluated by:

\_\_\_\_\_  
Signature of Forest Service  
Evaluator

\_\_\_\_\_  
Date

Approved by:

\_\_\_\_\_  
Signature of Authorized  
Officer

\_\_\_\_\_  
Date

ACCEPTANCE OF STIPULATIONS

The stipulations and/or modifications to this plan attached hereto have been reviewed, and will be incorporated into and become a part of this Operating Plan.

\_\_\_\_\_  
Signature of Operator

\_\_\_\_\_  
Date

H. ENVIRONMENTAL PROTECTION MEASURES

Describe actions taken to minimize adverse environmental impacts. State plans for reclamation of disturbed areas and for erosion control, including provisions for filling excavations, grading of soil banks, blocking of access roads, reseeding, etc.

I. PERIOD OF OPERATION

This operation will begin on \_\_\_\_\_ (a date not prior to date of approval. This operation will be completed on \_\_\_\_\_ (a date not to exceed 12 months from approval date). If operations are proposed to exceed one year, an addendum to this plan should be filed. A substantially changed operation will be covered by a new Operating Plan.

J. ANTIQUITIES

The operator agrees to notify the authorizing officer of any discovery of cultural or natural history resources within the area covered by the plan. This authorization to proceed does not constitute permission so as to relieve the operator from criminal prosecution under the Antiquities Act (P.L. 59-209).

K. ENCLOSURES (list as appropriate)

1. Exhibit A - map
- 2.

Submitted by:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



G. TYPE OF OPERATION

Describe the type and magnitude of the operation to be performed. Detailed information is required for any earth moving and site clearance operations. A separate surface disturbance map will be submitted as Exhibit B if such operations are extensive. Tie all operations to claim maps.

C. CLAIM OWNER

The owner(s) of the above claim(s) are as follows:

|        |           |         |
|--------|-----------|---------|
| _____  | _____     | _____   |
| _____  | _____     | _____   |
| _____  | _____     | _____   |
| (Name) | (Address) | (Phone) |

The above owner has authorized this operation through (check one):  lease,  contract,  direct employment,  Other (explain)

D. MAPS

Attached as Exhibit A to this Operating Plan is a map of all claims listed under item B. (a 2" = 1 mile quad map or a U.S.G.S. topographic map). An optional attachment is a sketch map showing the claim grouping, and details of the operation.

E. ACCESS

The proposed route of access is: \_\_\_\_\_  
 (describe access from point of  
 entry into National Forest, using road numbers when available)

which consists of existing roads shown as solid lines and proposed roads shown as dashed lines in Exhibit A. (Note: Construction, reconstruction, or restoration of a road is a means of access to mining claims will be authorized separately by a special use permit.)

F. VEHICLES AND EQUIPMENT

The following vehicles and equipment listed by type and size, will be used in connection with this operation:

| Type & Size of Vehicle | License or Serial No. | Location |
|------------------------|-----------------------|----------|
|                        |                       |          |

OPERATING PLAN

Tonto National Forest

Date Rec'd \_\_\_\_\_

\_\_\_\_\_ Ranger District  
 \_\_\_\_\_ County  
 \_\_\_\_\_ Mining District

This Operating Plan is submitted pursuant to 36 CFR 252 by the below-listed operator, for review and approval by the authorized officer of the Tonto National Forest.

A. OPERATOR

Name of Operator \_\_\_\_\_ Telephone No. \_\_\_\_\_

Address of Operator \_\_\_\_\_

Name of Field Representative \_\_\_\_\_  
(if other than Operator)

Address and phone of Field Representative \_\_\_\_\_

B. CLAIM IDENTIFICATION

The name(s) of the claim(s) on which the operation will be conducted are:

| Name & Type of Claim<br>( ) Lode ( ) Tunnel Site<br>( ) Placer ( ) Millsite | Location<br>(Township, Range<br>Section) | Location<br>Date | Recorded          |      |
|-----------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|------|
|                                                                             |                                          |                  | Book or<br>Docket | Page |
|                                                                             |                                          |                  |                   |      |

# ASARCO

Southwestern Exploration Division

February 28, 1980

MEMO TO: ~~W.E. Lockhart~~  
N.P. Whaley  
H.M. Stone  
W.E. Lockhart

Superior East  
Drill Sites  
Tonto National Forest

Rod Byers newly appointed Assistant District Ranger\*, Globe, reaffirmed his earlier verbal permission for Asarco to prepare access sites for Amendments #9, #10, #11, and #12. He stated that he will approve plans as submitted.

I mentioned our need to move immediately onto Amended Drill Site #9.

Byers would like to visit the area and in particular, the access to #13, to check for visual impact. Approval for #13 is withheld, subject to the inspection. I encouraged him to check the area and suggested he contact any one of us to accompany him.

Site #7 -- it is critical that this site is located east of our "LD" line of claims on Rawhide Project property (check claim map attached).

Jim Stringham and Walt Lockhart recently visited the drill site presently occupied (with other visitors). Remarks were made regarding scattered drill core (possibly cement).

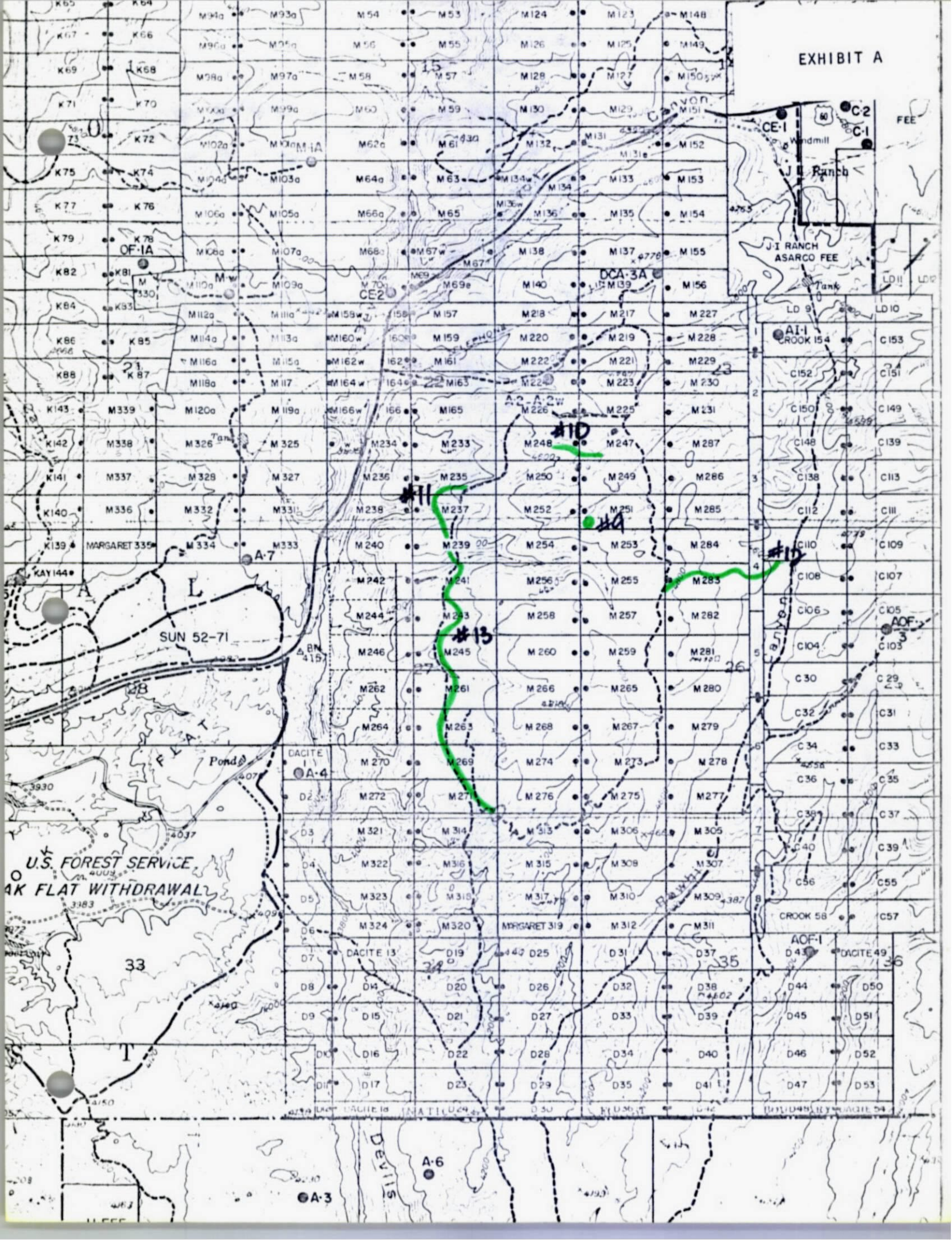
*RBC*  
R. B. Crist.

RBC:jlh  
encls drill site map, claim map  
c.c. F.T.Graybeal, w/o maps

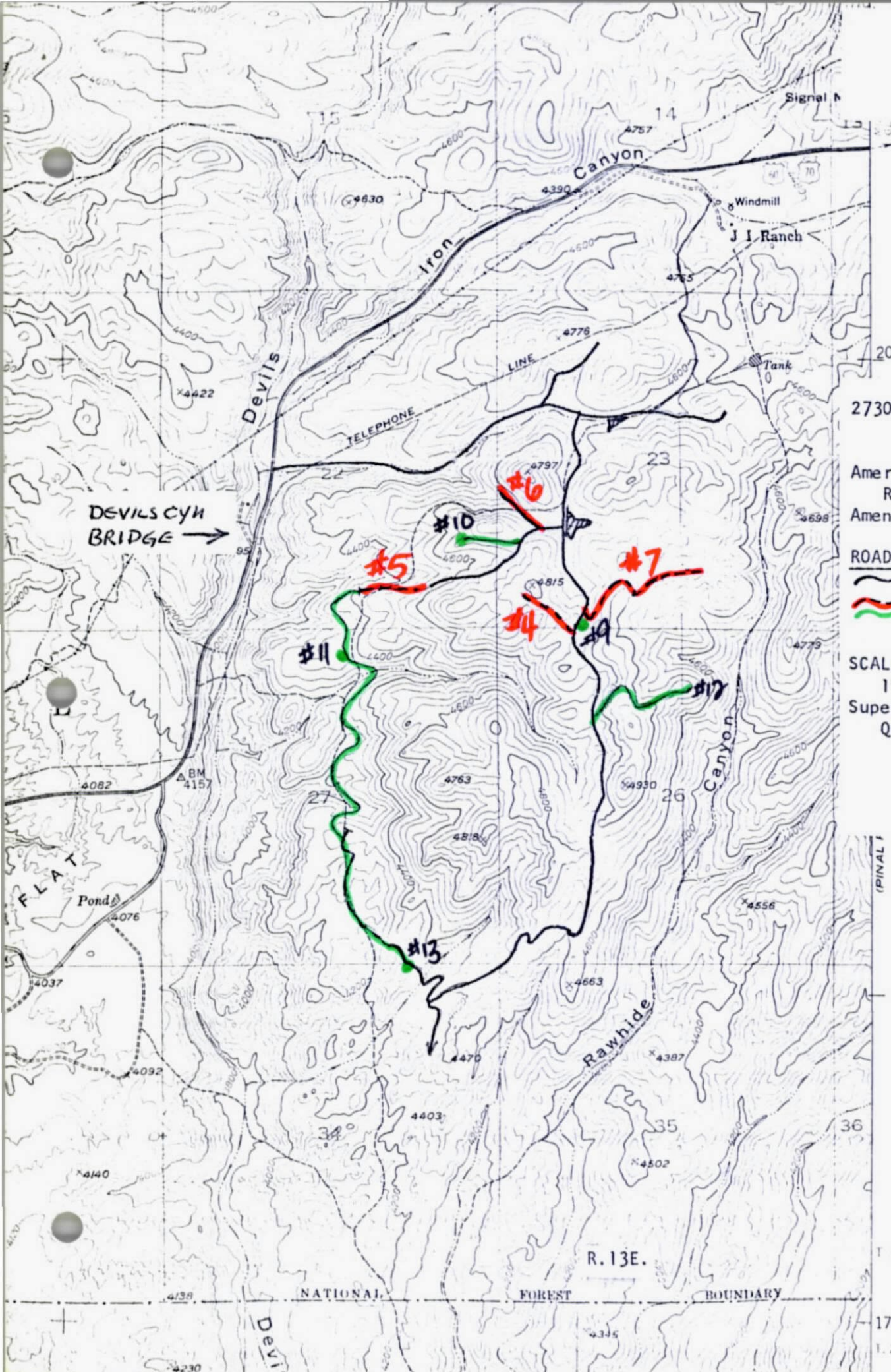
\* New District Ranger is Dave Stewart.



EXHIBIT A









2730 Right-of-Way Grants

American Smelting & Refining Company Amendment #

ROADS

 Present  
 To be constructed

SCALE:

1" = 2000 ft.  
Superior 7-1/2' Quadrangle

Date

AMENDMENTS #9, #10, #11, #12, #13

(PINAL)

R. 13E.

NATIONAL FOREST BOUNDARY

T 1 S

17'30"

T. 2 S.



# ASARCO

JDSel

Exploration Department  
Southwestern United States Division  
R. B. Crist  
Property Manager

March 27, 1980

Mr. Dave Stewart  
District Forest Ranger  
Tonto National Forest  
Globe District  
Route 1 - Box 33  
Globe, Arizona 85501

Forest Service Regulations  
36 C.F.R. § 252

Dear Sir:

In compliance with the above-noted regulations, we submit the following information and plans for continued entry upon National Forest System lands in the search for minerals.

An enclosed topographic map highlights in yellow, previously existing and approved access road grants, and the mining claims as located on National Forest land, and as filed with the BLM under the Federal Land Policy and Management Act.

To-date our exploration program has been conducted under road right-of-way grants No. 2730, granted in 1971 and amended nine times. All previous rights-of-way will be combined into one exploration plan of operation.

Permission is requested for the following construction work:

- a) Rebuild 8,000' of existing and washed-out roads and trails as highlighted on the map in green;
- b) Construct 3,000' of new road as highlighted on the map in red. An additional 3,000' of new road is shown on private land.
- c) Prepare five new drill sites, each of which will be approximately 60 x 200 feet, as shown in red.

Reseeding with recommended grasses and shrubs is carried on during construction. The drill sites upon completion of drilling, will be cleared

→ → →

Mr. Dave Stewart  
March 27, 1980  
page 2

of all debris, the mud pits (if any), tanks, and decanting areas drained and restored.

Attached is a list of various seeds used in the reseeding program, combinations of which are blended for temperature and altitude.

The completed drill hole will be capped to prevent entry.

Upon completion of the various portions of the program, roadways will be considered for restoration (put-to-bed), subject to the possibility of re-entry for additional drilling and for use during the Range Management Plan.

Additional considerations are as follows:

1. Fire protection equipment used solely for that purpose. Asarco representatives shall acquaint contractors of fire plans and equipment;
2. Drilling sites collared in bedrock. Soil erosion should be nonexistent or minimal.
3. No adverse effect is anticipated on wildlife, natural resources; hazards to public health or antiquities.
4. Vehicle traffic will consist of changing the drilling crew two or three times each 24 hours. Water, fuel, and service trucks will be required on an intermittent basis.

Very sincerely,

*R. B. Crist*  
R. B. Crist.

RBC:jlh  
c.c. JDSell  
WELockhart

- encls: 1. topo map  
2. current aff.labor (Margarets et al  
Crook/Conto)  
3. performance bonds  
4. equipment list  
5. seed varieties

August 20, 1980

TO: R. B. Crist

FROM: N. P. Whaley

Superior East Project  
Brush Fire of June 27  
Bryant Construction Company

Some time ago I informed you verbally that the blasting crew of Bryant Construction Company had started a brush or wild fire in the Tonto National Forest while working on the construction of our new access road south of the location of hole A-10. Paul Bryant contacted me immediately (I was at home on sick leave) and said that he accepted full responsibility for starting the fire, and had so informed the Forest Service. He was told that any contacts regarding the matter would be made with Asarco since the plan of operations had been issued to us. I gathered the following information from Paul Bryant during a conversation on July 17. It very possibly reflects some uncertainties in fact as almost three weeks had elapsed since the event.

The fire occurred on June 27 at approximately 1400 to 1430 hours. It started at a point approximately 65 feet from the location of a dynamite-carbonite blast set off at that time. Safety fuse had been used and the crew had retreated to a safe position on the completed road to the north. By the time they could get back to the blast site the fire was beyond controlling with equipment available to them. After making an attempt to put it out they resorted to their CB radio to inform the Forest Service. Paul said he felt a USFS lookout had probably spotted the smoke and alerted Globe before that office had received the relayed CB transmissions from his crew because a government spotter plane was over the area in approximately twenty minutes. Two or perhaps three slurry drops from a Forest Service tanker after 1530 hours brought the fire under control, and follow-up by ground crews had it out by 1830 to 1900 hours. No one was injured in the operation, and no equipment was lost. Paul estimated that the burn covered approximately 2.5 acres.

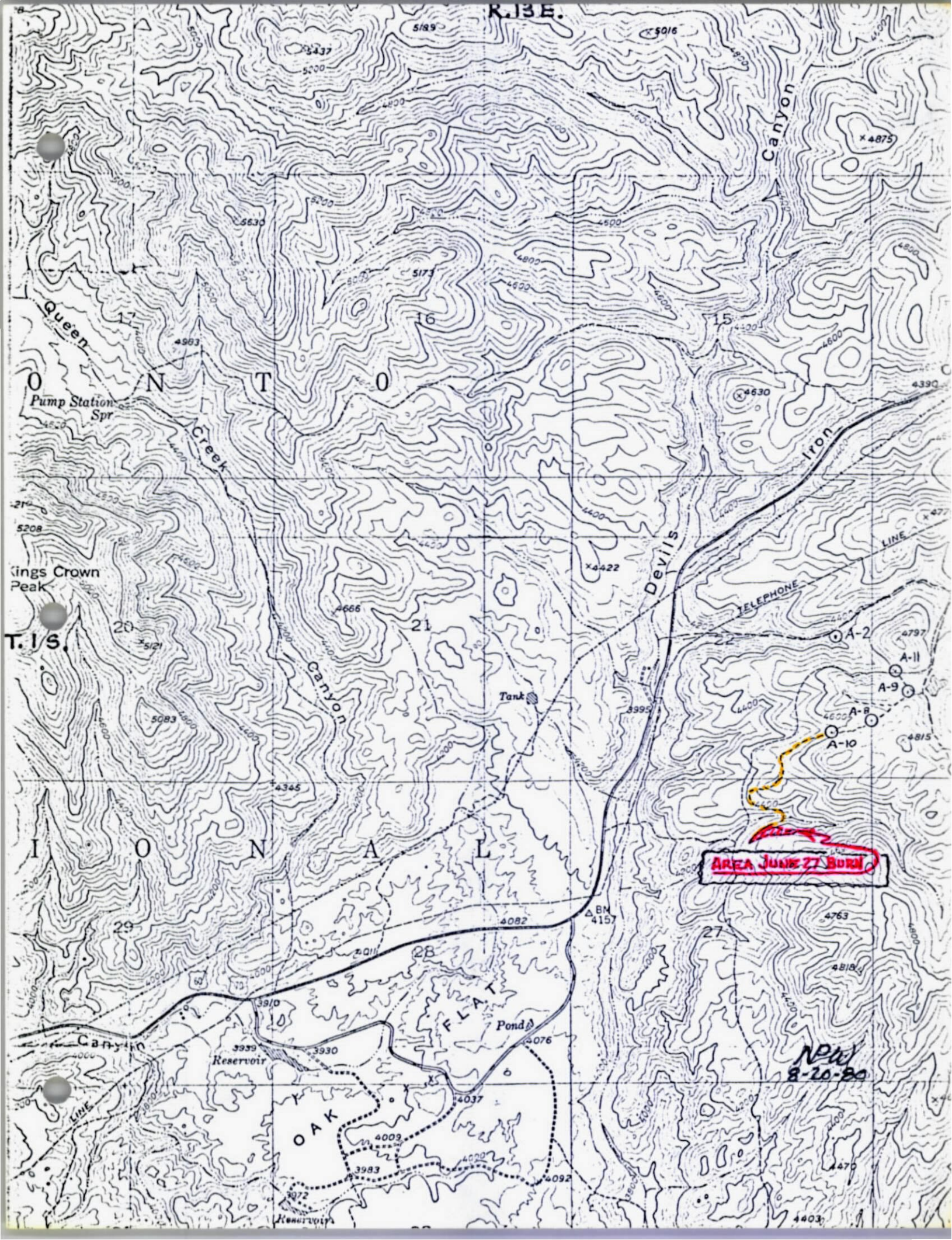
On August 19 I walked out the new road from the road blocks below our A-10 drill site, photographed the burn, and traced its approximate outline on my field copy of the USGS 7.5-min. quadrangle covering the area. This outline lies in the S $\frac{1}{2}$ , NW $\frac{1}{4}$ , NE $\frac{1}{4}$ , Sec. 27, T.1S., R.13E. A Xerox copy of a portion of my field sheet showing this outline is attached.

*N. P. Whaley*  
N. P. Whaley

NPW:lb  
Att.

cc: JDSell - w/att. ✓





R. 13 E.

Queen Creek Canyon

Pump Station Spr

Kings Crown Peak

T. 1 S.

IRON A L

Canyon

Reservoir

OAK FLAT

Pond

OAK

**AREA JUNE 27 BURN**

NPW  
8-20-80

5189

5016

5437

5173

16

15

4875

4983

5121

21

5208

20

5121

5083

21

Tank

4422

TELEPHONE LINE

4390

4630

4630

4797

A-11

A-9

A-8

A-10

4815

4345

3995

29

4000

4082

4157

4763

4818

3910

3930

28

4076

27

4037

4003

3983

4000

4092

3972

4092

4403

4470

4403



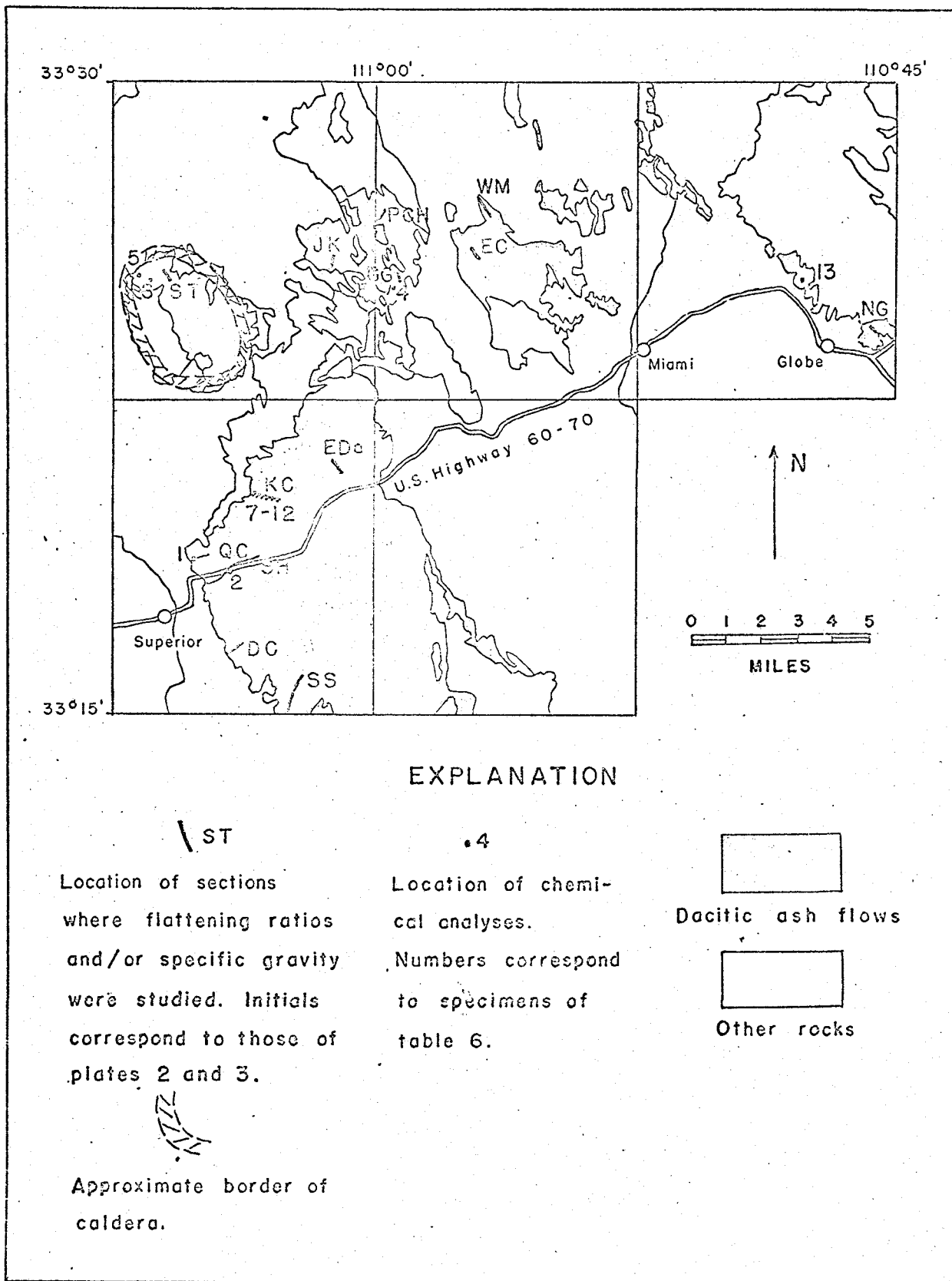


Figure 19.--Map showing location of flattening ratio studies, specific gravity studies, chemical analyses, and approximate border of the caldera.



# TENNESSEE CORPORATION

MIAMI COPPER COMPANY DIVISION

P.O. Box 100, Miami, Arizona 85538

AREA CODE (602) 473-2441

B. R. COIL  
VICE PRESIDENT & GENERAL MANAGER

April 9, 1970

Mr. James D. Sell, Geologist  
American Smelting and Refining Company  
Southwestern Exploration Division  
P. O. Box 5747  
Tucson, Arizona 85703

Dear Jim:

I have been instructed that no information is to be released on our drilling in the dacite area between Miami and Superior.

I am glad that you enjoyed the tour of the Copper Cities pit last week. Come to see us again when you can.

I do not plan to go to Cananea. Joe Fowells and Robert Moore plan to attend and will probably see you there. They hope to visit your property further south.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'W. W. Simmons', written over a horizontal line.

W. W. Simmons  
Chief Geologist

WWS:lg



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 14, 1970

MEMORANDUM TO: W. E. Saegart

Globe-Superior Project  
Gila-Pinal Counties, Arizona

Last night I called Ben Dickerson of Superior Oil Company to inquire about their information on the drilling of the Dacite Plateau. I was especially interested to know if information had been exchanged with Inspiration. Ben was not acquainted with the project (being before his time with SOC) but said to come on down and look the data over. I did so this morning.

Unfortunately, no new information was gained on the drilling. A memo had been exchanged from Miami to Superior Oil about exchanging information with Inspiration, but no drill information was found in their records. The IP results run by Anaconda were in the files but nothing else from Inspiration-Anaconda.

Ben mentioned before we got started that he has looked for you at the last several meetings he has attended in order to "gas" with you about Calico.

J. D. Sell

JDS/kvs

OCT 2 1970

10930 Santa Fe Drive  
Sun City, Arizona 85351  
September 30, 1970

Certified mail

S. I. Bowditch  
American Smelting & Refining Co.  
Exploration Department  
P. O. Box 5795  
Tucson, Arizona 85703

Dear Mr. Bowditch:

This is to notify you that your employees or sub contractors have grossly violated Section 6 of the agreement made between us for use of the road across my property at the lower end of Pinal Ranch.

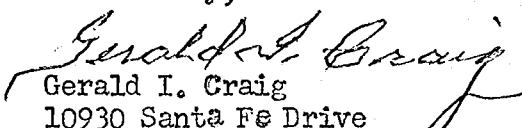
During the summer when you started to use the road, the men came on to my property (off the specified roadway), knocked down one old large oak tree and several smaller trees then threw a ramp up to unload equipment. When I went up later I was met by irate owners of the properties as they felt I had violated my obligation to them. These people after much argument with your employees, and some threats, were able to get your men to push the tree out of the roadway in order that they might get to their homes; but only if said owners would cut the tree in order that both east and west roadways could be used.

This last Saturday, I was on the property only to find that you are using not only mine but Mr. Spurlock's property for parking for several pieces of large and small equipment.

No. 1 - I did not rent a parking lot to you - only a right of way.

No. 2 - To put the property in shape for sale (or use by me) it would necessitate much work, time and money, thus I am submitting a bill for \$500.00 damages which I expect to be paid immediately. This does not mean that you can send your men and equipment in lieu of the money as I would not be there to supervise the job and they have already done too much damage with their carelessness.

Yours truly,

  
Gerald I. Craig  
10930 Santa Fe Drive  
Sun City, Arizona 85351

CC-James R. Malott



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

S. I. BOWDITCH  
PROPERTY MANAGER

October 6, 1970

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Gerald I. Craig  
10930 Santa Fe Drive  
Sun City, Arizona  
85351

Dear Mr. Craig:

I was sorry to hear from your letter of September 30th, that you are unhappy with the way we have used the right of way you granted us.

I have talked with the man who is in charge of the work and he said that he had improved your road and had also, upon discovering that he had dumped some dirt which might interfere with your well, had cleaned out the creek so that it was well below your well and would not flood it. Before this had been done there was considerable danger that a flash flood in the creek would damage your well. He also cleaned the creek of rubbish above the culvert which saved the culvert during the next flash flood.

In regards to the tree, Mr. Knight volunteered to cut up the tree for firewood and neither he nor Mr. McClintock felt that the tree was at all in the way.

We did park some equipment along side the road as this was the only place where there was room to park it, but it was not in any ones way. This equipment has since been removed.

From what I can make out, we have done no monetary damage to your property and in fact, have left it in better shape than we found it. If you still feel that we should pay you for some damages, I would appreciate it if you would give me further details.

Yours very truly,

S. I. Bowditch

SIB/van

cc: WESaegart  
JDSell ✓  
JRMalott

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

November 5, 1970

FILE MEMORANDUM

From: J. D. Sell

Re: Pioneer General Reconnaissance  
Superior East Project  
Pinal-Gila Counties, Arizona

The general premise of the reconnaissance study is to learn by observation, sampling, and recording, all facets of geology and mineralization which is within the project area. Expansion of study outside the area will be governed by the direct application of the information to the project. Published geologic mapping is available for most of the area and will be used as a base. Thus geology as such will not have to be mapped, but the interpretation of contacts and other features plus distribution of mineralization-alteration should be closely interpreted. Recently flown colored aerial photographs at 1:30000 cover the entire area. The reconnaissance program is divided into five general sub-parts:

1. Study of intrusive centers, mainly on the northwest side of the area. John King is primary investigator.
2. Study of the premineral occurrences along the east side of the area, with special emphasis on known distribution patterns of oxide and sulfide occurrences. Doug Friel, primary investigator.
3. Study of the dacite itself, primarily tracing of fault structures and depth position within the mass. George Barnett, primary investigator.
4. Study of the Whitetail Conglomerate.
5. Mapping of the lower portion of the project area not presently covered by published USGS mapping.

The last two study areas will be covered primarily by James Sell, who will also integrate all other studies.

Ramon Shannon will assist with any assignment based on need of assistance, such as going along in extra rough country, but will also have several specific assignments such as gate repair and claim corner boundary location.

Summary reports of each of the study areas are to be submitted by the primary investigator. I recommend that reports be submitted upon completion of work in any portion of the study area and the information not be "saved" for a final covering your entire assignment.

November 5, 1970

Separate memos outlining additional thoughts and references will be submitted to the principal investigator.

I plan to be away from the project area from November 8-21 and November 29-December 12. John King will be in direct supervision of the project in my absence and problems and priorities should be freely discussed with him, or myself. It is suggested that all participants lodge in the Copper Hills Motel (Globe) for mutual cooperation and communication.

Claim boundaries and drill holes found during the study should be carefully plotted.

Each participant is expected to secure his own set of topographic sheets as needed.

The USGS GQ maps No. 128 and 818 are in print and additional copies may be secured through our office. Single copies of the USGS Prof. Paper 342 and Bulletin 1141-H have been checked out by Doug Friel.

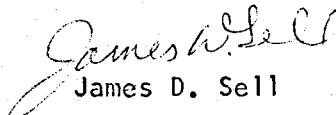
The photos will be taken care of by John King. They can be used for stereoviewing. John King will secure the office mirror-sterio for use in the motel, but individual glasses for field use should be secured by each participant if needed.

Extra keys for the gate on the north part of the JI Ranch are available from John King. Care and concern should be taken when using this road (to DCA 1 and 2), as well as any road used. Cordial relationships with ranchers and other land owners should be maintained.

Although primary investigators have been assigned to study areas, it should be noted that intra-assistance is expected between study areas.

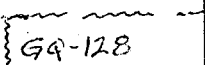
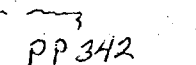


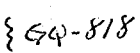



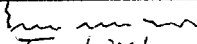

Each individual is to take care of his own vehicle.


Time distribution on the studies will be charged to Pioneer General Reconnaissance.

  
James D. Sell

JDS:mw

cc: W. E. Saegart  
J. R. King  
D. Friel  
G. Barnett  
R. Shannon

|                |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                             |                          |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 110° 15'       | 110° 11'                                                                                                                                                                                                                                                                          | 110° 45'                                                                                                                                                                                                                                                                                    | 33° 30'                  |
| Iron Mtn       | Hualtal Canyon<br><br>GQ-128                                                                                                                                                                     | Inspiration<br><br>PP 342                                                                                                                                                                                | Globe<br><br>PP 342      |
| Picketpost Mtn | Superior<br><br><br><br>GQ-818 | Pinal Ranch<br><br><br><br>B1141-H | Pinal Peak<br><br>P 12   |
| Mineral Mtn    | <br>Teapot Mtn                                                                                                                                                                                   | <br>Sonora<br><br>PP 115                                                                                                                                                                                 | El Capitan<br><br>PP 115 |
|                |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                             | 33° 15'                  |

 Approx. Project Outlines

all topographic sheets, 7 1/2' quadr., with  
 name shown on top edge.

Publication references are USGS series.



### Reference List

ASARCO File No. Aa-16A.16.19A

ASARCO File No. Aa-16A.16.19C

ASARCO File No. Aa-16A.19.13

ASARCO Map 2271. Plan Map and Generalized Geology, Superior East.

ASARCO Map 2273. Preliminary Land Status.

Blucher, A.G., 1958. Porphyry Copper Reconnaissance, Globe-Superior area: ASARCO file Aa-7.7.0 (December 15, 1958), 12 p.

Hammer, D.F., and Peterson, D. W. 1968, Geology of the Magma Mine area, Arizona, in Ridge, J. P., ed., Ore deposits of the United States, 1933-1967: AIME Graton-Sales volume, p. 1282-1310.

Hammer, D.F., and Webster, R.N., 1962, Some geologic features of the Superior area, Pinal County, Arizona, in Guidebook of the Magollon Rim region, east-central Arizona: New Mexico Geol. Soc., 13th field conference, 1962, p. 148-152.

Peterson, D.W., 1960, Geologic map of the Haunted Canyon quadrangle, Arizona: USGS Quadrangle Map GQ-128, scale 1:24,000.

Peterson, D.W., 1961, Flattening ratios of pumice fragments in an ash-flow sheet near Superior, Arizona: USGS Prof. Paper 424-D, p. 82-84.

Peterson, D.W., 1962, Preliminary geologic map of the western part of the Superior quadrangle, Pinal County, Arizona: USGS Mineral Investigation Studies Map MF-253, scale 1:12,000.

Peterson, D.W., 1968, Zoned ash-flow sheet in the region around Superior, Arizona, in Titley, S.R., ed., Southern Arizona Guidebook III: Tucson, Arizona, Arizona Geological Society, p. 215-222.

Peterson, N.P., et al, 1951. Geology and ore deposits of the Castle Dome area, Gila County, Arizona: USGS Bulletin 971, 134 p.

Peterson, N.P., 1962, Geology and ore deposits of the Globe-Miami district, Arizona: USGS Prof. Paper 342, 151 p.

Peterson, N.P., 1963, Geology of the Pinal Ranch quadrangle, Arizona: USGS Bulletin 1141-H, 18 p.

Ransome, F.L., 1903, Geology of the Globe copper district, Arizona: USGS Prof. Paper 12, 168 p.

Ransome, F.L., 1919, The copper deposits of Ray and Miami, Arizona: USGS Prof. Paper 115, 192 p.

Short, M.N., et al., 1943, Geology and ore deposits of the Superior mining area, Arizona: Arizona Bureau of Mines Bulletin 151, 159 p.

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

November 5, 1970

TO: George Barnett

FROM: J. D. Sell

Re: Pioneer General Reconnaissance  
Superior East Project  
Pinal-Gila Counties, Arizona

Your primary assignment is the study of features within the dacite mass.

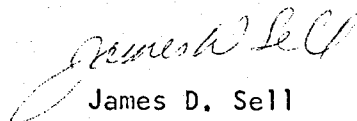
An intra-study of the colored photographs and the published USGS map GQ 818 will show where faults have been mapped in the dacite. These should be followed and the study expanded.

D. W. Peterson mapped the faults by using the "flattened pumice ratio" method (see reference), and this should be confirmed by your own study.

Also, pumice measurements should be taken throughout the dacite area for determination of "stratigraphic" or depth position within the mass itself.

I would suggest rerunning the several profiles shown by Peterson and checking the main faults before expanding to unknown areas. I would also suggest doing the remote northern areas early due to the higher elevations and deteriorating climatic conditions for working those areas.

In my absence, John King will be in direct charge of the project and any problems, questions, etc., should be referred to him.

  
James D. Sell

JDS:mw

cc: W. E. Saegart  
J. R. King

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

November 5, 1970

TO: Doug Friel

FROM: J. D. Sell

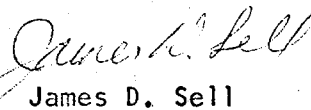
Re: Pioneer General Reconnaissance  
Superior East Project  
Pinal-Gila Counties, Arizona

Your primary assignment is the study of outcrops east of the dacite cover. Special note should be made on the copper oxide occurrences at Powers Gulch and South Pinal Rance (see Blucher's map No. 1408) and any other encountered.

Size and type of alteration-mineralization features as well as potential tonnage-grade is of prime importance in any evaluation. A look at Carlota, Manitou and others is desirable.

The type of contact, depositional, fault, or intrusive, between the dacite and underlying premineral rocks should be noted.

In my absence, John King will be in direct charge of the project and any problems, questions, etc. should be referred to him directly.

  
James D. Sell

JDS:mw

cc: W. E. Saegart  
J. R. King

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

November 5, 1970

TO: John R. King

FROM: J. D. Sell

Re: Pioneer General Reconnaissance  
Superior East Project  
Pinal-Gila Counties, Arizona

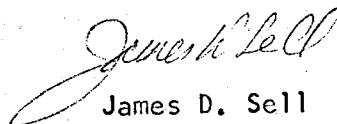
Your primary assignment on this reconnaissance will be the study of the Silver King and Rock House intrusive areas north of Superior.

Size and type of alteration-mineralization features as well as potential tonnage-grade is of prime importance in the two areas.

Contact zones, and especially near the dacite, are needed for trend direction under the dacite flow.

Silver King is designated by D. W. Peterson to be pre-dacite but the Rock House is mapped as intruding the dacite. Particular care should be made in examination of the post-dacite features. Perhaps Rock House is an intrusive related to the dacite volcanism, but if so the difference between pre and post intrusive types should be noted as well as any differences in alteration-mineralization.

Priority as to the use of R. Shannon should be determined by yourself in my absence.

  
James D. Sell

JDS:mw

cc: W. E. Saegart

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

November 5, 1970

TO: Ramon Shannon

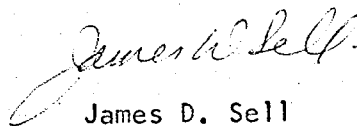
FROM: J. D. Sell

Re: Pioneer General Reconnaissance  
Superior East Project  
Pinal-Gila Counties, Arizona

Your primary assignment is the assistance to others on the project in any manner. If conflicts arise, John King will be in direct charge during my absence, and he should rule on priority of your assistance to others, as well as answering any questions or problems.

Specific problems assigned to you include:

1. The attaching of pull bars or cheaters to all the gates put in fences during the recent road building in the area. The gates are located along the new road west of drill hole DCA-1 in the north-central part of the area. Check with Milo Webb at the JI Ranch, rancher, as to possible means of doing this attachment, as we are primarily doing this at his request.
2. All validation drill sites put in by D. Hedrick by Airtrac should be checked as to their location within the claim stated and also to make sure they are within a valid portion of the ASARCO claim. All ASARCO border claims with the Margaret group have an overlap into the Margaret group and the validation drill site should not be within this overlap. (See Hedrick's Progress Report for September.)



James D. Sell

JDS:mw

cc: W. E. Saegart  
J. R. King





AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

W. E. SAEGART  
SUPERVISOR

W. L. KURTZ  
ASSISTANT SUPERVISOR

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

December 22, 1970

Mr. Kenneth L. Power, Plant Manager  
Bluebird Mine  
Ranchers Exploration and Development Co.  
Box 880  
Miami, Arizona 85539

Dear Ken:

I would like to thank you and Steve Potter for the very enjoyable visit of the Bluebird Mine last week by some of our geologic staff. The tour was most informative and we are particularly impressed by the efficiency of the Bluebird operation.

I would be happy to arrange a visit to either Mission or Silver Bell for Mr. Potter or any other members of your staff.

Very truly yours,

W. E. Saegart

WES:mw

cc: Mr. J. D. Sell ✓



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

W. E. SAEGART  
SUPERVISOR

W. L. KURTZ  
ASSISTANT SUPERVISOR

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

December 22, 1970

Messrs. Hugh Olmstead  
Jack Eastlick  
Dave Johnson  
Exploration and Mine Geology Departments  
Inspiration Consolidated Copper Company  
P. O. Box 69  
Inspiration, Arizona 85537

Gentlemen:

We would like to express our appreciation for the courtesies which were extended to ASARCO geologists during our visits last week to the Thornton, Live Oak and Oxhide operations. These tours were most informative and very ably guided by Mr. Johnson.

We would be pleased to arrange for visits to either our Mission or Silver Bell units for any members of your staff.

Yours truly,

W. E. Saegart

WES:mw

cc: J. D. Sell ✓



AMERICAN SMELTING AND REFINING COMPANY

EXPLORATION DEPARTMENT

SOUTHWESTERN UNITED STATES DIVISION

P. O. BOX ~~5705~~, TUCSON, ARIZONA 85703  
5747

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

January 5, 1971

Chief, Publications Division  
U.S. Geological Survey  
Washington, D. C. 20242

Dear Sir:

In correspondence with Mr. D. M. Kinney, Geologic Map Editor, USGS, it was stated that all requests for reproducible copy of USGS geologic maps and their bases should be directed to your office. In compliance, I request a negative copy on a stable base of the geologic features of the following maps in Arizona published by the USGS:

Plate 1, (Globe-Miami District) Professional Paper 342, by N. P. Peterson.

Plate 2, (Pinal Ranch Quadrangle) Bulletin 1141-H, by N. P. Peterson.

Map GQ-128, (Haunted Canyon Quadrangle) Geological Quadrangle Map 128 by D. W. Peterson.

Map GQ-818, (Superior Quadrangle) Geological Quadrangle Map 818 by D. W. Peterson.

It is my understanding that the geology is often on two sheets (or more depending upon the number of color separations). It is requested that these sheets be combined photographically to show the black geology in sharp outline on one stable sheet. The topographic-culture base should be submitted as a separate stable base sheet.

Upon completion of the maps, they should be submitted to this office rolled in a tube suitable for their safe transmission.

The billing for the work is to be for American Smelting and Refining Company, P. O. Box 5747, Tucson, Arizona 85703.

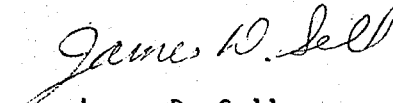
Chief, Publications Division

-2-

January 5, 1971

If any questions arise on this order, please contact either myself or Mr. William E. Saegart, Supervisor, Southwestern Exploration Department, ASARCO, (Phone 602-792-3010), Tucson, Arizona.

Sincerely,



James D. Sell

James D. Sell

JDS:mw

cc: W. E. Saegart  
W. L. Kurtz

Land Status Claims

North of Highway 60-70.

|          |   |                   |
|----------|---|-------------------|
| Margaret | - | 234               |
| Kay      | - | 154               |
| Carrie   | - | 95                |
| Gr.      | - | 20                |
|          |   | <u>503</u> Claims |

South of Highway 60-70

|             |   |                  |
|-------------|---|------------------|
| Margaret    | - | 115              |
| Noite       | - | 54               |
| State Lease | - | (2) Sections     |
|             |   | 169 + 2 Sections |

Grand Total - 672 Claims + 2 State Sections

Land Area:

Carie Group

a)  $1500 \times 2600 = 3,900,000$

b)  $2450 \times 9000 = 22,050,000$

c)  $6600 \times 4900 = 32,340,000$

d)  $5400 \times 2800 = 15,120,000$

Sub Total  $73,410,000$  sq. ft.

Key Group:

a)  $600 \times 7500 = 4,500,000$  sq. ft.

b)  $1200 \times 9000 = 10,800,000$

c)  $3000 \times 6000 = 18,000,000$

d)  $600 \times 1500 = 900,000$

e)  $13,200 \times 5800 = 76,560,000$

f)  $2400 \times 4000 = 9,600,000$

g)  $1000 \times 3400 = 3,400,000$

Sub Total  $123,760,000$  sq. ft.

Locate

a)  $3200 \times 10,500 = 33,600,000$

b)  $800 \times 6000 = 5,160,000$

Sub Total  $38,760,000$  sq. ft.

Total  $235,930,000$  sq. ft. =  $8.46$  sq. miles of located claims

plus State Lease land =  $1.94$  sq. miles of State Lease

10.40 sq. miles. ASARCO



ICC

Ghost-Cedar Group:

a)  $3000 \times 3000 = 9,000,000$

b)  $3600 \times 6000 = 21,600,000$

c)  $3000 \times 12000 = 36,000,000$

d)  $2000 \times 3000 = 6,000,000$

e)  $4500 \times 4200 = 18,900,000$

Sub Total = 91,500,000 sq. ft.

Corte Group: (plateau area only).

a)  $4200 \times 6000 = 25,200,000$  sq. ft.

Total 116,700,000 sq. ft. or 4.19 Sq. Miles

Magma - Plateau only.

a)  $5300 \times 9,700 = 51,410,000$

b)  $3000 \times 8600 = 25,800,000$

c)  $5300 \times 8,500 = 45,050,000$

d)  $1300 \times 6,000 = 7,800,000$

e)  $5300 \times 8,800 = 46,640,000$

176,700,000 sq. ft. or 6.34 Sq. Miles

f)  $5300 \times 6000 = 31,800,000$

g)  $5300 \times 5000 = 26,500,000$

235,000,000 or 8.45 Sq. Miles

## Continental Materials - Margaret Group.

a)  $2400 \times 4300 = 10,320,000$

b)  $3000 \times 7600 = 22,800,000$

c)  $2400 \times 11,700 = 28,080,000$

d)  $3300 \times 14,600 = 48,180,000$

e)  $6500 \times 10,000 = 65,000,000$

f)  $3000 \times 10,300 = 30,900,000$

g)  $3400 \times 12,000 = 40,800,000$

h)  $3000 \times 6,300 = 18,900,000$

i)  $3600 \times 7500 = 27,000,000$

Total = 291,980,000 sq ft OR

10.47

Sq. Miles

## Platements located in other areas:

a)  $2\frac{1}{2} \times 5 = 12.5$

b)  $1 \times 4 = 4.0$

c)  $1 \times 4\frac{1}{2} = 4.5$

d)  $1 \times 4 = 4.0$

e)  $2 \times 6\frac{1}{2} = 13.0$

f)  $2 \times 6\frac{1}{2} = 13.0$

51.00 sq. miles.

Also: 1.19 sq. miles of Cook Flat fee land.

Also: 1.00 sq. miles fee land.

Also: 2.50 sq. miles State Lease area.

Recap: on Land Status Plateau:

I.C.C. - 4.19 sq. miles.

Magma - 8.45

ASARCO - 10.40

Continental - 10.47

Forest Service - 1.19

Fee - 1.00

State <sup>open</sup> Lease - 2.50

Open for Mineral Staking - 12.89

51.09 sq. miles of Total Plateau



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

W. E. SAEGART  
SUPERVISOR

W. L. KURTZ  
ASSISTANT SUPERVISOR

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

March 24, 1971

Mr. R. B. Cummings  
American Smelting and Refining Company  
318 Broadway Boulevard  
Reno, Nevada

Transfer to Tucson

Dear Bob:

This will confirm our recent telephone conversations concerning your transfer from the Reno Office to the Tucson Office. Your first work assignment will be on the Superior East Project and you will be responsible to Mr. Sell, who is in overall charge of this project. The expected duration of your assignment will be six months or more. You and your family should plan on residing in the Globe-Miami area, at your own expense.

Asarco will pay your complete moving costs from Reno to the Globe-Miami area, and for your subsequent move to Tucson.

It is my understanding that Bekins Moving and Storage, whose local Reno Agent is O'Brien's Moving and Storage, 2577 E. 2nd Street, will move your household goods on or about April 1st - - - with scheduled arrival in Globe-Miami on April 8th. Further it is my understanding that the total weight of your household goods is estimated by the Bekins Agent to be 8,500 pounds, with a total estimated value of \$16,000.00. Bekins will deliver a portion of your household items, valued at \$8,000.00 to the Globe-Miami area and the other portion valued at \$8,000.00 to Arizona Moving and Storage Company, 3195 E. 36th Street, Tucson, Arizona, for storage. Asarco will pay the storage costs until your final move to Tucson. The Bekin Agent should be informed to insure the shipment at .60¢ per pound, per article. Asarco will provide the additional coverage. Also, the Bekin Agent should be informed that Asarco will insure the goods in storage.

Mr. Saegart and I are looking forward to your joining our Staff here in Tucson.

Yours very truly,

*W. L. Kurtz*  
W. L. Kurtz

WLK:van

cc: WESaegart  
JDSell  
GJStathis  
KvondenSteinen



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

W. E. SAEGART  
SUPERVISOR

W. L. KURTZ  
ASSISTANT SUPERVISOR

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

February 1, 1971

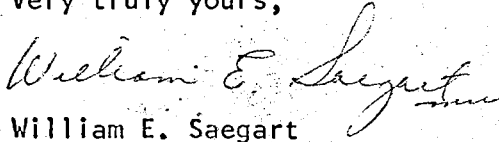
Mr. R. P. Hughes, Manager of Operations  
Cities Service Company  
Miami Copper Operations  
Box 100  
Miami, Arizona 85539

Dear Mr. Hughes:

A group of our exploration personnel is interested in a geological tour of your Castle Dome, Pinto Valley, and Cactus areas. This group includes William L. Kurtz, James D. Sell, John R. King, Douglas T. Friel, and myself.

In a conversation with Joe Fowells, it was suggested that Monday, February 22, would be a convenient time. Please let us know if this will be agreeable to you.

Very truly yours,

  
William E. Saegart

WES:mw

cc: Joe Fowells

copy JDS  
Jim - Please contact  
Fowells and arrange  
on Feb 22



CITIES SERVICE COMPANY  
P. O. BOX 100  
MIAMI, ARIZONA 85539

JDS -  
Full Mine Units  
RECEIVED  
FEB 3 1971  
S. W. U. S. EXPL. DIV.

MIAMI COPPER OPERATIONS

(602) 473-2441

February 2, 1971

Mr. William E. Saegart,  
Supervisor,  
American Smelting & Refining Company,  
Southwestern Exploration Division,  
P. O. Box 5747,  
Tucson, Arizona 85703.

W.E.S.  
FEB 3 1971

Dear Mr. Saegart:

Your letter of February 1, 1971 indicates that you have had preliminary conversation with our Mr. Fowells, Resident Geologist, regarding a visit by a group of your exploration personnel to our Pinto Valley and Cactus areas.

You are most certainly welcome, and as I will depend on Mr. Fowells to host your party and arrange for your tour, I will approve any date mutually convenient for both you and Joe. Please make your arrangements directly with Mr. Fowells or Mr. Napp, our Superintendent of Mining and Geology.

Very truly yours,  
*R. P. Hughes*  
R. P. Hughes  
Manager of Operations

RPH:mes  
cc: J. E. Fowells  
G. E. Napp

9:00 AM Monday 22<sup>nd</sup> OK



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 7, 1971

TO: W. E. Saegart  
W. L. Kurtz  
R. B. Crist  
Yolanda Mazon  
J. D. Sell ✓  
R. B. Cummings  
Accounting Dept./3 copies

SUPERIOR EAST FIELD OFFICE

For your reference and records:

Location: 24 Broad Street, Claypool, Arizona

Telephone: 473-3802

Mailing Address: P. O. Box 190, Claypool, Arizona 85532

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 13, 1971

MEMORANDUM

For your information and records, please note:

ASARCO presently has a living trailer to be used by Crittendon,  
Sell and Shannon while on the Superior East Project.

Location: Patio Trailer Park  
(2 blocks west of Copper Hills Motel)

Trailer Space: 57 B

Telephone: 473-3772

/sh



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

W. E. SAEGART  
SUPERVISOR

W. L. KURTZ  
ASSISTANT SUPERVISOR

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

April 19, 1971

Mr. C. R. Williams, Exploration Manager  
Tipperary Resources Corporation  
500 W. Illinois  
Midland, Texas  
79701

Dear Mr. Williams:

Per your request of March 22, 1971, we have reviewed the data covering Tipperary's Superior Copper Prospect.

We wish to thank you for calling this prospect to our attention, however we must inform you that Asarco would not be interested in this property.

We have enclosed the copies of your reports and again thank you for allowing us to review your data.

Yours very truly,

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

WES:van  
Enc.

cc: JDSell  
JRKing  
File Copy/WLKurtz

C O P Y

ETAC SEED COMPANY  
(Edgar A. McGuire)  
Box 338  
Willcox, Arizona 85643

Telephone: Area Code 602  
Office: 384-2451

May 1, 1971

|                                                         | <u>PRICE LIST</u> |                      | <u>Price per Lb.</u> |
|---------------------------------------------------------|-------------------|----------------------|----------------------|
|                                                         | <u>(Purity)</u>   | <u>(Germination)</u> |                      |
| Lehmann Lovegrass                                       | 94%               | 94%                  | \$2.50               |
| Lehmann lovegrass and<br>sand dropseed mixture          | 88<br>12          | 94<br>100            | 2.30                 |
| Lehmann lovegrass and<br>sand dropseed mixture          | 64<br>35          | 95<br>97             | 1.60                 |
| Boer lovegrass                                          | 98                | 92                   | 2.50                 |
| Boer lovegrass and<br>sand dropseed mixture             | 79<br>21          | 92<br>95             | 1.95                 |
| Indian ricegrass                                        |                   |                      | 3.00                 |
| Catalina Boer lovegrass, plains lovegrass, blue panic - |                   |                      | ASK                  |

Special quotations to large lot buyers and dealers.  
All prices F.O.B. Willcox, Arizona, subject to unsold stock.

**DISTRIBUTION AND DELIVERY RECORD**

(Seeds and Plants)

Delivered to Dr. John L. Thames, Watershed Management Dept., U. of A., Tucson, Arizona  
(Project or individual) (Address)

Ordered by R. Joy Date 8-6-71 Shipped to above

Shipped from Tucson, Arizona Plant Materials Center Date shipped Picked up 8-6-71

Parcel Post  Freight  Express  Govt. B/L No. \_\_\_\_\_ Other \_\_\_\_\_

| ACCESSION NO.                    | SPECIES                                       | HOW PACKED | SEEDS (pounds) |         | PLANTS (number) |
|----------------------------------|-----------------------------------------------|------------|----------------|---------|-----------------|
|                                  |                                               |            | Clean          | Unclean |                 |
| P-15653                          | Atriplex semibaccata<br>(Australian saltbush) | 4939       | 2              |         |                 |
| A-68                             | Eragrostis lehmanniana                        | 4856       | 1              |         |                 |
| P-15641                          | Sporobolus usitatus<br>(Creeping dropseed)    | 4908       | 1              |         |                 |
| For: Silver Bell Mine plantings. |                                               |            |                |         |                 |

Storage facility from which delivered: Regular inventory, Tucson PMC

Order prepared by R. Joy Filled by R. Joy Checked by R. Joy

Received by [Signature] 6 Aug 1971 Approved by [Signature] 8-6-71  
(Signature) (Date) (Signature) (Date)  
Gen/assist for: Robert D. Slayback  
(Title) Manager, Tucson Plant Materials Center

Whitetail in Magmas tunnel

$\pm 600$  feet at  $\odot 30^\circ = 400$  strata

Verbal of Charlie Phillips, resident geol at  
Ray: Cross dated a tuff in the whitetail  
and got a date of 34 my. Also a  
date on a unit (tuffite tuff?) in Gila  
conglomerate with date of 14 my  
(AGS meeting, Jan 5, 1971).





JDS

AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

May 6, 1971

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Gerald I. Craig  
10930 Santa Fe  
Sun City, Arizona

Re: SUPERIOR EAST  
ACCESS LICENSE

Dear Mr. Craig:

Enclosed, please find a check in the amount of \$100.00  
as payment due under our License Agreement dated  
June 15, 1970.

In the near future, I will contact Robert G. Craig of  
Miami regarding our recent phone conversation.

Yours truly,

*R. B. Crist*  
R. B. Crist

RBC:sh  
enc.

cc: HEKelshaw, Jr. - N. Y. Office  
JDSe11  
WESaegart  
KAvondenSteinen

JDS

ARIZONA REPUBLIC  
May 19, 1971

In Miami area

# Occidental discloses copper find

MIAMI — The Occidental Petroleum Corp. announced yesterday the discovery of a new copper deposit of undetermined size at Miami.

The announcement was made in the annual report released to stockholders. It's the first official word concerning the firm's exploratory drilling program that was launched in and around Miami three years ago by Occidental Minerals, a subsidiary of Occidental Petroleum.

Occidental said that copper oxide mineralization was found at depths from 1,100 to 2,000 feet underground. The thickness of the ore varied from 100 to 368 feet, graded from .56 to 1.26 per cent copper, the report stated.

The company said also that 10 of the

18 wide-spaced drill holes completed to date have intercepted copper mineralization.

The company said additional drilling and testing would be required to delineate the limits of the copper ore and to gather data necessary for a feasibility study.

Occidental holds 7,000 acres of mineral rights by lease or by claim in the Miami area including 90 per cent of the town itself and since January of this year the firm has been offering six-year purchase options to Miami property owners.

The Occidental announcement is the third release during the past year by a mining company of the discovery of new copper deposits in the Miami area.

Less than one-half mile east of Occi-

dental's present drilling sites in the town of Miami, the Cities Service Co. earlier announced the discovery of a copper mineralization that ranged from 2,400 to 3,500 feet with an average assay of 1.35 per cent.

A \$3.5 million underground shaft is under development for the purpose of evaluating the ore deposit.

About one half mile east, Inspiration Consolidated Copper announced last month to stockholders that it has discovered copper mineralization that ranged from 4,800 feet to 5,500 feet in depth, with a copper content of more than 1 per cent.

Inspiration said further slow, costly deep drilling will be required to analyze that deposit.

S  
il  
a

Copy from: Arizona Silver Belt

Vol. 92, No. 51. Thursday, May 20, 1971

Front Page.

Quote:

### Occidental Corp. releases report

The Occidental Petroleum Corp. in its 1970 annual report announced recently that Oxymin, its minerals corporation, controlled approximately 7,000 acres in claims or under lease for mineral development in the Miami area.

Ten of 18 test holes drilled have intersected copper oxide mineralization at depths between 1,100 and 2,000 feet, according to the report.

The grade of the intercepts, which varied between 10.3 and 36.8 feet in thickness, was found to be between .56 and 1.26 per cent copper.

The report said that "additional drilling and testing will be required to delineate the limits of mineralization and gather data necessary for a feasibility study."

Sam Napp of Miami Copper said that it was impossible to say whether such data could indicate a workable mining area.

He said that there were too many "variables" that had to be considered before the decision to begin mining could be made.

Unquote

A WALL STREET JOURNAL News Roundup  
The nation's railroads swung back into operation after a two-day strike that stopped most

until Oct. 1 and giving the signalmen a 10% wage increase retroactive to Jan. 1, 1970. President Nixon signed the bill into law.

Action W311

JDS

## Occidental Petroleum Discovers Zinc Deposit In Central Tennessee

By a WALL STREET JOURNAL Staff Reporter

LOS ANGELES - Occidental Petroleum Corp. said in its annual report that it has discovered zinc mineralization in a 15-mile belt in central Tennessee near Carthage, where it controls about 10,000 acres, with more lands being optioned.

The company said drilling indicates the possible existence of a flat-lying ore deposit at depths between 1,200 and 1,400 feet. It said 66 holes have been completed, including 18 that show zinc intercepts at least 10 feet thick with the average thickness being 14.7 feet and the average zinc grade 5.59%. Eighteen additional holes show lower grade zinc intercepts, Occidental added.

It said the drilling results "compare favorably with those in zinc-producing areas in eastern Tennessee." However, "more work will be required before any reliable estimate of reserves and commercial profitability can be assessed," it explained.

Occidental Petroleum also said drilling near Miami, Ariz., resulted in the discovery of copper mineralization on lands adjacent to presently producing copper properties. It added that additional drilling and testing will be necessary to delineate the limits of mineralization and gather necessary data for a feasibility study.

The company said it controls about 7,000 acres in claims or under lease in the area. Ten out of 18 wide-space drill holes completed to date have intercepted copper oxide mineralization at depths between 1,100 and 2,000 feet. The thickness of the intercepts varies between 103 and 363 feet, and the grade varies between 0.56% and 1.26% copper.

Wall Street  
Journal  
5/20/71

EXPORTS TO THE U.S.

The divestiture program "might take two or three years to complete," the executive said. This year, National will poll its public...



JDS

AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

May 24, 1971

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. W. E. Dolph  
Bilby, Thompson, Shoenhair & Warnock  
9th Floor  
Valley National Bank  
Tucson, Arizona

Re: SUPERIOR EAST  
OAK FLAT

Dear Mr. Dolph:

Last week we spoke briefly of what action might be required to re-open for Mineral Entry Land that has been withdrawn from Mineral Entry within the Tonto National Forest.

Enclosed is a copy of the Public Land Order and a map of the land in question.

Magma or Newmont's new shaft is approximately 3600 feet west of the west boundary of Oak Flat. Magma has built an excellent road across the withdrawal area as the only personnel access for mining activities at this new shaft. Mining is deep (± 5000 feet), as would also be anticipated under the withdrawal area.

Oak Flat is entirely surrounded by the claims of Magma and ASARCO.

ASARCO has no proof of mineralization in the withdrawal area but the land must be considered as highly mineral in character.

You suggested that any inquiry should be developed as quietly as possible, omitting correspondence until the proper groundwork has been laid.

If our exploratory work does indicate a mineral potential in this direction, we would like to have some plans for action to be taken.

This area has been subjected to numerous incidents of vandalism. The Forest Service has no funds for regular policing employees. They may be thinking of asking for monies to place it within the Golden Eagle Admittance Plan. This would require approximately \$250,000.00 for site preparation.

Very truly yours,

*R. B. Crist*  
R. B. Crist

RBC:sh

cc: WESaegart  
WLKurtz  
JDSell

IDS

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

May 25, 1971

FILE MEMORANDUM

Re: STABLE BASE MATERIAL  
GEOLOGIC MAPS  
SUPERIOR-GLOBE AREA  
PINAL - GILA COUNTIES, ARIZONA

We now have in the drafting department, copies of the following maps on stable base material. Each map is made up of several sheets: a) Black line geology is on one sheet complete with symbols and contact; b) topography only on another sheet, and c) culture, drainage, township lines, etc., on various other sheets. The maps involved are:

1. Plate 1, (Globe-Miami District) Professional Paper 342, by N. P. Peterson.
2. Plate 2, (Pinal Ranch Quadrangle) Bulletin 1141-H, by N. P. Peterson.
3. Map GQ-128, (Haunted Canyon Quadrangle) Geological Quadrangle Map 128, by D. W. Peterson.
4. Map GQ-818, (Superior Quadrangle) Geological Quadrangle Map 818, by D. W. Peterson.

These maps were secured from the U.S.G.S. and ordered on January 5, 1971.

*James D. Sell*  
James D. Sell

*Billing Cost was \$300<sup>00</sup>.*



OFFICIAL RECEIPT  
BILL FOR COLLECTION

1060-0001-361-71

Bill No. ~~XXXXXXXXXX~~

Date May 25, 1971

Make Remittance Payable To: U. S. Geological Survey, Washington, D. C.

(Bureau or Office)

Mail Payment To: Branch of Budget & Finance, U. S. Geological Survey, Washington, D. C. 20242

(Address)

PAYER:

American Smelting and Refining Company  
Exploration Department, Room 3000 US Bldg.  
P. O. Box 5747, Tucson, Arizona 85703

To be issued as official receipt  
for all cash remittances and for all  
other remittances when required  
by applicable procedures.

Amount of Payment \$ 300.00

| Date | DESCRIPTION                                                                                                                    | Quantity | Unit Price |     | Amount |
|------|--------------------------------------------------------------------------------------------------------------------------------|----------|------------|-----|--------|
|      |                                                                                                                                |          | Cost       | Per |        |
|      | Cost of labor and materials necessary to<br>comply with letter dated 1/5/71, from James<br>N. Sell.<br><br>(Our Job No. 51003) |          |            |     | 300 00 |
|      | <i>James N. Sell</i>                                                                                                           |          |            |     |        |

AMOUNT DUE THIS BILL \$ 300 00

RECEIVED as payment on above bill.

Date..... Signature..... Title.....

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

June 3, 1971

MEMORANDUM

TO: W. L. Kurtz  
J. D. Sell

FROM: W. E. Saegart

John Collins will be in Tucson June 13 and 14. We will plan to visit the Superior East Project on the 14th, leaving from the Tucson office at 8:00 AM (suggest Jim pick up J.J.C. at motel - Royal Inn - head north and pick up remainder of group, assembled at my house by + 8:20 AM).

We will look at drills in AM on Dacite Plateau. Lunch is scheduled with Hugh Olmstead - meet 11:45, his office, to discuss Eder Claims and DCA-1. After lunch, we can review M-1 core at Miami office.

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

WES:sh

cc: JHCourtright - do you want to be included?  
JJCcollins - New York office

**norandex**

August 9, 1971

Mr. Jim Sells  
American Smelting & Refining Co.  
P.O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Sells:

Helicopter services as per attached; July 20, thru 24, 1971

|                            |             |
|----------------------------|-------------|
| 1 Hour @ \$180.00/her hour | \$180.00    |
| 4% Sales Tax               | <u>7.20</u> |
| Total                      | \$187.20    |

Yours truly,

NORANDEX INC.

*for* R. D. Karvinen  
R. D. Karvinen  
District Geologist

/jh

Encl: As stated

*Approved for payment  
Superior East MA-0010  
JW Sells*



EXECUTIVE OFFICES • SCOTTSDALE MUNICIPAL AIRPORT  
 7600 EAST BUTHERUS DRIVE • SCOTTSDALE, ARIZONA 85254  
 (602) 948-2150 • 948-2400

NAME Norandex Corporation DATE 7/14/71  
 MAILING ADDRESS 225 West Florer, Tucson, Arizona PHONE \_\_\_\_\_  
 ORDERED BY Jo Henderson - Rene Moulinet PHONE 623-2595  
 TYPE OF JOB Mineral - Globe SHIP QUOTED FH 442  
 SPECIAL INFORMATION Job starts night of July 19 RATE QUOTED \$180.00  
or morning of July 20. (2hrs/day min.)  
Service truck \$35.00 per day, 35¢ per mile, they pay crews living expense  
 DATE ACCOMPLISHED 20-27 July PILOT R. Taylor CREW \_\_\_\_\_

|         | Hours | Rate   | Charges  | Vehicle                                 | Mileage | Misc. Charges                           |
|---------|-------|--------|----------|-----------------------------------------|---------|-----------------------------------------|
| Ferry   | 1.4   | 180.00 | \$252.00 | Speedometer Back                        |         | Service truck 5 days<br>\$35.00 Per Day |
| Flight  | 19.7  | 180.00 | 3546.00  | Speedometer Out                         |         |                                         |
| Standby | /     | /      |          | TOTAL MILES                             |         |                                         |
| TOTAL   | 21.1  |        | 3,798.00 | 587.3 Miles <sup>extra</sup> @ = 146.83 |         | TOTAL CHARGES 175.00                    |

TOTAL CHARGES \$41983 DATE BILLED 7/29/71  
 4% Sales Tax 16479  
 total 42846 ✓

| Trip  | Weight  | Mission            | Start | Stop  | Time | Approved By |
|-------|---------|--------------------|-------|-------|------|-------------|
| 1     | 20 July | SCOTTSDALE - Globe | 314.2 | 315.0 | .7   |             |
| 2     | 20 July | Globe LOCAL        | 315.0 | 320.1 | 5.1  |             |
| All   | 21 July | Globe - LOCAL      | 320.1 | 324.6 | 4.5  |             |
| All   | 22 July | Globe - LOCAL      | 324.6 | 328.4 | 3.8  |             |
| All   | 23 July | Globe - LOCAL      | 328.4 | 333.5 | 5.1  |             |
| All   | 24 July | Globe - LOCAL      | 333.5 | 334.7 | 1.2  |             |
|       | 24 July | Globe - SCOTTSDALE | 334.7 | 335.4 | .7   |             |
| TOTAL |         |                    |       |       | 21.1 |             |

4.3380

[Signature]  
 Pilot's Signature

[Signature]  
 Customer's Signature  
 AGENT FOR NORANDEX, INC.

ARIZONA UNDERGROUND SURVEYS

P. O. Box 876  
ELOY, ARIZONA 85231

Phone 466-7464

TO ASARCO - BILL  
HOWARD  
BOB

9/12/71

|                                            |  |                          |  |
|--------------------------------------------|--|--------------------------|--|
| DATE<br>12 SEPT., 1971                     |  | JOB NO.                  |  |
| PROJECT<br>Photolog Drill Hole #           |  |                          |  |
| LOCATION<br>Approx 15 mi uphill from Queen |  |                          |  |
| CONTRACTOR<br>Creek Tunnel                 |  | OWNER                    |  |
| WEATHER                                    |  | TEMP. ° at AM<br>° at PM |  |
| PRESENT AT SITE                            |  |                          |  |
|                                            |  |                          |  |
|                                            |  |                          |  |

THE FOLLOWING WAS NOTED:

AS YOU CAN SEE WE HAVE MUCH BETTER PICTURES THIS TIME. I CHANGED FILM -- HAD BEEN PRETTY DAMNED DISAPPOINTED WITH THE FIRST GROUP... THEY WERE BADLY OVER-EXPOSED, due (MAYBE) TO REFLECTIVITY OF LIGHT COLORED ROCK WALLS AND THE SMALL DIAMETER OF THE HOLE.

So -- CHANGED TO THE FILM I WAS TELLING YOU ABOUT -- THAT DIDN'T GET GOOD ABOVE-WATER PICTURES - BECAUSE I COULDN'T POSE IT HARSHLY ENOUGH. Looks like I'VE MAYBE FOUND ITS BEST OPERATING ENVIRONMENT.

THE OPENING IN THE WELL GOES ON PAST THE PARTIAL OBSTRUCTION AT 677 (+ 1%).

THE CAMERA WEIGHS NO MORE THAN 40# -- AND IT LEFT AN IMPRESSION IN THE "BOTTOM" MATERIAL -- looked like 6"-8" deep to me. So the MATERIAL IS PRETTY SOFT.

MAKES IT DIFFICULT TO DECIDE WHAT HELD HARVEY'S TOOLS UP.

IF YOU HAVE ANY MORE PHOTO WORK -- WOULD YOU CONSIDER USING COLOR FILM? It's not much more expensive -- maybe 25% -- 30% THANKS FOR THE CHANCE TO SEE A NEW arena for photologs

COPIES TO \_\_\_\_\_  
I DO NEED THE VIEWER RIGHT BACK,  
THANKS!!!

FIELD INSPECTION REPORT

SIGNED Les Price

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

February 16, 1972

MEMORANDUM TO STAFF

Superior East Project


I want to emphasize that all drill information from the Superior East project should be held in strict confidence by all of you, and this especially applies to the occurrence of native copper in the Whitetail conglomerate.

The occurrence of native copper in drill hole A-4 represents a major copper discovery and shall remain the exclusive information of ASARCO.

I am certain that none of you have disclosed any of the information and you are hereby formally instructed not to do so.

  
W. L. Kurtz

WLK:lad

cc: JDSell   
JHCourtright

Blind Note:

Jim: You, of course, can give drill performance data on an exchange basis with other companies and other data for which you receive more than you give.

B.



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

February 25, 1972


FILE MEMORANDUM

Superior East  
Information Leak (?)

Today I talked with Jim Owens and Charley Goddard III concerning the footage and assay data that Mr. Owens had quoted to Roger Kirkpatrick. According to Mr. Goddard, Kirby Coryell is a completely ethical and honest man both in his personal life and in his business. Mr. Goddard worked for several years with Mr. Coryell while both were employed by Union Carbide Corp.

Mr. Goddard also stated that rumors concerning Asarco's drilling are very prevalent in the Denver area and that one can hear most any footage and grade figure one wants. Mr. Goddard also indicated that Norandex appears more interested and has more "information" than any other party or company in Denver, and also that Norandex has recently been conducting geophysical surveys on the dacite plateau.

I admitted to Goddard and Owens that the assay data from A-4 (drill hole number for location, not stated to them) was better than that in drill hole M-1, of which they have some knowledge through Kirby Coryell. I requested that Owens and Goddard keep the information in confidence and they agreed to do this.

  
W. L. Kurtz

WLK:lad

cc: JDSell 

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona


March 17, 1972

MEMORANDUM FOR FILES


Superior East Project

Mr. Saegart called today to inquire if we were aware of the claim staking south of our ground at Superior East (Jim Owens of VTN was the informant).

In the course of Saegart's conversation, he stated he understood that we had a hundred feet or so of 3% copper in the bottom of the drill hole near Oak Flat. I denied this and also informed him that the native copper was very gaudy in places, but these were local occurrences and didn't form a contiguous intercept of interest.

  
W. L. Kurtz

WLK:lad

cc: JDSell   
RBCrist

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

March 24, 1972

TO: R. B. Crist

FROM: W. L. Kurtz

Pending Work at Superior East

1. EIS -- John Thames to make overall study and one specifically for Oak Flat if necessary. I would like to talk with Thames when you next see him.
2. Forest Service laws relating to special use permit. Let's get copy of all of them (Karen could research this).
3. State Sections -- can we get them to the same date to allow (next year, not this year) us to do two years' work at one time.
4. Land map made of claims and State leases to the south of Oak Flat to the Ray area.
5. Follow thru on Oak Flat permit (JDS is reviewing sites today with Lance).
6. Review with Hiway Dept. on the long-term planning for the "by-pass route" Superior-Miami-Globe.

*W. L. Kurtz*  
W. L. Kurtz *lad*

WLK:lad

cc: JDSell 

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 19, 1972

TO: Howard Crittendon

FROM: J. D. Sell

Kurtz has received word that Kirby Coryell of CanUS is meeting some of his sponsors at Florence Jct. at 8:00 AM Friday. He will then drive on up to the Superior East project area and will look at the drill rig at A-2.

It is imperative that you be at the drill rig when they arrive.

ASARCO does not owe Coryell anything and, altho permission to view the rig has been given, they will not be allowed to view the core, learn of the type and grade of any intercepts, nor hole depths and formation contacts, etc.

General drilling problems, without reference to hole location or depths, can be discussed but nothing specific.

Alert Ramon and others that no one is to gain permission to enter the core office under any conditions. We would also caution Ramon and others against chatting with this group and especially talking about anything other than temperature, sunshine, weather, cows, grass conditions, etc. Stay away from any project talk, claims, etc.

  
J. D. Sell

JDS:lad

TO

JDS

FROM

SUBJECT

Kerby Coryell

DATE

5/17/72

**MESSAGE**

Quintana is willing to discuss  
 joint venture on Kirby's ground to south; what  
 do you think? I'm still inclined not to  
 be overly excited about the area other than  
 adding section 8 to our holdings. See you about  
 this when I get ~~signed~~.

Kerby

**REPLY**

SIGNED

DATE

/ /



W615  
1055

COLUMBIA STANDARD CORP. v. RANCHERS EXPLOR. & DEV. CO.

468 F.2d 547 (10th Cir. 1972)

Mining Claims: LOCATABLE PUBLIC LANDS - Generally; LOCATION PROCEDURES - Lode Location

Mining Claims: LOCATION PROCEDURES - Relocation - good faith; PEDIS POSSESSIO

The plaintiff, Columbia Standard Corp., brought suit in the District Court for New Mexico to enjoin the defendant, Ranchers Explor. & Dev. Co., from interfering with its operations to establish and perfect lode claims for uranium. Judgement was granted the defendant on the grounds, inter alia, that plaintiff had shown bad faith in relocating claims which they asserted had been improperly located in the first instance by the defendant. The plaintiff appealed to the Court of Appeals.

The Court of Appeals affirmed the decision and the finding of bad faith by the District Court. It appeared that the plaintiff's geologist knew of the defendant's claims and operations on them. Further, plaintiff had relied solely on courthouse records in determining the validity of the defendant's prior claims. The only apparent defect in the claims was a failure to file timely affidavits of discovery several years prior to this litigation. However, all other requirements, including annual assessment work, had been performed diligently. Had the plaintiff's geologist checked the claims in dispute he would have found evidence of defendant's extensive explorations.

It further appeared that plaintiff had surreptitiously entered defendant's claims over a week-end in order to relocate the claims. The Court of Appeals found the preceding evidence sufficient to support the lower court's finding of bad faith on the part of the plaintiff.



AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

March 21, 1974

TO: W. L. Kurtz

FROM: J. D. Sell

7" Casing  
North Oak Flat Area  
Superior East Project  
Pinal County, Arizona

On Tuesday, March 19, 1974, at approximately 5:45 PM, I found two men and two boys cutting up the 7" casing and loading it on a truck. I asked them what they were doing and they said they had bought the casing from a Mr. Raymond Hutton of ASARCO and were moving it to Apache Junction. I handed them one of my cards, after previously stating my name and affiliation, and told them no Raymond Hutton worked for ASARCO. One Chuck Thompson said, "Oh, Hell, do you mean we're out \$500.00?"

Mr. Chuck Thompson  
Apache Granite Company  
Route 3, Box 751  
Apache Junction, Arizona 85220  
Phone: 986-3405 & 986-0417  
Driving a Chev. PU, Ariz. lic. CN-6976(1973)  
tag R23015(1974). His son, with right foot  
and leg in cast, was also along.

Mr. Gene Marshall  
Apache Junction  
Chev. 2-ton flat bed truck, lic. 2CG-568,  
with loading boom, home-made, next to cab.  
With him was his helper "Jack".

All the cut pieces were loaded on the truck and off-loaded at Bryant's equipment yard as Thompson said he promised a guy the truck the next morning.

28 pieces approximately 15 feet long were moved, leaving 16 pieces approximately 30 feet long still on site, with one partially cut.

The above information was given to Deputy Sheriff Jim Sherwood at the Superior suboffice of the Pinal County Sheriff Dept. on March 20, 1974 in the afternoon. The value as given to Mr. Sherwood was \$1800.00. Mr. Sherwood said he would make a report on the incident and forward a copy to us. Any further investigative process would need to be initiated by ASARCO.

  
James D. Sell

To WLL  
from JWS

April 1, 1974

A high school classmate of Don Hammer & myself was in Tucson this past week attending a fungi convention. He had dinner with Don & his wife on 4th evening. <sup>past</sup> Friday he called Marnee & chatted awhile and mentioned that Don is being transferred to the New York office. He will apparently leave as soon as possible.

Jim

April 13, 1976

Memorandum for R. L. Brown

May Field Trip

A tentative schedule:

Arrive in Reno Friday, May 7th; reservations made at the Sundowner Hotel and Casino, 450 N. Arlington Ave., Reno, phone: 702-786-7050.

Saturday, May 8th -- Tour Rochester  
Night in Winnemucca

Sunday, May 9th -- Krum Hills a.m.  
Getchell, Pinson, Prebble p.m.  
Night in Winnemucca

Monday, May 10th -- McDermitt Hg Mine a.m.  
Drive to Alturas, California p.m.

Tuesday, May 11th -- Hayden Hill, California  
Night in Reno

Wednesday, May 12th -- Travel to Tucson (Air ticket provided by Tucson)  
(Travel to Globe) → reservation at Copper Hills. 3 nights  
for ONE NIGHT


Thursday, May 13th -- Superior East  
Night in Globe? or Casa Grande? ~~Tucson~~

Friday, May 14th -- Sacaton-Santa Cruz  
Return to Tucson

Graybeal and Stathis will accompany us in Nevada and California; Sell at Superior East and Sell/Kreis at Santa Cruz. Barnes and/or Rees will meet us in Winnemucca to guide us through Krum Hills.

*W. L. Kurtz*  
W. L. Kurtz

WLK:lb

cc: JHCourtright  
FTGraybeal  
GJStathis  
JDSell   
HGKreis

April 21, 1976

WLK.

Magna Tour.

You & Dick Brown are signed up.  
Crest, Duane Webb, & Lockhart are  
also signed up, but Lockhart will be  
unable to attend so his space can be used  
by FTG.

c: FTG

Jui -

April 21, 1976

~~WLC.~~

Magma Tour.

You & Dick Brown are signed-up.  
Crest, Duane Webb, & Lockhart are  
also signed-up, but Lockhart will be  
unable to attend so his space can be used  
by FTG.

cc: FTG

Jim

JDS— can you provide belt & hat  
for Dick. We'll assume we  
can tie our way past the  
toe inspector!?

WPK. return to JDS

Re your memo on May field Trip with RL Brown.

The Sigma AIME Underground session meeting is being hosted by Wagon Copper Co., Superior on Friday May 14<sup>th</sup>. Any chance RL B might be interested & move the Sacaton-Santa Cruz to Saturday?

JDS

MAGMA COPPER COMPANY

SUPERIOR DIVISION  
SUPERIOR, ARIZONA 85273  
(602) 689-2444

March 22, 1976

*sent in March 29*

*I believe that  
Bob Crist also  
signed up for  
the trip*

*JMF*

Dear Member:

The Underground Section of the AIME will hold its spring meeting at Magma Copper Company, No. 9 Shaft site at Superior, Arizona on Friday May 14, 1976.

Due to the technical problems of escorting a large number of people through the working places during normal operations the number of visitors that can make the underground tour will be limited to 150 persons.

- Registration time at No. 9 Shaft parking lot..... 8:30 A.M.
- Trip underground..... 9:30 to 11:30 A.M.
- Lunch..... 1:00 P.M.
- Technical session..... 2:00 P.M.

Please fill in the following information.

- Will attend underground field trip.
- Will not attend underground field trip.
- Will attend luncheon and technical session.

If you plan to go on the underground field trip bring your hard hat, safety shoes, lamp belt and diggers.

Please mail your answer as soon as possible so that we can find out how many persons to expect.

Respectfully,

*Frank M. Florez*

Frank M. Florez  
Chairman  
Underground Section

om

Mail answer to: Mr. Frank M. Florez  
Magma Copper Company  
Box 37  
Superior, AZ 85273



February 25, 1976

Mr. R.L. Brown  
New York Office

**SUPERIOR EAST PROJECT  
ARIZONA PUBLIC SERVICE  
RIGHT-OF-WAY**

For approval and execution please find enclosed two copies of a form of Right-of-Way Easement which contains the language in a similar easement granted to Arizona Public Service on a previous occasion.


The form was prepared and approved by W.E. Dolph.

The roads planned for construction of the 500 KV transmission line will be of great benefit to the J.I. Ranch and the Superior East Project.

*R.B. Crist*  
R.B. Crist

RBC:vh

Enclosures

cc: F.T.Graybeal  
J.D.Sell 

~~FTG~~  
JDS  
HMS

4/23/76

Superior E.  
Core Storage

FTG.

MRS. Geroldine Sanders APR 19 1976

473-9969

Boarded up Bronx-111

4/16/76 12:40 A.M.

Her husband is Retiring and  
would like to start Re-modeling.  
However Jerry sees no reason  
why we cannot go on a Month/Rate/<sup>one</sup>  
Month basis. Her husband will have?  
plenty to do on the outside.  
She suggested Miami for VACANT  
Bldg.

-RBC-

## STATEMENT

## SCHWARZ LUMBER COMPANY, INC.

PHONE 473-3521

513-603 LIVE OAK STREET

P.O. DRAWER "W"

MIAMI, ARIZONA 85539

ASARCO IncorporatedP. O. Box 5747Tucson, ArizonaAttention: Mr. James D. Sell  
Senior GeologistStatement of your account for the month of June 2, 1976

All bills due on first of month following purchase. Interest after maturity.

| DATE | REFERENCE  | CHARGES                                                                    | CREDITS      | BALANCE       |
|------|------------|----------------------------------------------------------------------------|--------------|---------------|
|      | To:        | Repairs on De Cordova Building,<br>401 Live Oak Street, Miami, Arizona     |              |               |
|      | Materials: | Ticket # F 4043                                                            | \$ 236.33    |               |
|      |            | Ticket # F 4045                                                            | <u>41.61</u> |               |
|      |            | Total Materials                                                            |              | \$ 277.94     |
|      | Labor:     | including labor, insurance, Overhead, etc.<br>17 Hours @ \$ 18.80 per hour |              | <u>319.60</u> |
|      |            | Total                                                                      |              | \$ 597.54     |

APPROVED FOR PAYMENT

By: James D. Sell  
(Signature)



# SCHWARZ LUMBER COMPANY, INC. CP Job

(#2)

513-622 Live Oak St.

P.O. Drawer W

Telephone 473-3521

401 Live Oak St.

F 4045

De Cordova Building

5-24-76

SOLD TO ASARCO Incorporated

Miami, Arizona 85539

JOB

James D. Sell P.O. Box 5747

Tucson, Ariz.

P. O. No. T-76-185

Driver B. Montine

| PIECES   | SIZE            | LENGTH |                    | FEET | TOTAL FEET | PRICE  | TOTAL |
|----------|-----------------|--------|--------------------|------|------------|--------|-------|
| 1/2 #    |                 |        | 8d Finish Nails    |      | 1/2        | .95    | 48    |
| 1 #      |                 |        | 4d Finish Nails    |      | 1          | .95    | 95    |
| 50       |                 |        | Plastic Anchors    |      | 50         | .15    | 750   |
| 100      |                 | 2"     | Wood Screws        |      | 100        | .05    | 500   |
| 2        | 27 3/4 X 3 1/4" |        | DSB Glass          |      | 2          | 8.65   | 1730  |
|          |                 |        | Glazing points     |      |            | .50    | 50    |
| 2 quarts |                 |        | Glazing Compound   |      | 2          | 2.50   | 510   |
| 20 ft    | 3/4"            |        | Wood core moulding |      | 20         | .14    | 280   |
|          |                 |        |                    |      |            |        | 3963  |
|          |                 |        |                    |      |            | 5% tax | 178   |
|          |                 |        |                    |      |            |        | 4161  |

MOORE BUSINESS FORMS, INC. M



# SCHWARZ LUMBER COMPANY, INC. CP Job

(#1)

513-622 Live Oak St.

P.O. Drawer W

Telephone 473-3521

401 Live Oak St.

F 4043

De Cordova Building

SOLD TO ASARCO Incorporated

Miami, Arizona 85539

JOB

P.O. Box 5747 Tucson, Ariz.

James D. Sell

P. O. No. T-76-185

Driver B. Montine

| PIECES | SIZE  | LENGTH |                            | FEET | TOTAL FEET | PRICE  | TOTAL |
|--------|-------|--------|----------------------------|------|------------|--------|-------|
| 2      | 28x68 | 1 3/4" | Solid Core Doors           |      | 2          | 44.40  | 8880  |
| 1      | 28x68 |        | exterior door frame        |      | 1          | 19.90  | 1990  |
| 3      | 2x6   | 14'    | #1 select WPS4S            |      | 42         | .40    | 1680  |
| 1      | lock  |        | Super mortar               |      | 1          | 3.90   | 390   |
| 2      | 4x8   | 3/4    | PC Exterior Plywood        |      | 64         | .58    | 3712  |
|        |       | 44'    | #2 WP S4S                  |      | 44         | .40    | 1760  |
| 21     | 1x2   |        | Clear WPS4S                |      | 21         | .26    | 546   |
| 2 pr   | 4"    |        | Door Butts (Hinges)        |      | 2 pr.      | 4.80   | 960   |
| 1      |       |        | 400 BDL Kwikset Entry Lock |      | 1          |        | 1275  |
| 1      |       | 36"    | High bay threshold         |      | 1          |        | 1115  |
| 1      |       | 1/4'   | gr. epoxy Bit              |      | 1          |        | 200   |
|        |       |        |                            |      |            |        | 22508 |
|        |       |        |                            |      |            | 5% tax | 1125  |
|        |       |        |                            |      |            |        | 23633 |

MOORE BUSINESS FORMS, INC. M

# PURCHASE ORDER

|                 |              |
|-----------------|--------------|
| DATE            | June 7, 1976 |
| ORDER NO.       | T-76-214     |
| REQUISITION NO. |              |

ASARCO Incorporated  
~~American Smelting And Refining Co~~

TUCSON OFFICE  
P. O. BOX 5747

1150 NORTH 7TH AVENUE  
TUCSON, ARIZONA 85703

|                   |
|-------------------|
| PLANT JOB NO.     |
| APPROPRIATION NO. |

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| To:<br>A. J. Flores<br>P. O. Box 583<br>Miami, Arizona 85539 |                          |
| 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      |
| CONSIGNMENT — SELLER WILL SHIP TO                      |
| — RENDER BILLS AS PER ATTACHED SHIPPING INSTRUCTIONS — |
| SHIP VIA                                               |

| QUANTITY | UNIT | SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ITEM NO.                  | UNIT PRICE |
|----------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|
|          |      | <p>A. J. FLORES, Hereinafter referred to as CONTRACTOR, will furnish and install, complete, at 401 Live Oak St., Miami, Arizona, seventy-five feet (75 ft.) of six foot (6 ft.) chain link fence, with one three foot (3 ft.) wide walk-in gate and tension wire top and bottom, with V-bracket with barbed wire on top, in accordance with his quotation of June 3, 1976 . . . . .</p> <p>Installation will be in accordance with instructions of ASARCO's representative at the jobsite.</p> <p>Work will commence June 9, 1976, and be completed by June 11, 1976.</p> <p>CONTRACTOR's particular attention is called to Clause Eleven (11) on the reverse of this order. CONTRACTOR will submit acceptable evidence of compliance with the Workmen's Compensation Laws of Arizona, and, on ASARCO's standard insurance form, acceptable evidence of other required insurance.</p> |                           | \$435.00   |
|          |      | <p>Orig: A. J. Flores<br/>cc: A. J. Flores, for acceptance<br/>FTGraybeal, RBCrist, JDSell,<br/>HMStone, Acctg. Dept., File</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ACCEPTED FOR A. J. FLORES | By         |

**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.

/s/ F. T. Graybeal  
Manager, Southwestern Exploration  
Division

|     |                        |    |                |
|-----|------------------------|----|----------------|
| HMS | Time                   | \$ | 1000.00        |
| HMS | Expenses +<br>Supplies |    | 400.00         |
|     | Carpenters' wages      |    | 2300.00        |
|     | Schwarz Lumber         |    | 600.00         |
|     | a J Flores             |    | 435.00         |
|     | Globe Builders Supply  |    | 625.00         |
|     |                        | \$ | <u>5360.00</u> |

File 6/29/76  
 FROM: F. T. GRAYBEAL ← fight on  
 To: WLK ✓  
 JDS SUPERIOR E

I vaguely remember a verbal estimate of \$1500 to fix new core shack at Miami and move the core.

With work virtually complete it has cost \$5400 !!! I guess this is my induction to Superior E, since we are now a \$1500 in red.

Note:  
 did not include all of HMS time & expenses plus any of Bryant's money.

See final report, Ah!!!

PHONE - GLOBE 425-5784 PHOENIX - 964-8967

**Hagen Construction Co., Inc.**

EXCAVATING, PAVING, CONCRETE STRUCTURES  
READY-MIX CONCRETE  
SAND AND ROCK PLANT, EQUIPMENT RENTALS

P.O. Box 150  
DON G. ANDERSON  
GENERAL SUPT.

1/4 MILE SOUTH OF GLOBE  
GLOBE, ARIZONA

*Presently 10/29/76, shipping  
CuO-Silica to Tony Kisha*



NOTE:

2/25/77

HMS Stone reported by phone yesterday & retold today of the following incident of 2/23? as reported by the day driller & helper:

Mr. Lockhart arrived and without much of a hi he went to the cow trough & outside box and inspected them rather closely. He also timed the 2 1/2 foot drill bar down time and later inquired how long it took to drill a distance, time to complete run, pull, etc. He stayed approximately one hour.

The driller & helper were perturbed as Lockhart's name is not on the visitor list tho they knew he was ranch manager.

HMS arrived prior to Lockhart leaving & was filled in on the action but Lockhart by then was only timing the drilling progress.

HMS subsequently told the driller to keep the cow under better cover & not to empty new cow tubes if visitors are around. This does not help if the work is underway when Lockhart arrives.

The sudden interest in cow & drilling time by Lockhart is outside his character and smacks of being prompted on what to do & observe. Assuming all the actions described are valid.

Recommend that RBC call Lockhart & tell him that the crews are perturbed when he visits the rig & inspects cow, as his name is not on the permission list & please help out by not being seen.

Verbally reported to FTO, Monday Feb. 20, 1977.

WJC

SME Abstract Booklet  
AIME Annual Meeting  
March 6-10, 1977  
Atlanta, Georgia

UES PM

TUES PM

**The Great Gossan Lead:** *J. Ruzicka*, Walts, Griffis, McQuat, Anchorage, Alaska

**Similar and Dissimilar Features of Three Mississippi Valley Type Mineral Deposits:** *R. C. Gilbert*, New Jersey Zinc Exploration Co., Carthage, Tenn.

The zinc deposits at Elmwood and Jefferson City, Tenn. and at Elmo, Wisc. have some features that are similar and other features that are dissimilar. The named deposits are in a limestone-dolostone sequence; the ore host is a solution collapse breccia and the principal ore mineral is ZnS. Contrasting features include the relative thickness of the breccia and ore units, the amount distribution of limestone in the unaltered sequence, the relative abundance and type of gangue minerals, the relationship to erosional conformities and Karst development, and the post-ore features.

### STUDENT SESSION

(M&E)

12:00 pm **Dusseidorf**

**Chairman:** L. M. Kaas, U.S. Bureau of Mines, Washington, D.C.

**Welcoming Remarks:** *J. F. Havard*, Kaiser Engineers, Oakland, Calif.

**Uranium In Situ Leaching: Its Advantages, Practice, Problems, and Computer Simulation:** *B. A. Hancock*, University of Minnesota, Minneapolis, Minn.

In situ leaching for the recovery of uranium from low grade sandstone deposits is one of the newest technological advances in the mineral industry. It is rapidly developing into a commercially feasible mining system which has economic, environmental, and social advantages over conventional mining systems. Because of the current uranium shortage, development of in situ leaching into a sophisticated system has gained new impetus. In situ leaching will become an important mining technique in the future, which will greatly help to supply uranium for our nation's energy needs. This paper will give an overview of the merits of the system, as well as the technology, problems, and research in solution mining of uranium. 77-AS-66

**Influence of pH on Adsorption of Various Metals on Clays: Application to Treatment of Patzo Acid Mine Spoil by Sewage Sludge:** *K. R. Krivanek*, Southern Illinois University, Carbondale, Ill.

The Patzo mine, located in Williamson County, Illinois, contains acid mine spoil, the pH of which is as low as 2.0. In an attempt to alleviate the acid condition of the spoil, the U.S. Forest Service in 1975 began a program of applying sewage sludge to the surface. The sludge being applied contains large quantities of various trace metals including nickel, chromium, copper, cobalt, zinc, cadmium, and lead. In order to evaluate the probable fate of the metals as the organometallic complexes within the sludge decompose, a project to determine the cation exchange capacity of the overburden clays at various pH values was initiated. Adsorption of the metals by the clays was investigated over a pH range from 2.0 to 7.5, using solutions of one normal and 100 ppm concentrations of each metal respectively. As the pH of the solutions increase, metals can be adsorbed onto the clays in increasing amounts. 77-L-65

**Closing Remarks:** *D. W. Lynch*, Duval Corp., Tucson, Ariz.

### GAUDIN LECTURE

(MPD)

1:30 pm **Ballroom A**

William A. Griffith received the Gaudin Award "for his technical leadership in applying the innovative combination of mineral beneficiation, hydrometallurgy, and pyrometallurgy to develop a coordinated treatment process for the Lakeshore Mine in Arizona."

26

### FUNDAMENTALS II GENERAL

(MPD)

2:30 pm

**Ballroom A**

**Chairman:** R. S. Rickard, Earth Sciences Inc., Golden, Colo.

**Grinding of Quartz in Amine Solutions:** *S. Vidanage, H. El-Shall, and P. Somasundaran*, Columbia University, New York, N.Y.

A study on the effect of amine additions on the wet-grinding of quartz has shown that improved grinding can be obtained under certain conditions of amine concentrations and pH. Under certain other conditions, amine additions can produce deleterious effects. These effects are compared with those normally obtained for flotation. Microscopic examinations of the product (dispersed and sieved) has clearly shown the possibilities for major experimental artifacts in the past work. In addition, results obtained during a photographic study of the milling process have been helpful in identifying the above effects.

**Wet Dielectric Separation:** *I. J. Lin*, Israel Institute of Technology, Haifa, Israel and *L. Benguigui*, Solid State Institute, Haifa, Israel

We have studied the possibility to use electrical phenomena in order to selectively separate minerals with various densities and dielectric constants in nonhomogeneous electric fields. This technique is based on levitation forces acting on a solid particle immersed in dielectric fluid. The separation process can be made by using two possible modes: either by direct application of electrical forces or by change in the density and dielectric constant of a liquid medium in which the mineral particles are placed. We have investigated several electrode configurations in order to produce electrical fields which are strongly non-homogeneous. Further more, investigations on the dielectric properties of liquids have been performed. 77-B-28

**Autogenous Grinding and Concentration of a Michigan Native Copper Ore:** *C. F. Acton*, Olin Corp., New Haven, Conn.

Based on a laboratory structure analyses, a pilot plant study was made of a Michigan conglomerate native copper ore. Comminution of sized feed was accomplished using wet, closed-circuit autogenous grinding with and without crushing of the recirculating load. Coarse metallics were concentrated in two stages of jigging with fine metallic copper being recovered in a three-stage xanthate flotation. With a feed of about 1.95% Cu typically final tailings ran about 0.1 - 0.2% Cu with an overall metal recovery of 85-95%. An evaluation of the autogenous grinding operation in terms of pertinent parameters such as feed and product size and metal distribution, energy consumption, flowsheet, and ore characterization is made. Application of autogenous grinding to full scale plant operation is discussed. 77-B-15

### GENERAL HYDROMETALLURGY

(TMS/MPD-SME)

2:00 pm

**Lancaster C**

**Hyatt Regency**

**Chairmen:** P. B. Queneau, AMAX, Golden, Colo.  
G. M. Ritcey, Energy, Mines, and Resources of Canada, Ottawa, Ont., Canada

**Silver Extraction from Copper Refinery Slimes via Aqueous Chlorine Chemistry (A Pilot-Scale Investigation):** *J. E. Hoffmann and W. E. Zamorski*, AMAX Base Metals Research and Development Inc., Carteret, N.J.

The process chemistry of the aqueous-phase chlorination of electrolytic copper refinery slimes to extract selenium, tellurium, and the previous metals is discussed. The subsequent solids-liquid separation and the distribution of the various elements between the two phases is described. The effect of varying chlorination conditions on both reaction rate and completion (as determined in a 200 gal glass lined Pfaudler reactor) is briefly covered. Emphasis of the presentation will be a description of a process for recovery of high purity silver from the wet chlorination residue. This process, which includes the unit processes of aqueous leaching, ammoniacal leaching, precipitation of high purity silver chloride and conversion of the silver chloride to high purity silver powder by aqueous phase reduction in an alkaline medium will be described in detail. Overall silver recovery, distribution, and purity will be discussed.

27

JDS

2/15/78

Tom Clary's Co.  
PINAL Mng. & Minerals Ltd.  
P.O. BOX 1010 (Westinghouse ??)  
MIAMI, AZ

8 P.P. - 8 SECTIONS E. of SHARK S.

AREA of URANIUM Prospects - Dripping  
Springs Qtz. Minor Production 1950.

Tom Clary - Lucky Boy

Rumor that Westinghouse has optioned  
VARIOUS HOLDINGS

~~EFG~~/JDS/NPW

2/15/78

Superior East  
SLASH 5

## Acquifer Potential

AREA of SATURATED GRAVELS:

$$30,000' \times 11,000' = 7575' \text{ ACRES}$$

2000' depth

$$15,151,600 \text{ ACRES'}$$

ASSUME 15% SATURATION

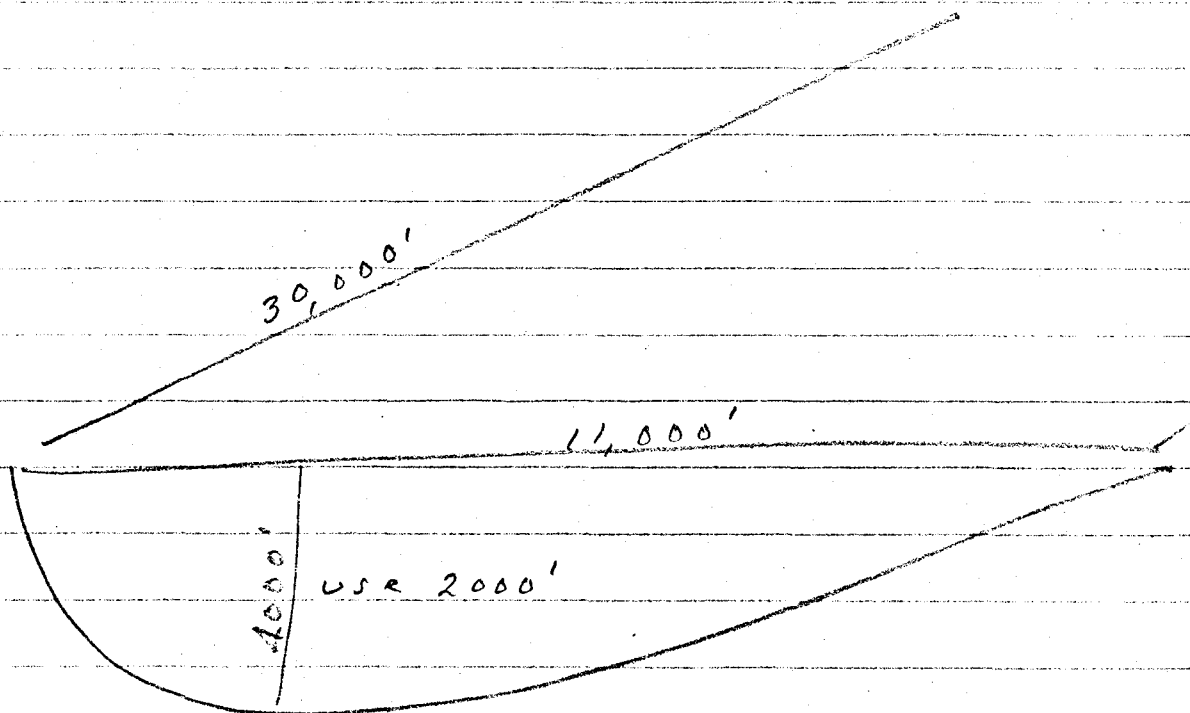
$$2,272,740 \text{ ACRES' WATER}$$

ASSUME USE of 5,000 ACRES ft. per yr.

OR 3,100 gpm per yr.

Life without Recharge @ 5,000 ACRES' per yr.

$$= 450 \text{ yrs.}$$



1201451 - where is the property exactly.

WLG-105

10/2/78

Superior EAST

WILLARD Shoecraft

owner of former CARRIS property & Globe Radio Sta  
Sutton Summit - Apple orchard

Remarried

Present Address: 405 W. WHITMAN PLACE  
COLLEGE PLACE, WASH. 99324

IS ASARCO INTERESTED IN OPTION TO PURCHASE  
MINIMUM DOWN.

Shoecraft has received license for  
FM station with transmitter on Pinal Mtn.  
claiming it will give him greater ARIZONA  
FM coverage than ALL other FM stations.

would like to interview someone  
from ASARCO.

-ABC

~~0008 08 C~~

~~0007 02 L/C~~

~~0023 02 U~~

~~0002 07 W~~

~~0063 02 C~~

~~0052 02 L~~

0001 06 L

~~0135 02 L~~

~~0050 02 L/C~~

~~0013 02 L~~

~~0002 04 L~~

~~0161 02 L~~

~~0052 02 L~~

0001 07 W



76  
RBCAST

*Give our back page credit*

Area Weather HI Lo Prec.

|           |    |    |  |
|-----------|----|----|--|
| Wednesday | 84 | 51 |  |
| Thursday  | 85 | 51 |  |
| Friday    | 85 | 55 |  |
| Saturday  | 89 | 66 |  |
| Sunday    | 89 | 68 |  |
| Monday    | 83 | 69 |  |
| Tuesday   | 74 | 65 |  |
| Wednesday | 74 | 59 |  |

R. R. Timberley  
Miami Copper Assay Office

# ARIZONA SILVER BELT

YOUR AWARD-WINNING COMMUNITY NEWSPAPER IN ITS SECOND CENTURY OF SERVICE

20  
No. 101 - No. 52 Per Copy  
Thursday, April 24, 1980  
Published Thursdays at 208 N. First, 50 Per Year, \$5.00  
For 6 mos. and rates postage paid at Globe, Ariz. 85301  
Globe, Arizona (USPS 030-880)



# ASARCO

Exploration Department  
Southwestern United States Division  
Frederick T. Graybeal  
Manager

June 10, 1980

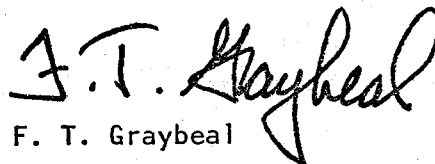
Memorandum to all Drill Crews:

Superior East Project

The following personnel are authorized for access to drill rigs, core, sample materials, and related shift reports:

W. F. Baker  
T. C. Benavidez  
F. T. Graybeal  
H. G. Kreis  
W. L. Kurtz  
D. A. Melhado  
G. W. Pickard  
J. D. Sell  
R. B. Sprague  
N. P. Whaley

If you are not acquainted with anyone claiming to be one of the above, please require positive identification such as a driver's license. Do not accept business cards.

  
F. T. Graybeal

1b

Exploration Department  
Southwestern United States Division

August 20, 1980

Memorandum to all Drill Crews:

Superior East Project

The following personnel are authorized for access to drill rigs, core, sample materials, and related shift reports:

W. F. Baker  
T. C. Benavidez  
F. T. Graybeal  
H. G. Kreis  
W. L. Kurtz  
D. A. Melhado  
G. W. Pickard  
J. D. Sell  
R. B. Sprague  
N. P. Whaley  
J. M. Wood

If you are not acquainted with anyone claiming to be one of the above, please require positive identification such as a driver's license. Do not accept business cards.

*N. P. Whaley*  
N. P. Whaley  
Geologist

1b

ORIGINAL COPY. 110 IN J. C. PARKER

TR. MK. REG. U.S. PAT. OFF.

WT-4 Thru 7 SE 1/4-SW 1/4, Sec. 25  
(Not Queen Creek - Tennesse)  
Disturbance area 20 x 40 feet. Dip trend  
direction is N70°W to N70°W., with few  
reversal dips to east.

WT-4. Top 3 ft. plus 80% clast material  
dominantly shales, some blocky & containing  
pseudo-oligoclase. Shear staining. Also  
Limonite (Rm). Crinoid of Cr. corals (see  
spec.) several hundred diam or greater  
fragments w/ root, perhaps some Fe stain.

WT-5. Below WT-5, 20 ft. out. Dominant  
red sand tuff matrix with bands of clasts  
(smaller size, i.e. 1/2" - 1") of perhaps 90% shales.

WT-6. Horizontal shales - granular to clastic  
relatively fresh, small, some Fe-stain

WT-7. Red & min. clasts of shales & few lime  
(spindly?)  
Cross. minor shales (see) but rounded in situ  
rare shales.

LEFAY PHOSPHATE CO. PA. MADE IN U.S.A.

WT-8 thru 10. Just SE of center of Sec. 36 along  
ridge crest. Exposure is approx 10x10, composed  
of 3 sections: Top 4' is coarse sand volcanic tuff  
with minor grey & white (S), mudstone - all coarse sandstone.  
Very few 1/2" size frags. Middle 1 ft is bed of 1/4" to 1"  
with some 1 1/2" rock clasts (some of unit) with matrix  
of fine to coarse sand size tuff & fine frag (10-20% of unit).  
Lower 5 ft is soft, very fine to med coarse sand, tuff  
with occ. frag of shale & silt scattered thruout.  
Red clast in mid unit are med. grey, all argill.

Whitewater Samples

WT-1, NW 1/4, SW 1/4, Sec. 8, T R

Disturbance area approx 3x20 ft in road cut  
and near Dm - to contact on map.

Very tuffaceous matrix with shaly appearance,  
no bedding with fragments from 4" to 1/2 ft,  
with 2"-4" med corners of larger sizes.

Fragments predom. macerals & mineral content,  
minor quantities of fossils. No dolomite - No shales  
body rot, poorly developed. Dual facies  
suggest westerly trend to stream direction but  
have some reversals suggesting lateral movement.

WT-2 SW 1/4, NW 1/4, Sec. 8

Disturbance area approx 6x10' in creek bed on side  
hill. Reddish brown shales & w/ stream  
cement, minor tuff cement. Mostly the fossilifer  
light grey (M) w/ few blk lines, minor sh. tuff  
conspicuous large frags (3-6") of dark green, porous  
clastic, fresh. Mainly subangular frags, w/  
remnants of bedding. Pattern trend suggest stream  
flow is S to W direction. (Note: Gt. more  
resemble glauconite rather than calcite!).  
Matrix becomes more tuffaceous (but attributed to North)

WT-3 Same loc. as WT-2

Pieces of only the shales & tuff.

LEFAY PHOSPHATE CO. PA. MADE IN U.S.A.

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TR. MK. REG. U.S. PAT. OFF.

WT-8-10 Cont.

with minor rhyolite, diabase, + schist. ~~High~~  
has some contact but are not small + minor.  
Poorly developed trend suggest S85°E transport  
direction. Very fine character suggest local  
deposition. Simplidana approx 30' above  
base of WT.

Climber up + along section found  
1 piece of fresh orthogneiss (Pg) gr. and one  
fresh dark granodiorite (ndiorite). Also  
remnants of unit is similar sand size  
tuff material w/ few fragments except in  
6"-1 1/2' bands. These boulder-boulder bands  
are planar units (non-scouring on base)  
and near top often have large cobbles-boulders  
6-8" or subang to subround quartz, diorite  
and fossil limestone (Dm). Trend direct  
still poor - very SE trend w/ few westerly.  
that becomes more blocky toward top (indicated  
by weathering?), lower is fine grained,  
has mud balls.

LEFAX PHOTOCOPYING IN U.S.A.

White tuff collectors

Fri Dec 4.

on  
G4 way

Cross Canyon (CC) Starting at upper contact & working down

Contact with white breccia tuff (which contains some red-bk diabase) is microporous (cgl -15-20°) - (retro -10° E) with semi change in strike direction. Upper part of T<sub>u</sub> is composed of

pebble beds (+80% pebbles 1/2" - 2") granod. red-bk diabase, some dark green db, schist, minor lens & gneiss, all semi-circular. Pred transport direction is Northwest, some westerly component. Also S30E

trend on few frag! beds set in dacitic tuff matrix and alternate with dacitic tuff layers w/ few fragments. Possible 50% pebble

beds - 50% tuff beds. One good S<sub>1</sub> fragment, diabase frag. Very rare material. alt frag. noticed, except for red-bk db.

CC-1. dacitic tuff matrix.

CC-2 alt? weather red-bk (Fe) diabase frag only seen CC-1.

CC-3. 50-70ft below top. ~~Unit~~ Unit lost pebble bed. More massive sand-granular tuff with few <sup>db-lens</sup> pebbles or clasts.

CC-4. 130-150ft below top. Approx same as area CC-3 except diff matrix characteristics. Sample taken in 5ft zone of pebbles in matrix of tuff-diabase debris. Pebbles are gneiss, green db, red db, minor lens, minor sch.

lower contact (@ ± 180ft below top) of cgl-lens not exposed. lowest part of cgl continues to be tuffaceous some cobble-boulder bed of gneiss, limestone, db, minor sch. Poorly developed trend direction in all directions suggest dumping area.



Whitetail Collier. Elm Canyon Tributary (North) 4 Dec 70  
ET starting at top of Tw. In contact with brittle white  
tuff under vitrophyre. Also a 10' section (not sampled)  
of massive dacitic tuff, somewhat welded).

On  
Eggs

ET-1 matrix of dacitic tuff with abundant clasts of fossil lime  
& pink shale (Pa) with lesser amt of crystal lime. No reptiles  
seen, scattered exposures and all have unsorted, dumped appearance.  
Lime makes up 80+% of clast & clast is 80+% of cal, great  
for big massive dacitic tuff. Total thickness 50-60'. Resting on  
Noco lime.

### Granules

Some top of  
of top in  
the wash  
Cone #3 of Dec Claim #39  
Cone #6 of " " #40.

Dec #39 21 March 1970 by R F Ellison PO Box 576,  
Hawthorn, Nevada 89415.

on  
low  
was

10 ft southely & 1470 ft north & 300 each side  
Loc. in SW 1/4, Sec. 23, T 25, R 12E @ 14400 ft  
southely from NW Corner Sec. 23.

To north in SW 1/4 Sec. 15 is part w/ cones #4 of Dec #109; cone #5 of Dec #1  
also drill bits 14A, 60', 14B, 40' & 14, 60'.

Dec #109 4 Nov. 70 by Louisa Mining Co PO Box 4220, TOC 85-717  
by Agent R F Ellison Hawthorn, Nev.  
SW 1/4 Sec. 14, T 25, R 12E. 25' S & 1475' N.

Whitehead striking area

SK-1-3. Tu cut on fresh granules, gty, drvit unevenly. Basal zone of Tu is +100% cobble to bould. acid clast, predom lens (Pa + Mc) with minor gty & shale. Coarse frag of med grained gty, drvit (SK type) usually more silicified, some kaolinitic det. also few drvit frag (Meyen type) all set in granular sized gty-feldspar - lens detritus with minor amt of tuff sand material (increasing in amt upward). Lentic suggest pred westward direction of movement of frag trans. Some alt lens (epid + spec) also minor alt of <sup>gty, sh</sup> ~~frag~~.

- SK-1. gty, drvit, fresh, mixed under Tu
- SK-2. Granular matrix of Tu.
- SK-3. all frag in Tu

} basal zone.

SK-4 taken in middle of exposure. More tuff matrix, more rounded drvit & coarse gty, dr. also db + sch. frag. sand of matrix only.

SK-5. Taken 80% below top, but above 3 lens bands of 2, 4, 1 1/2 thickness of cl between. +40% fragment size 1" - 6" clast, predom diabase, some gty, dr, lens, sch. & gty. Matrix predom diabase debris of tuff; dark brown soil horizon as lenses.

SK-6. Fe, Si, or Cu stain? on diabase granules, gty, dr & lower. Frag. band in a dark water. <sup>(±20%)</sup> <sub>thin bed. vol.</sub> <sup>beds</sup> 90% - 95% v. matrix (±70%); grade upward into white <sup>beds</sup> crystalline tuff also water stain!! with few <sup>beds</sup> ~~small~~ db ~~frag~~ lens bands.

pred. matrix is rounded, but lower beds at top NW & SW corners. 2000

Whitetail in Belmont Canyon BC-Sens.

Unit is approx 40-45 ft thick resting on Mac lms & overlain by thin (2-3 ft) of white tuff overlain by 20 feet of vitrophylo.

Unit is 80-95% clasts, primarily Mac lms & siltstone of 1/2" to 1/4" mostly subangular. Lower portion contains abundant Fe-Mn altered lens frag. no quartz. Upper part has sparse stylite with some <sup>W. st.</sup> ? lms & Eolite type. Matrix is brown tuff <sup>muddy</sup> with some small stony pieces but mostly decayed appearance. No well defined trend direction. ? on w. side? Lower portion has numerous large slab fragments of Mac.

BC-1 Top 8 ft, tuff matrix containing abundant small lens-like clasts & debris. Very tough - does not pulverize.

BC-2 Lower 20 ft; only Fe-Mn altered frags of silty chert lms.

BC-3 Same area as BC-2. tuff matrix with some fresh coal frags as fine debris.

Note: No evidence for Fe-Mn staining & neglect & it appears the frags in T2 did not have much transp. distance.

Bar?  
CS 152 68 69

Goose Spring area. SW part of Inspiration Quad. 1.3 miles SW of Pop. Mt. (Costello Road)  
Rounded hill slopes, no areas of bedding etc. abundant dolomite clasts up  
to 1 1/2' diam, median around 2-4 inches. Also abundant barite, gypsum, quartz, feldspar  
fragments with lesser amount of lime (on south side of hill quite abundant on  
northwest of site area), angular to subangular frags. little rounded  
In upper part of these have more barite & gypsum frags.

GS-1. Niobasic weathered submatrix clayey soil development w/ fine alb & quartz frags.  
(Seined fraction) Note: Does NOT look like Tuff matrix! ; lent is moist.

GS-2. Niobasic fragments in GS-1. abundant magnetite & reddish, oolitic pebbles  
Perhaps is altered, but only spotty. No iron visible.  
areas quite from GS-1, etc.

GS-3. Same frag as above but in a dry, tuffaceous looking, muddy matrix. Unbonded  
typical Tuff type.

GS-4. Similar to GS-1. abundant barite, Devonian, quartz, & feldspar.

Some amount of Tuff debris. Niobasic, muddy, subacid type matrix.

GS-5. 0.9 m SW of GS-4

GS-5. Tuffaceous matrix from deep type Tuff. contains abundant subrounded  
clasts of alb, quartz, lime. clast 2" - 6" some 2 ft diam. matrix not 50% - clast 50%

GS-6. weakly set, reddish-brown, dolomite frag frags

Note: In all exposure of GS samples No schist nor intrusive rocks were  
found, even in GS-5. ? host block post. Tuff!?

GS-7-8 Gila G1 Area about T6

GS-7. Early alkali tuff with Qtz & Tuff frag plus dolomite, quartz, lime and  
igneous (glaucous, plagioclase crystals) matrix only.

GS-8. Frag of quartz, plagioclase quartz

Hackberry Creek. SW 1/4 Sec. 18, T25 R13E.

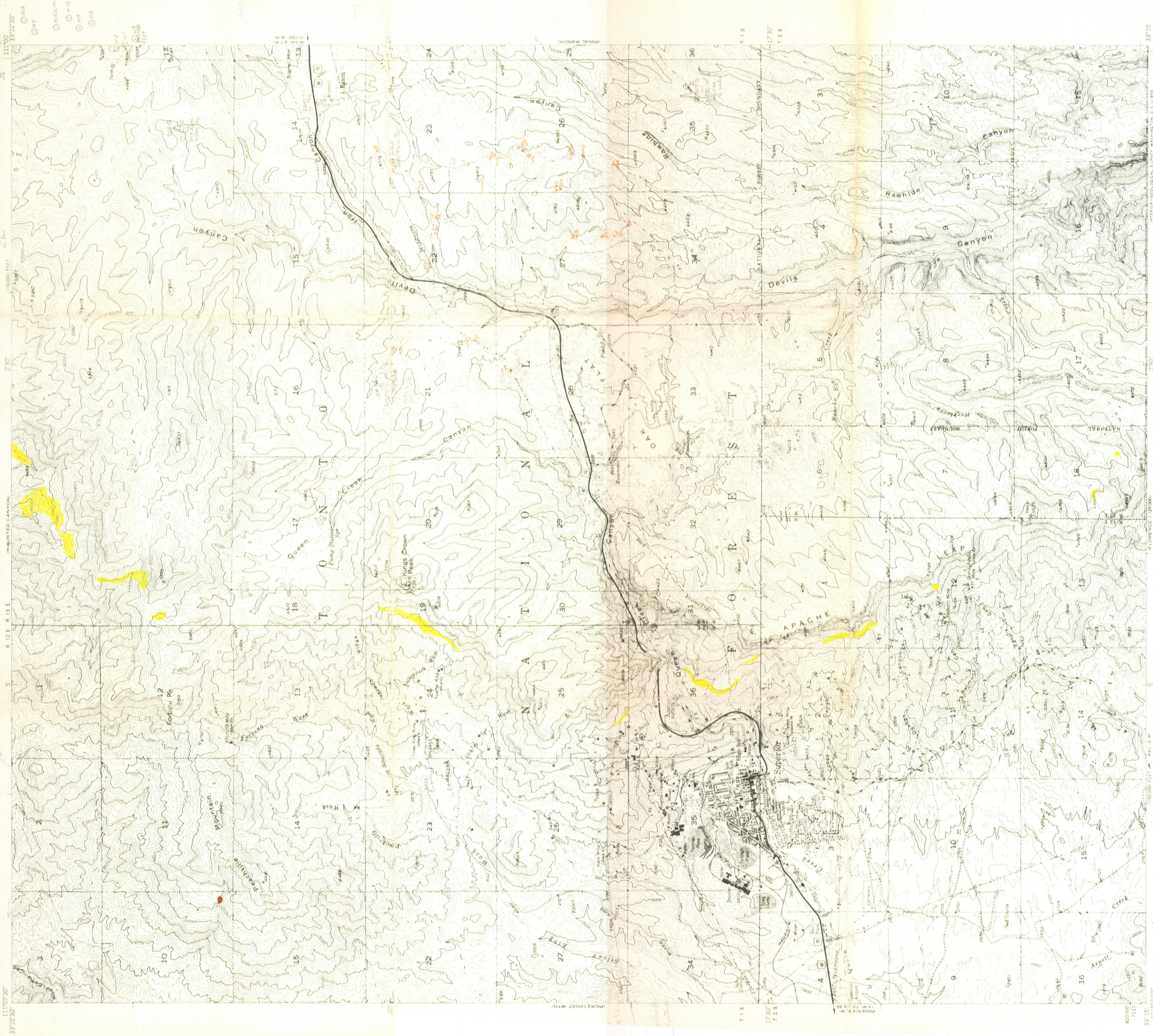
HC-1. Regolith soil development on TPn with abundant Troy and Bobs types debris. Rare diabase frags. No outcrops, only also material.

HC-2. More sandy tuffaceous regolith with similar fragment. Increased diabase (reddish blk), chert, & few TPn fragments. Most debris in bottles located in 1/4"-3" with some 6"-10". Apparent increase size toward #2. Still no outcrops for trend direction. No TPn or Mo! in either location or interstices! All are angular pieces w/ minor rounded corners.

HC-3. POOR SAMPLE - Taken from eroded sand.

Red. sets lens of TPn with some Bobs & Troy type debris in eroded. Banks of soil tuff along eroded walls contain diabase fragments. No diab. angular frags.





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Aerial photographs taken 1945. Field check 1948  
Polyconic projection. 1927 North American datum  
10000-foot grid based on Arizona coordinate system,  
central zone  
Unchecked elevations are shown in brown

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APPROXIMATE MEAN  
DECLINATION, 1948



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Medium-duty  
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TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE 1-27-71

| SAMPLE MARKED |            | ANALYSIS                                                                                | CHARGES  |
|---------------|------------|-----------------------------------------------------------------------------------------|----------|
| SK            | 1--6       | W. G. K.<br>FEB 1 1971<br><br>Geo-Chem Cu, Zn, Mo<br>Ceramic Plate Pulverizing<br>Total |          |
| CC            | 1--4       |                                                                                         |          |
| ET            | 1          |                                                                                         |          |
| WT            | 1--10      |                                                                                         |          |
| BC            | 1--3       |                                                                                         |          |
|               | 24 Samples |                                                                                         | \$108.00 |
|               |            |                                                                                         | 12.00    |
|               |            |                                                                                         | \$119.00 |



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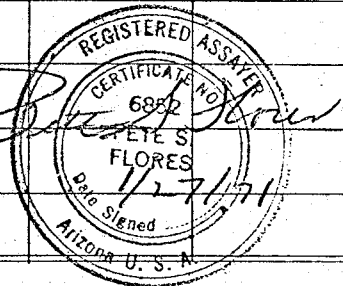
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DATE Jan. 27, 1971

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PPM                          |                 | PPM                        |                                  | PERCENT<br>IRON |
|---------------|-----------------|-------------------|------------------------------|-----------------|----------------------------|----------------------------------|-----------------|
|               |                 |                   | <del>PERCENT</del><br>COPPER | PERCENT<br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM |                 |
| SK - 1        |                 |                   | 14                           |                 | 40                         | 3                                | W. G. K.        |
| 2             |                 |                   | 23                           |                 | 38                         | 5                                | FEB 1 1971      |
| 3             |                 |                   | 42                           |                 | 79                         | 24                               |                 |
| 4             |                 |                   | 40                           |                 | 98                         | 9                                |                 |
| 5             |                 |                   | 54                           |                 | 102                        | 8                                |                 |
| 6             |                 |                   | 15                           |                 | 22                         | 2                                |                 |
| CC- 1         |                 |                   | 230                          |                 | 145                        | 8                                |                 |
| 2             |                 |                   | 118                          |                 | 509                        | 3                                |                 |
| 3             |                 |                   | 187                          |                 | 133                        | 9                                |                 |
| 4             |                 |                   | 335                          |                 | 121                        | 14                               |                 |
| ET - 1        |                 |                   | 174                          |                 | 65                         | 14                               |                 |
| WT - 1        |                 |                   | 24                           |                 | 45                         | 11                               |                 |
| 2             |                 |                   | 20                           |                 | 19                         | 9                                |                 |
| 3             |                 |                   | 40                           |                 | 108                        | 28                               |                 |
| 4             |                 |                   | 440                          |                 | 169                        | 19                               |                 |
| 5             |                 |                   | 183                          |                 | 123                        | 2                                |                 |
| 6             |                 |                   | 48                           |                 | 61                         | 7                                |                 |
| 7             |                 |                   | 130                          |                 | 129                        | 7                                |                 |
| 8             |                 |                   | 161                          |                 | 80                         | 36                               |                 |
| 9             |                 |                   | 91                           |                 | 40                         | 16                               |                 |
| 10            |                 |                   | 120                          |                 | 148                        | 13                               |                 |
| BC - 1        |                 |                   | 100                          |                 | 230                        | 14                               |                 |
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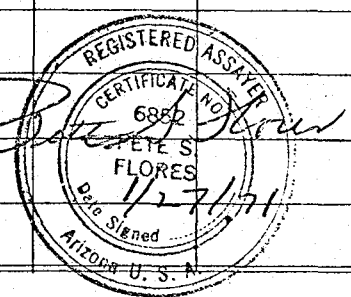
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| 4             |                 |                   | 335                          |                 | 121                        | 14                               |                 |
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| 7             |                 |                   | 130                          |                 | 129                        | 7                                |                 |
| 8             |                 |                   | 161                          |                 | 80                         | 36                               |                 |
| 9             |                 |                   | 91                           |                 | 40                         | 16                               |                 |
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| BC - 1        |                 |                   | 100                          |                 | 230                        | 14                               |                 |
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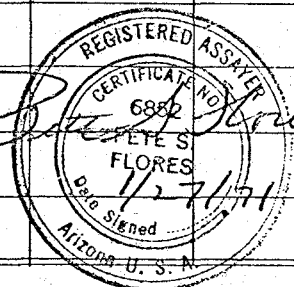
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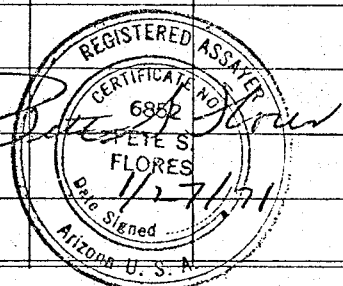
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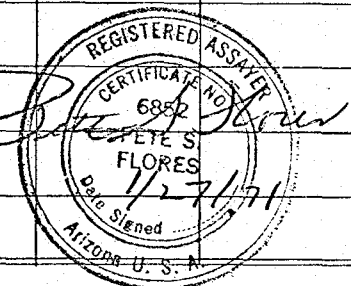
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Invoice # 5899

CHARGES \$ 108.00

INVOICE

3226 East 46th Street

No. 5925

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS · CHEMISTS · METALLURGISTS

Phone 624-0049

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company  
Mr. J. Sells

DATE 2-4-71

| SAMPLE MARKED                      | ANALYSIS                                  | CHARGES |
|------------------------------------|-------------------------------------------|---------|
| SK - 1<br>SK-6<br>CC - 3<br>WT - 5 | W. G. K.<br>FEB 8 1971<br>Geo-Chem Cu, Zn | \$8.00  |

# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company  
 Re-runs - 5 g Mr. J. Sell PPM PPM

DATE Feb. 4, 1971

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | COPPER | PERCENT<br>LEAD | ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON |
|---------------|-----------------|-------------------|--------|-----------------|------|-----------------------|-----------------|
| SK - 1        |                 |                   | 24     |                 | 50   |                       |                 |
| SK - 6        |                 |                   | 14     |                 | 30   |                       |                 |
| CC - 3        |                 |                   | 165    |                 | 113  |                       |                 |
| WT - 5        |                 |                   | 164    |                 | 107  |                       |                 |
|               |                 |                   |        |                 |      |                       |                 |
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W. G. K.  
 FEB 8 1971

REGISTERED ASSAYER  
 PETE S. FLORES  
 Feb 2/4/71  
 Arizona U. S. A.  
 ASSAYER-CHEMIST

Invoice # 5925  
 CHARGES \$ 8.00



AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Feb. 4, 1971

Re-Runs - 5 g Mr. J. Sell PPM PPM

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | <del>PPM</del><br>COPPER | PERCENT<br>LEAD | <del>PPM</del><br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON |
|---------------|-----------------|-------------------|--------------------------|-----------------|------------------------|-----------------------|-----------------|
| SK - 1        |                 |                   | 24                       |                 | 50                     |                       | W. G. K.        |
| SK - 6        |                 |                   | 14                       |                 | 30                     |                       | FEB 8 1971      |
| CC - 3        |                 |                   | 165                      |                 | 113                    |                       |                 |
| WT - 5        |                 |                   | 164                      |                 | 107                    |                       |                 |
|               |                 |                   |                          |                 |                        |                       |                 |
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REGISTERED ASSAYER  
 PETROS FLORES  
 2/4/71  
 Signed  
 Arizona U. S. A.

Invoice # 5925  
 CHARGES \$ 8.00

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS • CHEMISTS • METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company  
Re-Runs - 5 g Mr. J. Sell PPM PPM

DATE Feb. 4, 1971

| SAMPLE MARKED | GOLD<br>OZ / TON | SILVER<br>OZ. / TON | <del>PPM</del><br>COPPER | PERCENT<br>LEAD | <del>PPM</del><br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON |
|---------------|------------------|---------------------|--------------------------|-----------------|------------------------|-----------------------|-----------------|
| SK - 1        |                  |                     | 24                       |                 | 50                     |                       | W. G. K.        |
| SK - 6        |                  |                     | 14                       |                 | 30                     |                       | FEB 8 1971      |
| CC - 3        |                  |                     | 165                      |                 | 113                    |                       |                 |
| WT - 5        |                  |                     | 164                      |                 | 107                    |                       |                 |
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|               |                  |                     |                          |                 |                        |                       |                 |

REGISTERED ASSAYER  
 PETE S. FLORES  
 2/4/71  
 Arizona U. S. A.

Invoice # 5925  
 CHARGES \$ 8.00

INVOICE

3226 East 46th Street

No. 6015

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

Phone 624-0049

SAMPLE SUBMITTED BY American Smelting & Refining Company  
Mr. James D. Sell

DATE 2-3-71

| SAMPLE MARKED | ANALYSIS                  | CHARGES |
|---------------|---------------------------|---------|
| GS-1 -- GS-8  | Geo-Chem Cu, Zn, Mo       | \$63.00 |
| D-1 -- D -3   | Ceramic Plate Pulverizing | 7.00    |
| HC-1 -- HC-3  | Total                     | \$70.00 |

# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Mar. 3, 1971

| SAMPLE MARKED | GOLD<br>OZ. / TON | SILVER<br>OZ. / TON | PPM                          |                 | PPM                        |                                  | PERCENT<br>IRON |
|---------------|-------------------|---------------------|------------------------------|-----------------|----------------------------|----------------------------------|-----------------|
|               |                   |                     | <del>PERCENT</del><br>COPPER | PERCENT<br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM |                 |
| GS -1         |                   |                     | 132                          |                 | 392                        | 4                                |                 |
| GS -2         |                   |                     | 62                           |                 | 99                         | 2                                |                 |
| GS -3         |                   |                     | 95                           |                 | 282                        | 4                                |                 |
| GS -4         |                   |                     | 75                           |                 | 152                        | 4                                |                 |
| GS -5         |                   |                     | 76                           |                 | 404                        | 2                                |                 |
| GS -6         |                   |                     | 358                          |                 | 385                        | 2                                |                 |
| GS -7         |                   |                     | 37                           |                 | 120                        | -1                               |                 |
| GS -8         |                   |                     | 121                          |                 | 69                         | 3                                |                 |
| D -1          |                   |                     | 588                          |                 | Nil                        | 85                               |                 |
| D -2          |                   |                     | 403                          |                 | 63                         | 2                                |                 |
| D -3          |                   |                     | 74                           |                 | 49                         | 14                               |                 |
| HC -1         |                   |                     | 143                          |                 | 168                        | 2                                |                 |
| HC -2         |                   |                     | 63                           |                 | 133                        | 2                                |                 |
| HC -3         |                   |                     | 28                           |                 | 70                         | 3                                |                 |
|               |                   |                     |                              |                 |                            |                                  |                 |
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|               |                   |                     |                              |                 |                            |                                  |                 |
|               |                   |                     |                              |                 |                            |                                  |                 |
|               |                   |                     |                              |                 |                            |                                  |                 |

REGISTERED ASSAYER  
 CERTIFIED  
 Date 2/3/71  
 U.S.A.  
 ASSAYER - CHEMIST

Invoice # 6015

CHARGES \$ 63.00

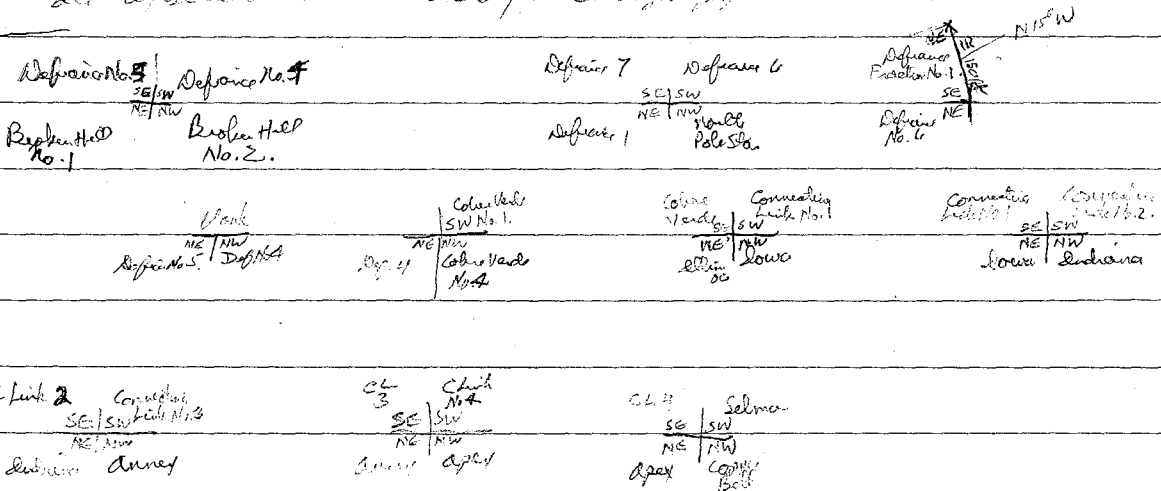
Samples:

- D-1. Cuttings from MCC? Shinn hills in Pointe Coch. Heavy Fe + clay w/ gty-sand. No. 63-66
- D-2. Cuttings from H-S? same distribution Pointe Coch area. Gty-sand, highly bedded No. 63-66

NOTE

On E side of Giggley Mtn + above lower beds, in side channel have rather massive tilted fractured beds underlain by vitreous, underlain by white buff, and then by 15' exposure of buff-colored dolomite (sh. 4 min. schist about 100').  
 No. 63  
 No. 64  
 No. 65  
 No. 66  
 No. 67  
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 No. 100

- D-3 Le Pointe coal near Giggley Ben Springs. Cuttings from shinn hills. schist, all w/ schist mass + clay. Analysed? No. 63-66



Quines disc w/ DFH map #9 now at 1800' in Tw. Had no lower vol. Thinks Tw maybe +1000' thick.

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

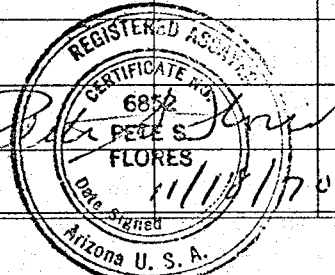
ASSAYERS · CHEMISTS · METALLURGISTS

Page 1 of 3  
TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Nov. 14, 1970

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PER CENT<br>COPPER | PERCENT<br>LEAD   | PERCENT<br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON | Percent<br>Ox Cu |
|---------------|-----------------|-------------------|--------------------|-------------------|-----------------|-----------------------|-----------------|------------------|
| SR - 1        | .001            | 0.04              | 0.35               |                   |                 |                       |                 | 0.32             |
| 2             | Nil             | 0.15              | 0.41               | <del>0.15</del> / |                 |                       |                 |                  |
| 3             | Trace           | 0.17              |                    |                   |                 |                       |                 |                  |
| 4             | Trace           | 0.15              |                    |                   |                 |                       |                 |                  |
| 5             | Trace           | 0.16              |                    |                   |                 |                       |                 |                  |
| 6             | Trace           | 0.14              |                    |                   |                 |                       |                 |                  |
| 7             | Trace           | 0.13              |                    |                   |                 |                       | SUPERIOR EAST   |                  |
| 8             | .001            | 0.11              |                    |                   |                 |                       | FRIEL           |                  |
| 9             | Trace           | 0.17              |                    |                   |                 |                       |                 |                  |
| 10            | Trace           | 0.12              |                    |                   |                 |                       |                 |                  |
| 11            | .003            | 0.17              | 0.43               | <del>0.15</del> / |                 |                       |                 |                  |
| 12            | .001            | 0.15              | 0.45               | <del>0.20</del>   |                 |                       |                 |                  |
| 13            | .001            | 0.04              | 0.25               |                   |                 |                       |                 | 0.22             |
| 14            | .001            | 0.15              | 0.50               | <del>0.18</del>   |                 |                       |                 |                  |
| 15            | Trace           | 0.11              | 0.28               | <del>0.36</del>   |                 |                       |                 |                  |
| 16            | Trace           | 0.15              | 0.45               | <del>0.25</del>   |                 |                       |                 |                  |
| 17            | .001            | 0.13              | 0.78               | <del>0.19</del>   |                 |                       |                 |                  |
| 18            | .001            | 0.20              | 7.05               | <del>0.21</del>   |                 |                       |                 |                  |
| 19            | .002            | 0.05              | 1.80               |                   |                 |                       |                 | 1.71             |
| 20            | .006            | 1.47              |                    | 3.65              | 9.75            |                       |                 |                  |
| 21            | .001            | 0.20              |                    |                   | 1.30            |                       |                 |                  |
| 22            | Trace           | 0.16              |                    |                   |                 |                       |                 |                  |
| 23            | Trace           | 0.23              |                    | 1.00              | 1.20            |                       |                 |                  |
| 24            | .002            | 0.75              |                    | 3.90              | 11.40           |                       |                 |                  |
| 25            | .002            | 0.16              |                    |                   |                 |                       |                 |                  |



Invoice # 5577  
CHARGES \$ 161.00



AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

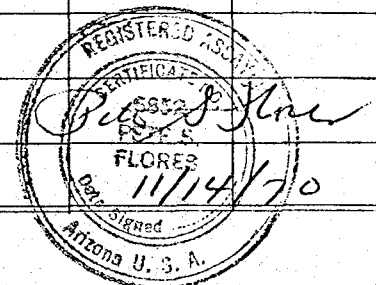
Page 2 of 3

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Nov. 14, 1970

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PPM                          |                            |                            |                                  | PERCENT<br>IRON |
|---------------|-----------------|-------------------|------------------------------|----------------------------|----------------------------|----------------------------------|-----------------|
|               |                 |                   | <del>PERCENT</del><br>COPPER | <del>PERCENT</del><br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM |                 |
| SR - 1        |                 |                   |                              | 24                         | 56                         | 2                                |                 |
| 2             |                 |                   |                              | 10 ✓                       | 57                         | 3                                |                 |
| 3             |                 |                   | 115                          | 12                         | 58                         | 3                                |                 |
| 4             |                 |                   | 275                          | 8                          | 60                         | 17                               |                 |
| 5             |                 |                   | 475                          | 19                         | 56                         | 11                               |                 |
| 6             |                 |                   | 66                           | 21                         | 68                         | 2                                |                 |
| 7             |                 |                   | 104                          | 21                         | 79                         | 2                                |                 |
| 8             |                 |                   | 167                          | 10                         | 38                         | 3                                | SUPERIOR E.     |
| 9             |                 |                   | 193                          | -1                         | 38                         | 12                               | FAIR            |
| 10            |                 |                   | 239                          | 15                         | 42                         | 8                                |                 |
| 11            |                 |                   |                              | 5 ✓                        | 38                         | 9                                |                 |
| 12            |                 |                   |                              | -1                         | 35                         | 10                               |                 |
| 13            |                 |                   |                              | 8                          | 31                         | 7                                |                 |
| 14            |                 |                   |                              | 12                         | 61                         | 2                                |                 |
| 15            |                 |                   |                              | 19                         | 34                         | 2                                |                 |
| 16            |                 |                   |                              | 5                          | 30                         | 9                                |                 |
| 17            |                 |                   |                              | 14                         | 53                         | 7                                |                 |
| 18            |                 |                   |                              | -1                         | 22                         | 7                                |                 |
| 19            |                 |                   |                              | 18                         | 22                         | 10                               |                 |
| 20            |                 |                   | 1860                         |                            |                            | 9                                |                 |
| 21            |                 |                   | 94                           | 814                        |                            | 2                                |                 |
| 22            |                 |                   | 58                           | 57                         | 160                        | 2                                |                 |
| 23            |                 |                   | 153                          |                            |                            | 4                                |                 |
| 24            |                 |                   | 997                          |                            |                            | 6                                |                 |
| 25            |                 |                   | 110                          | 122                        | 625                        | 214                              |                 |



Invoice # 5577

CHARGES \$ 107.00  
Sample Preparation Charges on Page 1

ASSAYER - CHEMIST

# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

Page 3 of 3  
TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Nov. 14, 1970

PPM                  PPM                  PPM                  PPM

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | <del>PERCENT</del><br>COPPER | <del>PERCENT</del><br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM | PERCENT<br>IRON |
|---------------|-----------------|-------------------|------------------------------|----------------------------|----------------------------|----------------------------------|-----------------|
|---------------|-----------------|-------------------|------------------------------|----------------------------|----------------------------|----------------------------------|-----------------|

SR - 26

.001

0.15

88

18

69

3

27

.002

0.12

327

5

40

13

28

.001

0.12

59

7

54

2

29

Trace

0.18

83

49

96

5

SUPERIOR E.  
FRIEL.

*Peter F. Friel*  
REGISTERED ASSAYER-CHEMIST  
PETER F. FRIEL  
FLORENCE, ARIZONA  
11/14/70  
ASSAYER-CHEMIST

Invoice # 5577

CHARGES \$ 36.00

## AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining CompanyDATE Nov. 20, 1970

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PPM                          | PPM                        | PPM                        | PPM                              | PERCENT<br>IRON |
|---------------|-----------------|-------------------|------------------------------|----------------------------|----------------------------|----------------------------------|-----------------|
|               |                 |                   | <del>PERCENT</del><br>COPPER | <del>PERCENT</del><br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM |                 |
| SC - 1        | .002            | 0.10              |                              | 30                         | 127                        | 7                                |                 |
| 2             | Trace           | 0.11              | 250                          | 42                         | 60                         | 2                                |                 |
| 3             | .001            | 0.06              | 180                          | 33                         | 19                         | 40                               |                 |
| 4             | .008            | 0.13              | 140                          | 83                         | 105                        | 1                                |                 |
| 5             | Trace           | 0.11              | 109                          | 44                         | 98                         | 3                                |                 |
| 6             | Trace           | 0.08              | 76                           | 37                         | 38                         | 3                                |                 |
| 7             | .003            | 0.09              | 67                           | 68                         | 218                        | 2                                |                 |
| 8             | Trace           | 0.09              | 48                           | 32                         | 79                         | 2                                |                 |
| 9             | .004            | 0.07              | 151                          | 47                         | 45                         | 2                                | SUPERIOR E.     |
| 10            | Trace           | 0.08              | 58                           | 38                         | 68                         | 1                                | FRIEL.          |
| 11            | Trace           | 0.10              | 87                           | 18                         | 39                         | 2                                |                 |
| 12            | Trace           | 0.01              | 48                           | 24                         | 35                         | 1                                |                 |
| 13            | Trace           | 0.13              | 56                           | 35                         | 65                         | -1                               |                 |
| 14            | Trace           | 0.05              | 48                           | 25                         | 50                         | 1                                |                 |
| 15            | Trace           | 0.12              | 21                           | 8                          | 42                         | 1                                |                 |
| 16            | Trace           | 0.10              |                              | 33                         | 70                         | 1                                |                 |
| 17            | Trace           | 0.11              | 73                           | 11                         | 7                          | 98                               |                 |
| 18            | .001            | 0.09              | 78                           | 10                         | 8                          | 58                               |                 |
| 19            | .002            | 0.16              | 1270                         | 10                         | 12                         | 17                               |                 |
| 20            | .001            | 0.17              | 425                          | 13                         | 9                          | 63                               |                 |
| 21            | .003            | 0.08              |                              | 20                         | 59                         | 12                               |                 |
| 22            | .003            | 0.14              | 599                          | 35                         | 14                         | 83                               |                 |
| 23            | .003            | 0.13              | 387                          | 29                         | 15                         | 64                               |                 |
| 24            | .004            | 0.12              |                              | 27                         | 32                         | 120                              |                 |
| 25            | Trace           | 0.08              | 102                          | 23                         | 11                         | 72                               |                 |

Invoice # 5616  
 CHARGES \$ 221.00

*Peter S. How*  
 REC  
 11/20/70  
 ANALYTICAL  
 AMERICAN  
 U. S. I.

ASSAYERS - CHEMISTS

3226 East 46th Street

Phone 624-0049

# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

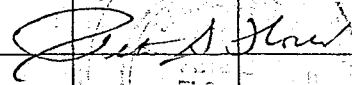
ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Nov. 20, 1970

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PER CENT<br>COPPER | PERCENT<br>LEAD | PERCENT<br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON |
|---------------|-----------------|-------------------|--------------------|-----------------|-----------------|-----------------------|-----------------|
| SC - 1        |                 |                   | 2.12               |                 |                 |                       |                 |
| 16            |                 |                   | 1.37               |                 |                 |                       |                 |
| 21            |                 |                   | 0.54               |                 |                 |                       |                 |
| 24            |                 |                   | 0.29               |                 |                 |                       |                 |
|               |                 |                   |                    |                 |                 |                       | SUPERIOR E.     |
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FLC  
11/20/70  
ASSAYER-CHEMIST

Invoice # 5616

CHARGES \$ 7.00

# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

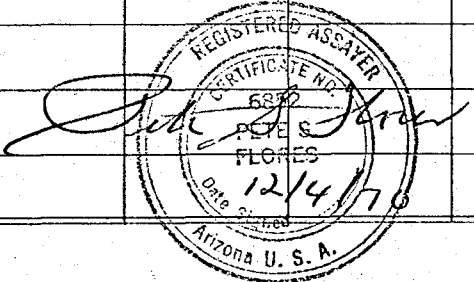
TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Dec. 4, 1970

| SAMPLE MARKED | GOLD<br>OZ / TON | SILVER<br>OZ. / TON | PPM                          | PPM                    | PPM                        | PPM                              | PERCENT<br>IRON     | Percent<br>Ox Cu |
|---------------|------------------|---------------------|------------------------------|------------------------|----------------------------|----------------------------------|---------------------|------------------|
|               |                  |                     | <del>PERCENT</del><br>COPPER | <del>PPM</del><br>LEAD | <del>PERCENT</del><br>ZINC | <del>PERCENT</del><br>MOLYBDENUM |                     |                  |
| SC -26        | Trace            | 0.08                | 90                           | 20                     | 40                         | 7                                |                     |                  |
| 27            | Trace            | 0.07                | 399                          | 15                     | 15                         | 9                                |                     | 0.01             |
| 28            | Trace            | Trace               | 2000                         | 6                      | 20                         | 1360                             |                     |                  |
| 29            | Trace            | Trace               | 280                          | 165                    | 118                        | 74                               |                     |                  |
|               |                  |                     |                              |                        |                            |                                  |                     |                  |
|               |                  |                     |                              |                        |                            |                                  | SUPERIOR E<br>FRIEL |                  |
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Invoice # 5675  
 CHARGES \$ 38.00



AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE Dec. 5, 1970

| SAMPLE MARKED | GOLD<br>OZ. / TON | SILVER<br>OZ. / TON | PER CENT<br>COPPER | PERCENT<br>LEAD | PERCENT<br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON | Percent<br>Ox Cu |
|---------------|-------------------|---------------------|--------------------|-----------------|-----------------|-----------------------|-----------------|------------------|
| SC - 1        |                   |                     |                    |                 |                 |                       |                 | 1.98             |
| 16            |                   |                     |                    |                 |                 |                       |                 | 1.28             |
| 21            |                   |                     |                    |                 |                 |                       |                 | 0.51             |
| 28            |                   |                     | 0.64               |                 |                 |                       |                 |                  |
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*SUPERIOR E.  
FRIEL*

REGISTERED ASSAYER  
 CERTIFICATE # \_\_\_\_\_  
 6852  
 PETE S. FLORES  
 12/5/70  
 Date Signed  
 Arizona U. S. A.

Invoice # 5680

CHARGES \$ 0.00



# AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

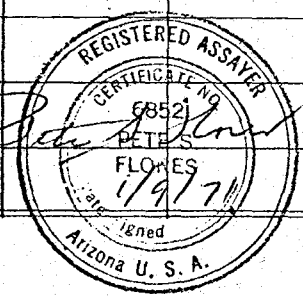
SAMPLE SUBMITTED BY American Smelting & Refining Company  
Mr. Doug Friel

DATE Jan. 9, 1971

| SAMPLE MARKED       | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PPM    | PPM  | PPM  | PPM        | PERCENT<br>IRON |
|---------------------|-----------------|-------------------|--------|------|------|------------|-----------------|
|                     |                 |                   | COPPER | LEAD | ZINC | MOLYBDENUM |                 |
| SR 13-2             | Trace           | 0.09              | 420    | 50   | 19   | 41         |                 |
| SR 13-3             | Trace           | 0.05              |        | 44   | 45   | 9          |                 |
| SR 13-4             | Trace           | 0.13              | 1439   | 36   | 88   | 6          |                 |
| SR 18-2             | .001            | 0.11              |        | 56   | 64   | 12         |                 |
| SR 18-3             | Trace           | 0.01              | 1500   | 42   | 85   | 7          |                 |
| SR 30               | Trace           | 0.08              | 88     | 49   | 12   | 23         |                 |
| SC 30 Br            | Trace           | 0.02              |        | 64   | 70   | 36         | SUPERIOR E.     |
| SC 31 Br            | Trace           | 0.11              | 131    | 55   | 33   | 68         | FRIEL           |
| SC 32               | .001            | 0.04              | 15     | 76   | 27   | 11         |                 |
| SC 33 <sup>yb</sup> | Trace           | 0.14              | 117    | 352  | 600  | 16         |                 |
| 34 <sup>yb</sup>    | .003            | 0.43              |        |      |      |            |                 |
| 35 <sup>yb</sup>    | Trace           | 0.06              | 40     | 384  | 750  | 65         |                 |
| SC 36               | Trace           | 0.04              | 525    | 97   | 83   | 11         |                 |
| SC 37               | .001            | 0.10              |        | 66   | 48   | 147        |                 |
| SC 38               | Trace           | 0.08              | 93     | 35   | 39   | 12         |                 |

K.V.D.S.  
JAN 14 1971

SUPERIOR E.  
FRIEL



Invoice # 5817

CHARGES \$ 126.00

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

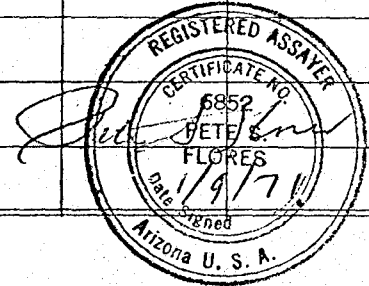
SAMPLE SUBMITTED BY American Smelting & Refining Company  
Mr. Doug Friel

DATE Jan. 9, 1971

| SAMPLE MARKED | GOLD<br>OZ / TON | SILVER<br>OZ / TON | PER CENT<br>COPPER | PERCENT<br>LEAD | PERCENT<br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON | Percent<br>Ox Cu |
|---------------|------------------|--------------------|--------------------|-----------------|-----------------|-----------------------|-----------------|------------------|
| SR 13-2       |                  |                    |                    |                 |                 |                       |                 | 0.02             |
| SR 13-3       |                  |                    | 0.39               |                 |                 |                       |                 | 0.35             |
| SR 13 4       |                  |                    |                    |                 |                 |                       |                 | 0.11             |
| SR 18-2       |                  |                    | 0.27               |                 |                 |                       |                 | 0.19             |
| SR 18-3       |                  |                    |                    |                 |                 |                       |                 | 0.09             |
| SR 30         |                  |                    |                    |                 |                 |                       |                 | 0.02             |
| SC 30         |                  |                    | 1.34               |                 |                 |                       |                 | 0.74             |
| SC 31         |                  |                    |                    |                 |                 |                       |                 | 0.03             |
| SC 32         |                  |                    |                    |                 |                 |                       |                 | 0.02             |
| SC 33         |                  |                    |                    |                 |                 |                       |                 | 0.03             |
| SC 34         |                  |                    | 0.28               | 2.33            | 2.53            | 0.235                 |                 | 0.21             |
| SC 35         |                  |                    |                    |                 |                 |                       |                 | 0.01             |
| SC 36         |                  |                    |                    |                 |                 |                       |                 | 0.03             |
| SC 37         |                  |                    | 1.04               |                 |                 |                       |                 | 0.84             |
| SC 38         |                  |                    |                    |                 |                 |                       |                 | 0.02             |

K.V.D.S.  
JAN 14 1971

SUPERIOR E.  
FRIEL



Invoice # 5817

CHARGES \$ 47.00

3226 East 46th Street

Phone 624-0049

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

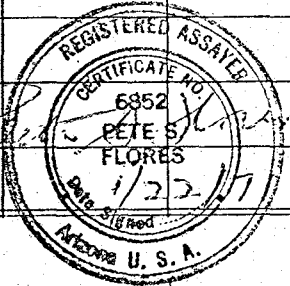
ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company  
 Re-Run

DATE Jan. 22, 1971

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PER CENT<br>COPPER | PERCENT<br>LEAD | PERCENT<br>ZINC | PERCENT<br>MOLYBDENUM | PERCENT<br>IRON | PPM<br>Ox Cu |
|---------------|-----------------|-------------------|--------------------|-----------------|-----------------|-----------------------|-----------------|--------------|
| SR-30         |                 |                   |                    |                 |                 |                       |                 | 40           |
| SC-31         |                 |                   |                    |                 |                 |                       |                 | 84           |
| SC-32         |                 |                   |                    |                 |                 |                       |                 | 31           |
| SC-33         |                 |                   |                    |                 |                 | SUPERIOR E.           |                 | 57           |
| SC-35         |                 |                   |                    |                 |                 | FRIGL                 |                 | 45           |
| SC-38         |                 |                   |                    |                 |                 |                       |                 | 47           |
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CHARGES \$ N/C

ASSAYER · CHEMIST

J. R. K.

MAY 24 1971

GEOPHYSICAL DIVISION

3422 SOUTH 700 WEST  
SALT LAKE CITY, UTAH 84110

May 19, 1971

MEMORANDUM to W. E. SAEGART:

SCHULTZE GRANITE, PINAL COUNTY, ARIZONA,  
Cu CONTENT OF BIOTITE

The recent completion of our new laboratory facility has enabled us to separate and analyze the biotite fractions from the ten samples of Schultze Granite collected by Mr. J. R. King last March. The resultant Cu data are plotted on a copy of a sketch map, originally prepared by Mr. King, which also show relevant data relating to samples collected by Thomas A. Clarey for his Master's thesis at A.S.U. and Fred Greybeal in connection with his Doctoral thesis at the U. of A. Although it is probably not strictly correct to attempt direct comparisons between Cu data relating to the three sets of samples (because of varying degrees of purity of the "biotite" separates), geochemical contours are shown on this map as the broad patterns of Cu distribution thereby indicated are likely accurate (insofar as the sample coverage allows).

The resultant picture of Cu distribution patterns in the Schultze Granite is extremely interesting in view of current Asarco interest in the adjacent Dacite Plateau. Cu concentrations in the central portion of western limb of the exposed granite appear to progressively increase towards the west. They could be interpreted to indicate that areas particularly favorable for the occurrence of Cu porphyry type mineralization beneath the Dacite occur in relatively close proximity (i.e. vicinity of DDH A-1?) to the western margin of the Schultze Granite outcrop.

Interpretation of the biotite data for the western limb of the Schultze Granite could probably be improved if it were based on more adequate sample coverage (say 1/2 mile centers). Consideration might also be given to an investigation of biotite samples from Schultze Granite encountered in the drilling program.

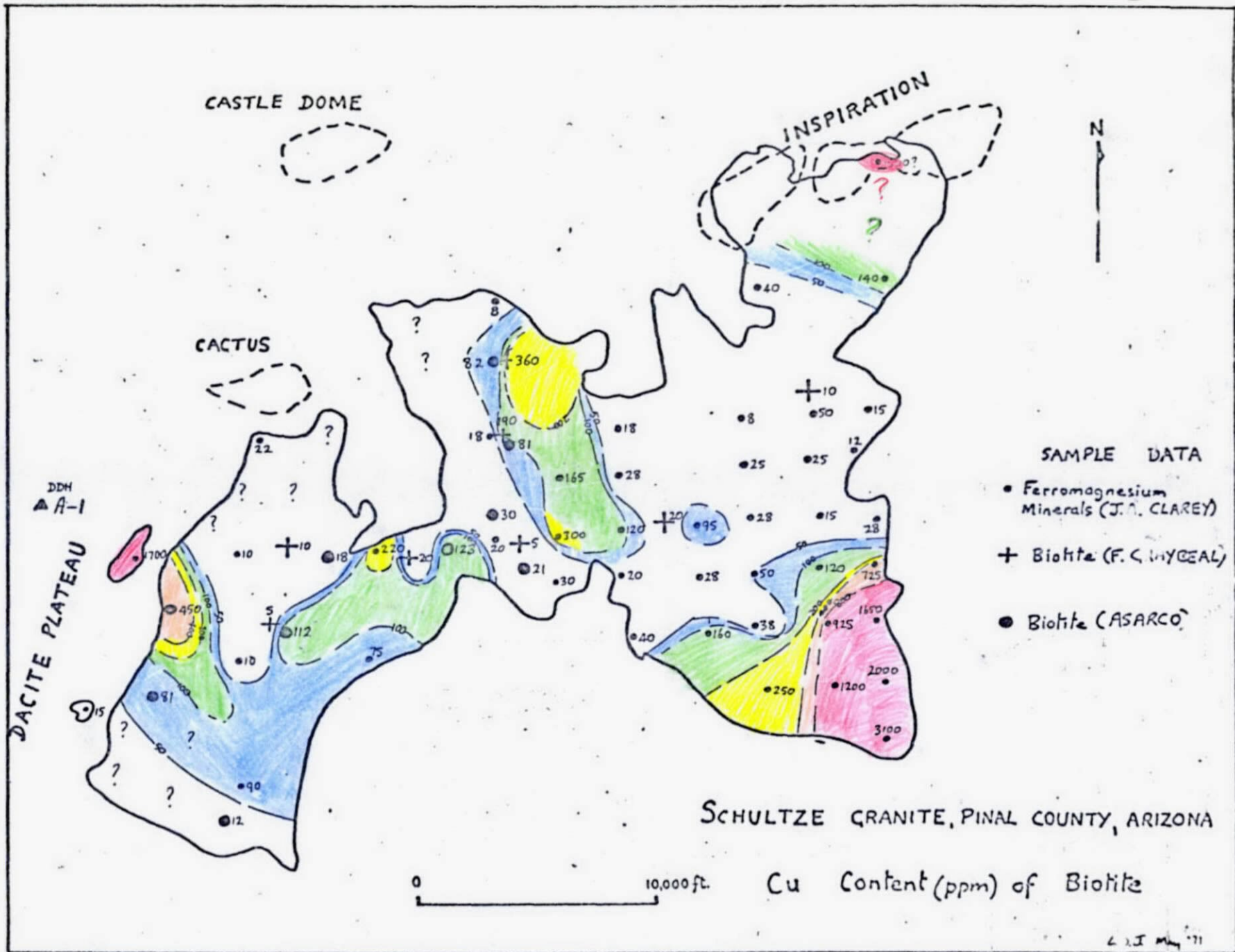
*L. D. James.*

L. D. JAMES

LDJ:db  
Encl.

cc: J.J. Collins w/encl.  
J.H. Courtright w/encl.  
J.R. King ✓ "

*8# sample ± for 5 grams of fresh biotite*



Schultz Granite  
Pinal County, Arizona  
Copper content of biotite

Lloyd James

Suggest you arrange  
to have west limb of  
Schultz gr. sampled on  
 $\frac{1}{2}$  mile centers - also  
~~and~~ any granite intersected  
in drilling on plateau.  
These should be sent to  
Lloyd James for biotite  
separations & analyses.

WES



*Circulate Staff*

**GEOPHYSICAL DIVISION**

3422 SOUTH 700 WEST  
SALT LAKE CITY, UTAH 84119

May 19, 1971

RECEIVED  
MAY 20 1971  
S. W. U. S. EXPL. DIV.

W.E.S.  
MAY 27 1971

MEMORANDUM to W. E. SAEGART:

RUBY STAR GRANODIORITE  
SIERRITA MOUNTAINS ARIZONA--  
BIOTITE GEOCHEMISTRY

Geochemical analysis of biotite fractions from additional samples (i.e. RS 12 through 17) of the Ruby Star Granodiorite, collected and submitted to the Geochemical Laboratory by Mr. J. R. King, has recently been completed. The resultant new data, together with the old, are shown on the attached figures. The new data does not significantly change the picture obtained from the original U.S.G.S. and Asarco data. Cu displays a general tendency to increase and Zn to decrease in concentration as the porphyry mineralization is approached.

*L. D. James*

L. D. JAMES

LDJ:db  
Encl.

cc: J.J. Collins w/encl.  
J.H. Courtright w/encl.  
J.R. King w/encl.

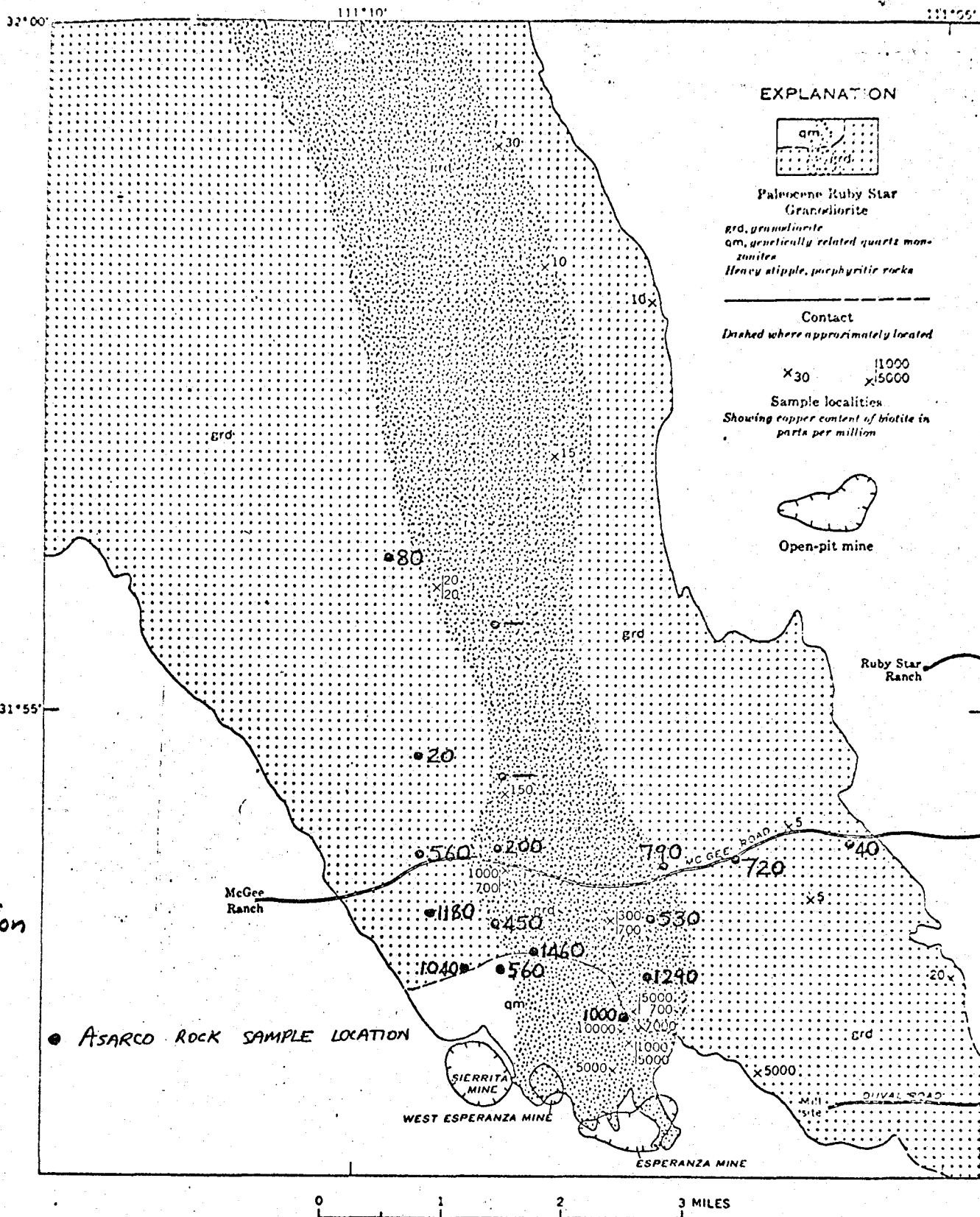


Figure 2—Generalized map of composite stock and associated ore deposits in the southwestern part of the Pima mining district, east of the Sierrita Mountains, showing sample localities and copper content of biotite.

Cu content (ppm) of biotite in Asarco Rock samples (analysis by Geochemical Laboratory using an A.A. technique)

Fig. 2a

EXPLORATION SERVICES DIVISION

3422 SOUTH 700 WEST

SALT LAKE CITY, UTAH 84119

July 14, 1971

RECEIVED  
JUL 15 1971  
S. W. U. S. EXPL. DIV.

MEMORANDUM to W. E. SAEGART:

SCHULTZE GRANITE,  
PINAL COUNTY, ARIZONA  
Cu CONTENT OF BIOTITES

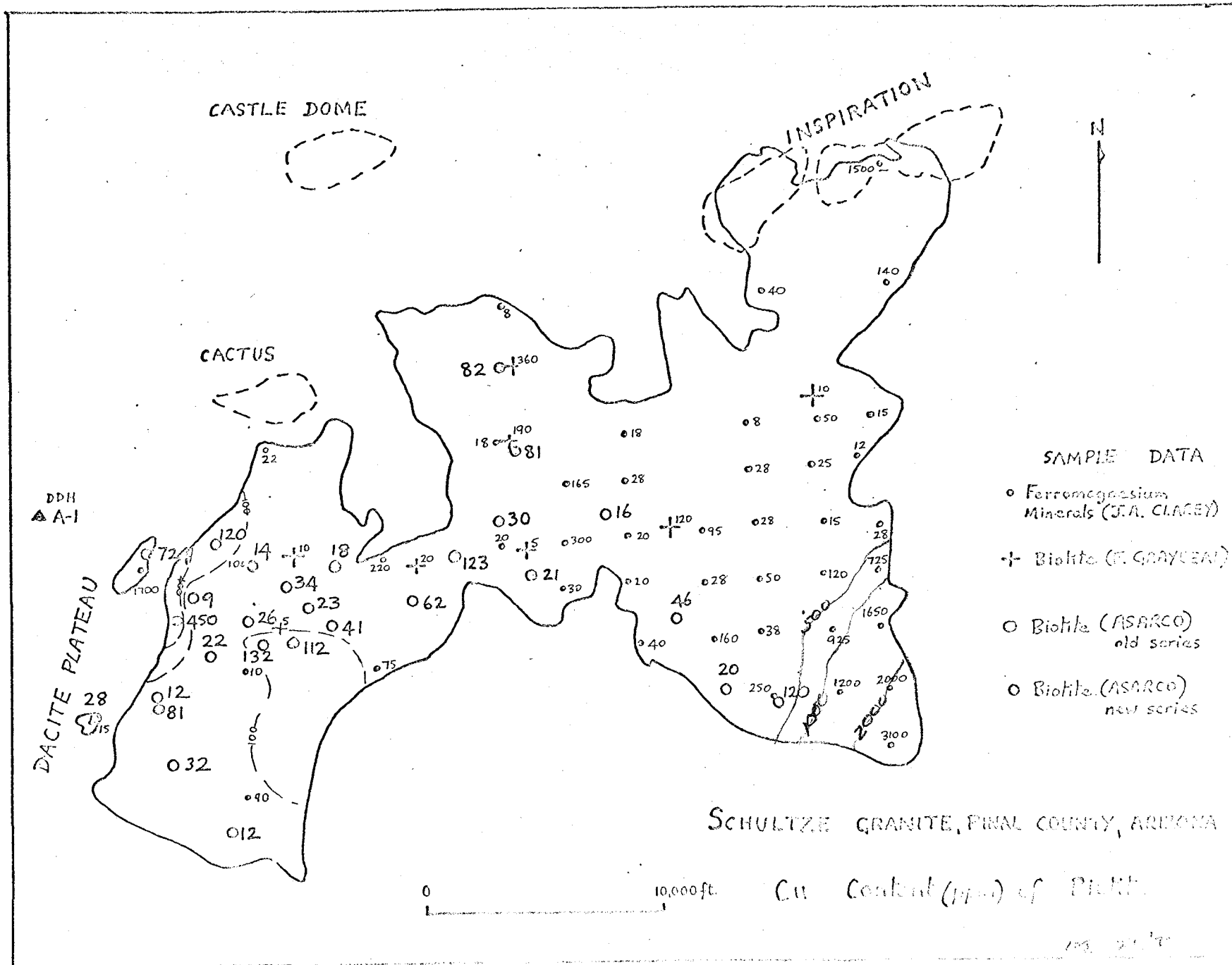
We have just completed the Cu analyses of the biotite fractions obtained from the samples of Schultze Granite recently collected and sent to the Geochemical Laboratory by Mr. J. R. King. (Reference his letter of June 2, 1971). The resultant data are shown on the attached sketch map. It verifies the presence of an area of high Cu concentration in the biotites from the western extremity of the central portion of the west limb of the Schultze Granite adjacent to the Dacite Plateau. Also of possible significance is the anomalously high Cu concentration (660 ppm) detected in biotite from the Schultze Granite (?) intersected by DDH M-1A beneath the Dacite Plateau. The analytical data sheets will be sent to you as soon as they are complete.

*L. D. James*

L. D. JAMES

LDJ:db  
Encl.

cc: J.J. Collins w/encl.  
J.H. Coartright   "  
J.R. King        "  
J.D. Sell        "



CASTLE DOME

INSPIRATION

CACTUS

DDH  
▲ A-1

DACITE PLATEAU

DDH M-1A

▲  
660

0 10,000 ft.

Cu Content (ppm) of Biotite

195 20 19

**AMERICAN ANALYTICAL and RESEARCH LABORATORIES**

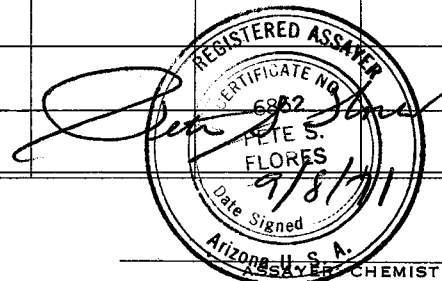
ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE September 8, 1971

| SAMPLE MARKED | GOLD<br>OZ./TON | SILVER<br>OZ./TON | PPM    |      | PPM  |            | PERCENT<br>IRON |
|---------------|-----------------|-------------------|--------|------|------|------------|-----------------|
|               |                 |                   | COPPER | LEAD | ZINC | MOLYBDENUM |                 |
| PG-1          |                 |                   | 108    |      | 236  | 5          |                 |
| PG-2          |                 |                   | 62     |      | 51   | 4          |                 |
| PG-3          |                 |                   | 335    |      | 64   | 23         |                 |
|               |                 |                   |        |      |      |            |                 |
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Invoice # 6717

CHARGES \$ 13.50

Shafter, Tucson, Hermosillo  
April 1979

## SILVER PRICES MAKE LOW GRADE INTO ORE

When silver reached an all time high price of \$7.92 per ounce late in February 1979 it was \$3.03 per ounce higher than exactly one year earlier. This price coupled with favorable exploration results was good news to mining companies planning major silver operations.

About 40 years ago the then American Metal Company operated one of the largest silver mines in the United States. This was at Shafter, Texas where mining ended when stoping stopped against a dike which had every characteristic of a pre-mineral dike which formed the down dip limit of mineralization. Not true was the belief of a geologist for the Goldfields America Corporation who carefully studied the old mine and the district. Subsequent diamond drilling proved he was right and it was a post-, not premineral dike. A series of diamond drill holes has indicated the ore body to continue for several thousands of feet over widths of 400 to 600 feet and thicknesses from 10 to 14 feet. Drilling continues on the down dip extension with no indication of the end of mineralization. However, the ore body flattens out. Several holes have yielded cores with high gold content. Silver grade is believed to average about 7 ounces compared with 10 in the old mine.

Inspiration Consolidated Copper Company's smallest mine--Black Pine--in Montana is also one of its most profitable operations. With an underground crew of only about 10 men, 100 tons per day of high silica silver ore is mined and shipped to Asarco Inc.'s East Helena smelter as a flux.

Operating profits have been estimated at many thousands of dollars per month. The company makes no breakdowns of sales values and profits by specific mines in its reports. And reserves are believed to be several hundreds of thousands of tons by industry "silver watchers."

In the Creede mining district, Mineral County, Colorado, Chevron Minerals Company has been forced to limit recent exploration to underground work by the very heavy snows and cold weather. Many of the old workings have been reopened and sampled. A surface diamond drilling program will be started as soon as weather permits while underground drilling will be started immediately. All recent drilling has been by reverse air circulation.

Chevron Minerals seeks large tonnages of low grade silver mineralization 4 to 7 ounces per ton for open pitting. The higher silver prices maximize interest in the low grade zones.

Engelhard Minerals and Chemical Company is believed to be making a feasibility study on the development of a silver deposit near Ely, Nevada.



## AMBROSIA LAKE WATER GETS HOTTER

The long, difficult, and costly water battle in the Ambrosia Lake uranium district of Grant and McKinley counties, New Mexico was won many years ago by the mining companies. Sink shafts deeper than the Westwater formation. Sink through it and drive drifts under the ore beds to drain water ahead of mining. WORLD MINING has extensively documented Ambrosia Lake water problems.

Today, water is not giving up easily in the Ambrosia Lake extensions--Crown Point and Nose Rock to the northwest and North Laguna, Mt. Taylor, and others to the east. Bokum Resources has made little progress sinking its new shaft north of Laguna. Sinking of Phillips Petroleum Company's three big shafts at Nose Rock is very slow. The deepest at 1,200 feet is only about one-third of its planned 3,300-foot depth. This is 18 feet in diameter, the second nearby shaft is 16 feet in diameter while the smallest, 14 feet, about 1,500 feet away has just been collared.

Water has a new ally in its battle against miners. It is heat. Drill indications and drill hole measurements point to hot water, lots of it, in the new deeper mines. One shaft is reported to have an inflow of 6,000 gallons of plus 1250° F. water per minute. Gulf Oil Company is finding hot water and high rock temperatures which are slowing mine development at its Mt. Taylor uranium mine.

## VEKOL LOOKS AT LAKESHORE

The accelerated and spectacular rise in the copper price has once again focused attention on the Lakeshore mine and Vekol Hills copper deposit on the Papago Indian Reservation in Arizona. Hecla Mining Company operated the Lakeshore mine, flotation mill, oxide leaching plant, and complex metallurgical plant before it was forced to close by low copper prices. In Arizona, the question being asked is "will Hecla reopen Lakeshore"? Another question is "will Newmont Mining Corporation start a mine at Vekol Hills"? Key to such a mine could be the Lakeshore flotation mill which was operated at 9,200 tons per day, above design capacity. Under such a plan, Newmont would truck the Vekol Hills ore to Lakeshore over a new high capacity haul road which would be a private road within the reservation where the truck load limits would not apply.

Vekol Hills, a 105,000,000-ton deposit assaying 0.55 percent copper and 0.09 percent molybdenum, would be mined by Vekol Copper Mining Company.

7  
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009

## MEXICO'S MOLYBDENUM DISTRICT

The western side of the Arizona-Sonora porphyry copper province has a number of molybdenum-bearing breccia pipes, stocks, and pegmatites. La Caridad, largest copper mill in Sonora will recover byproduct molybdenum. Minera Frisco S.A. de C.V. is developing the Cumobabi underground mine for production in mid-1980. High grade veins, 0.50 percent molybdenum in breccia pipes, will be mined underground. A pit will be developed to mine 0.25 percent mineralization in porphyry surrounding the pipes. Amax, Inc. and Minera Mexicana Penoles S.A. have a joint exploration project at Opo-depe (Meztli) and have developed 100,000,000 tons of 0.18 percent molybdenum disulphide with 40 diamond drill holes. Drilling is being accelerated using machines and crews imported from the United States. Mineralization is disseminated in granite and in fractures.

*George O. Argall, Jr.*

Senior Editor

Vol 32 #4

What's Going on in

**WORLD MINING**

*Circulate to geologists*

GEOCHEMICAL OFFICE - EXPLORATION DEPARTMENT

3422 South 700 West  
Salt Lake City, Utah 84119

July 14, 1978

RECEIVED

JUL 17 1978

S. W. U. S. EXPL. DIV.

F. T. G.

MEMO TO J. C. Balla

D. P. Cadwell

F. T. Graybeal ✓

Geochemical Exploration  
Techniques  
Basin and Range Province

The latest issue of the Journal of Geochemical Exploration (June 1978, Vol. 9, No. 2/3) contains an interesting compilation of geochemical data relating to the Basin and Range Province. The volume is entitled "Conceptual Models in Exploration Geochemistry - The Basin and Range Province of the Western United States and Northern Mexico". A list of contents is attached.

*L. D. James*

L. D. JAMES

LDJ:am  
Attch.

cc: W. L. Kurtz, w/enc.

*Check title page looks very interesting*

# ASARCO

*JDS*

Exploration Department  
Southwestern United States Division

October 1, 1979

Mr. Erick Weiland  
Barringer Research Inc.  
1626 Cole Blvd., Suite 120  
Golden, Colorado 80401

Dear Erick:

Thank you for your letter of Sept. 24, 1979 updating our information on your Denver and Toronto laboratories. I plan to be at the A.I.M.E. convention later this month and will look forward to seeing you at that time.

Very truly yours,

*James D. Sell*  
James D. Sell

1b



*JDSell: Will you please respond.* FTG

RECEIVED  
 SEP 23 1979  
 S. W. U. S. EXPL. DIV.

BARRINGER RESEARCH INC.  
 OFFICES:  
 1626 COLE BLVD., SUITE 120  
 GOLDEN, COLORADO 80401  
 PHONE: (303) 232-8811  
 TELEX: 45810  
 MINERALS LABORATORY:  
 5161 WARD ROAD, UNIT 4  
 WHEATRIDGE, COLORADO 80033  
 PHONE: (303) 423-2220  
 TELEX: 45810

Sept. 24, 197

Fred Graybeal, Manager  
 ASARCO, S.W. Exploration Division  
 P. O. Box 5747  
 Tucson, Arizona 85703

Dear Fred:

I just wanted to touch base and let you know how everything is progressing. The Denver analytical laboratory has been moved to its new location on Ward Road and is back in full operation. The new facility is ideally suited so that we may provide the service expected of us by the industry.

The Toronto laboratory is in the final stages of interfacing our new computer to the I.C.P. multi-element units. The interfacing should be completed within the next month and thereafter provide much better control on quality and data handling. It will also mean much faster turnaround time for multi-element analyses.

I will be in Tucson on Oct. 17 - 20 to give a talk at the A.I.M.E. convention. I would very much like to take you or Jim Sell to lunch and discuss what services Barringer might be able to provide ASARCO or the industry. If you know of a convenient time to get together, please let me know.

Looking forward to hearing from you.

Sincerely,

BARRINGER RESEARCH INC.

Erick Weiland  
 Staff Geochemist

*I should be there & available*  
 JDS

W. L. K.

AUG 05 1971

*Oak Flat mainly used as  
"land" use of nearby citizens, rather  
than highway strip? If so trucks  
may be possible. Kutz*

LAW OFFICES

*WZK  
JOS  
JBC*

RALPH W. BILBY  
B. G. THOMPSON  
T. K. SHOENHAIR  
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W. E. DOLPH  
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MARVIN S. COHEN  
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THOMAS E. WILSON  
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NINTH FLOOR VALLEY NATIONAL BUILDING

TUCSON, ARIZONA 85701

TELEPHONE [502] 792-4800

KNAPP, BOYLE, BILBY & THOMPSON  
1946-1954  
BOYLE, BILBY, THOMPSON & SHOENHAIR  
1954-1968

July 30, 1971

AUG 3 1971

R.S.C.

OUR FILE NO. 2831

Mr. Robert B. Crist  
American Smelting and Refining Company  
P. O. Box 5747  
Tucson, Arizona 85703

Re: East Oak Flat

Dear Bob:

I spent nearly an hour yesterday in Phoenix with Ned R. Jackson, Director of Recreation and Lands for Tonto National Forest. I told Mr. Jackson of ASARCO's possible interest in mining the ore which may lie beneath East Oak Flat. Mr. Jackson told me that representatives of Magma had already contacted him about the same possibility.

Mr. Jackson said that the Forest Service has no present intention of permitting the revocation of the order withdrawing the area from mineral entry. He also said that they plan no immediate improvements in the area, but that beginning in 1976 substantial improvements were planned. He also said that the Forest Service would be very reluctant to exchange East Oak Flat for other lands in the area. The reason he gave was that he knew of no other suitable recreation area with the same proximity to Superior and other nearby towns.

However, Mr. Jackson did say that the Forest Service may be willing to enter into an agreement with ASARCO permitting ASARCO to mine the area beneath East Oak Flat under certain terms or stipulations. He said that if ASARCO was willing to develop a definite plan for underground mining of the area, including disclosure of shaft locations, and tailing dumps, and preferably including a study of the effect of any improvements or dumps on the environment of the area, then the Forest Service would be in a position to rescind the order withdrawing the area as to underground

Mr. Robert B. Crist  
American Smelting and Refining Company  
Re: East Oak Flat  
July 30, 1971  
Page 2

mining. A performance bond would probably be required.

I would be pleased to talk with you further about my discussion with Mr. Jackson. Also, I would like to have your thoughts on this matter.

Sincerely yours,

*Thomas E. Wilson*  
for Bilby, Thompson, Shoenhair & Warnock

TEW:ohh





AMERICAN SMELTING AND REFINING COMPANY

EXPLORATION DEPARTMENT

SOUTHWESTERN UNITED STATES DIVISION

P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

January 25, 1972

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Walt Lockhart  
District Ranger  
Route 1, Box 33  
Globe, Arizona 85501

OAK FLAT  
PINAL COUNTY, ARIZONA

Dear Mr. Lockhart:

This letter constitutes our Application for a Prospecting Permit on U.S. Forest Service Land under your jurisdiction.

The land for which we are applying is the Oak Flat PLO 1229 Withdrawal Area, more fully described as follows:

LEGAL DESCRIPTION PLO 1229

|                               |                  |
|-------------------------------|------------------|
| S2S2, Sec. 28, T1S, R13E,     | 160 Acres        |
| SESE, Sec. 29, T1S, R13E,     | 40 Acres         |
| E2NE, Sec. 32, T1S, R13E,     | 80 Acres         |
| N2, N2S2, Sec. 33, T1S, R13E, | <u>480 Acres</u> |

760 Acres G&SRB&M, Pinal County, Arizona

The attached map shows the Oak Flat Area in relationship to the mineral holdings of the American Smelting and Refining Company and Magma Copper Company.

ASARCO started an intensive, expensive exploration program in May, 1970, to explore for minerals beneath the post-mineral dacite and Whitetail conglomerate cover of the Superior-Miami area. Our exploration work has strengthened our belief that deep beneath Oak Flat an economic mineral deposit may occur. ASARCO desires to explore for this potential.

An exploratory drilling program in Oak Flat could be conducted from the existing roads and all drill sites rehabilitated. If any economic mineral deposit is discovered beneath Oak Flat, it will be deep and therefore can be mined without disturbing the surface.

Mr. Walt Lockhart

-2-

January 25, 1972

ASARCO will comply with all restrictions in the Prospecting Permit and will not assign any interest in the Prospecting Permit to another party. Mr. William L. Kurtz, Manager of ASARCO'S Southwestern Exploration Division, and I are available to discuss any details concerning this application for a Prospecting Permit.

Very truly yours,

*R.B. Crist*

R.B. Crist

cc: W.L. Kurtz

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Tonto National Forest  
Globe Ranger District  
Globe, Arizona

RECEIVED

MAR 17 1972

EXPLORATION DEPT.

2820 Leases and Permits  
Prospecting Permit Application  
Oak Flat Campground  
March 16, 1972



Mr. R. B. Crist  
American Smelting & Refining Co.  
P. O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Crist:

I have requested and obtained an opinion from higher authority concerning your recent application for exploration rights on the Oak Flat Campground Mineral Withdrawal Area, PLO 1229.

The following advice was received:

1. The Forest Service has the authority to issue a permit for geological and geophysical exploration on this area.
2. Such a permit would be for surface occupancy only and would not include any preference right to any minerals which might be under the area.
3. Any minerals permit would be subject to further review and mining rights would undoubtedly be granted to the highest bidder.
4. An equitable fee for drill sites would be charged and site restoration would be required.

If you are still interested in the drilling permit, with the above conditions attached to our regular requirements, please let me know and I will proceed with the necessary permit preparation.

Sincerely,

H. L. LANCE  
Acting District Ranger



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

March 31, 1972

Mr. W. E. Lockhart  
Mr. H. L. Lance  
Tonto National Forest  
Globe Ranger Dist.  
1100 North Broad Street  
Globe, Arizona 85501

Oak Flat Recreational Area

Dear Sirs:

Enclosed is our Special Use Application.


On March 24th our Mr. Sell met with Mr. Lance at Oak Flat to review in the field our request for a Special Use Permit for constructing drill sites on Oak Flat.

Mr. Sell has prepared for me a detailed account of all pertinent factors. I hereby enclose his memorandum, which should provide you with the necessary information to understand how and when our work would be conducted.

Very truly yours,

*W. L. Kurtz*  
W. L. Kurtz  
Manager of Exploration

WLK:lad  
Encs.

cc: JDSell   
RBCrist

bc: GWHaggard  
Evans, Kitchel & Jenckes  
Attorneys at Law  
363 North 1st Avenue  
Phoenix, Arizona 85003

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

March 29, 1972

Memorandum

TO: W. L. Kurtz

FROM: J. D. Sell

Special Use Permit Proposal  
Drilling Aspects and Sites  
Oak Flat Area (Superior)  
Tonto National Forest  
Pinal County, Arizona

Summary

Three primary drill sites have been selected for a Special Use Permit within the Oak Flat area. All primary sites, 1) are screened from the general public, 2) are near existing special use permit roads, 3) are favorable for containment and decant areas for control and disposal of developed water and drilling fluids, 4) are in areas suitable for expansion of picnic-parking areas, and 5) all areas would be suitable for conversion to water supplies with gravity flow to present use areas.

Drilling Aspects

Our program for drilling the sites would follow the successful program established during our previous drilling in the adjacent areas in similar rock units. Basically, the first part of the hole is drilled with a rotary drill while the lower part of the hole is cored with a diamond drill. The rotary rig will be the Mayhew 3000 class, with supplementary large capacity air compressors and attached booster stages, capable of permitting air drilling with a down-the-hole hammer. A six and three-quarter inch hole will be drilled to below the volcanic sequence and a string of casing of four-inch pipe will be stabilized and cemented in the hole.

In the rotary air drilling program, the drilling medium to remove the cuttings is air and aeriated water. Increased water inflow from the drilled units necessitates the addition of drilling mud material to lift the hydrostatic head of water and cuttings. This is handled by additives such as the Baroid Quik-foam (page 7 of Baroid Attachment), a biodegradable foaming agent. If more lifting capability is needed it may be necessary to convert to a mud-mist technique which is the addition of thin slurry of bentonitic mud base. Baroid Quik-Gel (page 4) is the general type base material used.

It is necessary to construct pits or contained areas for the discharge from the drilling. This allows separation of the air-water-mud-cuttings mixture. Decanting of the water and its reuse or disposal is compatible with normal stream use with the type material used.

March 29, 1972

After placing the casing, a diamond drill of the CP-50 class is moved onto location and will deepen the hole using conventional drilling muds as the circulating medium. The core drilling operations use the Baroid Quik-Gel (page 4) base with additives such as Baroid CC-16 (page 5), Baroid Con-Det (page 6), Baroid Cellex (page 6) or Baroid Dextrid (page 6). All of these materials are basic and are in recommended drilling practices. The Con-Det is biodegradable and the others are basic fertilizer chemicals which break down by fermentation processes. In core drilling, all return fluids and cuttings are contained in mud pits, the solids are settled out and the decanted fluids circulated back through the drilling system.

As in our previous drill sites, the new sites will be cleaned of all debris, the mud pits, tanks and containment areas drained and restored. The areas are reseeded with native and recommended grasses. (See letter by R. B. Crist to Mr. W. Moehn, Globe Forest Service, dated August 16, 1971). The completed hole will be abandoned with the four-inch casing remaining in the hole and a plate welded on the top collar to prevent further entry. The casing can be plugged or cemented below the projected best water flow, perforated, and be available for a pumping plant.

Our drilling to date suggests that the best water inflow to be between 800 and 1100 feet below the surface. It is unknown to what extent the water inflow will continue in any opening in the volcanic sequence. Records supplied by Mr. Delbrige show that the Arizona Water Company in 1962 trapped 23 million gallons of water in Queen Creek while in 1971 only 11 million gallons were recovered. To date of this year, only a minor amount was trapped during the January runoff.

Our past drilling experience suggests that we discharge between 200-300 gallons per minute during the rotary drilling in unloading the hole and drilling in the zones of heavy water flow. The four to six days of this discharge prior to reaching the casing point necessitates large holding reservoirs if we are to totally contain the produced water at the drill site vicinity. However, as pointed out previously, the Baroid products used (primarily Quik-foam) are biodegradable and non-toxic in the normal amounts used during drilling.

### Drill Sites

Three drill sites, one with two alternatives, have been selected in the Oak Flat area and are shown on Attachment A.

Site One is in the northwest portion and has two alternatives. The primary Subsite One A is the best overall area from the drilling and water containment viewpoint. It will be necessary to construct a short road up into a large suitable flat area. A survey of the subsite suggests it is very suitable for conversion into a picnic-parking area. Upon conversion of the drill hole to a windmill (or similar) pumping plant, the movement

March 29, 1972

of water into the present use areas would be by gravity flow. The subsite area is also screened, by surrounding brush covered hills, from the Magma road and all existing use areas.

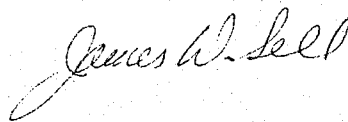
The secondary Subsite One B would occupy the area used by the heavy equipment camp during the Magma road construction. Unfavorable aspects include its nearness to the Magma road and the western edge of the Oak Flat area, its visibility from the State Highway, and the difficult area for the construction of mud pits and drilling fluid retainment areas. Its close proximity to Queen Creek and the intake areas of the Arizona Water Company would necessitate extreme control of all discharged fluids. Conversion of this area would necessitate second stage pumping to move water into the present use areas.

Site Two is in the north central part of the area and also removed from the present use areas. A short road with little clearing would be reopened into the old CCC campsite. The favorability of the site is based on its screening from the view of present use sites. All decanted discharge would be into a playa (pond) area with ultimate discharge eastward off the Oak Flat area and into Devils Canyon. Again, utilization of the site for a water well will permit the water to flow by gravity from the storage tank into the present camp use areas.

Site Three is in the south central portion and would be constructed near the present special use permit pioneer road. The area is presently un-accessible to general vehicular use, but could be converted to picnic parking at a later date and additional water supply. Drainage would be westward off the area.

#### Timing of Drill Site Preparation and Drilling

Our drilling program will be designed to be active during the "slack" season for the camping use of the area. Thus, we would start in mid-September and continue in the winter and early spring months. Site preparation takes about two weeks and the drilling and clean-up period takes up to five months per site area. One drill site and drill hole should be completed and evaluated prior to starting the next site. Drilling may be extended over several seasons to be compatible with additional camping use of the area.

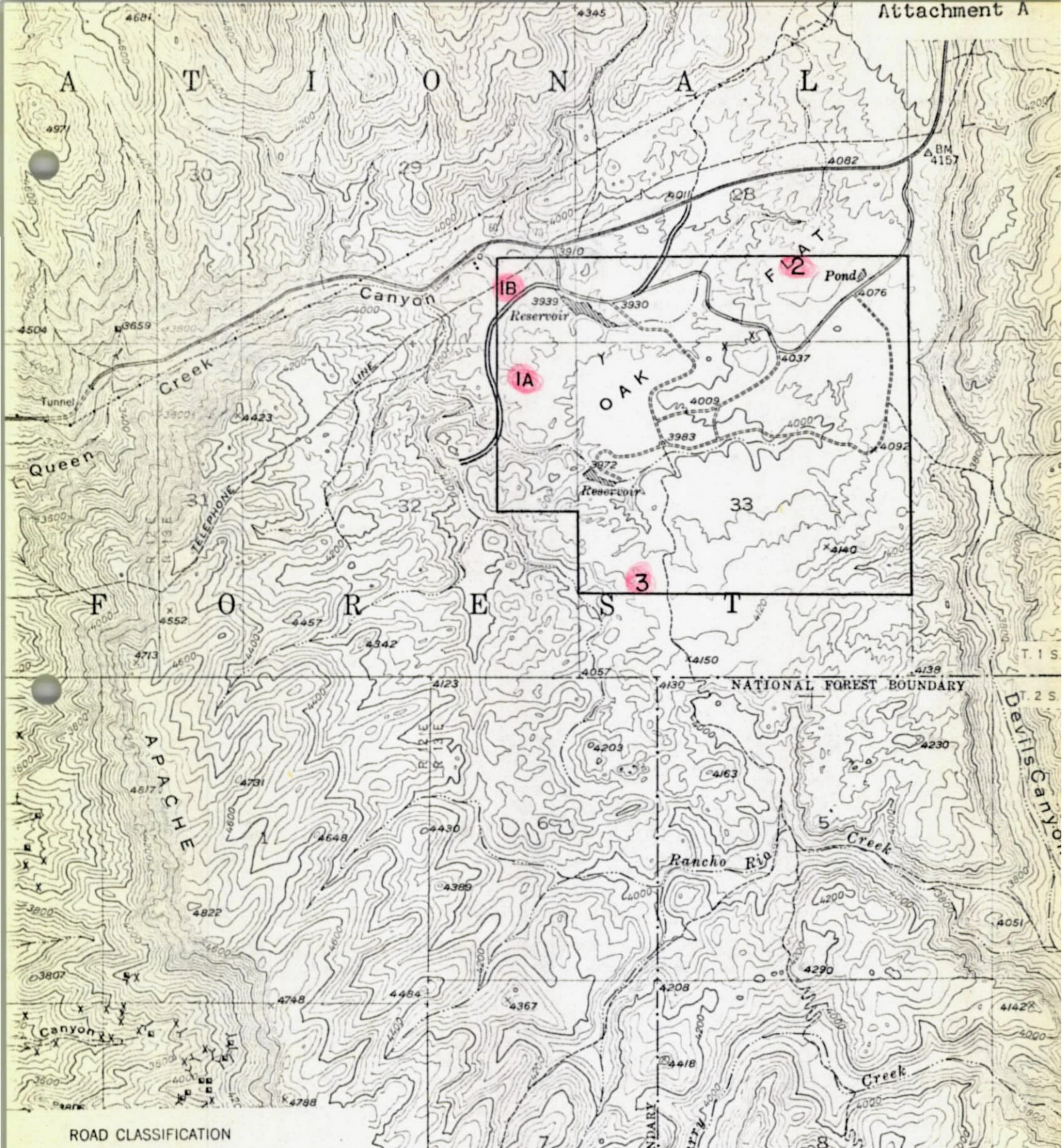


James D. Sell

JDS:sg  
attach.

cc: RBCrist

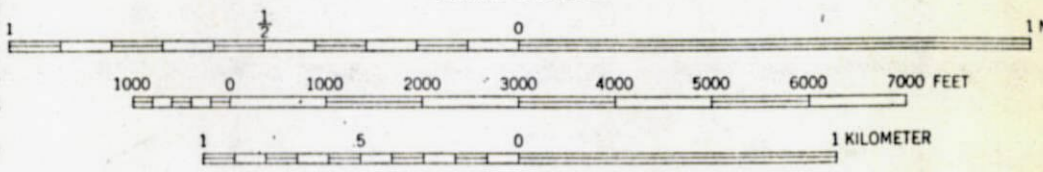




ROAD CLASSIFICATION

- |   |                                |   |                   |
|---|--------------------------------|---|-------------------|
| — | FACE ALL WEATHER ROADS         | — | DRY WEATHER ROADS |
| — | 4 LANE 6 LANE                  | — | Improved dirt     |
| — | 4 LANE 6 LANE                  | — | Unimproved dirt   |
| — | graded, or narrow hard-surface | — |                   |
| — | U. S. Route                    | — | State Route       |

SCALE 1:24000



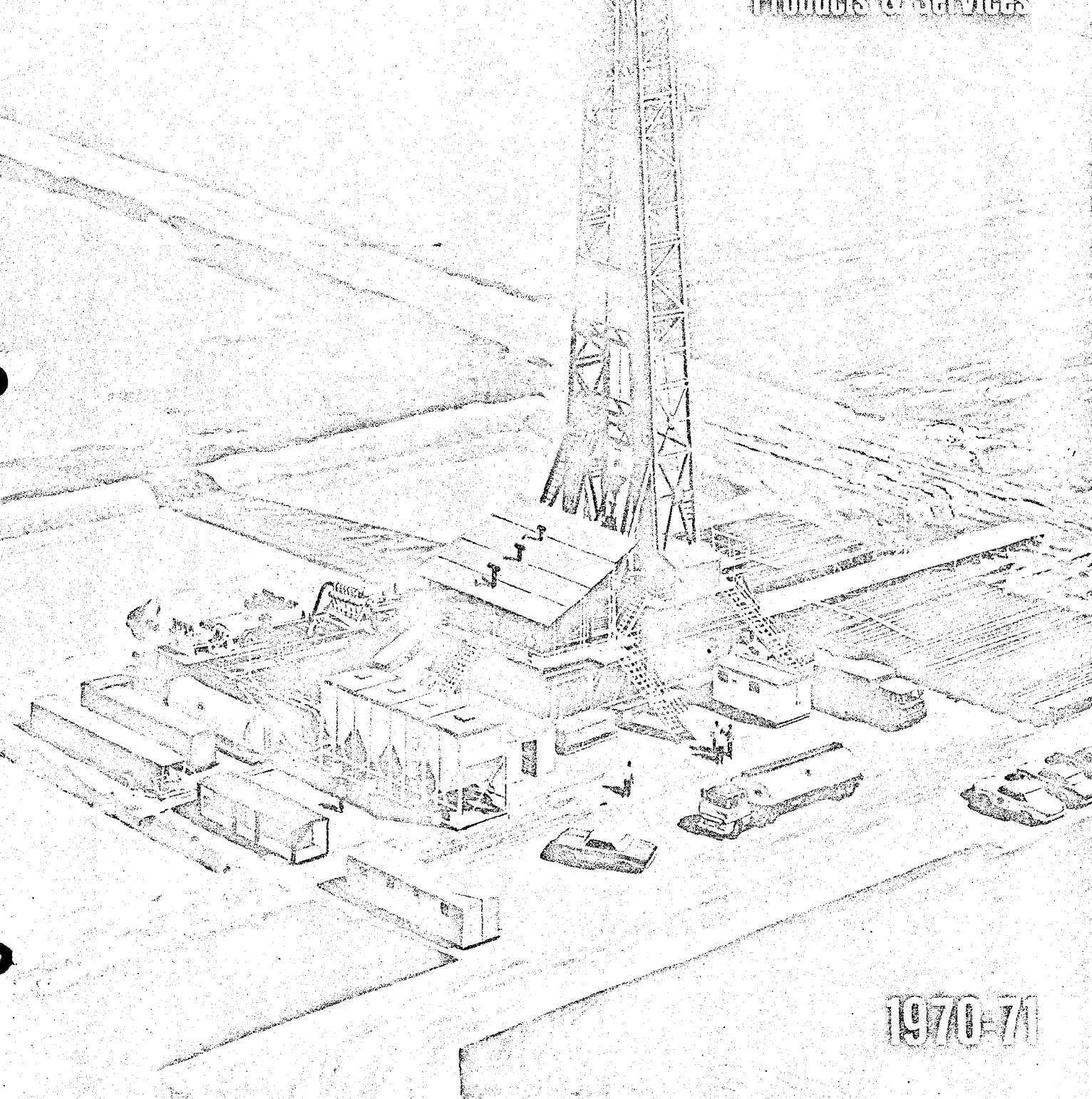
SUPERIOR, ARIZ.  
N3315-W11100/7.5

CONTOUR INTERVAL 40 FEET  
DATUM IS MEAN SEA LEVEL



# BAROID DIVISION NATIONAL LEAD COMPANY

- Testing Equipment
- Drilling Mud
- Logging
- Perforating
- Equipment
- Treating Chemicals
- Cathodic Protection
- Products & Services



1970-71



## LOST CIRCULATION

Lost circulation is one of the most difficult of drilling problems. This is one of the reasons why the Baroid family of lost circulation materials is so varied and specialized. For more than a quarter of a century Baroid has constantly developed new products to combat the causes of partial or complete loss of mud to formations. There are three general types of lost circulation: (1) cavernous; (2) low pressure and (3) high pressure. The cavernous type of loss takes place in actual caverns or crevices and is the most

severe because mud loss is immediate and complete. Low pressure losses are encountered in highly permeable formations such as gravel, reefs or vuggy limestones. High pressure losses occur when high pressures are exerted against the formation. High mud weight, pump pressure where the annulus is sealed, improper manipulation of the drilling tools or a combination of these conditions may cause pressure parting of the formation with accompanying loss of drilling fluid.

### FIBERTEX

**Material:** Blended processed cane fibers.  
**Features:** For preventing or overcoming lost circulation.  
**Use:** Treated to resist decomposition. Non-abrasive. Does not clog pump. Gives permanent bridge.  
**Container:** Multi-wall paper bag containing 40 pounds. Special export packaging also available.

### PLUG-GIT

**Material:** Processed, shredded hardwood fiber.  
**Use:** To prevent or overcome loss of circulation, particularly in porous formations.  
**Features:** Large, tough particles have high strength for good matting and bridging ability. Will not plug pumps or valves.  
**Container:** Multi-wall paper bag containing 40 pounds.

### WALL-NUT

**Material:** Processed nut hulls.  
**Use:** For preventing or overcoming lost circulation.  
**Features:** Efficiency compares favorably with lubricating qualities of graphite or diesel oil; reduces drill pipe backlash in crooked hole drilling.  
**Container:** 50 pound multi-wall paper bags.

### JELFLAKE

**Material:** Fragmented plastic foil.  
**Use:** To stop or prevent loss of drilling mud to formation.  
**Features:** Particles are graded in size, providing an effective seal on a wide range of formation types.  
**Container:** Multi-wall paper bag containing 25 pounds.

### MICATEX

**Material:** A specially prepared flake mica.  
**Use:** To prevent or overcome lost circulation.  
**Features:** Flakes form an overlapping plate-like structure that seals many types of permeable formations.  
**Container:** Multi-wall paper bag containing 50 pounds.

### LEATHER-SEAL

**Material:** A dry, finely ground leather fiber.  
**Use:** To overcome and prevent lost circulation.  
**Features:** When wet, the fibrous strands mat into a seal that is highly effective in extremely permeable thief zones. Particularly useful in clear-water drilling.  
**Container:** Multi-wall paper bags containing 50 pounds.

### HY-SEAL

**Material:** Finely ground, processed organic fiber.  
**Use:** To control lost circulation in clear water and minimum solids muds, and to increase effectiveness of coarser lost circulation materials.  
**Features:** Disperses rapidly. Does not separate and float out of clear water. Gives quick seal in "no solids" water fluids. Easy to add.  
**Container:** Multi-wall paper bags containing 40 pounds.

## INORGANIC COLLOIDS - CLAYS

The Baroid family of inorganic colloids, AQUAGEL, BAROCO, QUIK-GEL and ZEOGEL, perform all of the general and specialized uses commonly attributed to drilling mud clays. AQUAGEL, introduced by Baroid in 1928, and BAROCO are composed predominantly of the mineral montmorillonite and are commonly called bentonites. ZEOGEL, a selected attapulgite-type clay, finds widespread application as a viscosity builder in muds having a high salt

concentration. QUIK-GEL, manufactured exclusively by Baroid, is a high-yield bentonite that makes twice as much mud as ordinary Wyoming bentonite. AQUAGEL produces a colloidal suspension with low unit weight (only slightly greater than water) with suitable viscosity, good gel properties and low filtrate loss. BAROCO is used in drilling formations containing moderate quantities of salt or when the make-up water is only moderately saline.

### AQUAGEL

**Material:** Selected, finely ground bentonite clay.  
**Use:** General, purpose gel-forming colloid used to adjust viscosity, gel strength, and reduce filtrate loss.  
**Features:** A universally-used mud product for both rotary and cable-tool drilling. Yields 100 barrels of 15 centipoise drilling mud per ton of AQUAGEL.  
**Container:** Multi-wall paper bag containing 100 pounds. Also available: marine bag containing a moisture resistant sheet; special export bag.

### ZEOGEL

**Material:** Dry, ground attapulgite clay.  
**Use:** As a suspending agent in drilling muds of any salt concentration.  
**Features:** Yields 130 barrels of 15 centipoise mud per ton in saturated salt water.  
**Container:** Multi-wall paper bag containing 100 pounds. Also available: special export packaging in 50 pound bags.

### BAROCO

**Material:** Dry, ground sub-bentonite.  
**Use:** For muds having low to moderate salt concentration.  
**Features:** Yields 45 barrels of 15 centipoise drilling mud per ton of BAROCO in fresh water. Functions well with make-up water having up to 1.5% salt content.  
**Container:** Multi-wall paper bag containing 100 pounds.

### QUIK-GEL

**Material:** High-yield bentonite.  
**Use:** To make high viscosity mud faster than with ordinary clays. Used particularly in drilling seismic shot holes and water wells.  
**Features:** High yield (200 bbl/ton). Easy and fast to mix. Low cost. Improves wall building. Aids in preventing lost circulation. Does not ferment. Reduces water loss. Only half as much needs to be transported compared to other bentonites.  
**Container:** Multi-wall water-resistant bags containing 50 pounds.



## THINNERS

Thinners can be generally defined as those chemicals that are used to modify the clay particle properties of drilling muds to control viscosity, gel strength and filtrate loss. The use of any chemical

agent presents specific problems and this is particularly true with chemical mud thinners. A Baroid service engineer can aid in determining the specific treatment best suited to the drilling conditions.

### TANNEX

**Material:** Tannin compound for treating drilling mud, a non-caking, dry powder.

**Use:** As a mud thinner, or wherever use of quebracho would otherwise be indicated.

**Features:** Does not cake; replaces quebracho on a pound for pound basis; high efficiency when converting to lime mud.

**Container:** Multi-wall asphalt-lined paper bag containing 50 pounds.

### LIGNOX

**Material:** Calcium lignosulfonate, a dry powder.

**Use:** An organic chemical thinner for drilling muds.

**Features:** Often used during conversion or "breakover"; especially good for muds containing calcium ions; emulsifies oil in mud.

**Container:** Multi-walled asphalt-lined paper bag containing 50 pounds. Special export packaging also available.

### CC-16

**Material:** Modified lignite in black, free-flowing powder form.

**Use:** Thinning and filtration control in fresh water muds.

**Features:** Low unit cost. High solubility in normal pH muds. Stable at highest drilling temperatures. Eliminates or reduces the need for adding raw caustic soda at the rig. Good tolerance for soluble contaminants. Complements other thinners and reduces the need for special filtration control agents.

**Container:** Asphalt-lined, multi-walled paper bags containing 50 pounds.

### CQ

**Material:** Modified ferrochrome lignosulfonate in light brown powder form.

**Use:** A chemical thinner for treatment of drilling muds, especially where an increase in pH is also desirable.

**Features:** Requires little or no handling of additional raw caustic soda; allows use of salt water for mud make-up; thins rapidly.

**Container:** Asphalt-lined, multi-walled paper bags containing 50 pounds.

### CARBONOX

**Material:** Organic mud-treating compound, non-caking dry powdered selected lignitic material.

**Use:** A chemical thinner for treatment of normal pH muds, high-pH-IMPERMEX muds and high-pH-Lime muds; also used as an emulsifier.

**Features:** Can be used alone or with other thinners; resists effects of high temperature.

**Container:** Multi-wall paper bag containing 50 pounds.

### Q-BROXIN

**Material:** Ferrochrome lignosulfonate, a non-caking, light brown, water soluble powder.

**Use:** A chemical thinner for drilling muds, especially for muds contaminated with salt, gypsum, or both, or as a general utility thinner.

**Features:** Permits use of gyp muds for deep drilling; allows use of salt water for mud makeup; emulsifies oil in mud.

**Container:** Multi-wall paper bag containing 50 pounds.

### BARAFOS

**Material:** Sodium tetrphosphate in dry granular form.

**Use:** A polyphosphate mud thinner.

**Features:** An effective dispersing agent for clays; has little effect on pH of muds.

**Container:** Asphalt-lined bag containing 100 pounds. Also available in 100-pound bags for export.

### STABILITE

**Material:** Temperature-stable organic phosphate in liquid form.

**Use:** A chemical thinner and clay dispersant, particularly useful as a thinner in fresh water, low to medium solids muds.

**Features:** Overcomes temperature limitations of older inorganic phosphates; accomplishes thinning at low concentrations.

**Container:** 50-pound cans.



## SURFACTANTS

A surfactant is a surface active agent; a substance that affects the surface properties of a liquid or solid by concentrating in the surface layer of the liquid or solid. Surfactants of various kinds are available for compounding muds. In combination with other

treating compounds and emulsifiers one or more of the following desirable properties result: faster bit penetration, longer bit life, bigger cuttings, less shale hydration, greater solids tolerance and less damage to producing formation.

### AKTAFLO-S

**Material:** AKTAFLO-S is a surfactant and defoamant. An amber colored liquid with non-ionic properties.

**Use:** Used in an emulsified-surfactant mud system, it is especially effective in deep wells with high bottom-hole temperatures, or when drilling severe mud-making shales or "dirty sands."

**Features:** Stable to heat; unaffected by anhydrite or salt; reduces dispersion of shales or swelling of clays.

**Container:** Steel drums containing 460 pounds (55 gallons).

### TRIMULSO

**Material:** Drilling mud surfactant and emulsifier, a concentrated liquid emulsifier and surfactant; a synthetic chemical product dissolved in a solvent thinner, with a corrosion inhibitor added.

**Use:** To prepare oil-in-water emulsions for clear water drilling; also used in low solids oil-in-water emulsions.

**Features:** Gives bigger cuttings; makes bits last longer and drill faster; can be used with fresh or salt water; retards corrosion.

**Container:** In two sizes of steel drums: 55 gallons or 15 gallons.

### CON DET

**Material:** Specially compounded detergent used in drilling-water and low-solids mud.

**Use:** To control build-up of formation solids when drilling with water or low-solids mud.

**Features:** A good emulsifier in either fresh or salt water. Results in increased drilling rates by reducing the dispersion of formation solids in the drilling fluid.

**Container:** 5 gallon cans or 55 gallon steel drums.

### DEFOAMER 23

**Material:** A dry, free-flowing powder.

**Use:** To defoam or prevent foaming in salt water emulsion drilling muds.

**Features:** Easy to mix and handle. Does not freeze. Field-tested for many years.

**Container:** Asphalt-lined multi-wall paper bag containing 75 pounds.

### SEA-MUL

**Material:** Liquid organic emulsifier.

**Use:** Emulsifies oil into salt water muds and brine systems.

**Features:** Improves filtration and rheological properties more than can be attributed to the addition of oil; effectively thins, improves filtration and emulsifies at low concentrations.

**Container:** Five gallon cans.

### SKOT FREE

**Material:** Concentrated surfactant and emulsifier in liquid form.

**Use:** As a spotting fluid to free stuck drill pipe and as an additive for water mud to reduce torque and drag on drill pipe.

**Features:** Improves oil-wetting of drill pipe and wall to increase lubricity. Can be added to prevent differentially stuck pipe without harmful changes in mud properties.

**Container:** 55 gallon drums.

## ORGANIC COLLOIDS

IMPERMEX, DEXTRID and CELLEX, Baroid's organic colloids, produce muds with extraordinarily low filtration rate. IMPERMEX is a specially processed colloidal starch that aids in overcoming adverse drilling conditions, caving formations, adverse effect on producing zones, and for improving ordinary drilling operations in deep or shallow wells. IMPERMEX is useful in fresh water drilling muds as well as those that are highly contaminated with salts,

acids, cement, gypsum, anhydrite and other substances. CELLEX is widely used in low-solids drilling muds. A cellulose derivative, CELLEX is quite resistant to fermentation or similar decay. DEXTRID, a colloidal organic polymer, is economical and efficient in salt and gypsum contaminated water muds. Stabilized against bacterial attack, DEXTRID requires no preservative.

### IMPERMEX

**Material:** Specially processed, pre-gelatinized starch powder.

**Use:** An organic colloid for reducing filtrate loss of any drilling mud.

**Features:** Allows continued use of mud that would otherwise be discarded because of contamination by salts, acids, cement, gypsum, anhydrite, and other deleterious substances. Produces minimum filtration rate in fresh or salt water.

**Container:** Multi-wall asphalt-lined paper bag containing 50 pounds. Also available: special export packaging.

### CELLEX

**Material:** Sodium carboxymethylcellulose, a granular powder.

**Use:** An organic colloidal compound for providing muds with low filtration rate.

**Features:** Resists fermentation—effective in small quantities.

**Container:** Multi-wall asphalt-lined paper bag containing 50 pounds. Domestic bag also suitable for export.

### DEXTRID

**Material:** Organic polymer, stabilized against bacterial attack.

**Use:** Economical and efficient control of filtration, mud rheology and solids in fresh water, gypsum and salt contaminated water muds.

**Features:** Controls filtration with less increase in viscosity. Efficient in low solids muds. Temperature stable. No preservative is needed. Fast control of weighted-mud filtration. Can be used to flocculate drilled solids. Small amount required for treatment.

**Container:** Multi-wall paper bags containing 50 pounds.



**PRESERVATIVES**

There are three methods of successfully preserving organic drilling mud compounds from decomposition by fermentation: (1) the use of salt concentrations of no less than 25% (NaCl); (2) maintenance of the mud at a pH of 12 or above; and (3) the use of

chemical bactericides, fungicides and anti-fermentatives. Baroid originated and perfected ALDACIDE to allow use of the third method. By its use, practically any drilling mud can be quickly converted to an IMPERMEX mud without danger of fermentation.

**ALDACIDE**

- Material:** A bactericide supplied as a dry powder.
- Use:** Protects organic colloids from spoilage in low or moderate salt contaminated muds. Mixed through chemical barrel or mixing hopper.
- Features:** Allows use of IMPERMEX mud under any condition without danger of fermentation.
- Container:** Multi-wall paper bags containing 50 pounds.

**SPECIAL PURPOSE**

Chemical treatment to overcome the effects of specific contaminants, to control mud-making or caving shales, to control viscosity, gel strength and filtrate loss, to prevent corrosion of drilling equipment and to improve the lubricating qualities of drilling fluids, can be accomplished through the use of specific drilling mud chemical

additives. The use of any chemical treating agent should be attended by careful checking and supervision. Pilot testing is of great value in determining the proper chemical and the amount to be used in specific cases. A Baroid service engineer can aid in determining the specific treatment best suited to the drilling conditions.

**SHALE BAN**

- Material:** Drilling mud conversion and maintenance compound, a free-flowing dry powdered, blended chemical.
- Use:** To convert or maintain muds for drilling mud-making shales or for drilling and completing in "dirty sand" formations.
- Features:** All needed chemicals in one package; seldom needs caustic; filtrate hardens exposed shales; reduces swelling of clays.
- Container:** Multi-wall paper bag containing 50 pounds.

**ANHYDROX**

- Material:** Dry, powdered barium carbonate.
- Use:** To prevent or overcome contamination of mud by anhydrite or gypsum—precipitates both the calcium and sulfate ions.
- Features:** Mud is not harmed and is easily maintained; prevents sticking of tools caused by settling or flocculated solids.
- Container:** Multi-wall paper bag containing 100 pounds.

**BARAFLOC**

- Material:** White, flaky powder; organic polymer.
- Use:** To flocculate drilled solids in low-solids muds.
- Features:** Controls build-up of formation solids. Permits reduction of weight without dilution. Very small amount needed.
- Container:** Tin can containing 1 pound.

**LQLOSS**

- Material:** Modified guar gum.
- Use:** To control viscosity and filtration in low-solids muds.
- Features:** An effective means of controlling viscosity and filtration in either fresh water or salt water low-solids mud, while reducing the amount of formation solids dispersed in these muds. Particularly effective in brine workover fluids.
- Container:** Multi-wall paper bags containing 50 pounds.

**QUIK-FOAM**

- Material:** Biodegradable foaming agent in liquid form, blended from nonionic and anionic surfactants.
- Use:** Overcomes water invasion, loss of air to formations, and dust in air drilling; can be used with QUIK-GEL to compound stable foam for water well, foundation and seismic drilling, and in mining operations.
- Features:** Biodegradable; easily mixed on the well site; convenient method of increasing the capability of air drilling equipment.
- Container:** One gallon plastic bottles.

**SOLTEX**

- Material:** Free-flowing flakes; high molecular weight hydrocarbon compound.
- Use:** To stabilize shale sections; as a salt or fresh water emulsifier.
- Features:** Inhibits dispersion of drilled solids. Provides temperature stability. Replaces oil in many muds. Extends bit life. Compatible with known mud formulations. Versatile application. Economical. Increases effectiveness of filtration control agents.
- Container:** Multi-wall, water-proof paper bags containing 50 pounds.

**E P MUDDLUBE**

- Material:** A liquid mud additive used to impart extreme pressure lubricating properties to drilling fluids.
- Use:** To prolong the life of bit bearings subjected to conditions of heavy loading. In addition, there is improved lubrication of the drilling string (reduction in torque) and metal parts of the circulating system.
- Features:** Stable to heat and is unaffected by anhydrite or salt contamination. Reduces number of bits required and overall drilling costs.
- Container:** 5 gallon cans or 55 gallon steel drums.

United States Department of Agriculture  
Forest Service

**SPECIAL USE  
APPLICATION AND REPORT**

Ref: FSM 2712

|                         |                                     |                                  |                                    |
|-------------------------|-------------------------------------|----------------------------------|------------------------------------|
| FOREST SERVICE USE ONLY | a. Record no. (1-2)<br><br>70<br>-- | b. Region (3-4)<br><br>--        | c. Forest (5-6)<br><br>--          |
|                         | d. District (7-8)<br><br>--         | e. Use number (9-12)<br><br>---- | f. Kind of use (13-15)<br><br>---- |
|                         | g. State (16-17)<br><br>--          | h. County (18-20)<br><br>---     | k. Cord No. (21)<br><br>1          |

**PART I - APPLICATION** (To be completed by applicant)

Application is hereby made for a permit to use National Forest land as indicated below:

1. Description of land: (Attach MAP or PLAT)

Oak Flat Picnic and Camp Ground, Pinal County, Arizona.  
T. 1 S., R. 13 E.,  
Sec. 28, S1/2S1/2;  
Sec. 29, SE1/4SE1/4;  
Sec. 32, E1/2NE1/4;  
Sec. 33, N1/2, N1/2S1/2.  
The areas described aggregate 760 acres. (Map attached.)

2. Purpose of use.

Special Use Permit to prepare three deep holes for geologic information.

3. Land Area applied for (For Rights-of-Way show length and width and convert to acres; for other uses show acres)

See attached plat.  
Length in:                      (Miles) or                      (Feet) X Width                      (Feet) =                      (Acres)

4. Improvements

a. Description Each drill site will occupy approximately one acre, providing an improved area that could be utilized as a parking and picnic area. If water is intersected in the drill holes, it would be available for Forest Service use. Each site will be rehabilitated under the terms and conditions set forth by the Forest Service.

b. Plans attached  Yes  No. If "NO" show date plans will be furnished \_\_\_\_\_

|                                                 |                                                                                            |                                                                                                                     |
|-------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| c. Estimated cost<br>\$ 4,000.00 per drill site | d. Construction will begin within<br>First drill site --<br>September 5, 1972.<br>(Months) | e. Construction will be completed within<br>First drill site -- 2 weeks<br>First drill hole -- 5 months<br>(Months) |
|-------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|

|                                       |                                                                                                                              |                                                                                 |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Date of Application<br>March 31, 1972 | Applicants name and signature<br>AMERICAN SMELTING AND REFINING COMPANY<br><br><i>Robert B. Crist</i><br>By: Robert B. Crist | Applicant's address<br>P.O. Box 5747<br>Tucson, Arizona 85703<br><br>(ZIP Code) |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|



**PART II - REPORT ON APPLICATION** *(To be completed by Forest Officer)*

1. General description of the area and adaptability for the proposed use. Outline area on separate Map Sheet if needed to clarify proposed use. *(Use Field Map Sheet Form 5400-19, if needed)*

2. If previously under permit indicate:

a. \_\_\_\_\_ (Name of Permittee)      b. \_\_\_\_\_ (Date of Permit)      c. \_\_\_\_\_ (Date Closed)

3. Describe any encumbrances on the land, such as withdrawals, power projects, easements, rights-of-way, mining claims, leases, etc. Show on map provided or on Form 5400-19.

4. State approximate amount and kinds of timber to be cut, recommended stumpage prices, method of scaling; include recommendation on disposal of merchantable timber (a) to permittee at current damage appraisal or (b) to others than permittee under regular timber sale procedure.

5. Is the proposed use in conformity with the District Multiple Use Plan?  Yes  No  
 Impact survey proposed?  Yes *(Attach)*  No  
 Does it conform with the District Land Adjustment Plan?  Yes  No

*(NOTE: If "NO" is checked in answer to any of the above questions, explain under No. 6 below)*

6. Recommendations, including any factors which might affect the granting of the permit or future use of the land.

7. List conditions which should be made a part of this permit *(See FSM 2780)*

8. Fee recommendation *(Describe here or on computation sheet attached)*

9. Name and Address of Permittee exactly as it should be shown on the permit:

\_\_\_\_\_  
 (ZIP Code)

|                                        |      |           |       |
|----------------------------------------|------|-----------|-------|
| RECOMMEND: Approval*<br>Disapproval* → | DATE | SIGNATURE | TITLE |
|                                        | DATE | SIGNATURE | TITLE |
| Approved* →<br>Disapproved* →          | DATE | SIGNATURE | TITLE |

\*Delete One



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

July 5, 1972

Mr. Jerry L. Haggard  
Attorney at Law  
Evans, Kitchel & Jenckes, P.C.  
363 North First Avenue  
Phoenix, Arizona 85003

Superior East  
Oak Flat

Dear Jerry:


Enclosed please find a copy of the Permit for Exploratory Drilling that we discussed last Thursday. H. L. Lance stated that we could start drilling at any time (prior to Sept. 5th).

Since receiving the permit Mr. Lance has discussed the possibility of amending our agreement to furnish the Forest Service a water well at Hole No. 2 and substitute a hole previously drilled adjacent to Oak Flat. This would also provide water for our test drilling.

Very truly yours,

*Bob*  
R. B. Crist

RBC:lad  
Enc.

cc: WLKurtz - w/enc.   
JDSell - w/enc.

Permittee

|                                                                                                                                                                                          |                     |                      |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|------------------------|
| United States Department of Agriculture<br>Forest Service<br><br><b>SPECIAL USE PERMIT</b><br><br>Act of June 4, 1897<br>This permit is revocable and nontransferable<br>(Ref. FSM 2710) | a. Record no. (1-2) | b. Region (3-4)      | c. Forest (5-6)        |
|                                                                                                                                                                                          | 70                  | 03                   | 12                     |
|                                                                                                                                                                                          | d. District (7-8)   | e. Use number (9-12) | f. Kind of use (13-15) |
|                                                                                                                                                                                          | 02                  | 2724                 | no code ---            |
|                                                                                                                                                                                          | g. State (16-17)    | h. County (18-20)    | k. Card no. (21)       |
|                                                                                                                                                                                          | 04                  | 021                  | 1                      |

Permission is hereby granted to American Smelting and Refining Company  
 of Box 5747, Tucson, AZ 85703  
 hereinafter called the permittee, to use subject to the conditions set out below, the following described lands or improvements:

Three drill sites in the Oak Flat area as shown on the attached map labeled Appendix #3 submitted by ASARCO and approved by Ned R. Jackson on June 8, 1972. Said map is hereby made a part of this permit and is attached thereto.

This permit covers 3.0 acres and/or .5 miles and is issued for the purpose of:  
 Drilling three deep exploratory holes.

1. Construction or occupancy and use under this permit shall begin ~~within~~ Sept. 5, 1972 months and construction, if any, shall be completed within 2 1/2 months, from the date of the permit. ~~This use shall be actually exercised at least xxxxxxxxxxxxxxx days each year, unless otherwise authorized in writing.~~

2. In consideration for this use, the permittee shall pay to the Forest Service, U.S. Department of Agriculture, the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the period from \_\_\_\_\_ 19\_\_\_\_, to \_\_\_\_\_, 19\_\_\_\_, and thereafter annually on See Clause 18

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_):  
 Provided, however, Charges for this use may be made or readjusted whenever necessary to place the charges on a basis commensurate with the value of use authorized by this permit.

3. This permit is accepted subject to the conditions set forth herein, and to conditions 18 to 22 attached hereto and made a part of this permit.

|                 |                                         |                                  |         |
|-----------------|-----------------------------------------|----------------------------------|---------|
| PERMITTEE       | NAME OF PERMITTEE                       | SIGNATURE OF AUTHORIZED OFFICER  | DATE    |
|                 | American Smelting and Refining Company  | <i>R. B. Critt</i>               | 6/30/72 |
| ISSUING OFFICER | NAME AND SIGNATURE                      | TITLE                            | DATE    |
|                 | <i>Ned R. Jackson</i><br>NED R. JACKSON | Recreation & Lands Staff Officer | 6-8-72  |

4. Development plans; layout plans; construction, reconstruction, or alteration of improvements; or revision of layout or construction plans for this area must be approved in advance and in writing by the forest supervisor. Trees or shrubbery on the permitted area may be removed or destroyed only after the forest officer in charge has approved, and has marked or otherwise designated that which may be removed or destroyed. Timber cut or destroyed will be paid for by the permittee as follows: Merchantable timber at appraised value; young-growth timber below merchantable size at current damage appraisal value; *provided* that the Forest Service reserves the right to dispose of the merchantable timber to others than the permittee at no stumpage cost to the permittee. Trees, shrubs, and other plants may be planted in such manner and in such places about the premises as may be approved by the forest officer in charge.

5. The permittee shall maintain the improvements and premises to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the forest officer in charge.

6. This permit is subject to all valid claims.

7. The permittee, in exercising the privileges granted by this permit, shall comply with the regulations of the Department of Agriculture and all Federal, State, county, and municipal laws, ordinances, or regulations which are applicable to the area or operations covered by this permit.

8. The permittee shall take all reasonable precautions to prevent and suppress forest fires. No material shall be disposed of by burning in open fires during the closed season established by law or regulation without a written permit from the forest officer in charge or his authorized agent.

9. The permittee shall exercise diligence in protecting from damage the land and property of the United States covered by and used in connection with this permit, and shall pay the United States for any damage resulting from negligence or from the violation of the terms of this permit or of any law or regulation applicable to the national forests by the permittee, or by any agents or employees of the permittee acting within the scope of their agency or employment.

10. The permittee shall fully repair all damage, other than ordinary wear and tear, to national forest roads and trails caused by the permittee in the exercise of the privilege granted by this permit.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise herefrom unless it is made with a corporation for its general benefit.

12. Upon abandonment, termination, revocation, or cancellation of this permit, the permittee shall remove within a reasonable time all structures and improvements except those owned by the United States, and shall restore the site, unless otherwise agreed upon in writing or in this permit. If the permittee fails to remove all such structures or improvements within a reasonable period, they shall become the property of the United States, but that will not relieve the permittee of liability for the cost of their removal and restoration of the site.

13. This permit is not transferable. If the permittee through voluntary sale or transfer, or through enforcement of contract, foreclosure, tax sale, or other valid legal proceeding shall cease to be the owner of the physical improvements other than those owned by the United States situated on the land described in this permit and is unable to furnish adequate proof of ability to redeem or otherwise reestablish title to said improvements, this permit shall be subject to cancellation. But if the person to whom title to said improvements shall have been transferred in either manner provided is qualified as a permittee and is willing that his future occupancy of the premises shall be subject to such new conditions and stipulations as existing or prospective circumstances may warrant, his continued occupancy of the premises may be authorized by permit to him if, in the opinion of the issuing officer or his successor, issuance of a permit is desirable and in the public interest.

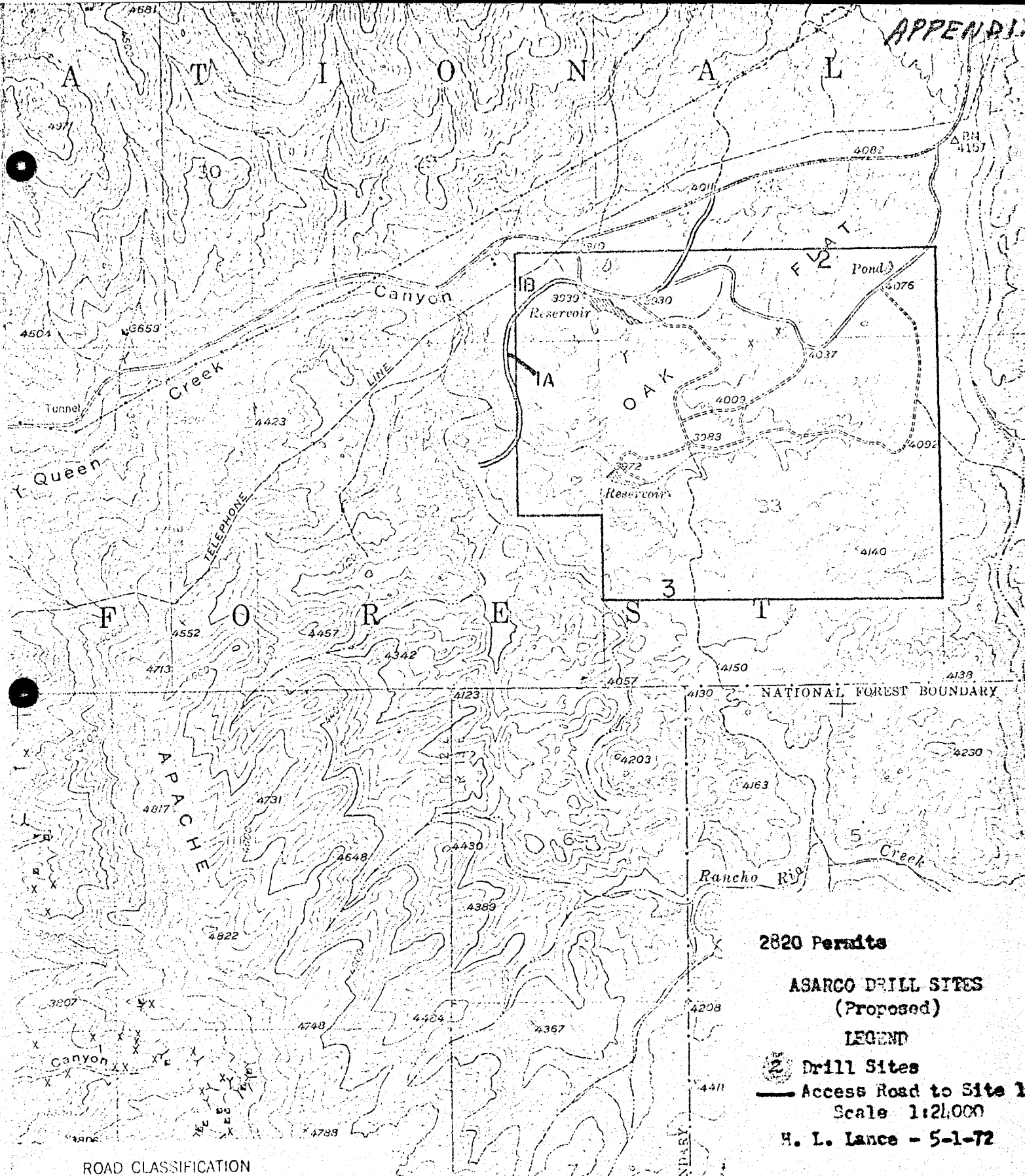
14. In case of change of address, the permittee shall immediately notify the forest supervisor.

15. The temporary use and occupancy of the premises and improvements herein described may be sublet by the permittee to third parties only with the prior written approval of the forest supervisor but the permittee shall continue to be responsible for compliance with all conditions of this permit by persons to whom such premises may be sublet.

This permit may be terminated upon breach of any of the conditions herein or at the discretion of the regional forester or the Chief, Forest Service.

17. In the event of any conflict between any of the preceding printed clauses or any provisions thereof and any of the following clauses or any provisions thereof, the following clauses will control.



18. As reimbursement to the Forest Service for the uses described in this permit, the American Smelting and Refining Company shall:
  - A. Cement Hole No. 2 inside and outside the casing in the customary manner so as to prevent loss of all ground water above the cement.
  - B. Perforate the casing above the cemented area at the depths ground water was intersected as indicated by the drilling log.
  - C. Cap the hole casing to prevent entry but in such a manner that it can be reopened when necessary.
19. All drill sites and access routes will be rehabilitated to as near a natural condition as possible. Extent and type of rehabilitation to be determined by the District Forest Ranger.
20. The American Smelting and Refining Company and their contractors will make all necessary plans and arrangements to prevent undue dust, noise, and vehicular traffic through the developed camping area when it is occupied by campers and picknickers.
21. This permit grants no rights or claims to any mineral or other substance of value which might be located by the drilling operation.
22. This permit will expire September 5, 1974. All rehabilitation work will be completed on or before the expiration date.



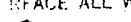
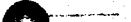

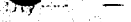

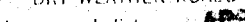
2820 Permits

ASARCO DRILL SITES  
(Proposed)

LEGEND

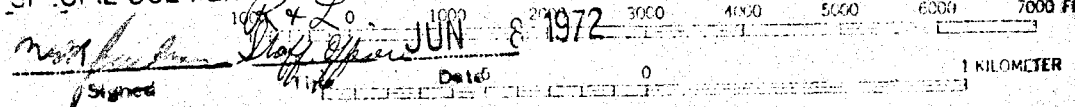
-  Drill Sites
  -  Access Road to Site
- Scale 1:24,000  
H. L. Lance - 5-1-72

ROAD CLASSIFICATION

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li> SURFACE ALL WEATHER ROADS</li> <li> Improved dirt</li> <li> Unimproved dirt</li> <li> U. S. Route</li> <li> State Route</li> </ul> | <ul style="list-style-type: none"> <li> DRY WEATHER ROADS</li> </ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

APPROVED IN ACCORDANCE WITH SCALE 1:24,000

SPECIAL USE PERMIT DATED JUN 8 1972



SUPERIOR, ARIZ. TONTO NATIONAL FOREST  
N3315 - W11100/7.5

CONTOUR INTERVAL 40 FEET  
DATUM IS MEAN SEA LEVEL

MULTIPLE USE SURVEY REPORT

AMERICAN SMELTING & REFINING COMPANY

Geological Information Drilling Sites  
Oak Flat Campground Withdrawal Area

GLOBE RANGER DISTRICT  
TOMTO NATIONAL FOREST

REGION 3

Prepared by W. L. Lance, 5-2-72  
H. L. Lance, R&L Staff Date

Approval Recommended by Walter E. Lockhart, 5/2/72  
Walter E. Lockhart, DFR Date

Approved by Fred J. Wirth, JUN 12 1972  
Fred J. Wirth, Forest Supervisor Date



I. Introduction and Description of Project

A. Purpose

The American Smelting and Refining Company "ASARCO" has applied for a special use permit to drill three exploratory holes through the dacite area encompassed by the mineral withdrawal officially described under Public Land Order 1229, September 27, 1955, and modified under Public Land Order (Arizona 05427), October 26, 1971. This area is locally known as Oak Flat Campground.

Each drill site will require about one acre of land. Each hole will require approximately 3 to 5 months to complete.

B. Legal Description

T1S, R13E-Gila and Salt River Meridian, Pinal County, Arizona, Queen Creek Watershed #21 and San Carlos Watershed #22.

S28, S45 $\frac{1}{2}$   
S29, SE $\frac{1}{4}$ SE $\frac{1}{4}$   
S32, E $\frac{1}{2}$ NE $\frac{1}{4}$   
S33, W $\frac{1}{2}$ NE $\frac{1}{4}$

Containing 760 acres within the withdrawal. Each drill site will require about one acre.

- C. Drilling methods are described in detail in the memorandum from J. D. Sell to W. L. Kurtz, dated March 29, 1972. This memorandum is attached as Appendix #1. The type of chemical additives used in drilling are attached to Mr. Sell's memorandum.

A general location map and a detailed site location map are attached as Appendix 2 and 3 respectively.

D. Land Ownership

All land involved is Forest Service land.

E. Management Zone

The Oak Flat area is within the Travel Influence Zone of US 60.

II. Evaluation of Proposed Project on National Forest Resources, Uses, and Activities

- A. Air - Road dust from vehicles could be a problem under certain conditions.
- B. Minerals - Minerals will not be affected by this proposal as surface drill sites only will be involved.
- C. Natural Beauty - All of the proposed drill sites are out of sight

and hearing of developed areas and close enough to existing roads that natural beauty will not be adversely affected.

- D. Water - The chemical used in the rotary drilling operation is biodegradable within two weeks. Care must be exercised to contain the drilling residue and prevent surface water contamination. Specifications for this chemical from the Baroid Division is attached to Appendix #1.

E. Outdoor Recreation

The proposal is to start the first drilling operation after the Labor Day weekend 1972.

Vehicle traffic will consist of changing the drilling crew two or three times each 24 hours, water trucks will be necessary on an intermittent basis, as will fuel and service trucks. Site 1B and 2 are close enough to US 60 to be within the "seen area" of this major highway. At Site 2 only the top of the drill rig will be visible.

- F. Timber, Range, Wildlife, Wilderness, Fire and Air Operations, Insects and Disease, Landownership Adjustments, Land Uses, Transportation, and Antiquities will not be affected by this proposal.

- G. Soils - Soil on Site 1B, 2 and 3 will not be adversely affected. The necessary road to Site 1A will cause some surface disturbance. All sites are situated on level land that will need no tractor work to make them suitable for a drilling pad. Some work may be desirable to insure against drilling mud escaping into natural drainages.

This area is covered with dacite several thousand feet thick. Soils are very shallow to nonexistent.

- H. Water - Sites 1A and 1B are directly above Queen Creek Canyon which furnishes potable domestic water to the Town of Superior. Site 1B is within a few hundred feet of the bottom of Queen Creek. Sites 1A, 2, and 3 are on land so flat that the possible escape of drilling mud or water into a surface drainage is very remote.

An opportunity to develop Site 2 as a water source for Oak Flat Campground exists.

III. Recommendations

I recommend approval of an exploratory drilling permit for Sites 1A, 2, and 3 with the following stipulations:

- A. The spur road to Site 1A be constructed with the least possible soil and vegetation disturbance. This road will be completely drained and barricaded against further use at the completion of the exploration.

Site 1A is recommended instead of Site 1B because it is further removed from Queen Creek, will not present as much of a safety hazard to traffic on the Magma #9 Shaft road, and it is out of sight of US 60.

- B. Large metal tanks should be used to catch and decant drilling mud where it is not practical to construct a surface pond for this purpose. All surface ponds to be covered with soil at least 12" deep at the completion of exploration. Decanted mineral material removed from metal tanks will be uniformly spread in the immediate area of the drill pad so that it will not enter surface drainages.
- C. At Site 2 the hole casing will be sealed off immediately below the shallowest source of potable water and the casing perforated so that a pump of standard windmill capacity can be installed. The cost of sealing and perforation to be paid by American Smelting and Refining Company and will be the fee charged for occupancy of Sites 1A, 2, and 3.
- D. This permit will terminate September 5, 1974.

#### IV. Appendix

- A. Memorandum - J. D. Sell to W. L. Kurtz.
- B. General location map.
- C. Detailed site location map.

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Globe RD

WIK/JS

REPLY TO: 2820 Permits

July 10, 1972

SUBJECT: American Smelting & Refining Company  
Oak Flat Drill Sites 6-8-72

W. L. N.

JUL 17 1972



to: Forest Supervisor, Tonto

Enclosed are three copies of a proposed amendment to the referenced permit which will allow the American Smelting and Refining Company to convert an existing exploratory hole to a producing water well in Section 27, T1S, R13E, G&SRB&M.

I recommend approval of the amendment.

*Walter E. Lockhart*  
WALTER E. LOCKHART  
District Ranger

Enclosures

cc: ✓ Robert B. Crist

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 21, 1972

TO: J. J. Collins  
Director of Exploration  
New York Office

Superior East Project  
Oak Flat

Dear John:

In view of the part Oak Flat may play in company policy, I am enclosing for your information the pertinent data we have developed during the Superior East Project.

The 1" = 1 mile plan map shows the position of Oak Flat relative to the ground controlled by Asarco and the location of the drill holes.

The graphic log portrays the geology and assay data of hole A-4 located immediately east of Oak Flat.

The cross section A-A<sup>1</sup> portrays our interpretation of the geology beneath Oak Flat.

The graphic log and cross section show two extremely significant features:

- a) The replacement horizons at Magma, containing a proven reserve of 10.4 million tons grading 5.7% copper, are present east of Oak Flat in drill hole A-4. At A-4 these beds are thoroughly replaced with hematite and specularite, the minerals found peripheral to the main copper ore bodies at Magma. Therefore we conclude that an excellent exploration target exists beneath Oak Flat for the development of substantial tonnages of replacement ore containing 5-6% copper.
- b) Drill hole A-4 intersected three significant zones of native copper in the very competent Whitetail conglomerate. These three zones total 570 feet averaging 0.95% copper. This represents another excellent exploration target (a 1,000 foot radius about drill hole A-4 and 570 feet in thickness represents 143 million tons) which extends beneath Oak Flat.

Very truly yours,



W. L. Kurtz

WLK:lad  
Encs.

cc: JHCourtright, JDSell, RBCrist

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 25, 1972

FILE MEMORANDUM

Superior East Project  
Oak Flat

The following information was given by telephone to Mr. Hecox today:

1. Legal description of the Oak Flat Recreational Area.
2. Ownership Status: U.S. Forest Service ground; part of the Tonto National Forest; surface administered by the Forest Service; authority for disposition of locatable minerals with the BLM.
3. History of the recreational area: On Public Land Order 1229 the area is called Oak Flat Picnic and Campground. Facilities include a few picnic tables and a few chemical toilets; there is no water and no electricity available; overnight camping is allowed but no facilities for trailers; currently there is an admission charge for overnight camping.
4. History of mining: Oak Flat exists within an area of post-mineral cover rocks 5-6 miles wide and it is 7,000' west to premineral o.c. and 16,000' east. Oak Flat lies between two major copper mining districts.

In 1875 copper-silver ore was discovered 3 miles west of Oak Flat at Superior, Arizona. Since that time the Superior district has produced over \$400,000,000 mainly in copper with some silver, gold, lead, and zinc values, from underground workings.

Magma Copper Company is sinking a new shaft, called the No. 9 Shaft, to extract copper ore that occurs beneath the post-mineral cover rocks discovered in 1966 (10 million tons @ 5.7% copper and open ended). This shaft is located 3500' west of the western boundary of Oak Flat. It is noteworthy that Magma has been mining for years beneath Highway 60-70 without any surface disturbance.

To the east of Oak Flat is the huge Globe-Miami district, one of the major copper districts in the United States. Ore was first discovered here in 1874 and since that time has produced over 2 billion dollars, mainly in copper with some values in silver, moly, gold, lead, and zinc.

July 25, 1972

The covered area, in which Oak Flat exists, has been explored intermittently since the 1930's when Cibola Exploration drilled two holes. Between 1960 and 1970 at least nine holes have been drilled by major mining companies. In 1970 Asarco began exploring the covered area and, to date, has collared six holes. One of these holes is located 250' east of Oak Flat and one 3,000' north of Oak Flat.

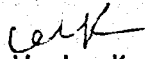
Because of the great depth to favorable host rock in the Oak Flat area, mining should be able to be undertaken without any visible effect on the surface other than surface facilities.

In discussions with the local Forest Service at Globe and with the B.L.M. in Phoenix, it is obvious that they recognize that Oak Flat is situated within an area of high mineral potential.

5. Exploration Potential: Deep but good. No ore as yet proven. Extremely encouraging results in drill hole A-4.

Difficult to put price tag on value of ground.

We have permit from Forest Service allowing us to drill, but cannot obtain the mineral rights from the Forest Service.

  
W. L. Kurtz

WLK:lad

cc: JDSell   
RBCrist



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

October 6, 1972

MEMORANDUM TO: M.B. Hecox, Jr.

OAK FLAT  
RECREATION SITE  
PINAL COUNTY, ARIZONA

Mr. Walt Lockhart, District Ranger, Globe, Arizona, has advised me by telephone that the Forest Service is cancelling our Permit to drill on Oak Flat.

This will be confirmed by letter from Mr. Ned R. Jackson, Administrator of Region Three Recreation Lands, Phoenix.

Mr. Lockhart indicated that the decision was not made locally, and it was out of his hands.

*RBC*  
R.B. Crist

RBC:kre

cc: W.L. Kurtz  
J.D. Sell ✓



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

March 7, 1973

Mr. W. L. Lockhart, District Ranger  
Tonto National Forest  
1100 North Broad Street  
Globe, Arizona 85501

Dear Mr. Lockhart:

In continuance of our discussion of March 2, 1973 in regard to rehabilitating and improvement of the access road south of Oak Flat and into Section 5, I submit the following sketch and data. The original Special Use Application was dated March 31, 1971 with cover letter and map by R. B. Crist (ASARCO) dated the same day. The Amendment #1 for extension of the Permit was prepared by H. L. Lance (FS), date April 7, 1972, and approved by N. R. Jackson (FS) on April 13, 1972.

As discussed with you, ASARCO will use fill material for the roadway starting at the big Oak Tree and continue filling with a minimum of blasting and other disturbances of the land until away from the picnic site and the visual view from the site. Subsequently, blasting and movement of rock material will be minimized for the size of the anticipated drill rig. Previously, the roadway outside the Oak Flat area had been partially modified and will require very little additional work at this time.

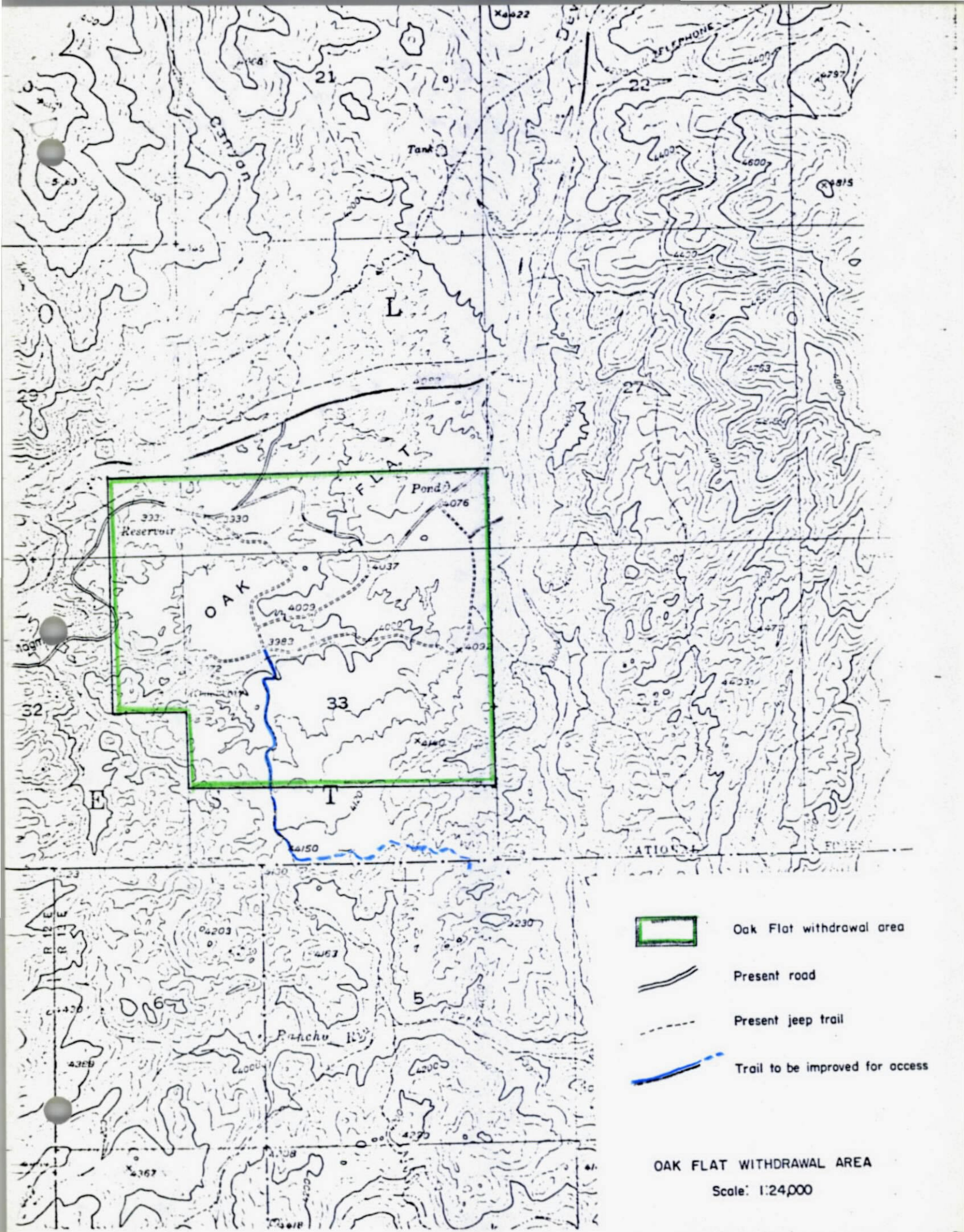
Sincerely,

James D. Sell

JDS:1b  
Attach.

cc: HLLance  
WLKurtz  
RBCrist  
HLCrittendon





AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

March 22, 1973

## FILE MEMORANDUM

Oak Flat

In a conversation today with H. L. Lance, U.S.F.S., Globe, he stated that estimated man days use of Oak Flat in 1971 was 12,000.

With further questioning, he estimated that 90% of use of Oak Flat was by Superior, Arizona, residents; +5% by Miami-Globe, Arizona, residents; and less than 5% by others (Arizona residents and out-of-State).

Sounds like Forest Service is running a park for the town of Superior.

  
W. L. Kurtz

WLK:1b

cc: NKesten  
MBHecox, Jr.



AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

April 4, 1974

FILE MEMORANDUM

Oak Flat  
Pinal County, Arizona

Today I talked with Byron Hardie of Newmont and told him of my discussions with T. Brown.

Hardie indicated he would try and avoid Brown.

I told Hardie that I didn't think any one party would be able to obtain mineral rights at Oak Flat because the government would not show partiality towards one party or one company. I told him he ought to think about the area and how it might be effectively explored considering the land positions of Newmont and Asarco.

  
W. L. Kurtz

WLK:1b

cc: TCOsborne  
JHCourtright  
RBCrist  
JDSe11 ✓  
NVisnes

January 13, 1978

## FILE MEMORANDUM

Oak Flat  
Superior East Project  
Pinal County, Arizona

On Dec. 21, 1977 W. L. Kurtz, R. B. Crist, and I met with R. W. Green and Bob Babcock, Right-of-Way Agents for the Salt River Project (SRP), regarding the power line sub-station they are planning to build roughly one mile north of Oak Flat. The U.S. Forest Service (USFS) has been fighting this particular location because it is visible from Oak Flat; however, as any alternate location for the station would add several million dollars cost to the power transmission network, the site is relatively certain.

The Salt River people requested the meeting with Asarco to determine whether the proposed location for the power station would conflict with future mining plans we might have in the area. We questioned them regarding alternate locations in the immediate area, but offered no objections to the proposed location.

At the conclusion of the meeting they indicated that the hassle from the USFS was so severe that the SRP was seriously considering moving the Oak Flat Picnic area at SRP expense and that this might be a condition of USFS approval of the proposed power plant location. This would be a very interesting development if it occurred and, although it might not free the current picnic area for staking, acquisition of Oak Flat by Asarco would not have the condition that Asarco also find a suitable substitute picnic area.

*F. T. Graybeal*  
F. T. Graybeal

FTG:1b

cc: TCOsborne  
SJSorensen  
WLKurtz  
RBCrist  
JDSell ✓

FTG-~~MS~~

J1 Ranch 1/20/78

Lockhart met with W. Ruth. Lg. Jan. 19<sup>th</sup>  
Regarding the F.S. Range Management Plan.

During the meeting Ruth. Lg. stated that  
they do plan to move the Oak Flat Rec. Area.  
And they would like to move it to the  
Shoecraft Ranch. Shoecraft has inquired of the F.S.

we should attempt to effect our own trade  
to control surface of Oak Flat.

-RBC

No better time than now. As you recall Mrs. Shoecraft has passed away  
& I understand Mr. Shoecraft is losing interest in the Ranch & wants  
to get out from it. His sons & friends have bobbled every endeavor  
they have tried around the area & I'm sure that has helped to drop  
Mr. Shoecraft's interest in the area.

I believe that the clay, Red Trails Park is now offering  
tenant the right to purchase their lot. (?) (?)

*[Signature]*



# ASARCO

Southwestern Exploration Division

JDS

January 22, 1980

MEMO TO: F. T. Graybeal

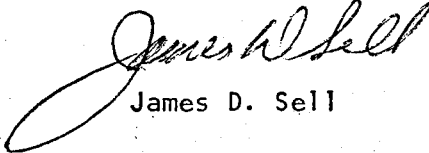
FROM: J. D. Sell

Oak Flat Withdrawal  
Superior East Project  
Pinal County, Arizona

At the Pinal Mountain AIME meeting of 1/15/80, a Mr. Fred Gronland of Magma Copper mentioned that he ran into a Mr. John Alexander, formerly with Magma, but now with the Forest Service, at Albuquerque.

John asked Fred, "Who is pressuring the Forest Service in regard to releasing the Oak Flat Withdrawal?" Fred was aware of our drilling and asked if it was Asarco, and I replied that we probably had not approached the Forest Service since our drilling near there some years ago. Fred replied that it must be Magma then.

The question does remain, and Asarco's interest should be reinforced.

  
James D. Sell

JDS:jlh

## TITLE 6500 - FINANCE AND ACCOUNTING

\*-EXHIBIT 1a--1

Photography Laboratory Services

## Price Schedule

Public, Federal, and Non-Federal Government Agencies

January 1971

801 399.6121

1. Ordering. Reproductions of official photographs, held by the Forest Service in Ogden, Utah, may be purchased by private individuals and firms and by Government agencies (other than Forest Service) in accordance with rules and prices established under authority vested in the Photographic Sales Committee, as indicated in Agricultural Property Management Regulations, 104-45.5007, Photographic Sales Committee.

Aerial photographs should be identified by alphabetical symbol, roll, and exposure number. When this is unknown, include state, township, range, and section number location or sketch showing area of interest.

a. Orders from Private Individuals and Firms. Inquiries and orders should be addressed to the U. S. Forest Service, Division of Engineering, Federal Office Building, 324 25th Street, Ogden, Utah 84401, Attention: Map Sales Office. The Map Sales Office is open for over-the-counter sales from 8 a.m. to 12 noon and 1 p.m. to 5 p.m., Mondays through Fridays. Payment by check or money order made payable to the Forest Service, USDA, must accompany all orders. If any part of the materials ordered cannot be furnished, and its value is less than \$1.00, no refund will be made.

b. Orders from Any Government Agency Other Than Forest Service. Orders from other Federal agencies and non-Federal agencies (states, counties, cities) will be accepted on purchase orders. However, for Federal agencies engaged in project work on or adjacent to National Forest system land, if this work will be of eventual benefit to the Forest Service in the administration of said land, charges will be made in accordance with the price schedule for "Forest Service Only," (exhibit 1b). This situation could occur with Federal agencies such as the Geological Survey, Bureau of Reclamation, National Park Service, and Bureau of Land Management.

Minimum charge on all orders - \$1.75. Indicate scale desired.

2. Aerial Photographs. Indicate symbol, roll, and exposure number (i.e., EIX - 11:2). The quantity prices apply only (1) when entire order is shipped to one address, and (2) to those prints ordered in excess of 25 of the same size (i.e., 26 contact prints cost: 25 at ~~\$1.57~~ plus 1 at \$1.25 = \$45.00 for total cost).-\*

#1.75

## TITLE 6500 - FINANCE AND ACCOUNTING

## \*-EXHIBIT 1a--2

a. Aerial Photo Mosaic Indexes. Double weight, semi-matte cost \$3.00 each, where available.

b. Spot Indexes. 1" = 1 mile, 15' planimetric map showing photo centers printed on diazo paper - \$.50 each.

c. Copy Negatives - \$6.00.

d. Contact 9" x 9" or 7" x 7" Prints. Black and white:

|           | <u>Double Weight<br/>Semi-Matte</u> | <u>Single Weight<br/>(Glossy)</u> | <u>Plastic-Coated<br/>(Waterproof)</u> | <u>Stable Base<br/>(Polyester)</u> |
|-----------|-------------------------------------|-----------------------------------|----------------------------------------|------------------------------------|
| 1 to 25   | \$1.75 ea.                          | \$1.75 ea.                        | \$1.75 ea.                             | \$2.50 ea.                         |
| 26 & Over | 1.25 ea.                            | 1.25 ea.                          | 1.25 ea.                               | 2.00 ea.                           |

e. Enlargements Made From 9" x 9" or 7" x 7" Negatives. Black and white:

|           | <u>14" x 14"</u> | <u>18" x 18"</u> | <u>20" x 20"</u> | <u>24" x 24"</u> |
|-----------|------------------|------------------|------------------|------------------|
| 1 to 25   | \$3.00 ea.       | \$3.50 ea.       | \$4.00 ea.       | \$4.50 ea.       |
| 26 & Over | 2.50 ea.         | 3.00 ea.         | 3.25 ea.         | 3.50 ea.         |

f. Contact 9" x 9" Prints.

(1) Color: \$5.50 each (no discount for quantity order).

(2) Lamination: matte or glossy surface available at \$.35 per print.

g. Enlargements. Color:

|             | <u>18" x 18"</u> | <u>20" x 20"</u> |
|-------------|------------------|------------------|
| First Print | \$15.00 ea.      | \$15.00 ea.      |
| 2 to 25     | 10.00 ea.        | 10.00 ea.        |
| 26 & Over   | 8.00 ea.         | 8.00 ea.         |

h. Glass Diapositives. Available plate thicknesses are 0.06", 0.13", and 0.25". Black and white:

|           |            |
|-----------|------------|
| 1 to 25   | \$6.50 ea. |
| 26 & Over | 6.00 ea.-* |

## TITLE 6500 - FINANCE AND ACCOUNTING

## \*-EXHIBIT 1a--3

3. Miscellaneous Products. Training kits on basic techniques in Forest photo-interpretation: \$20.00 each. Parts of the kit may be purchased as follows:

|                                              |            |
|----------------------------------------------|------------|
| Photo-interpretation aids, on film .....     | \$2.00 ea. |
| Problem photos and illustration prints ..... | 1.00 ea.   |
| Davis Percent Slope Scale .....              | 2.50 ea.   |

4. Special Services. All special laboratory work will be billed at \$12.00 per hour.

## PHOTOGRAPHY LABORATORY SERVICES:

Special color printing services for other Federal agencies when an agreed-to Memorandum of Understanding exists:

Selective printing of color negatives throughout one or more different rolls of film - \$3.00 per print.

Printing of color negatives in a series of six or more in sequence from the same roll:

|            |            |
|------------|------------|
| 1 to 25    | \$3.00 ea. |
| 26 to 100  | 2.50 ea.   |
| 101 to 500 | 2.00 ea.   |
| Over 500   | 1.75 ea.   |

## POLICY STATEMENT FOR BILLING OTHER FEDERAL AGENCIES ON AERIAL PHOTOGRAPHY SERVICES:

OPTION NO. 1: When a Memorandum of Understanding for project work has been prepared that includes photo services, the cost of said services will be billed as agreed in said Memorandum of Understanding.

OPTION NO. 2: Where other Federal agencies request color printing of their film, the cost will be computed on a sliding scale.

COST TO THE PUBLIC AND NON-FEDERAL AGENCIES: standard price of \$5.50 per exposure regardless of number.-\*

## ORDER FOR PHOTOGRAPHIC REPRODUCTIONS

*Prices and instructions for ordering on reverse side*

SHIP TO (NAME AND ADDRESS)

FOR LABORATORY USE ONLY

STATE

COUNTY

LAB. REG. NO.

TOTAL REPRODUCTIONS

AMOUNT REMITTED

PURCHASER'S ORD. NO.

DATE RECEIVED

DATE

SIGNATURE OF PURCHASER

DATE COMPLETED

| #  | KIND OF REPRODUCTION<br>PAPER SIZE AND REMARKS<br>(1) | QUANTITY<br>(2) | SYMBOL<br>(3) | ROLL NO.<br>(4) | EXPOSURE<br>NO.<br>(5) | PRODUCED BY<br>(6) | REMARKS<br>(7) |
|----|-------------------------------------------------------|-----------------|---------------|-----------------|------------------------|--------------------|----------------|
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| 19 |                                                       |                 |               |                 |                        |                    |                |
| 20 |                                                       |                 |               |                 |                        |                    |                |

**NOTICE:** Forest Service will prepare reproductions from aerial photographic materials to the approximate size or scale requested and, because of shrinkage or expansion of paper caused by atmospheric or other conditions, will not be responsible for variations in scale. Since regular Departmental activities must be given precedence, there may be some delay in making reproductions. Normally, reproductions will be made and shipped within 30 days after receipt.

# INSTRUCTIONS

## IDENTIFICATION OF AERIAL PHOTOGRAPHY

Column 1. Enter the kind of reproduction such as enlargements, contact prints, photo-indexes, etc. the paper size of reproduction such as 26x26", 40x40", etc. and the scale of photograph desired such as 1 in. = 660 ft., or the enlargement factor shown below in the Enlargement Factor column. (Unless otherwise specified, reproductions will be on doubleweight, semimatte paper).

QUAN-  
TITY

Column 2. Enter the quantity or number of reproductions desired from each negative on a line.

1

| SYMBOL | ROLL NO. | EXPOSURE NO. |
|--------|----------|--------------|
| DJD    | 3A       | 96           |

Columns 3, 4 and 5. Enter the symbol, roll number, and the exposure number of the negative. Exposure numbers may be listed in inclusive sequences. This information is in the upper right corner of each photograph and may be obtained from photo-index sheets in the Regional Office, Forest Supervisors Office or Ranger Office where the area photographed is located.

## PRICES FOR AERIAL PHOTOGRAPHIC REPRODUCTIONS

Advance payment is required before photographic reproductions will be made. Shipments will not be made C.O.D. Payment should be made by check, money order, or draft payable to the Forest Service, U. S. D. A. Stamps will not be accepted.

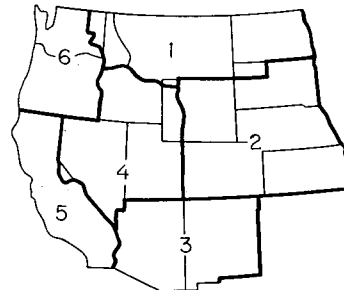
| *CONTACT PRINTS                                 |                    | ENLARGEMENTS         |                    |                    |                    |                    | PHOTO-INDEXES                                      |
|-------------------------------------------------|--------------------|----------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------------------------|
| Contact Prints Trimmed Additional 10 Cents Each |                    | Enlargement Factor   | 1.5                | 1.75               | 2.5                | 4                  | Usually 1 in. to 1 mi. Generally 20x24" Price Each |
| Size in Inches                                  | 10 X 10 Price Each | Paper Size in Inches | 14 X 14 Price Each | 18 X 18 Price Each | 26 X 26 Price Each | 40 X 40 Price Each |                                                    |
| QUANTITY                                        |                    | QUANTITY             |                    |                    |                    |                    |                                                    |
| First 25                                        | \$1.25             | First 25             | \$2.50             | \$2.75             | \$3.50             | \$8.00             | \$2.50 Per Sheet                                   |
| Excess over 25                                  | .90                | Excess over 25       | 2.00               | 2.25               | 2.75               | 7.00               |                                                    |

\*For Contact Prints on Polyester Material Add \$.50 Per Print.

## PHOTOGRAPHIC REPRODUCTIONS SHOWING CLASSIFIED AREAS WILL NOT BE SOLD WITHOUT MILITARY OR OTHER NECESSARY CLEARANCE

Inquiries and orders for Forest Service photography in the western United States within the respective numbered regions as shown on the map to the right should be addressed to the Regional Forester, U. S. Forest Service, as follows:

1. Federal Building, Missoula, Montana 59801
2. Federal Center Bldg. No. 85, Denver, Colorado 80225
3. Federal Building, 517 Gold St., S.W., Albuquerque, New Mexico 87101
4. Forest Service Bldg., Ogden, Utah 84403
5. 630 Sansome St., San Francisco, California 94111
6. Post Office Box 3623, Portland, Oregon 97208



For Alaska address: Regional Forester, U.S. Forest Service, P.O. Box 1628, Juneau, Alaska, 99801  
For eastern United States not shown on map at right, Address: Chief, Forest Service, U. S. Department of Agriculture, Washington, D. C. 20250

## PRICES FOR PHOTOGRAPHIC REPRODUCTIONS OTHER THAN AERIAL MINIMUM CHARGE \$1 PER ORDER

All sizes are approximate

| CLASS OF WORK AND SIZE                                                            | UNIT    | PRICE  | CLASS OF WORK AND SIZE                   | UNIT    | PRICE  |
|-----------------------------------------------------------------------------------|---------|--------|------------------------------------------|---------|--------|
| <u>Contact and Projection Prints</u>                                              |         |        | <u>Copy Negatives and Film Positives</u> |         |        |
| 4 x 5                                                                             | Ea.     | \$ .85 | 4 x 5                                    | Ea.     | \$1.75 |
| 5 x 7                                                                             | Ea.     | 1.05   | 5 x 7                                    | Ea.     | 1.90   |
| 8 x 10                                                                            | Ea.     | 1.30   | 8 x 10                                   | Ea.     | 2.50   |
| 11 x 14                                                                           | Ea.     | 2.20   |                                          |         |        |
| Larger Sizes                                                                      | Sq. Ft. | 2.00   | <u>Mounting</u>                          |         |        |
| Double weight paper - add 20% for air drying, spotting and finishing matte paper. |         |        | Cloth (plain)                            | Sq. Ft. | 1.15   |
|                                                                                   |         |        | Cardboard and wallboard                  | Sq. Ft. | 1.30   |

## AMERICAN SMELTING AND REFINING COMPANY

Tucson

Arizona

September 14, 1970

TO: Jerry Hazelton

SLC ph. (801) - 262-2451.

Re: Superior East Project

Dear Jerry:

Enclosed is a Xerox copy of a portion of the mesa AMS sheet showing our proposed color aerial photo coverage of the Superior East project.

It is my understanding that the color contact prints will be 9" x 9". I failed to note, however, the scale which you suggested for the contact prints. I would appreciate your advising me of the contact print scale.\*

Very truly yours,

W. E. Saegart

WES:mw

cc: R.J. Lacy  
J. D. Sell ✓  
W. L. Kurtz

\* ~~Scale of 1:24,000 (2)~~

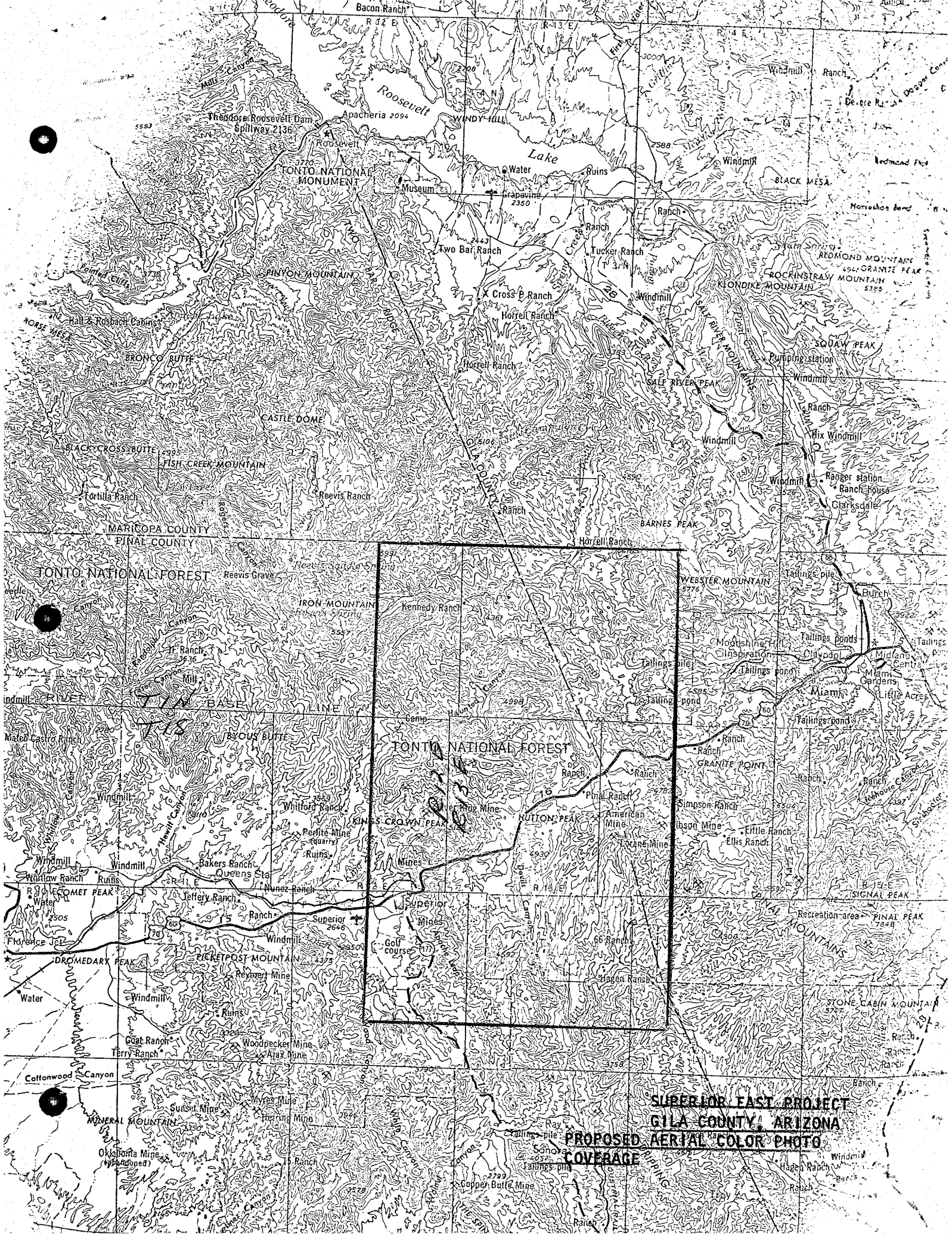
Telephone report Sept. 23, 1970

Color negative film blown on Sept. 22, 1970

9x9 prints at scale of 1:20,000.

Prints due in a week of Oct. 5.





**SUPERIOR EAST PROJECT**  
**GILA COUNTY, ARIZONA**  
**PROPOSED AERIAL COLOR PHOTO**  
**COVERAGE**

JDS.

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 9, 1971

TO: W. L. Kurtz

FROM: J. D. Sell

FOREST SERVICE AERIAL PHOTOS  
SUPERIOR - GLOBE AREA  
PINAL - GILA COUNTIES, ARIZONA

Photographs at a scale of 1:15840 are available from the Forest Service, Department of Agriculture, Washington, D. C. 20250 and from Ogden, Utah as shown on Attachment A, for the Superior 15-minute and Globe 15-minute quadrangles. The photo lines run north-south with photos on approximately one-mile centers. Likewise, the flight lines are on approximate one-mile spacings. The photos were flown in May and June 1967 and appear to be good quality. Quadrangle sheets, line numbers (from west to east) and photo numbers (from north to south) are as follows:

Tonto National Forest Aerial Planimetric Quadrangle 318 (Superior 15').  
Symbol ESA 1967

| <u>LINE</u> | <u>PHOTO NUMBERS</u>                      |
|-------------|-------------------------------------------|
| 33          | : 13-186 thru 13-201                      |
| 34          | : 13-136 thru 13-121                      |
| 35          | : 13- 91 thru 13-107                      |
| 36          | : 13- 26 thru 13- 9                       |
| 37          | : 1- 26 thru 1- 10                        |
| 38          | : 19- 65 thru 19- 81                      |
| 39          | : 5- 78 thru 5- 62                        |
| 40          | : 5- 28 thru 5- 31 and 21-154 thru 21-140 |
| 41          | : 5-153 thru 4-147 and 19-117 thru 19-128 |
| 42          | : 2- 24 thru 2- 9 and 19-146 thru 19-145  |

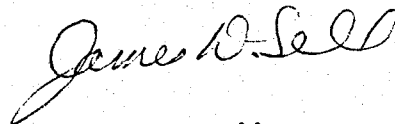
July 9, 1971

| <u>LINE</u>                                                    | <u>PHOTO NUMBERS</u>                                                                                |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Aerial Planimetric Quadrangle 319 (Globe 15') Symbol ESA 1967. |                                                                                                     |
| 43                                                             | : 2- 26 thru 2- 84                                                                                  |
| 44                                                             | : 9- 74 thru 9- 58                                                                                  |
| 45                                                             | : 18-174 thru 18-111                                                                                |
| 46                                                             | : 8- 91 thru 8- 75                                                                                  |
| 47                                                             | : 20- 80 thru 20- 74 and 9- 37 thru 9- 47                                                           |
| 48                                                             | : 8-177 thru 8-165                                                                                  |
| 49                                                             | : 8- 61 thru 8- 70 and 18-211 thru 8-218<br>with bottom section having extra of 18-203 thru 18-199. |
| 50                                                             | : 7-205 thru 7-168                                                                                  |
| 51                                                             | : 7-142 thru 7-157                                                                                  |
| 52                                                             | : 7- 23 thru 7- 8                                                                                   |

The main (dacite) portion of the Superior East project is covered by line 39, photos 5-70 thru 5-62 through line 44 photos 9-67 thru 9-58.

The main portion of the Globe-Miami mineralized district is covered by line 44, photos 9-70 thru 9-63 through line 52, photos 7-20 thru 7-13.

Photos and index are available for consultation at the District Ranger Station, 1100 North Broad, Globe, (Mr. John Lance).



James D. Sell

JDS:sh

cc: RBCummings

## TITLE 6500 - FINANCE AND ACCOUNTING

\*-EXHIBIT 1a--1

Photography Laboratory Services

## Price Schedule

Public, Federal, and Non-Federal Government Agencies  
January 1971

801 399.6121

1. Ordering. Reproductions of official photographs, held by the Forest Service in Ogden, Utah, may be purchased by private individuals and firms and by Government agencies (other than Forest Service) in accordance with rules and prices established under authority vested in the Photographic Sales Committee, as indicated in Agricultural Property Management Regulations, 104-45.5007, Photographic Sales Committee.

Aerial photographs should be identified by alphabetical symbol, roll, and exposure number. When this is unknown, include state, township, range, and section number location or sketch showing area of interest.

a. Orders from Private Individuals and Firms. Inquiries and orders should be addressed to the U. S. Forest Service, Division of Engineering, Federal Office Building, 324 25th Street, Ogden, Utah 84401, Attention: Map Sales Office. The Map Sales Office is open for over-the-counter sales from 8 a.m. to 12 noon and 1 p.m. to 5 p.m., Mondays through Fridays. Payment by check or money order made payable to the Forest Service, USDA, must accompany all orders. If any part of the materials ordered cannot be furnished, and its value is less than \$1.00, no refund will be made.

b. Orders from Any Government Agency Other Than Forest Service. Orders from other Federal agencies and non-Federal agencies (states, counties, cities) will be accepted on purchase orders. However, for Federal agencies engaged in project work on or adjacent to National Forest system land, if this work will be of eventual benefit to the Forest Service in the administration of said land, charges will be made in accordance with the price schedule for "Forest Service Only," (exhibit 1b). This situation could occur with Federal agencies such as the Geological Survey, Bureau of Reclamation, National Park Service, and Bureau of Land Management.

Minimum charge on all orders - \$1.75. Indicate scale desired.

2. Aerial Photographs. Indicate symbol, roll, and exposure number (i.e., EIX - 11:2). The quantity prices apply only (1) when entire order is shipped to one address, and (2) to those prints ordered in excess of 25 of the same size (i.e., 26 contact prints cost: 25 at ~~\$1.57~~ plus 1 at \$1.25 = \$45.00 for total cost).-\*

-#1.75

## TITLE 6500 - FINANCE AND ACCOUNTING

## \*-EXHIBIT 1a--2

a. Aerial Photo Mosaic Indexes. Double weight, semi-matte cost \$3.00 each, where available.

b. Spot Indexes. 1" = 1 mile, 15' planimetric map showing photo centers printed on diazo paper - \$.50 each.

c. Copy Negatives - \$6.00.

d. Contact 9" x 9" or 7" x 7" Prints. Black and white:

|           | <u>Double Weight<br/>Semi-Matte</u> | <u>Single Weight<br/>(Glossy)</u> | <u>Plastic-Coated<br/>(Waterproof)</u> | <u>Stable Base<br/>(Polyester)</u> |
|-----------|-------------------------------------|-----------------------------------|----------------------------------------|------------------------------------|
| 1 to 25   | \$1.75 ea.                          | \$1.75 ea.                        | \$1.75 ea.                             | \$2.50 ea.                         |
| 26 & Over | 1.25 ea.                            | 1.25 ea.                          | 1.25 ea.                               | 2.00 ea.                           |

e. Enlargements Made From 9" x 9" or 7" x 7" Negatives. Black and white:

|           | <u>14" x 14"</u> | <u>18" x 18"</u> | <u>20" x 20"</u> | <u>24" x 24"</u> |
|-----------|------------------|------------------|------------------|------------------|
| 1 to 25   | \$3.00 ea.       | \$3.50 ea.       | \$4.00 ea.       | \$4.50 ea.       |
| 26 & Over | 2.50 ea.         | 3.00 ea.         | 3.25 ea.         | 3.50 ea.         |

f. Contact 9" x 9" Prints.

(1) Color: \$5.50 each (no discount for quantity order).

(2) Lamination: matte or glossy surface available at \$.35 per print.

g. Enlargements. Color:

|             | <u>18" x 18"</u> | <u>20" x 20"</u> |
|-------------|------------------|------------------|
| First Print | \$15.00 ea.      | \$15.00 ea.      |
| 2 to 25     | 10.00 ea.        | 10.00 ea.        |
| 26 & Over   | 8.00 ea.         | 8.00 ea.         |

h. Glass Diapositives. Available plate thicknesses are 0.06", 0.13", and 0.25". Black and white:

|           |            |
|-----------|------------|
| 1 to 25   | \$6.50 ea. |
| 26 & Over | 6.00 ea.-* |

## TITLE 6500 - FINANCE AND ACCOUNTING

## \*-EXHIBIT 1a--3

3. Miscellaneous Products. Training kits on basic techniques in Forest photo-interpretation: \$20.00 each. Parts of the kit may be purchased as follows:

|                                              |            |
|----------------------------------------------|------------|
| Photo-interpretation aids, on film .....     | \$2.00 ea. |
| Problem photos and illustration prints ..... | 1.00 ea.   |
| Davis Percent Slope Scale .....              | 2.50 ea.   |

4. Special Services. All special laboratory work will be billed at \$12.00 per hour.

## PHOTOGRAPHY LABORATORY SERVICES:

Special color printing services for other Federal agencies when an agreed-to Memorandum of Understanding exists:

Selective printing of color negatives throughout one or more different rolls of film - \$3.00 per print.

Printing of color negatives in a series of six or more in sequence from the same roll:

|            |            |
|------------|------------|
| 1 to 25    | \$3.00 ea. |
| 26 to 100  | 2.50 ea.   |
| 101 to 500 | 2.00 ea.   |
| Over 500   | 1.75 ea.   |

## POLICY STATEMENT FOR BILLING OTHER FEDERAL AGENCIES ON AERIAL PHOTOGRAPHY SERVICES:

OPTION NO. 1: When a Memorandum of Understanding for project work has been prepared that includes photo services, the cost of said services will be billed as agreed in said Memorandum of Understanding.

OPTION NO. 2: Where other Federal agencies request color printing of their film, the cost will be computed on a sliding scale.

COST TO THE PUBLIC AND NON-FEDERAL AGENCIES: standard price of \$5.50 per exposure regardless of number.-\*



AMERICAN SMELTING AND REFINING COMPANY  
 SOUTHWESTERN EXPLORATION DIVISION  
 P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
 TELEPHONE 602-792-3010

July 22, 1971

U. S. Forest Service  
 Div. of Engineering  
 Federal Office Bldg.  
 324 - 25th Street  
 Ogden, Utah 84401

Attention: Map Sales Office

Dear Sir:

Enclosed is one dollar in cash for two "Spot Indexes" at a scale of 1" = 1 mile, 15' planimetric map showing photo centers printed on diazo paper at \$0.50 each, in the State of Arizona.

- |                                                                                                         |        |
|---------------------------------------------------------------------------------------------------------|--------|
| 1) Tonto National Forest Aerial Planimetric<br>Quadrangle 318, Superior 15' Quad., Symbol<br>ESA 1967 - | .50    |
| 2) Tonto National Forest Aerial Planimetric<br>Quadrangle 319, Globe 15' Quad, Symbol<br>ESA 1967 -     | .50    |
|                                                                                                         | \$1.00 |

Thank you for this service.

Sincerely,

*James D. Sell*  
 James D. Sell

JDS:sh  
 enc.





AMERICAN SMELTING AND REFINING COMPANY  
 SOUTHWESTERN EXPLORATION DIVISION  
 P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
 TELEPHONE 602-792-3010

August 3, 1971

U.S. Forest Service  
 Division of Engineering  
 Federal Office Building  
 324 - 25th Street  
 Ogden, Utah 84401

Atten: Map Sales Office

Dear Sir:

Enclosed is a check for the sum of Fifty-six Dollars and twenty-five cents (\$56.25) payable to the Forest Service, USDA, to cover the cost of the following photographs. They are to be black and white contact prints on double weight, semi-matte paper. The area covered is on the Tonto National Forest Aerial Planimetric Quadrangle 319 (Globe 15' Quad.), Arizona.

| <u>Symbol,</u> | <u>Roll-Exposure Numbers</u> | <u>Prints</u> |
|----------------|------------------------------|---------------|
| ESA,           | 8-82 thru 8-90               | = 9           |
| ESA,           | 9-37 thru 9-40               | = 4           |
| ESA,           | 9-65 thru 9-72               | = 8           |
| ESA,           | 18-176 thru 18-184           | = 9           |
| ESA,           | 20-74 thru 20-78             | = 5           |
| Total Prints   |                              | = 35          |

1 to 25 prints = 25 at \$1.75 each = \$43.75  
 26 and over = 10 at \$1.25 each = \$12.50  
 Total Order \$56.25

Sincerely,

*James D. Sell*  
 James D. Sell

JDS:sh  
 cc: WLKurtz  
 KAvondenSteinen

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

August 3, 1971

TO: W. L. Kurtz

FROM: J. D. Sell

FOREST SERVICE AERIAL PHOTOGRAPHS  
CASTLE DOME-COPPERCITIES AREA  
GILA COUNTY, ARIZONA

Black and white prints at a scale of 1:15,840, flown in 1967, have been ordered for the area between Castle Dome and Copper Cities. The area includes the Bohme-Coryell ground and the adjacent southern area.

Attached is a map showing the coverage. The planimetric quadrangle maps of the Globe and Superior 15-minute quadrangles showing the flight lines, roll and exposure numbers are on file in the drafting department.

*James D. Sell* / *JDS*

James D. Sell

JDS:sh

18-175

8-91

8-90

2-70

9-70

18-180

20-75

9-37

20-74

8-85

2-75

9-65

18-185

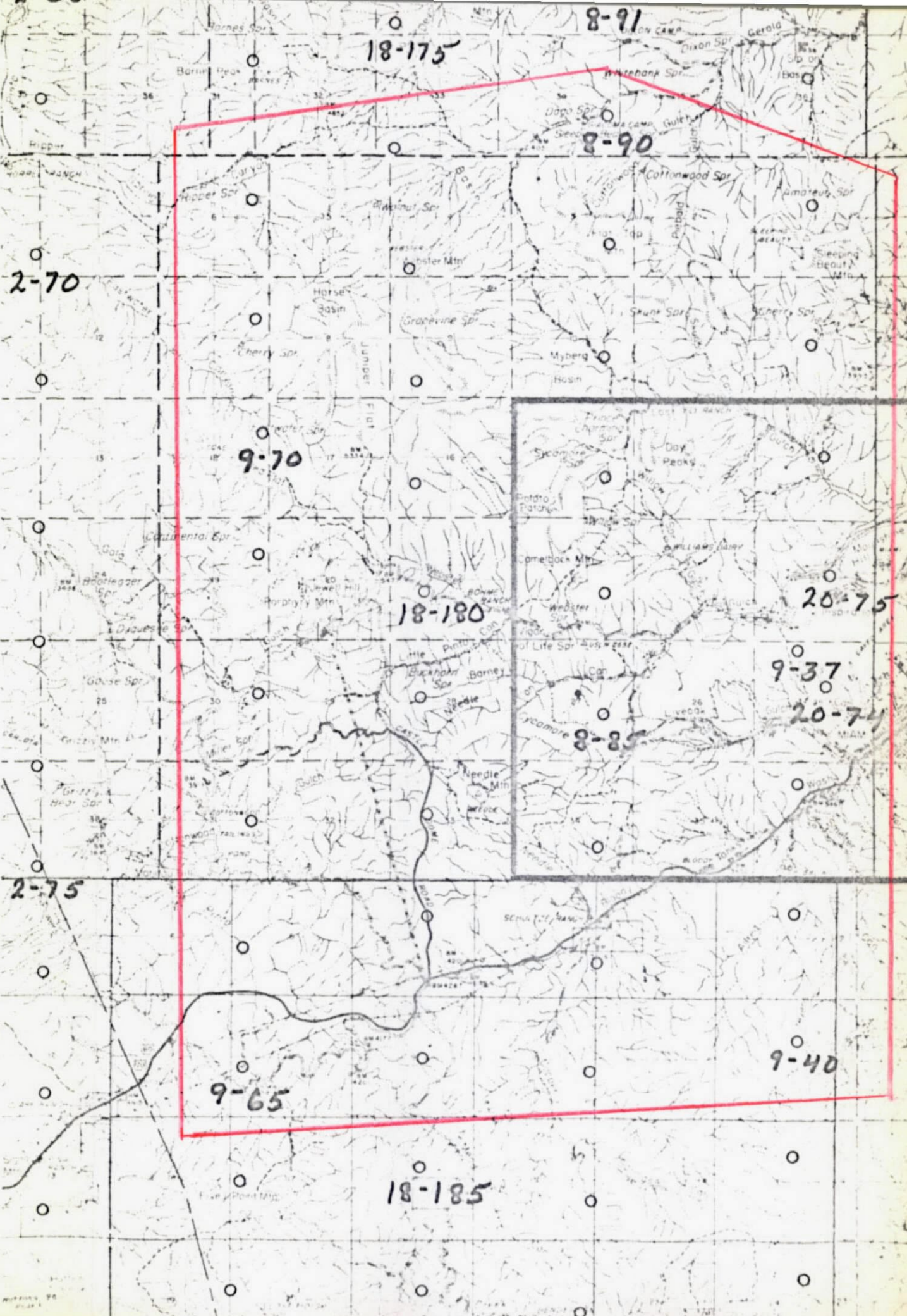
9-40

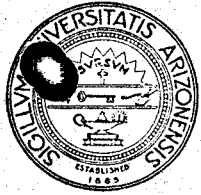
TIN

472000 FT

472000 FT  
MOUNTAIN ZONE

TIS





# THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85719

COLLEGE OF EARTH SCIENCES  
OFFICE OF ARID LANDS STUDIES  
1201 E. SPEEDWAY  
TEL. (602) 884-1955

December 22, 1971

Mr. John R. King  
American Smelting and Refining Co.  
Box 5747  
Tucson, Arizona

Dear Mr. King:

Copies of color aerial photography obtained by NASA high-altitude RB-57 and other aircraft are now obtainable through the EROS Data Center in Sioux Falls, South Dakota rather than through NASA Manned Spacecraft Center in Houston. With this change of procedure there is also now a charge of \$4.00 per 9" x 9" frame for duplicate color transparencies and \$3.00 per 9" x 9" frame for color prints to cover the cost of reproduction.

Our records indicate you had ordered the following imagery from us on August 16th:

| MISSION | ROLL | CAMERA | FILM | FRAME NUMBERS            |
|---------|------|--------|------|--------------------------|
| 155     | 48   |        |      | 1298, 1297, 1296<br>1295 |

SE 7

Because of the provision in our contract which does not allow us to conduct the necessary monetary transactions, we suggest you order your imagery directly from Sioux Falls at the address given below:

EROS Data Center  
U. S. Geological Survey  
132 S. Dakota Street  
Sioux Falls, S. D. 57198

Attention: Mr. William R. Campbell

-2-

If you have any questions, please do not hesitate to contact us-- sorry for the delay in this order.

Sincerely,



L. K. Lepley  
Project Manager  
Arizona Regional Ecological Test Site

LKL/jm

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

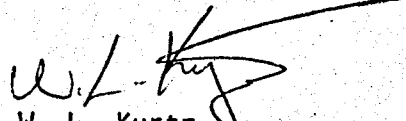
August 23, 1972

Mr. J. A. Staargaard  
Salt Lake City Office


Dacite Plateau

At the request of Mr. Collins I am forwarding you, under separate cover, the aerial photos we have of the Dacite Plateau area. Enclosed with this letter is a topographic map showing location of all drill holes, with bottom depths, for which we have information. Also enclosed is an index map showing the main published maps and literature pertaining to the Globe-Miami-Superior districts.

As you are no doubt aware, we have developed considerable knowledge of the Globe-Miami-Dacite Plateau-Superior areas and Mr. Sell and I will review this with you when you arrive in Tucson.

  
W. L. Kurtz

WLK:lad

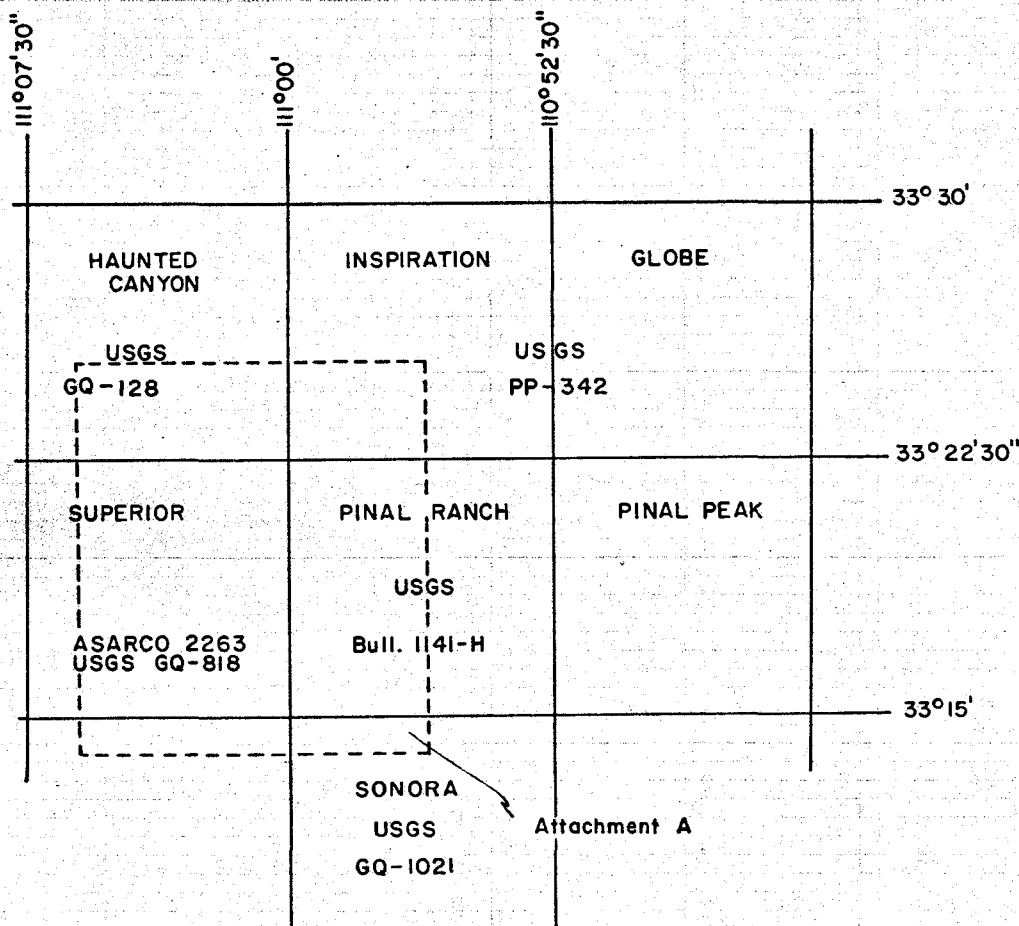
cc: JJCcollins  
JHCourtright  
JDSell 

Blind note to J.H.Courtright & J. D. Sell:

Mr. Collins requested all data (drill logs, assays, etc.) be forwarded to Staargaard in Salt Lake City. I have elected not to send what I consider Confidential Information to Salt Lake City, because Staargaard will be working with Jim Lindsay.

WLK





GQ-128. Geology of the Haunted Canyon Quadrangle by D.W. Peterson, 1960 (1 sheet)

PP-342. Geology and Ore Deposits of the Globe-Miami District, Arizona, by N.P. Peterson, 1962 (Plate I).

ASARCO 2263. Geologic Map of the Superior (7-1/2') Quadrangle, compiled by J.D. Sell, 1970. (File Memo Aa-16.A.16.19A, Map No. 2263.)

Bull. 1141-H. Geology of the Pinal Ranch Quadrangle, by N.P. Peterson, 1963 (Plate I)

GQ-818. Geologic Map of the Superior Quadrangle, Pinal County, Arizona, by D.W. Peterson, 1969. (1 sheet with text.) Note: Detailed 1:12000 mapping of the west half was released as USGS Map MF-253.

GQ-1021. Geologic Map of the Sonora Quadrangle, by H.R. Cornwall, et al, 1971. (1 sheet).

Geologic Quadrangle Mapping in  
Globe-Superior Area (7 1/2' Quadrangles)

**SUPERIOR EAST PROJECT**

PINAL & GILA COUNTIES

J.D.S.

1970  
revised 1972



Photo Coverage and Indexes sent to J. A. Staargaard -- 8/24/72

Forest Service Photos -- Globe-Miami District

ESA 8-82 thru 8-90  
ESA 9-37 thru 9-40  
ESA 9-65 thru 9-72  
ESA 18-176 thru 18-184  
ESA 20-74 thru 20-78  
With Index

AMS Project 120 Photos -- Ray to North of Globe

Photos 1772 thru 1787  
1814 thru 1826  
1894 thru 1910  
2643 thru 2653  
2733 thru 2745  
2777 thru 2790

With Index

NASA U-2 Flight Photos

Photo of Kearney-Superior Area  
Photo of Superior-Castle Dome Area  
No Index

ASARCO Salt Lake City -- Superior East Project

Lines 1 thru 12  
No Index

# ASARCO

Southwestern Exploration Division

July 14, 1977

TO: F. T. Graybeal

FROM: J. D. Sell

A-8 Photographed Core  
Superior East Project  
Pinal County, Arizona

Photographs of individual core boxes have been taken and processed of certain parts of drill hole A-8. The slides are stored in the basement.

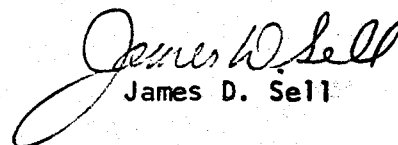
Boxes and footages with rock units are as follows:

TABLE 1 — Photographed A-8 Core

| <u>BOX</u>  |           | <u>FOOTAGE</u> |           | <u>ROCK UNIT</u>                            |
|-------------|-----------|----------------|-----------|---------------------------------------------|
| <u>From</u> | <u>To</u> | <u>From</u>    | <u>To</u> |                                             |
| 7           | 166*      | 70             | 1583      | Dacite                                      |
| 166         | 237       | 1583           | 2213      | Earlier Volcanics                           |
| 237         | 347       | 2213           | 3226      | Whitetail Conglomerate                      |
| 347         | 380       | 3226           | 3523      | S.B. of A-2 Type                            |
| 389         | 396       | 3595           | 3677      | S.B. of A-2 Type                            |
| 487         | 520       | 4506           | 4852      | Pinal Schist and Porphyry<br>w/minor q.s.v. |
| 524         | 526 T.D.  | 4882           | 4907 T.D. | As above                                    |

\*Photos of Boxes 35A & 99 are missing.

Mr. Stone may have taken pictures of part of the missing areas, but if so the slides have not been found.

  
James D. Sell

JDS:1b

July 14, 1977

TO: F. T. Graybeal

FROM: J. D. Sell

A-9 Photographed Core  
Superior East Project  
Pinal County, Arizona

Photographs of all the core of drill hole A-9 which was to be split have been taken, marked, and boxed. The slides are stored in the basement library.

Boxes and footages with rock units are as follows:

TABLE 1 — Photographed A-9 Core

| <u>BOX</u>  |           | <u>FOOTAGE</u> |           | <u>ROCK UNIT</u>       |
|-------------|-----------|----------------|-----------|------------------------|
| <u>From</u> | <u>To</u> | <u>From</u>    | <u>To</u> |                        |
| 234         |           | 2186-1/2       | 2193      | Earlier Volcanics      |
| 234         | 237       | 2193           | 2223      | Whitetail Conglomerate |
| 245         | 248       | 2286-1/2       | 2322-1/2  | Whitetail Conglomerate |
| 256         | 259       | 2385           | 2422      | Whitetail Conglomerate |
| 267         | 270       | 2486           | 2522      | Whitetail Conglomerate |
| 278         | 281       | 2584-1/2       | 2629      | Whitetail Conglomerate |
| 289         | 293       | 2684           | 2728      | Whitetail Conglomerate |
| 301         | 304       | 2787           | 2820      | Whitetail Conglomerate |
| 313         | 316       | 2889           | 2924      | Whitetail Conglomerate |
| 324         | 328       | 2985           | 3027      | Whitetail Conglomerate |
| 335         | 338       | 3089           | 3124      | Whitetail Conglomerate |
| 346         | 349       | 3188           | 3223      | Whitetail Conglomerate |
| 357         | 360       | 3283           | 3320      | S.B. of M-1A Type      |
| 368         | 372       | 3383           | 3427      | S.B. of A-2 Type       |
| 380         | 383       | 3488           | 3523      | S.B. of A-2 Type       |

F. T. Graybeal

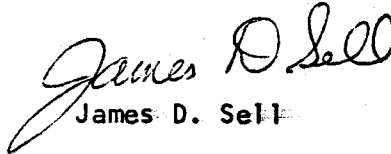
- 2 -

July 14, 1977

|     |          |      |           |
|-----|----------|------|-----------|
| 390 | 400      | 3584 | 3682      |
| 400 | 401      | 3682 | 3693      |
| 401 | 438      | 3693 | 4044      |
| 438 | 533*T.D. | 4044 | 4903 T.D. |

S.B. of A-2 Type  
Basal Fault Zone  
Pinal Schist, Oxidized  
Pinal Schist & Porphyry  
w/q.s.v.

\*Photo of Box 493 missing.

  
James D. Sell

JDS:1b

Superior East  
Core Photos  
Cloud

Color Photos

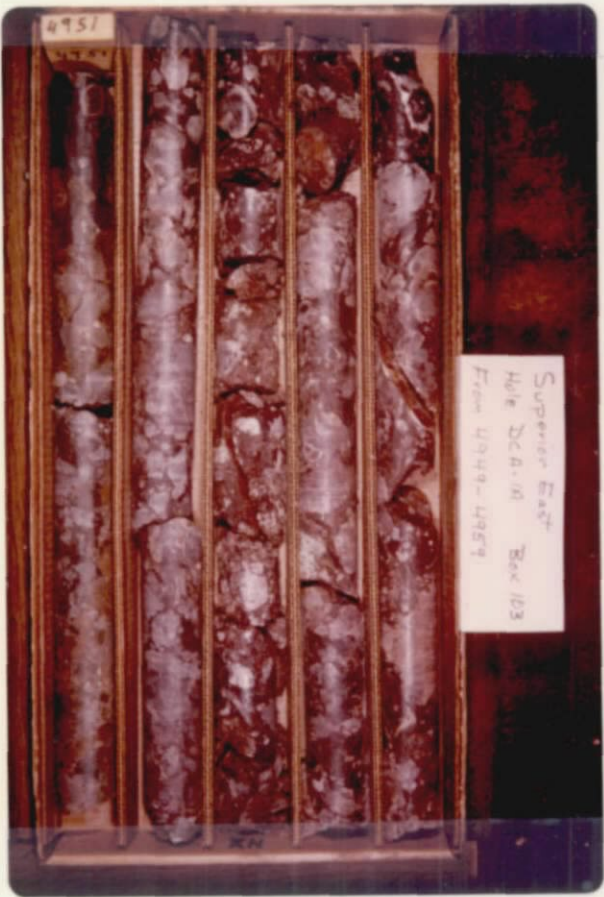








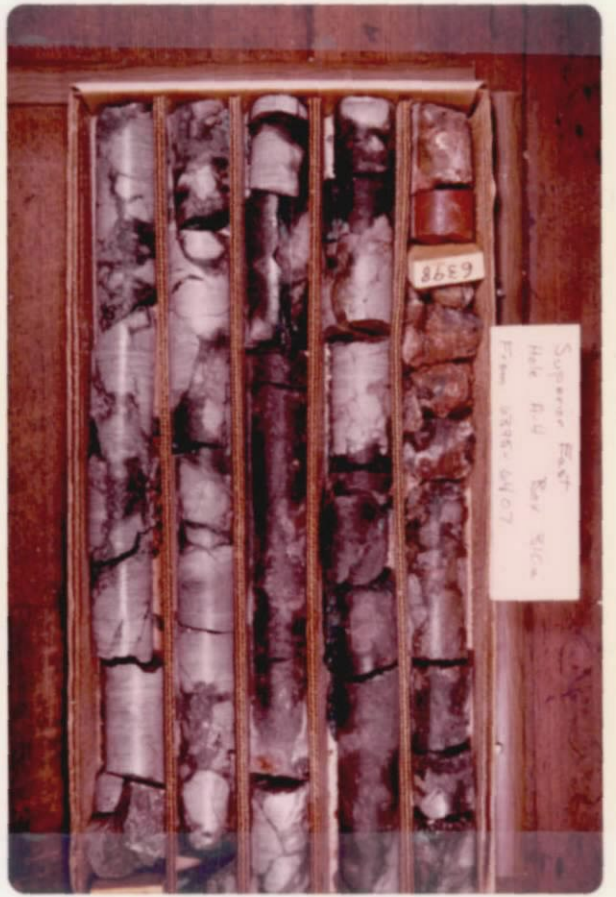












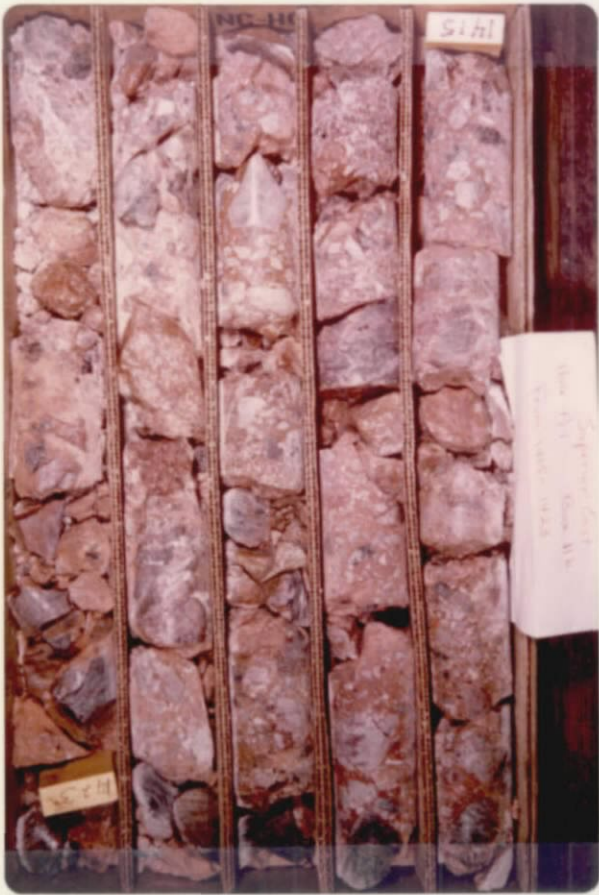












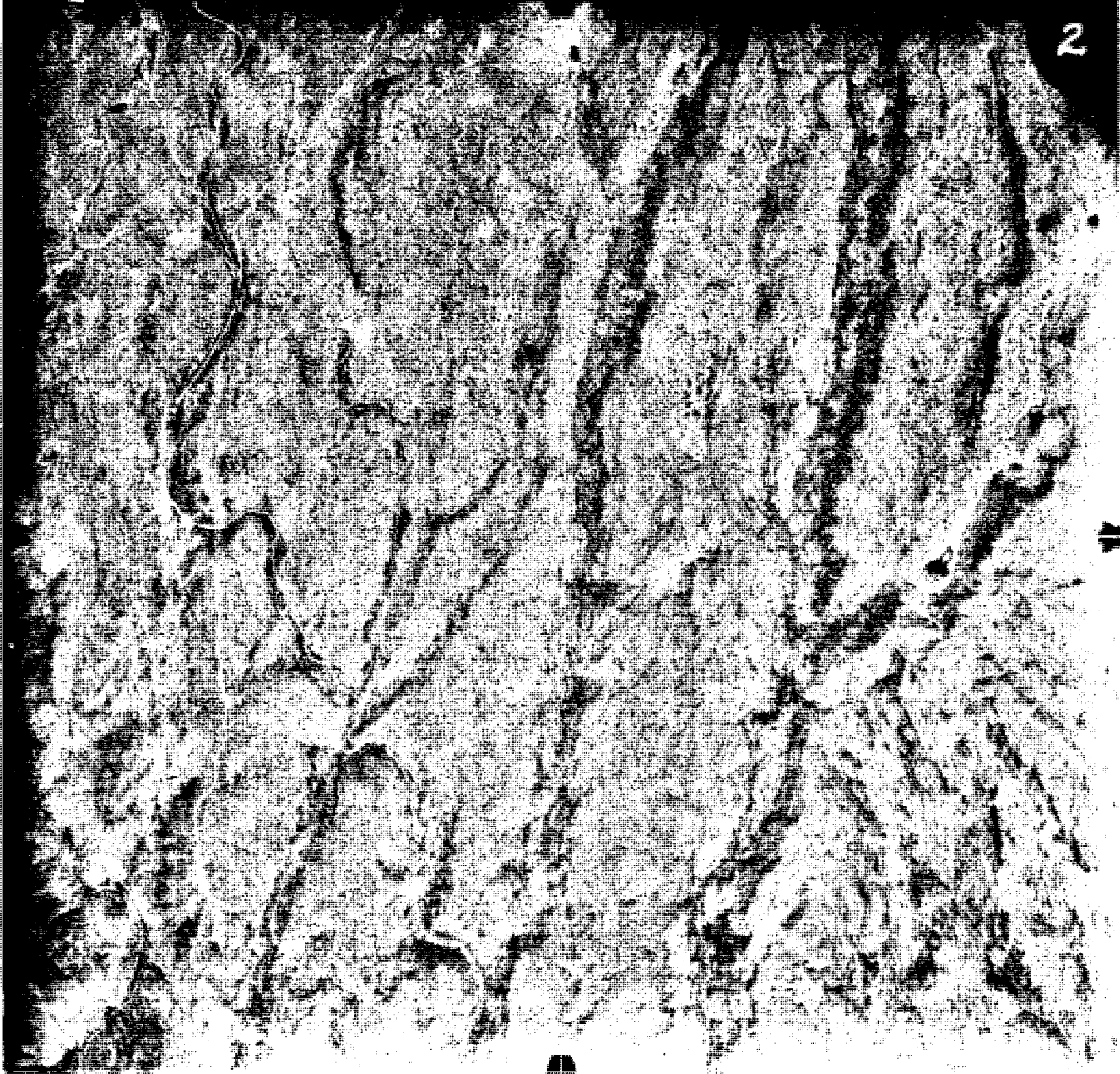




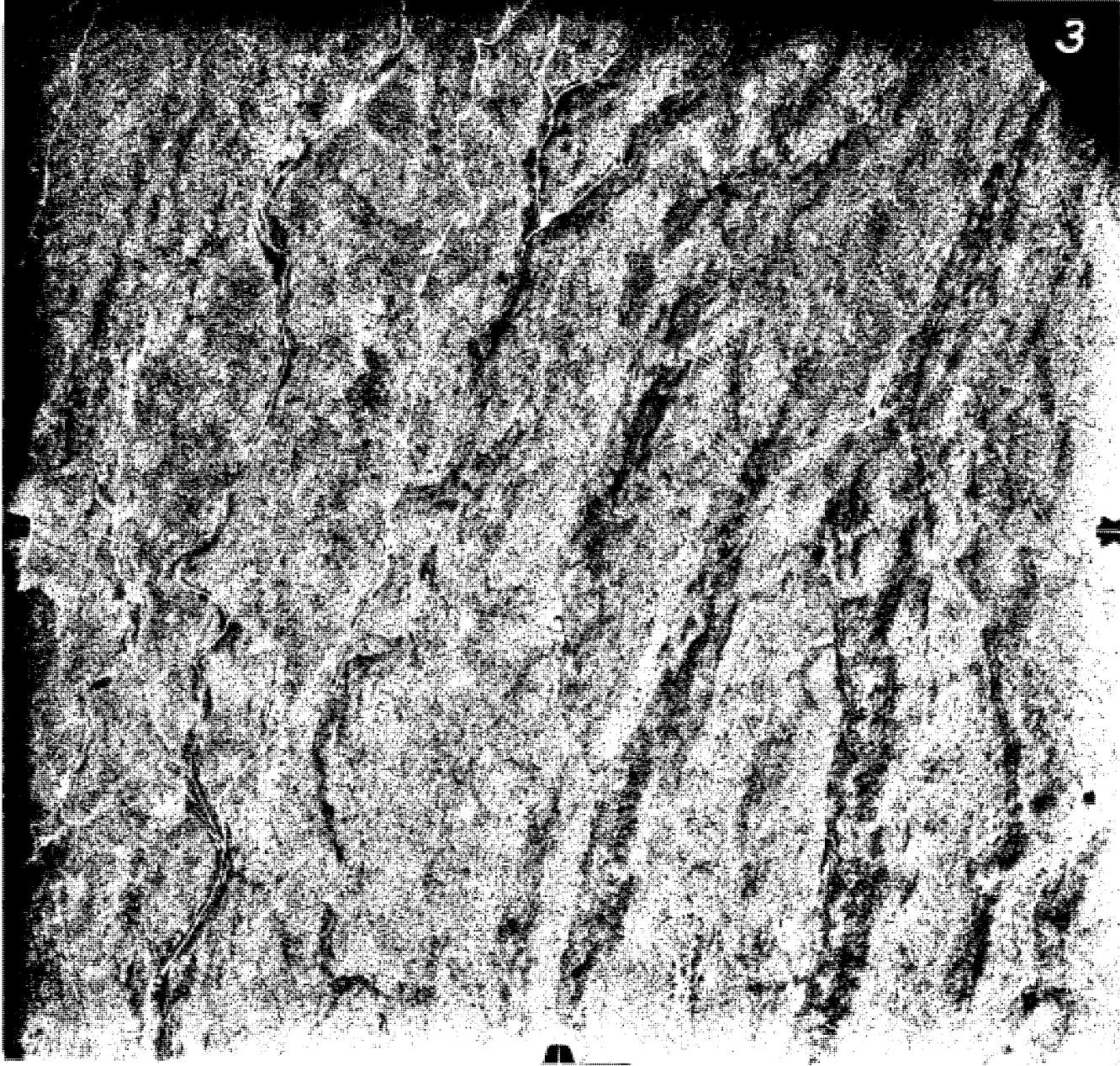
W  
S

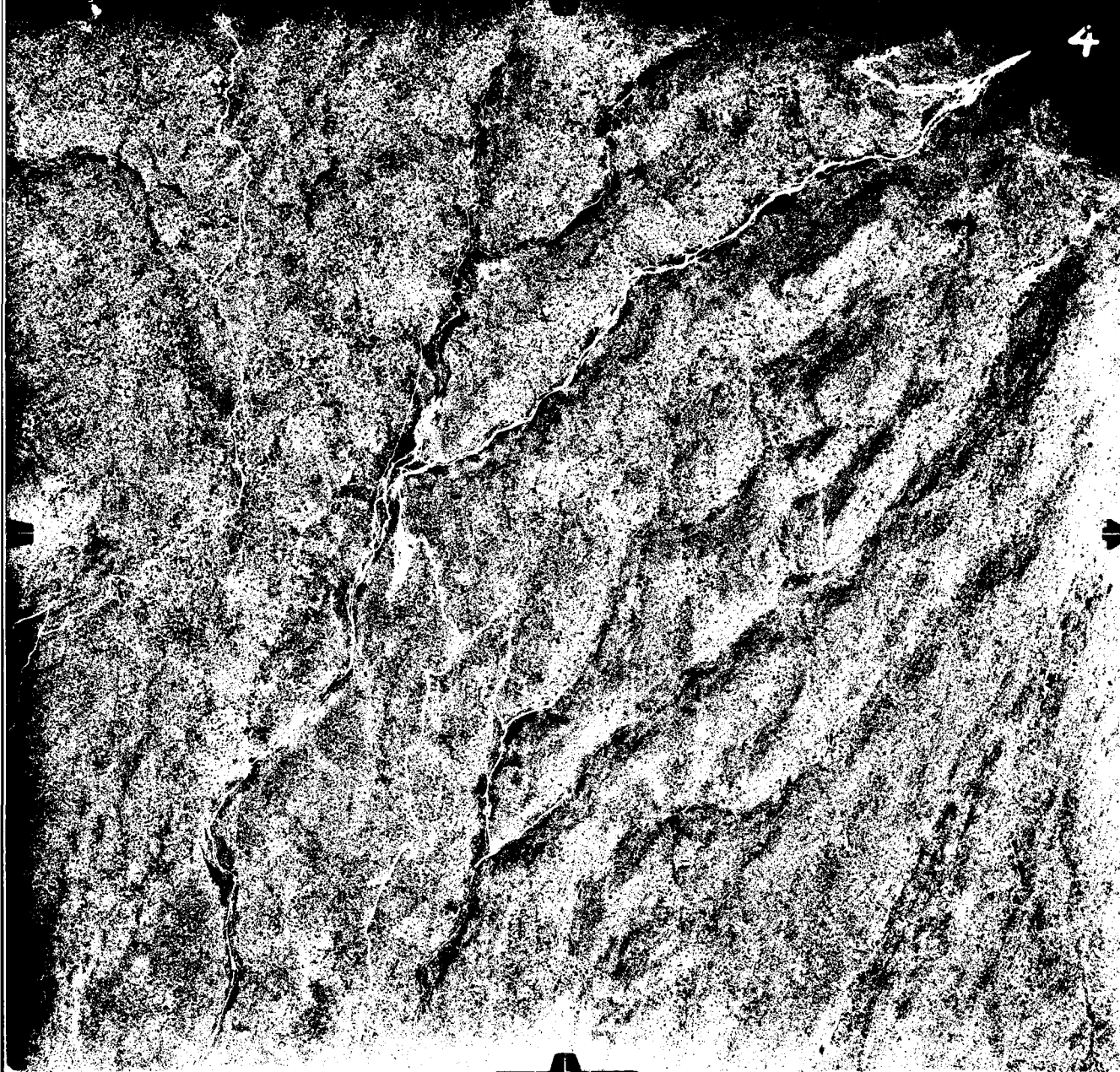
Jim Sell





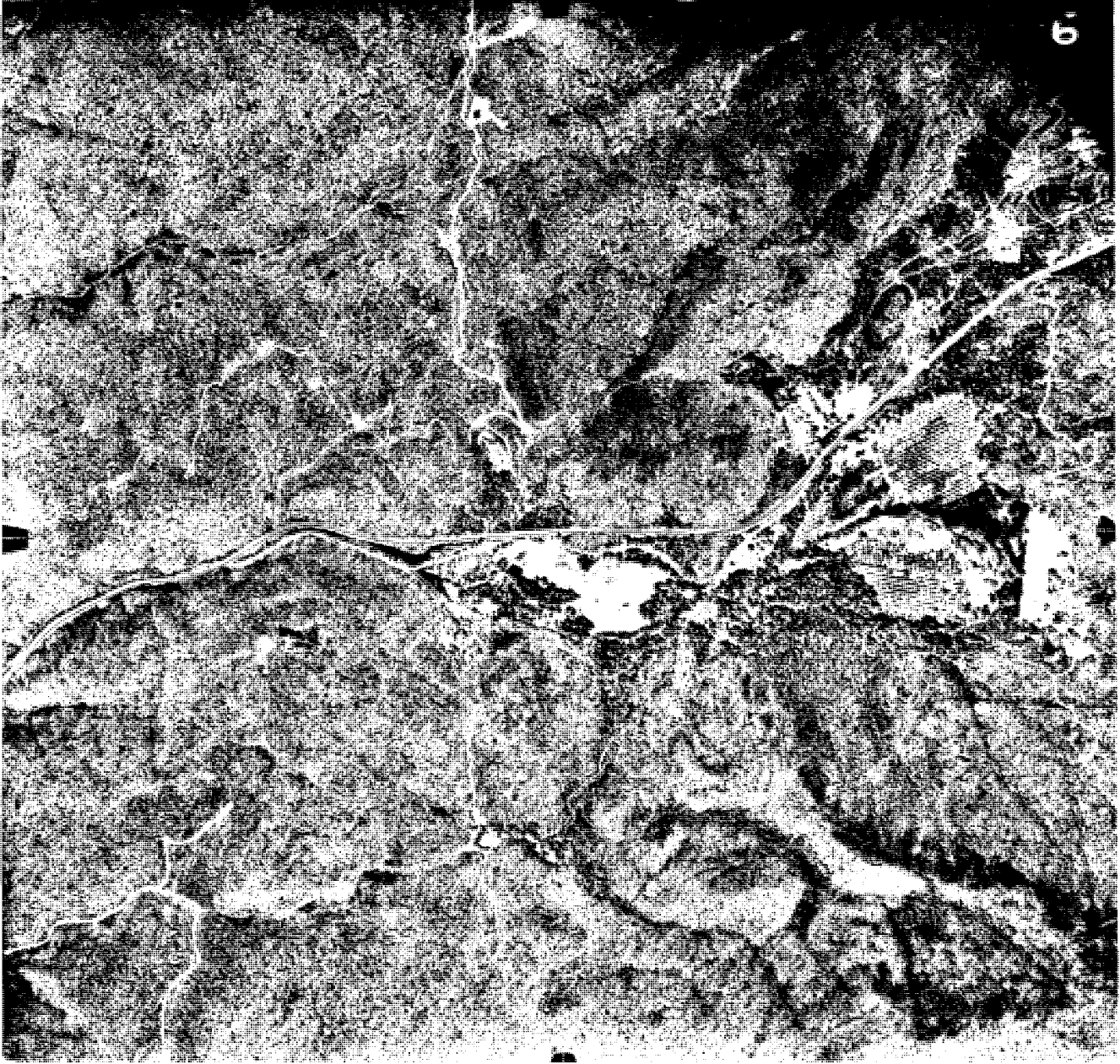


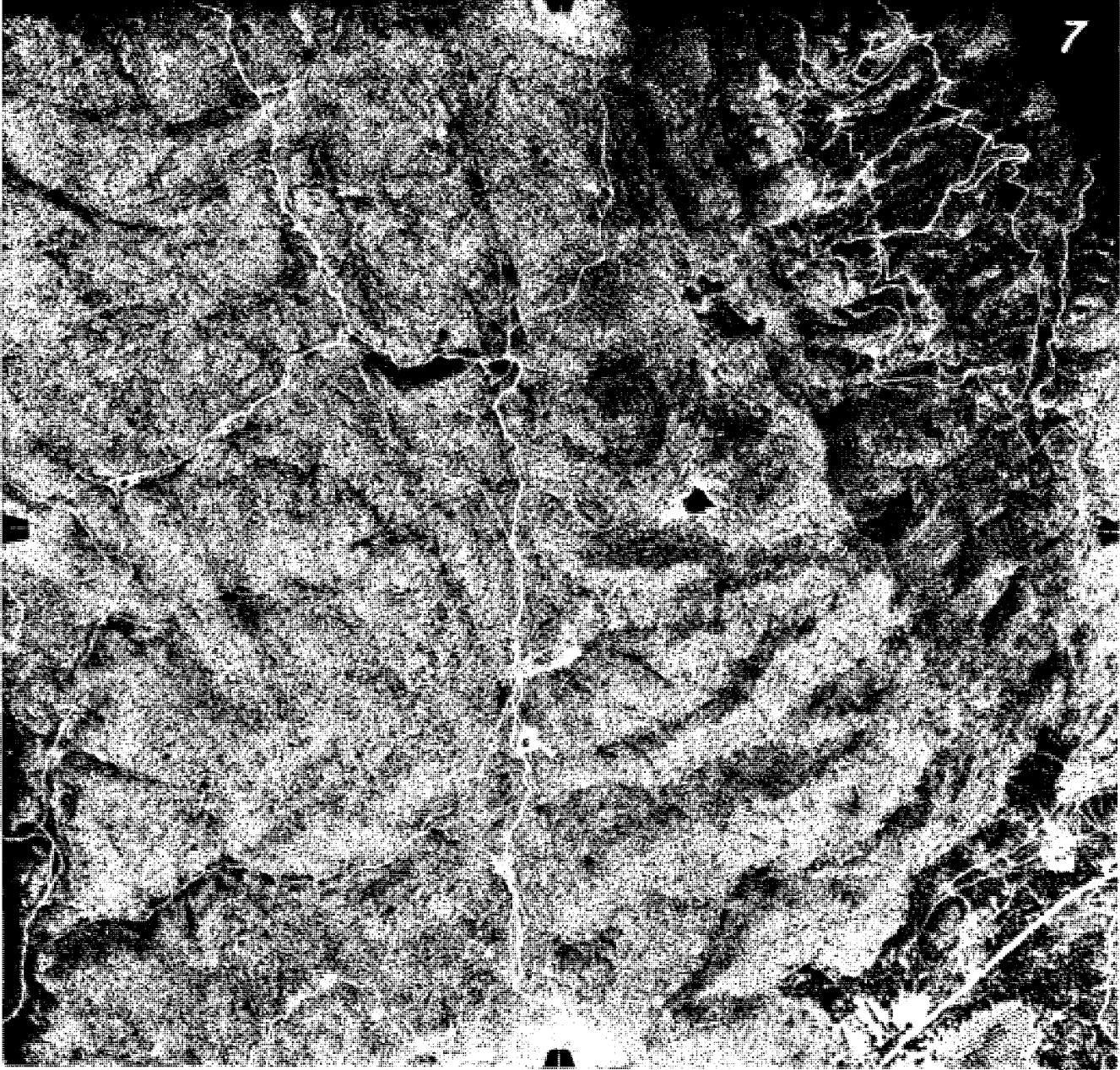


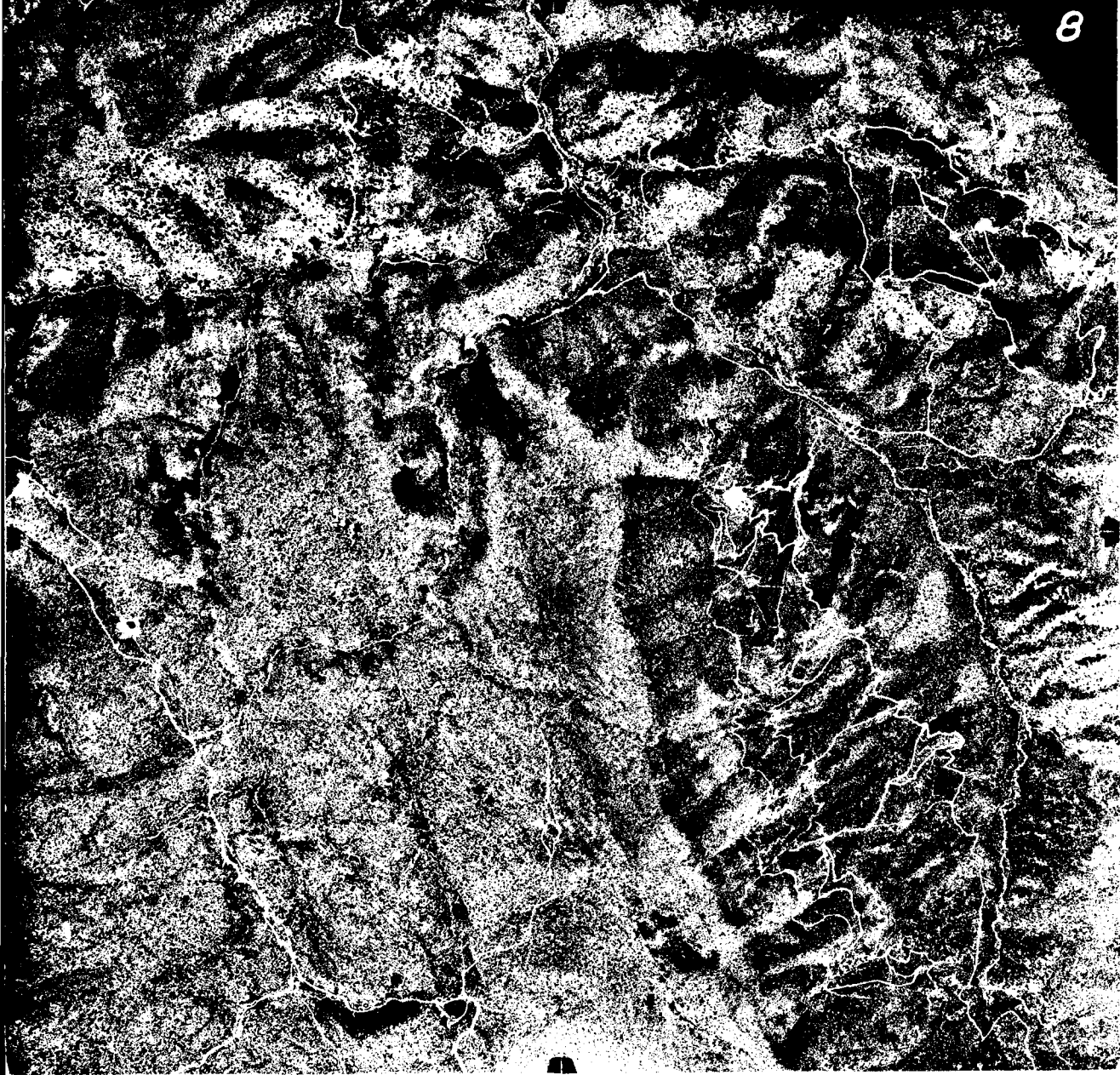








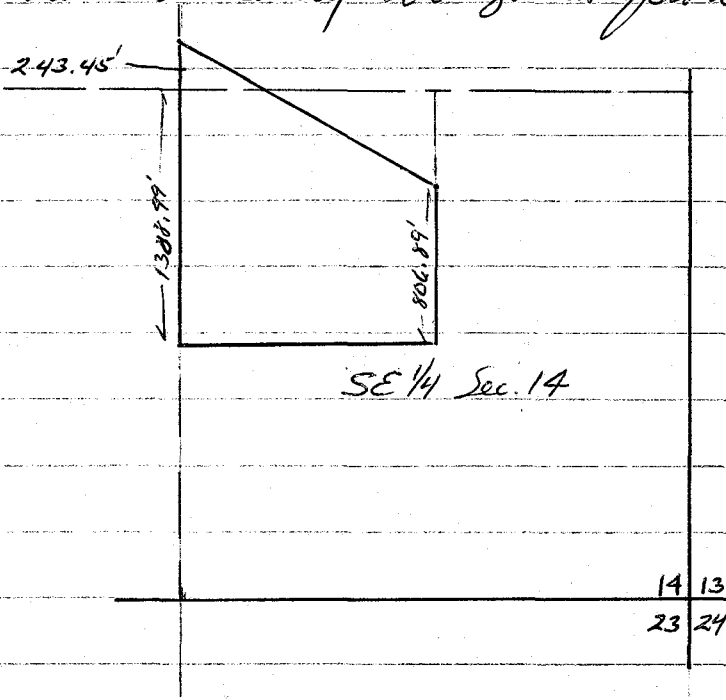




Star Route Box 18  
Miami, Oregon 975539

Q I Ranch area:

New block recently bought from G Craig: (1964?).

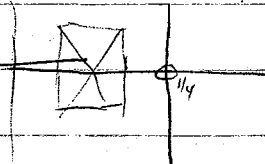


also have patented land in:

NW 1/4 NW 1/4 Section 21

SE 1/4 SE 1/4 Section 21

~~SE 1/4 NW 1/4 Section 28~~





\*Sat. Dec. 5, 1970

via  
pr



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX ~~8747~~, TUCSON, ARIZONA 85703  
8747

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

December 23, 1970

Mrs. Carl M. Webb  
Star Route  
Miami, Arizona 85539

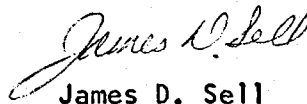
Dear Mrs. Webb:

It was a pleasure for myself and several others of the company to have worked with and known your husband when he assisted Mr. Harvey Smith of Scottsdale in surveying for some claims on which your ranch has the grazing lease.

The company project continues in the area and the company group will be doing additional work. We will keep in touch with you and hopefully be of some further service to you in the future.

Our sincere condolences to you and your son.

Sincerely,

  
James D. Sell

JDS:mw



MOTORS INSURANCE CORPORATION  
CIM INSURANCE CORPORATION

1121 EAST MISSOURI  
PHOENIX, ARIZONA 85014

TEL. NO. 277-4476

March 31, 1971

Mr. James D. Sell  
American Smelting & Refining Company  
P. O. Box 5747  
Tucson, Arizona

Dear Mr. Sell:

J I Ranch - Mrs. Carl Webb

You expressed an interest in my sister-in-law's ranch on the Miami-Superior Highway.

I have her authority to offer the patented land, the improvements thereon, the cattle, and the grazing permits for a total price of \$300,000.00. If you wish to discuss it further, please feel free to call me at the above telephone number or write to me at my residence address shown below.

Yours truly,



Wilbur C. Webb  
Claim Manager

Residence address:

4614 North 31st Place  
Phoenix, Az. 85016

Personal

*brother to Carl*

*Consent to Carl Webb*

MILTON D. WEBB  
HEBBARD & WEBB

RANCH BROKER -  
MORTGAGE LOANS  
OFFICE . . . 275-5715  
RESIDENCE 945-7721

5001 EAST WASHINGTON  
TOVREA STOCKYARDS BLDG.  
PHOENIX, ARIZONA 85034

*Copies to WES, JDS, BHC*



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

April 1, 1971

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Wilbur C. Webb  
4614 North 31st Street  
Phoenix, Arizona 85016

Re: Superior East  
J 1 Ranch

Dear Mr. Webb:

In response to your letter of March 31, 1971 to Mr. J. D. Sell, we would be pleased if you could give us further details of the property:

The description and acreage as to Patented Land, Grazing Permit or Lease.

The improvements and how many animal units the ranch could support.

I enjoyed meeting you last Monday.

Yours truly,

*WES  
JDS:LL  
RBC:sh*

*R. B. Crist*  
R. B. Crist

*GRAZING LOAN PLUM*

JDS

MOTORS INSURANCE CORPORATION  
CIM INSURANCE CORPORATION

1121 EAST MISSOURI  
PHOENIX, ARIZONA 85014

TEL. No. 277-4476

April 6, 1971

Mr. R. B. Crist, Property Manager  
American Smelting and Refining Company  
P. O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Crist:

J I Ranch - Mrs. Carl Webb

In reply to your letter of April 1, 1971, details of the property are as follows:

The patented land consists of approximately 315 acres. One hundred fifty-five of these acres are at the headquarters home plot located in Sections 14 and 23, Township 1, South Range 13 East, Gila and Salt River Meridian, Pinal County, Arizona. In addition, there are four other 40-acre plots, all in Township 2, South Range 13 East, Gila and Salt River Meridian, Pinal County, Arizona; one of them is in Section 5, two are in Section 21, and the other one in Section 28 --all in Township 2 indicated above.

The improvements consist of the headquarters house, barns, corrals, fences, springs, and dirt water tanks distributed over the range. The water is protected by water rights issued by the State Water Commission and properly recorded.

The ranch carries a term permit for 355 head of grown cattle plus their natural increase. The permit is full at present. The cattle are grazed on over 30,000 acres of land, two-thirds of which is U. S. Forest Service and one third Arizona State land.

Actually, you met my cousin Milton Webb at the ranch, but I will be happy to meet with you in person or by phone or letter if you desire to discuss the matter further.

Yours truly,



W. C. Webb  
Claim Manager

WCW:jc



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

April 27, 1971

Mr. W. C. Webb  
1121 East Missouri  
Phoenix, Arizona 85014

J I Ranch  
Mrs. Carl Webb

Dear Mr. Webb:

We would appreciate the legal descriptions of the grazing leases that the ranch holds on U. S. Forest Service and State Lands.

I talked with Mrs. Webb yesterday regarding access to Sec. 5, T 2 S, R 13 E. (near one of the forties). Although I told her it was decidedly premature, we did discuss the possibility of an option to purchase.

In the meantime, however, we would like to become as familiar as possible with what might govern the terms.

Thank you.

*R. B. Crist*  
R. B. Crist

RBC:sh

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

May 10, 1971

MEMORANDUM

TO: R. B. Crist

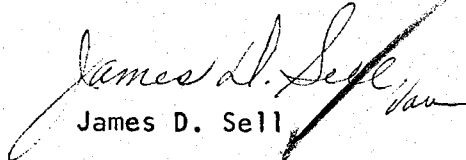
FROM: J. D. Sell

Grazing Permit  
J I Ranch  
Pinal-Gila Counties, Arizona

While chatting with Mrs. Carl (Betty) Webb regarding her ranch, etc., she gave me a copy of their 1970 Grazing Permit from the Tonto National Forest, which I submit to you.

As noted, the tenure lease on the allotment is effective until December 31, 1975.

The Forest Service allotment is for 256 cows and bulls full time, and an additional 99 on the State Lease lands, giving a total of 355 cows year long (355 CYL) permit. A few yearlings can also be kept full time to replace older cows and keep the allotment full.

  
James D. Sell

JDS:van  
Attch.

Tonto N.F.  
230 N. First Avenue  
Phoenix, Arizona

2230 Permits  
Webb, M. Carl &  
Florence E.  
June 18, 1970

Mr. M. Carl Webb  
Star Route  
Phoenix, Arizona 85509

Dear Mr. Webb:

Attached is a revised permit for the Devils Canyon Allotment. This permit supersedes and cancels permit issued April 22, 1966 by R.E. Courtney, Forest Supervisor.

We are happy that we are able to prepare the new term permit to reflect the number of livestock that have used the allotment the past six years under a pasture management system that includes your total operation.

The permit number is effective so long as the State lands are included as a part of the total operation. If for some reason the non-National Forest lands should be excluded the grazing permit will have to be revised.

Sincerely,

John B Blackwood

JOHN B. BLACKWOOD,  
Deputy Forest Supervisor

Enclosure

cc: Globe

WJFleishman:rd

W. J. Fleishman



U.S.A. - FOREST SERVICE

PERMIT NUMBER

GRAZING PERMIT - PARTS 1 AND 2

12 3 10

Part 1

Edward M. Vico  
(Name of Permittee)

of STAR ROUTE, MIAMI, ARIZONA  
(Post Office Address)

25550

Hereinafter called the permittee, is hereby authorized to graze livestock owned by the permittee upon Forest Service administered lands within the TENTO National Forest, National (Strike out one)

subject to the following provisions and requirements:

1. Description of range. The animals shall be grazed upon the area ~~described as follows on attached pages~~ as delineated on the attached map dated 1/16/63 and Revised... which is part of this permit (Strike out item or items not applicable). to date of permit

2. The number and kind of livestock, kind of permit, period of use, and grazing allotment on which the livestock are permitted to graze are as follows, unless modified by the Forest Service in the Bill for Collection:

| NUMBER OF LIVESTOCK | KIND OF LIVESTOCK                                    | KIND OF PERMIT (Term, Temp.) | PERIOD OF USE |       | GRAZING ALLOTMENT       |
|---------------------|------------------------------------------------------|------------------------------|---------------|-------|-------------------------|
|                     |                                                      |                              | FROM —        | TO —  |                         |
| 255                 | CATTLE                                               | TERM                         | 1/1           | 12/31 | DEVILS CANYON ALLOTMENT |
| 100                 | YEARLINGS                                            | TERM                         | 1/1           | 5/31  | DEVILS CANYON ALLOTMENT |
| 20                  | YEARLINGS                                            | TERM                         | 1/1           | 11/30 | DEVILS CANYON ALLOTMENT |
|                     | YEARLINGS ARE THE PROGENY OF THE CATTLE OWNED ABOVE. |                              |               |       |                         |

3. It is fully understood and agreed that this grazing permit may be revoked or suspended, in whole or in part, for failure to comply with any of the provisions and requirements specified in Parts 1, 2, and 3 hereof, or any of the regulations of the Secretary of Agriculture on which this permit is based, or the instructions of Forest officers issued thereunder; or for knowingly and willfully making a false statement or representation in the permittee's grazing application, and amendments thereto.

M. Carl Smith  
SIGNATURE OF PERMITTEE OR HIS AUTHORIZED AGENT

3-10-69  
DATE

John B. Blackburn  
SIGNATURE OF FOREST OFFICER

TITLE  
DEPUTY FOREST SUPERVISOR

DATE  
JUN 13 1969

## PART - 2 GENERAL PROVISIONS AND REQUIREMENTS.

**1. Bill for Collection.** Each year prior to the beginning of the grazing season, the Forest Supervisor will send the permittee a Bill for Collection specifying, for the current year, the kind and number of animals allowed to graze, the period of use, the grazing allotment, and the grazing fees. This bill, when paid, becomes part of this permit.

**2. Payment of Fees.** The permittee will deposit his payment for grazing fees with the designated Forest Service collection officer not later than the date specified in the annual Bill for Collection. The permittee will not allow his livestock to enter upon Forest Service administered lands until this permit is validated by paying the fees specified in the Bill for Collection.

**3. Validation of Permit.** The issuance of a Bill for Collection and payment of fees will validate this permit for the number and kind of livestock, grazing allotment, and period of use for the particular year.

**4. Tenure of Permit.**

(a) The TERM portion of this permit is effective until DECEMBER 31, 1975, unless waived, cancelled, revoked; or otherwise terminated as provided herein. It entitles its holder to first priority for its renewal at the expiration of this term permit period.

(b) The TEMPORARY portion of this permit terminates with the period of use specified herein unless it is extended in whole or in part by the Forest Supervisor. Extension may be made by issuance and payment of a Bill for Collection.

**5. Ownership Requirement.** Only livestock owned by the permittee are authorized to graze under this permit.

**6. Range and Livestock Management.**

(a) The permittee will carry out the provisions of the range management plans or other instructions issued by the Forest officer in charge for the area under permit, and will require his employees, agents, and contractors and sub-contractors to do likewise.

(b) The number of livestock and period of use specified in the permit or Bill for Collection may be adjusted when determined by the Forest Supervisor in charge to be needed for resource protection. Except in extreme emergencies where resource conditions are being seriously affected by livestock use, or other factors such as fire, drought, or insect damage, notice of a scheduled reduction of numbers of livestock or period of use under a term permit will be given one (1) full year before a reduction in permitted numbers or period of use becomes effective. This does not apply to annual adjustment in grazing as provided for in Section 6(c).

(c) When in the judgment of the Forest officer in charge, the forage is not ready to be grazed at the beginning of the designated grazing season, the permittee, upon request of the Forest officer, will defer placing his livestock on the grazing allotment to avoid damage to the resources. The permittee will remove his livestock from Forest Service administered lands before the expiration of the designated grazing season upon request

of the Forest officer in charge when, in his judgment, further grazing would damage the resources.

(d) The permittee will allow only the numbers and kind of livestock permitted hereunder to graze upon Forest Service administered lands within the grazing allotment and during the period specified in the permit or the Bill for Collection. He will not allow his livestock to intrude on any other areas of Forest Service administered lands.

(e) The Forest Supervisor may, at any time, place or fasten or require the permittee to place or fasten upon livestock covered by this permit appropriate marks or tags which will identify them as livestock permitted to graze on lands administered by the Forest Service.

(f) Only livestock marked or branded as shown in the application upon which this permit is based, and as may be required under Section 6(e), will be allowed to graze under this permit unless the permittee has advance written approval from the Forest Supervisor to do otherwise.

(g) The permittee will pay the costs of, perform, or otherwise provide for, his proportionate share of cooperative improvements and management practices on the permitted area when determined by the Forest Supervisor that such improvements and practices are essential to proper protection and management of the resources administered by the Forest Service.

**7. Fire Protection.** The permittee, his agents and employees, and his contractors and subcontractors will take all reasonable precautions to prevent, make diligent efforts to suppress, and report promptly all fires on or endangering Forest Service administered land.

**8. General.**

(a) The permittee will protect the land and property of the United States covered by and used in connection with this permit. He will pay the United States for any damage to its property resulting from negligence or from violation of the provisions and requirements of this permit or any law or regulation applicable to the National Forests or National Grasslands, by the permittee, by his agents and employees when acting within the scope of their employment, or by his contractors and sub-contractors.

(b) The Forest Supervisor may at any time require the permittee to give good and sufficient bond to insure payment for all damages sustained by the United States through the permittee's failure to comply with the provisions and requirements of this permit or the regulations of the Secretary on which it is based.

(c) This permit will terminate whenever the area described in this permit is withdrawn from the National Forest or National Grassland by land exchange, modification of boundaries, or otherwise, or whenever the area described in this permit is needed by the Government for some other form of use.

(d) This permit shall not be transferred or assigned in whole or in part.

(e) This permit includes the requirements and provisions of Part 3 hereof, consisting of pages, through, which follow.

GRAZING PERMIT - PART 3

PERMIT NUMBER

12 010

Special Provisions and Requirements

CAZALISE

25 CWT. 201 YLS 1/1-5/31 AND 25 YLS 1/1-11/30

This permit provides for grazing of ~~25 CWT. 201 YLS 1/1-5/31 AND 25 YLS 1/1-11/30~~ for the grazing period

..... to ..... on Forest Service administered land and land controlled by the permittee which together form a natural grazing allotment. The use by these livestock will be approximately .....% on Forest Service administered land and .....% on the lands controlled by the permittee.

The livestock will graze only upon the specified grazing allotment and only during the permitted grazing period. It is further understood and agreed that if the permittee allows grazing on this allotment in excess of the total allotted months authorized, this provision shall become null and void irrespective of whether the permit is suspended or revoked. Any grazing use in excess of that authorized under permit, will be treated as a grazing trespass.

GRAZING PERMIT - PART 3

PERMIT NUMBER

12-313

Special Conditions and Requirements

1. Annual Application for Validation Required. Each year the permittee will submit to the District Ranger an application for validation of, or for changes to, the permit as specified in the term permit. It is to be submitted substantially at the beginning of the desired grazing season. Approval of the application, in whole or in part, will be reflected in the ensuing Bill for Collection.

2. Maintenance of Range Improvements. This permit is issued and accepted with the provision that the permittee will maintain all range improvements to standards of regular, orderliness, and safety acceptable to the Forest Service, whether private or government owned, from which he derives a benefit and which are assigned to him for maintenance. The government retains the prerogative, however, of also maintaining or otherwise improving said improvements when in its opinion such action will be to its advantage.

Assignments are shown on form R3 2200-5 (Range Improvements-Inventory and Maintenance) which is page(s) 1 of this permit and are further identified on the map which accompanies this permit.

3. Livestock Grazed in Excess of the Numbers or Outside of the Period of Use Authorized in the Current Bill for Collection.

(a) If the annual application is approved for yearlong use, in whole or in part, livestock grazed in excess of the authorized numbers must be removed from the National Forest System lands at the earliest possible date. Forage consumed by the excess must be paid for at commercial grazing rates. In addition:

(1) For first offense cases, the term permit may be suspended or reduced by the percentage of the excess numbers exceeding 10 percent of the current authorized numbers. If the excess is 110 percent or greater, total suspension or revocation could result.

(2) For second offense cases, the term permit will be suspended or reduced by twice the percentage of the excess numbers. If the excess is 50 percent or greater, total suspension or revocation would result.

(3) For second offense cases occurring during periods of suspension, the term permit will be reduced by the amount of the suspension in effect or by twice the percentage of the excess numbers involved whichever is greater.

(4) For additional offenses, the term permit may be reduced in any amount including total revocation without regard to the percentage of excess.

(b) If the annual application is approved for only seasonal use, livestock grazed in excess of authorized numbers or grazed outside the authorized season must be removed from the National Forest System lands at the earliest possible date. Forage consumed by the excess must be paid for at commercial grazing rates. Additional action may be taken under Part 1, Clause 3, of the permit.

4. Notice Required Before Livestock are placed on the National Forest. The permittee will give the District Ranger at least 5 days notice whenever he intends to place livestock on the National Forest System lands. If called upon to do so, he will provide for having the animals counted at the time they enter the forest and at any time thereafter during the life of the permit.

Grazing Permit - Part 3

Permit Number **12 316**

5. As a condition of this grazing permit the permittee is required to keep such records of purchases, brandings, sales, losses, and movements of livestock as will enable him to accurately furnish the Forest Service at any time with the numbers, by classes, of livestock that he has on national forest range.
6. In case the permittee desires to graze livestock on lands of other than national forest status, located within, or adjacent to the national forest land allotted to his use, he will be required to have a separate brand on the livestock grazed on the national forest range. This is necessary to avoid confusion in record keeping.
7. Owners of all livestock grazed under permit must comply with State Livestock Laws.

APPLICATION FOR GRAZING PERMIT-PART 1

3-10-69

(To be completed by applicant)

APPLICANT'S NAME AND ADDRESS: STAR ROUTE, MIAMI, ARIZONA  
 (Post office address)

I hereby apply for a permit to graze livestock upon Forest Service administered lands as follows:

| NUMBER OF LIVESTOCK | KIND OF LIVESTOCK | KIND OF PERMIT (Term, Temp.) | PERIOD OF USE |          | GRAZING ALLOTMENT |
|---------------------|-------------------|------------------------------|---------------|----------|-------------------|
|                     |                   |                              | FROM          | TO       |                   |
|                     |                   |                              | 1/1/69        | 12/31/69 | DEVILS CANYON     |
|                     |                   |                              | 1/1/69        | 5/31/69  | DEVILS CANYON     |
|                     |                   |                              | 1/1/69        | 11/30/69 | DEVILS CANYON     |
|                     |                   |                              |               |          |                   |
|                     |                   |                              |               |          |                   |

I do hereby understand and agree that this grazing permit, if issued and accepted, may be revoked or suspended, in whole or in part, for failure to comply with any of the provisions and requirements specified in the grazing permit; or for failure to comply with regulations of the Secretary of Agriculture on which the permit is based, or the instructions of Forest Officers issued thereunder; or for knowingly and willfully making a false statement or representation in this application, consisting of part(s) 1, 2 & 3 hereof, and amendments thereto.

SIGNATURE OF APPLICANT OR AUTHORIZED AGENT: [Signature] DATE: 3-10-69

I also apply for nonuse of the term permit issued pursuant to this application for \_\_\_\_\_ head of \_\_\_\_\_ and \_\_\_\_\_ head of \_\_\_\_\_ for the \_\_\_\_\_ grazing season.

Section B (To be completed by Forest Officers)

1. Recommendations: RECOMMEND APPROVAL

SIGNATURE: [Signature] TITLE: DFR DATE: 3/10/69

2. Approval:

The number and kind of livestock, kind of permit, period of use, and grazing allotment on which the livestock are permitted to graze are approved as entered below:

| NUMBER OF LIVESTOCK                                                          | KIND OF LIVESTOCK | KIND OF PERMIT (Term, Temp.) | PERIOD OF USE |              | GRAZING ALLOTMENT    |
|------------------------------------------------------------------------------|-------------------|------------------------------|---------------|--------------|----------------------|
|                                                                              |                   |                              | FROM          | TO           |                      |
| <u>250</u>                                                                   | <u>Cattle</u>     | <u>Term</u>                  | <u>1/1</u>    | <u>12/31</u> | <u>Devils Canyon</u> |
| <u>100</u>                                                                   | <u>Hrs</u>        | <u>"</u>                     | <u>1/1</u>    | <u>5/31</u>  | <u>"</u>             |
| <u>25</u>                                                                    | <u>Hrs</u>        | <u>"</u>                     | <u>1/1</u>    | <u>11/30</u> | <u>"</u>             |
| <u>Approved for 355 cattle 1/1-12/31, 254 hrs 1/1-5/31, 25 hrs 1/1-11/30</u> |                   |                              |               |              |                      |
| <u>Approved for 720 hrs in accordance with approved request plan.</u>        |                   |                              |               |              |                      |

SIGNATURE: [Signature] TITLE: Forest R. M. DATE: 12/17/68

nonuse is approved for \_\_\_\_\_ head of \_\_\_\_\_ and \_\_\_\_\_ head of \_\_\_\_\_ for the \_\_\_\_\_ grazing season. This is the \_\_\_\_\_ year of approved nonuse for personal convenience.



DATE

APPLICATION FOR GRAZING PERMIT - PART 2

*William J. Kelly*

3-10-69

TO THE FOREST SERVICE BY APPLICANT:

The following statements and representations constitute a part of my application for grazing permit.

I now own or have an interest in ..... 14 ..... head of horses, ..... head of sheep, and .....



2. I do not desire any livestock as I desire to graze but I intend to purchase ..... head of ..... not later than .....

3. During the period any permitted livestock are on Forest Service administered lands my other range livestock will be grazed as follows: .....

4. I own 315 acres of ranch property location in 10 ACRES OF THIS 315, DESCRIBED AS FOLLOWS, (Give section, township, and range)

WILL BE RETAINED AS COMPENSURATE PROPERTY: NE1/4SW1/4SE1/4 SEC. 14, T1S, R15E

and classified as ..... acres cultivated, ..... acres improved pasture, ..... acres summer range, ..... acres winter range, ..... acres spring-fall range, and X acres yearlong range.

5. Last season I produced on the above-cultivated lands, ..... tons of hay, ..... tons of straw, ..... tons of grain, and ..... tons of other livestock feeds; and in addition I purchased 25 tons of hay, 5 tons of grain, and 10 tons of other supplemental feeds.

6. I hold a license or permit on Taylor Grazing District No. NONE, or on Section 15 Lands, for- head of ..... from ..... to ..... head of ..... from ..... to ..... head of ..... from ..... to .....

7. I now lease ..... acres of cultivated land, ..... acres of summer range, ..... acres of winter range, and 1371.32 acres of spring-fall range. STATE LAND

8. No other person owns any interest in the livestock I desire to graze, except as follows: No

9. I do not hold, or have interest in any other grazing permit held by any person or organization on Forest Service administered lands, except as follows: No

10. I am not applying and do not have outstanding an application for a grazing permit on any other Forest Service lands, except as follows: No (Give name of Forest, Grassland or other area and number applied for)

11. I am a citizen of the United States; by birth, by naturalization, (Strike out one). If latter, give status of papers

## APPLICATION FOR GRAZING PERMIT - PART 3

3/10/69

## APPLICANT'S NAME OR NAME TO BE COMPLETED BY APPLICANT:

I hereby request that the following provisions be made part of my grazing permit:

1. On-and-Off Provision

That I be allowed to graze a total of 355 CYL, 224 YLS 1/1-5/31 AND 25 YLS 1/1-11/30 head of \_\_\_\_\_ under an on-and-off provision on the \_\_\_\_\_ grazing allotment. The land I control together with the Forest Service

administered land forms a natural grazing unit. The land I offer under this provision consists of 315

acres I own, and 131.22 acres I lease or have the right to use described as follows:

SEC. 3 - LOTS 1-4 S1/2NW1/2, S1/2 - 592.28 ACRES

SEC. 4 - LOTS 1-4 S1/2NW1/2, S1/2 - 590.76 ACRES

SEC. 5 - LOTS 1-4 S1/2 NE1/4SE1/4NW1/4, S1/2-548.28 ACRES; SEC. 8, 640A

SEC. 9, 640A; SEC. 10, 640A; SEC. 15, 640A; SEC. 16, 640A; SEC. 17, 640A

SEC. 21 - NE1/4, E1/2NW1/4, SW1/4NW1/4, SW1/4, W1/2 SE1/4, NE1/4SE1/4 - 560 ACRES

SEC. 22 - 640 ACRES

SEC. 28 - N1/2NW1/4, N1/2S1/2NW1/4, SW1/4SW1/4NW1/4, SE1/4SE1/4NW1/4, NW1/4NW1/4SW1/4  
S1/2SW1/4, S1/2N1/2SW1/4, NE1/4NE1/4 - 600 ACRES

ALL IN T2S, R13E, G1A AND SLAT RIVER BASE AND MERIDIAN  
ALL STATE OF ARIZONA LAND

2. Commercial Transportation Stock

That I be authorized to graze my permitted transportation stock intermittently during the permitted period for

not to exceed \_\_\_\_\_ animal months actual use. During the period my livestock are not grazed under this permit they will be grazed or fed as follows:

## 3. Other (Describe: lambing, bucking, etc.)



AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

June 5, 1972

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Gerald I. Craig  
10930 Santa Fe  
Sun City, Arizona

SUPERIOR EAST  
ACCESS LICENSE  
DOCUMENT BOOK ENTRY 3-B

Dear Mr. Craig:

Enclosed please find a check in the amount of \$100.00 as payment due  
under our License Agreement dated June 15, 1970.

Very truly yours,

*R. B. Crist*  
R. B. Crist

RBC:kre  
Encl: Check  
cc: H.E. Kelshaw, Jr.  
H.M. Brindle  
W.L. Kurtz  
J.D. Sell ✓  
K.A. von den Steinen

RECEIVED  
JUL 7 1972  
EXPLORATION DEPT.

10930 Santa Fe Dr.  
Sun City, Arizona  
July 3, 1972--85351

American Smelting & Refining Co.  
Box 5747  
Tucson, Arizona 85703

Dear Mr. Crist:

I am returning \$50.00 of your June 8th check and giving the required six months' notice to terminate the license agreed upon in June, 1970. Article 4, page 2, stipulates this condition. This would set the terminal date as January 15, 1973.

I have sold the land to Mr. William Dees, Attorney in Tucson, and have told him that any further negotiations concerning the use of the land must be done with him.

Sincerely,

*Gerald I. Craig*  
Gerald I. Craig

|                                                                                                  |  |                             |
|--------------------------------------------------------------------------------------------------|--|-----------------------------|
| GERALD CRAIG<br>MRS. GERALD I. CRIAG<br>10930 SANTA FE DRIVE 933-9204<br>SUN CITY, ARIZONA 85351 |  | 932                         |
| PAY TO THE ORDER OF <i>American Smelting and Refining Co.</i>                                    |  | <i>July 3</i> 1972          |
| <i>Fifty and no/100</i>                                                                          |  | 91-392<br>1221              |
|                                                                                                  |  | \$50 <sup>00</sup>          |
|                                                                                                  |  | DOLLARS                     |
| MEMO <i>Refund on hand agreement</i>                                                             |  | <i>Mrs. Gerald I. Craig</i> |
| SUN CITY-LAKEVIEW OFFICE<br>10300 West Thunderbird Boulevard<br>Sun City, Arizona 85351          |  |                             |
| ⑆ 1221 0392 ⑆                                                                                    |  | 753 488 1 ⑆                 |



JDS

AMERICAN SMELTING AND REFINING COMPANY  
EXPLORATION DEPARTMENT  
SOUTHWESTERN UNITED STATES DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

R. B. CRIST  
PROPERTY MANAGER

July 20, 1972

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

Mr. Willis R. Dees  
Suite 706  
Lawyers Title Building  
199 North Stone Avenue  
Tucson, Arizona

Dear Mr. Dees:

Enclosed please find a copy of our License Agreement with  
Gerald I. Craig.

Also enclosed is a copy of his letter regarding termination.

Very truly yours,

*R.B. Crist*  
R.B. Crist

RBC:kre

Encls: as noted

RECEIVED  
SEP 5 1972  
EXPLORATION DEPT.

14436 Cameo Point  
Sun City, Arizona  
Sept. 1, 1972

Mr. R. B. Crist  
Boxx 5747  
Tucson, Arizona

Dear Mr. Crist:

Re: Superior East Access License

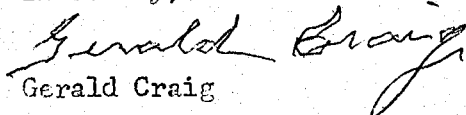
We have conferred with our lawyer, Mb. James Malott of Globe, concerning the two copies of our License Agreement. He tells us that our copy was made from the original he sent to you, and that evidently for some reason your office made its own copy for us to sign.

Because I had gone over the original copy carefully, I assumed that it was the same one that I was signing and had not noticed the difference in the paper until you sent yours to me the other day. Therefore, I missed the change that had been made for the amount of time that notice was to be given---from six months to one year. I had never given Continental but the six months' time originally.

However, since my signature on your copy is valid, I have to accept the change that your company evidently made and have so instructed Mr. Tom Dees who has been kind enough to continue his contract with us in spite of the inconvenience to him. So will you please return the check for \$50 so we may give it to Mr. Dees?

Your further dealings for the use of the road will be with Mr. Tom Dees, R.R. # 1, Box 785, Miami, Arizona, or with his brother, Mr. Will Dees, a lawyer in Tucson.

Sincerely,

  
Gerald Craig

cc. Mr. Tom Dees



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

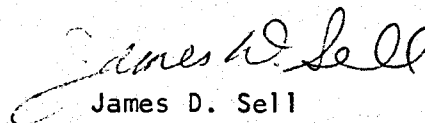
Sept. 5, 1972

File Memorandum

Stew Claim Area  
Superior East Project  
Pinal County, Arizona

On several occasions I walked the eastern side of the Margaret Group around the south and southeast sides of the JI Ranch patented ground in the vicinity of the reported Stew claims.

No new work of any nature was seen in the area to suggest that Mrs. Webb or the new owner, Mr. Dees, has started or has done the assessment work for the year just ending.

  
James D. Sell

JDS:lad

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

March 5, 1973

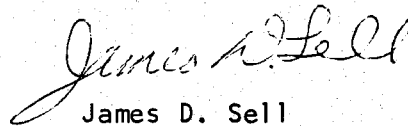
FILE MEMORANDUM

Stew #1 and #2 Claims  
Superior East Project  
Pinal County, Arizona

The recent drill holes (drilled Jan. 8th thru 15th, 1973), noted in the area of our LD No. 10 and LD No. 11, have finally been papered. These are 2" drill holes, ten feet deep, with white plastic pipe and nearby a wooden 4"x4" post with can and paper.

The two holes on the east center of Stew #2 say "Work for 72-73 done on Stew Claim for Stew 1 and 2." Two other holes to the south are location drilling for Stew #5 and #6 and are located on ground covered by Crook No. 153; while two others to the north are location drilling for Stew #3 and #4 and were drilled on patented land.

The road used was not improved, nor has any other work been noted in the area.

  
James D. Sell

JDS:1b

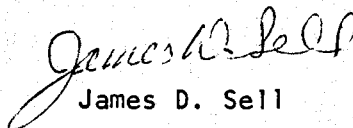
AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

March 8, 1973

FILE MEMORANDUM

Dees Ranch Gate  
Superior East Project  
Pinal County, Arizona

The ASARCO road from drill hole A-2 area going south to State Lease section 4 will pass near a stock tank and through a line fence (SW1/4 Sec. 23, T1S, R13E). Mr. Paul Bryant, ASARCO road contractor, has secured verbal permission from Mr. Brown, Ranch Foreman of the Dees Ranch, to relocate the gate through the fence through a hard rock bottom in the creek. We will also put up iron posts set in concrete and rewire the area to conform to the new gate area. The normal wire range gate will be installed on the iron posts.

  
James D. Sell

JDS:lb

*Approved*

Dear Mr. Bryant:

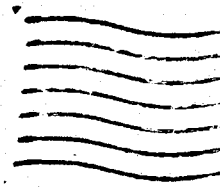
In view of the recent developments concerning the claims around the Fish Pond it is imperative, to prevent further problems, that no more road work be done toward the ~~tax~~ tank until things are resolved between us and American Smelting and Refining Co.

If you have any question concerning this property you may call Mr. Will Dees the owner in Tucson. His office number is 624 - 2303.

Thank you for your cooperation.

*Tom Dees*  
Tom Dees

*Bryant Const. Co.  
843 Spruce St.  
Superior, Ariz. 85273*



*Received  
afternoon mail  
March 20, 1973  
JES*

*American Smelting & Refining Co.  
Box 5747  
Tucson, Ariz. 85703*

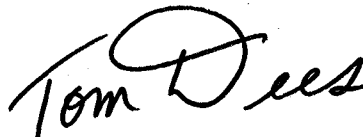
*Mr. Jim Sells.*

Dear Mr. Bryant:

In view of the recent developments concerning the claims around the Fish Pond it is imperative, to prevent further problems, that no more road work be done toward the ~~tax~~ tank until things are resolved between us and American Smelting and Refining Co.

If you have any question concerning this property you may call Mr. Will Dees the owner in Tucson. His office number is 624 - 2303.

Thank you for your cooperation.

  
Tom Dees

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 20, 1973

FILE MEMORANDUM

JI Ranch Area  
Tom Dees  
Superior East Project  
Pinal County, Arizona

P. Bryant, road contractor, called at 6:00 PM on Thursday, April 19, 1973, to state that Tom Dees stopped Paul on the work being done on the road east of A-2. Dees berated Bryant for a half hour, more or less, on being on Dees claims, etc., and that Dees would go get the Sheriff and confiscate the machinery. Bryant stated that ASARCO had asked for the road to be built and he would do so as far as possible. Bryant further stated that he would be to work the next morning. Dees retorted that he would be there with the hired hands.

  
James D. Sell

JDS:1b



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 20, 1973

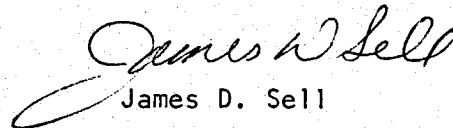
FILE MEMORANDUM

JI Ranch Area  
Tom Dees  
Superior East Project  
Pinal County, Arizona

P. Bryant, our road contractor, called at 7:30 AM Friday morning, April 20, 1973, to state that Tom Dees had called him about the confrontation of the evening before (see previous memo on subject).

Dees apologized for his attitude and verbal outpourings and said that Dees had had claims staked (Little Rocks) but they had not been filed on and so Dees had no claim. Further, Dees wanted Bryant to come up and look over the patented area and the Stew Claims so that no conflict would develop.

I stated to Bryant that there was no objection to looking it over, but that Bryant should make no statement as to the validity of any corners or claims. He could state that ASARCO had surveyed in the area and was aware of the probable locations of the various claims and patented land.

  
James D. Sell

JDS:lb

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

April 26, 1973

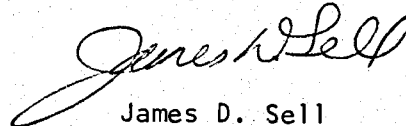
FILE MEMORANDUM

Option of JI Ranch and  
72 Unpatented Mining Claims (?)  
Superior East Project  
Pinal County, Arizona

P. Bryant called Wednesday evening, April 25, 1973, to state:

- (1) Robert Franks had called the previous evening and said he had been in Tucson that day talking to Paul Kayser.
- (2) Franks had heard that Dees has optioned the JI Ranch and 72 unpatented mining claims to an unnamed party.
- (3) Franks stated that the information from (2) came from a geologist which he would not name.
- (4) Bryant will attempt to secure additional information.

Is it possible Verity would know of any pending deal?

  
James D. Sell

JDS:lb

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

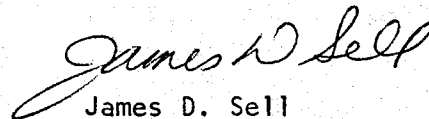
April 26, 1973

FILE MEMORANDUM

Jl Ranch Area  
Tom Dees  
Superior East Project  
Pinal County, Arizona

P. Bryant called Wednesday evening, April 25, 1973, to say that he had gone out on the east road and met with T. Dees, Floyd Hanly - geologist, Robert White - guard, et al, and Mr. Brown - foreman, and looked over the patented and claim situation as expressed by the above group.

T. Dees was still uncertain as to the south boundary of the patented ground, but Hanly stated that it cut through the "fish pond" and thus the proposed, and being built, road of ASARCO was well south of the patented ground. The Dees Group also expressed the idea that they were concerned that ASARCO would get onto claims Stew #1, #2, #5, and #6. Bryant again said that they should call ASARCO to clarify any problems and that Bryant was only working under contract.

  
James D. Sell

JDS:1b

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

May 10, 1973

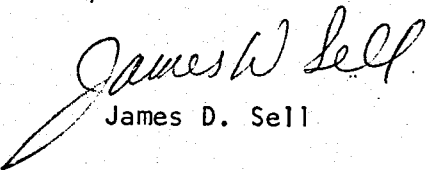
FILE MEMORANDUM

JI Ranch Area

On May 1, 1973, Howard Crittendon and I field checked the recent work conducted for us by H. McKee south of the JI Ranch. While in the area, we also looked in on the work being done on the reported Stew #1 and Stew #2 claims.

A tent had been set up near the crest of the hill, probably in the area of Stew #1, and occupied by employees of Dees sometime around March 19, 1973.

The tent was still up during Howard's and my visit, but was unoccupied at the time. The work being done, as reported by Dees to W. L. Kurtz, has now resulted in a pit approximately four feet square and one and one-half feet deep.

  
James D. Sell

JDS:1b

W.L.K.  
J.D.S.

STATE OF ARIZONA } County of PIMA } No. 60007  
 COUNTY OF PIMA } } 3 8-109-129  
 Authority: Article 10, Section 1, Arizona Constitution  
 IDA AND CERTYH  
 County Recorder  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

LIMITED PARTNERSHIP AGREEMENT AND CERTIFICATE

THIS LIMITED PARTNERSHIP AGREEMENT AND CERTIFICATE, dated as of the 11th day of May, 1972, between WILLIS R. DEES and DONN R. BUCHANAN as the General Partners, and FRANK A. OLSON, RUSSELL E. NEINART, LEONARD J. LEWIS and LARRY E. CLARK as the Limited Partners, whereby the parties agree to form a Limited Partnership pursuant to the Uniform Limited Partnership Act of the State of Arizona:

1. PURPOSE.

The purpose of the PARTNERSHIP is to own and operate the real property and ranching business described in Exhibit "A" hereto and all purposes incident thereto.

2. DEFINITIONS.

2.1 "PARTNERSHIP" shall refer to the Limited Partnership created under this Agreement.

2.2 "GENERAL PARTNERS" shall refer to the hereinafter named GENERAL PARTNERS or to their successors. Reference to a "GENERAL PARTNER" shall be to any one of the GENERAL PARTNERS.

2.3 "LIMITED PARTNERS" shall refer to the Limited Partners who are parties hereto as above named and to such other persons

60007 104

W.L.K.  
JUL 16 1973

W.L.K. 60007 104

W. L. K.

MAY 21 1973

PATENT PROCEEDINGS

Another procedure valuable in disclosing conflicting mining claims, and a very good method where circumstances permit, is to file an application for a mineral patent to your claims. The patent proceedings provide for a period of posting and publishing a Notice of the Application, calling for any adverse claimants to respond and commence a civil court action within a short period, or forever waive their rights to the area in conflict.<sup>12</sup>

The big drawbacks to this procedure are (a) the expense and time required to get lode claims properly surveyed and the Mineral Survey approved by the Bureau of Land Management, and (b) the inherent risk of applying for a patent before the claims are completely ready to meet the stringent discovery tests imposed by the government.

However, if the advertising and posting period pass without any adverse claimant registering a protest, the title to your claims is as clean as if you had bought a quiet-title action, but without the necessity of searching out and identifying all possible conflicting claimants.

<sup>12</sup> 30 U.S.C. § 28.

(Excerpt from County Mining Records and Special Federal Records by R. G. Pruitt, Jr., Federal Land Status Determination Institute, University of Denver, College of Law, Denver, Colorado; May 8, 1971)

Bob Crist suggest this as way of "firming" our position in Superior East where Willis Dees has been staking claims over ours.

Lutz

I will discuss this with an attorney.

K



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

June 12, 1973

TO: W. L. Kurtz

FROM: J. D. Sell

T. Dees Problems  
JI Ranch  
Pinal County, Arizona

On June 11, 1973, upon arriving at the road going into A-2, I met Paul Bryant coming out. He said his men were up on the road being constructed to the Rawhide Project drill site. Paul had pushed the road in a hundred feet or so and the crew was drilling holes for final grade.

I went ahead and flagged more road and the proposed drill site. Stakes had been set by Gant's crew the previous Friday and our drill site will stay south of the line of stakes. I also went to check on the north end line of LD No. 1, which Gant's crew had also established last week, and marked the spot for our location drill hole. All three end line posts and the location post had been knocked down and the rocks partially scattered. I rebuilt all four.

I then returned to where Bryant's crew was drilling holes and took Jerry Bryant up to show him the road and the new drill site. While at the new drill site area, Jerry and I noted that a new tent had been set up on the south slope near the northeast corner of Crook #154 claim. We also noted a person part way down the hill from the tent and coming our way.

I then went to Section 4 and checked on the drilling activity. All was going good.

Returning to Bryant's crew, I found a stranger sitting under a tree in the midst of all the drilling dust. I spoke to him, but he did not answer, so I went on up the road and looked about and came back. I again asked how it was going, but no answer, so I moved on down and drove out. The stranger is a heavy-set lad wearing a polka dot, billed cap. His worn boots would appear to have possibly made the footprints left around the torn-down monuments.

I met Paul Bryant on the road and we stopped. I told Paul of the stranger and he said that he was the same one that met him Saturday as Paul was pushing the road in. Paul also said he had seen him sitting with the surveyors on Thurs. Paul reported that the stranger said he was working for Tom Dees and he really liked it up there rather than being in school where Tom teaches. The stranger also reported he had several rifles and liked to hunt coyotes.

*Martin  
Stricklin*

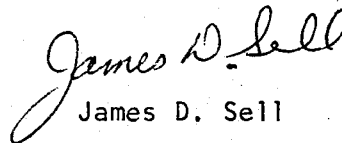
June 12, 1973

Paul advised him that they used powder and primers in the road construction and the stranger should be careful. The stranger stayed near where Paul was working and was there when Paul retired from the work Saturday night.

After my call to the office, I returned to the road site area. Paul Bryant reported that the stranger had made such a nuisance out of himself around the powder-primer area that Bryant asked him to please leave. The stranger did so.

I stayed and scouted around, but could see no one. I went out to the east to warn of the impending blast and watched the tent area when the blast occurred. No one came out of the tent after the blast, so I suppose that the stranger had gone on down to the ranch house area.

I cautioned Paul Bryant to call the office immediately if any other harassment-type problems arose.

  
James D. Sell

JDS:1b

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

June 21, 1973

FILE MEMORANDUM

Dees  
Superior East

Mr. Sell reported today, and I informed Mr. Verity, that someone has been moving some of our surveyed points and also some claim monuments, specifically the NW corner, N end center, and NE corner of the new LD-1, which are located west of "Stew No. 1" and on the south margin of the fee line. Also, the seven laths which Gant placed along the south side line of the "Stew No. 1" have been moved. These are the laths that Gant had put to guide our drill road and drill site.

Mr. Sell also reported that he spoke to the young man working for Tom Dees and mentioned to him that someone had been moving some of our monuments and survey points. The man responded with "Oh".

*W. L. Kurtz*  
W. L. Kurtz

WLK:lb

cc: RBCrist

JDSell

-- Blind note: The next time you see this young gentleman you should inform him, but not threaten him, that moving claim monuments is a criminal offense and if we determine who is moving them, the company may wish to bring charges.

WLK

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

June 29, 1973

FILE MEMORANDUM

Dees  
JI Ranch  
Superior East

Through Morrow Elias of UV Industries, I learned that a Larry Clark, president of a Salt Lake City firm called Petro Silver, Inc., had an interest in the JI (Dees) Ranch.

I called Mr. Clark on June 28th and he stated that the JI Ranch was purchased by a Limited Partnership consisting of four Salt Lake City individuals -- himself, Leonard Lewis (attorney who visited our office with Mr. Willis Dees) and two others not named. Besides these four Limited Partners, there are two general partners in Tucson -- Willis Dees and an unnamed man. Mr. Clark was very specific that Willis Dees was a minority holder, though the ranch was purchased and is held in Dees' name. Dees is responsible for running the ranch. Dees has always intimated to us that he was the sole owner.

Clark indicated that certain claims were transferred with the ranch and, therefore, held by the limited partnership.

Clark stated that he did not know whether additional claims staked by Dees were part of the ranch and, therefore, the limited partnership -- if Dees used ranch money they would be part of the ranch, but if Dees used his personal money then they would not be part of the limited partnership.

Clark was aware of our meeting with Dees and Lewis. Clark was aware of people carrying guns, camping on claims, etc., and expressed the opinion that he personally hoped no serious trouble developed.

I informed Clark that we (Asarco) considered none of Dees' claims valid and were going to send Dees a letter to this effect this week. I inquired whether a copy should be sent to him -- he suggested a copy to Mr. Leonard Lewis, the attorney.

Clark is interested in disposing of his interest in the ranch so that he may buy a small mill (for his Petro Silver, Inc.) from UV Industries. He has suggested to UV that UV approach Asarco for a joint venture on the ranch ground. I informed Clark Asarco would not be interested in a joint venture with UV at this time; however, we would consider purchase of the ranch with a mineral royalty reserved to them. This didn't seem to appeal to him at this particular time.

(limited partnership)

June 29, 1973

I acquired the distinct impression that Clark didn't approve of all of Dees' actions and that we could negotiate on realistic terms with Clark.

The above information will be given to Mr. Verity.

W. L. Kurtz

WLK:lb

cc: TCOsborne  
JHCourtright  
JDSell ✓  
RBCrist

Note to TCOsborne:

Tom: This is the ranch that has the grazing rights on the dacite plateau and approx. 320 acres of fee land. 155 fee acres lie approximately 600 feet north of our drillsite AI-1. We had obtained verbal approval in April/72 from Mr. Collins to purchase the ranch (\$300,000) but the Webb's elected to sell to Dees.

*W. L. Kurtz*

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 5, 1973

FILE MEMORANDUM

Dees

I previously had called Mr. Osborne to inform him that Verity & Smith had prepared a letter for my signature to be sent to Willis Dees concerning all the claim conflicts in the Superior East-Rawhide area.

I advised Mr. Osborne that one conflict, namely our LD-9 and 10 which we staked over previous claims because we considered assessment work had not been done and therefore the previous claims were invalid, might very well lead to a lawsuit.

Mr. Osborne, after checking with Mr. Hecox, agreed that the letter could be sent. The letter will be put in tonight's mail.

  
W. L. Kurtz

WLK:lb

cc: RBCrist  
JDSell ✓



AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 10, 1973

FILE MEMORANDUM

Superior East-Rawhide

Willis Dees' secretary called to inform us that Willis Dees is currently on vacation in Europe and she doesn't expect him back until the latter part of July.

  
W. L. Kurtz

WLK:fb

cc: RBCrist  
JDSe11 ✓

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 10, 1973

Memorandum for J. D. Sell

Superior East-Rawhide

Verity and Smith suggest that a chronological history be compiled of all the "conflicts" -- Little Rock, Jean, Big Rock, Dees, Stew. This should be built up from the File Memoranda and diaries.

Also, and probably best kept separate, should be a log (monthly or weekly) recording days spent by Asarco personnel or Asarco contractors in each of the areas. I think you might show this as:

- A. Physical occupying the land in conflict;
- B. In the general vicinity, but not necessarily specifically on the ground in "conflict".

This could all start with inception of Project and, I guess, some estimates will have to be made by you.

  
W. L. Kurtz

WLK:lb

cc; RBCrist

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 13, 1973

FILE MEMORANDUM

Dees Conflict  
LD No. 9 (Amended) Area  
Superior East Project  
Pinal County, Arizona

On July 12, 1973, Messrs. H. M. Stone, M. L. Robinson, and myself went to our drill site near the SW Corner of LD No. 9 (Amended) at about 8:15 AM. Also, there were Mr. Paul Bryant, his son, and a helper with some equipment in preparation for moving a drill rig onto the site.

The tent area of Melvin Stricklin, guard for Mr. Tom Dees, was observed at some 1200 feet distance. Stricklin came out and part way down the slope, stopped, then returned to his tent, but immediately came out and down the slope toward our group.

He ultimately arrived in our area, without his rifle, as Bryant was starting his tractor near the SW corner of LD No. 9 (Amended).

M. L. Robinson rebuilt the monument for the SW Corner in the presence of Stricklin and Stricklin did not comment. A vial with a paper naming the corner was placed in the monument.

H. L. Crittendon arrived and expanded the drill site area further onto the LD No. 9 (Amended) claim.

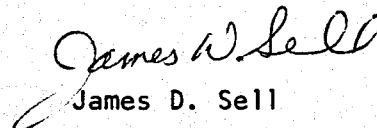
While the equipment was working, Stone and I took vials and papers and inspected the location drilling for LD No. 1, also LD No. 1 location monument and North End Center monument. All were intact. We then went to the west end line of LD No. 9 Fraction and the NE Corner LD No. 1 monuments and found all intact. Vials and papers were placed and additional rocks placed on the monuments. We did the same for the West End Center LD No. 9 (Amended) and returned to the drill site.

No comment was made by Stricklin. Robinson reported that Stricklin had wondered where we had gone, but had made no attempt to move from the drill site area.

I asked Stricklin how Tom Dees was and he replied that Dees had not returned.

No further comments were made and we all moved out toward the main highway. The tractor and crew were to help the moving of the drill rig when it came in, and Stone, Robinson, and I went to the Bohme area.

JDS:lb

  
James D. Sell

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 13, 1973

FILE MEMORANDUM

Dees Ranch Area Conflict  
LD Nos. 9-10-9 Fraction-10 Fraction  
Superior East Project  
Pinal County, Arizona

On Tuesday, July 10, 1973, H. M. Stone, M. L. Robinson and myself went into the above area to check on the claim monuments which had been reported as being destroyed. This action had been verified by H. M. Stone on July 8th in a survey of part of the area.

Upon arriving at the SW corner of LD No. 9 (Amended), we found a pile of broken laths and posts, some with aluminum tags, and the monument partially destroyed. The three of us rebuilt the monument and replaced the wooden post with the tag. We then went to the West End Center monument of LD No. 9 (Amended) and found a similar circumstance. We reposted and rebuilt the monument. Upon arriving in the area of the West End Line of LD No. 9 Fraction, we found similar events and were missing some posts and tags. Looking around we found several posts in the brush, including the one set for the NE Corner of LD No. 1. We replaced posts and tags, some remarked on wood as the aluminum tags were missing for NE Corner of LD No. 1, NW Corner of LD No. 9 Fraction, W End Center of LD No. 9 Fraction, and the common post for the SW Corner of LD No. 9 Fraction and NW Corner of LD No. 9 (Amended).

At 8:20 AM, Melvin Stricklin, a student at Gilbert High School where he will be a Senior this fall and where Mr. Tom Dees taught last year, arrived in the area with a rifle slung across his back, and he was carrying the post for the NE Corner LD No. 1. He stated that this area was Dees' "State claims". I asked for the post and secured it from him, and told him that we were checking our monuments. We continued to rebuild the monuments and Stricklin stated that he was going to the ranch house and secure Mr. Tom Dees.

The three of us continued eastward to the area of location monuments for LD No. 9 Fraction and LD No. 10 Fraction. All posts were down in the area, as well as parts of each monument. Some posts we found; others not. We rebuilt the location monuments for LD No. 9 Fraction and LD No. 10 Fraction. The notices of location were still within the monument. We also rebuilt the common monuments of the east end line of LD No. 9 Fraction and west end line monuments of LD No. 10 Fraction.

The three of us then went to the area of location monuments of LD No. 9 (Amended) and LD No. 10 (Amended) and added new rocks onto the partially destroyed monuments. The location notices were in the monuments.

July 13, 1973

We then continued south and took a picture of Stricklin's pit on the north-facing side of the hill northwest of triangulation station #15. It had recently been blasted but not mucked out. Mr. Stone reported that, during his inspection on July 8th, the pit (1-1/2 feet deep) was unblasted and had a stuck steel in it. (Note: On July 11th, Mr. Lester Cox, who lives north of the area, reported two blasts taking place on Monday the 9th of July in the area of the LD claims in question.)

The three of us continued our traverse to the common corner of SE Corner of LD No. 9 (Amended) and the SW Corner of LD No. 10 (Amended). The post and monument were intact. (Note: On July 12th, during a conversation with Stricklin, he mentioned that he had found a new post and monument near his campsite and had destroyed it. As the common southerly corner is in the tent area, I would presume that it is the one he was talking about.)

We then checked the NE Corner, the East End Center, and the SE Corner, all of LD No. 10 Fraction, and found them intact. The NE Corner of LD No. 10 (Amended) was also found intact and we visually saw across the canyon the East End Center and the SE Corner of LD No. 10 (Amended) as being undisturbed.

Traversing back we saw Stricklin at 9:35 AM, with rifle, up near survey station #15. I waved and he returned the wave.

Robinson and I went via the west end line of LD No. 9 Fraction, while Stone cut on over to our vehicles at the drill site of the Rawhide Project. Robinson and I again found the monuments of the end line, as well as the NE Corner of LD No. 1, had been partially destroyed and all the posts removed. We could not find any of the posts so rebuilt the monuments at 9:55 AM.

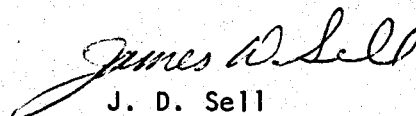
Mr. Stone and Melvin Stricklin were talking at the drill site when Robinson and I returned at 10:05 AM. I asked Melvin why he was pulling posts and tearing down monuments and he said that was his job. I asked if Tom Dees had instructed him to do it today, and he said that Dees was not at the ranch this day, but had told him previously to pull out all posts on the claim area. I mentioned that destroying mining monuments was a misdemeanor but he was unimpressed.

Several pictures were taken.

Stricklin asked if I was attending the meeting between ASARCO and Tom Dees and his partners and I replied that I was unaware of any such meeting.

On our way out I noticed that the SW Corner monument of LD No. 9 (Amended) had been redestroyed. The three of us did not stop and rebuild it.

Later in the day I called the office and relayed the above to Mr. Kurtz.

  
J. D. Sell

AMERICAN SMELTING AND REFINING COMPANY  
Tucson Arizona

July 16, 1973

FILE MEMORANDUM

Time: Approx. 3 PM  
Date: July 13, 1973  
Dees

H. Crittendon called to state that Melvin Stricklin had placed several lathes with ribbon along "line" between LD-9 and the Crook claims and informed Crittendon that he could not trespass on their ground (we had previously bulldozed this area to enlarge our drill site).

I informed Crittendon, after talking with Desmond Kearns, to not put drill or pipe truck on their ground, but to park his vehicle on it. Also, to inform Stricklin that we had every right under mining law to go on this ground.

Crittendon did go back and park on this ground.

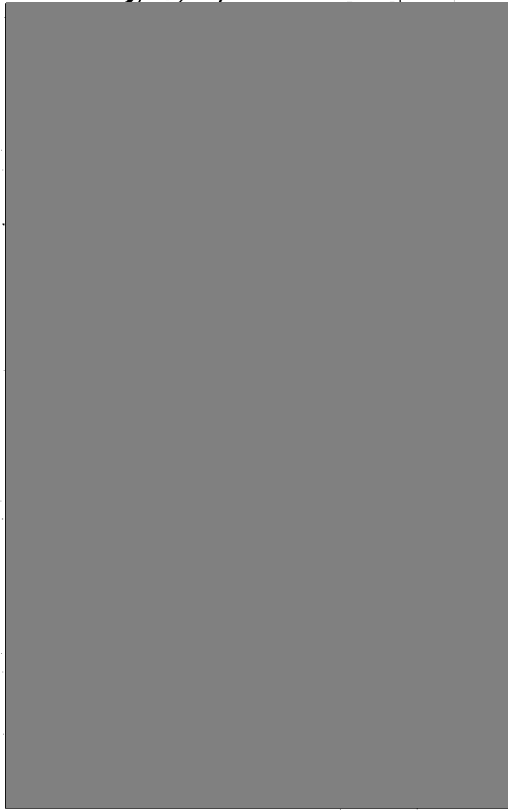
  
W. L. Kurtz

WLK:1b

cc: JDSell ✓  
RBCrist



*City Daily Star A-2*  
*July 26, 1973*



FROM: W. L. KURTZ

To: TCO

9-17-73  
JI Ranch  
Service East

For your info

JI ranch carries  
355 animal units.

cc RBC  
JDS ✓

WALTER D. ARMER  
4926 E. 13TH STREET  
TUCSON, ARIZONA 85711  
PHONE 326-2356 (602)

WALTER D. ARMER  
AND ASSOCIATES, REALTOR

RECEIVED  
SEP 12 1973  
S. W. U. S. EXPL. DIV.

RANCH & FARM  
MANAGEMENT  
APPRAISALS  
REAL ESTATE  
LOANS

September 10, 1973

Mr. William L. Kurtz, Supervisor  
Southwestern Exploration Division  
American Smelting & Refining Company  
P.O. Box 5747  
Tucson, Arizona 85703

Dear Mr. Kurtz,

This letter is in reference to our discussion the other morning on ranch values in Arizona in general, and more specifically the value of the JI ranch in Pinal County. This is not an appraisal as I have never inspected the JI ranch but am familiar with it from having visited at the ranch headquarters, seeing the portions of the range that lie next to the Miami-Superior highway and from the reputation of this ranch.

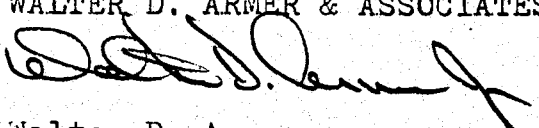
The Market Value of Arizona ranches has been above their production value for many years and only very recently with the dramatic increase in the price of cattle, has ranching made economic sense. The explanations for this are the desire to invest in land as a hedge against inflation, people with money coming to Arizona with the desire to live on a ranch and tax advantages under certain conditions.

Ranches with a high percentage of deeded land would naturally bring a premium, but in Arizona with only about 16% of the land in private ownership, ranches with practically all leased land, similar to the JI, are normal. Ranches of this type have been selling for \$800 to \$1000 per animal unit of carrying capacity without the livestock. With superior location and/or improvements some have sold for even higher prices. The JI ranch is very rough but with good location and average improvements it should fall in the average price range.

If additional information or an appraisal of this property is desired please let me know.

Sincerely,

WALTER D. ARMER & ASSOCIATES

  
Walter D. Armer

WDA:lea

AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

October 16, 1973

MEMORANDUM TO: FILES

SUPERIOR EAST  
DEE LAND & CATTLE CO.

Larry Clark called from Salt Lake City. He has been unable to meet with any two of the Ltd. Partners, however Leonard Lewis is available Thursday and they would like to fly to Tucson and meet with ASARCO.

He asked if I thought a head-to-head meeting would be of any benefit. I did encourage such a meeting and reminded him that after our initial meeting, it was implied that a man versed in mining law from Van Cott, Bagley, etc. would meet with Vic Verity. Clark stated that legal action was being considered. Clark asked me to call back if a meeting could be arranged.

Phoned Des Kearns - Vic Verity is in South America. Des felt that it might be best to go ahead with a meeting - Leo Smith could attend.

I called Clark back and informed him that Verity was in South America and Kurtz was in Mexico. He felt that if at all possible we should meet anyway and suggested that I contact N. Visnes and ask him to set-in. (Visnes is a friend of his brother-in-law, Russell Crouse).

Meeting arranged for 9:45 a.m., Thursday, October 18th.

Arrive Tucson International 8:50 a.m., Thursday, Air West (Leave Salt Lake City, 7:00 a.m.).

They will return the same day (5:00 p.m.). No baggage.

Pick-up at airport.

*RBC*  
R.B. CRIST

RBC:kre

cc: N. Visnes  
W.L. Kurtz  
J.D. Sell

AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

October 18, 1973

MEMORANDUM TO: FILES

SUPERIOR EAST  
J-1 RANCH

On October 18, 1973, Mr. Larry Clark and Leonard Lewis of the J-1 Ranch Ltd. partnership, met with Desmond Kearns (of Verity & Smith) and N. Visnes, C.W. Campbell and myself in Mr. Visnes' office.

The meeting commenced with the thoughts that the partnership was disenchanted with the entire project of ranching but that it had been to their interest as a tax shelter and profit motive in buildup of value. They felt that through Mr. Dees they had lost control of the situation and the problems brought on outweighed any benefits.

They wanted to know if ASARCO was still interested and would make a proposal to that effect. They want to sell the ranch and mineral rights based on reasonable appraisal. Various topics were brought up and expounded on by Lewis and these included such items as one group controlling both surface and mineral rights and the problems of separate ownership, the problems of water, the problems of environmental impact statements, the problems of unfriendly ranchers, forest rangers, and etc. etc.

The topic and tone was changed when Lewis announced that they had been informed that ASARCO was drilling a hole on one of their unpatented mining claims. This was discounted on our part and Mr. Visnes opened a map for their viewing which showed the drill hole to be on claims held by ICC and under lease to ASARCO. This brought on a flurry of words from the partnership about ASARCO moving onto their land after stating (according to Lewis) that in the February meeting ASARCO and Lewis had agreed to respect each others prior mining claim titles. No comment could be made as none of the ASARCO people at this meeting had been at the February meeting. Des stated that the ASARCO claims preceeded the February meeting but this seemed to have little effect on the continuing verbal thoughts expressed by Lewis about ASARCO not honoring its word, etc.

Des finally broke in and asked if they could supply us with proof of the assessment work on the claims in question. Lewis thought they could and would do so, but Clark cut in to say that these were certified receipts for the work performed submitted for payment by the people who did the work.

Mr. Visnes and Campbell expressed the thoughts that the claim questions should be resolved, and since ASARCO had been interested in the ranch previously, we were probably still interested but that further checking was necessary.

Lewis restated that the partnership was interested in selling the ranch at a "reasonable appraisal value" and that the mineral rights should go with the surface but that the mineral might be on a lease-work-payment agreement. He further stated that if ASARCO was not interested then they would go to others. Also they might sell the ranch and keep the mineral rights for either a third party or do some exploration of their own.

October 18, 1973

The meeting concluded after some two hours of talk, predominantly by Lewis, with the expression that the partnership would supply proof of ownership on the ground immediately south of their fee land, and that ASARCO would make known some proposal for future discussions, if any.

*James D. Sell*  
J.D. SELL

JDS:kre

cc: W.L. Kurtz  
R.B. Crist  
N. Visnes  
C.W. Campbell

AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

October 19, 1973

MEMORANDUM TO: FILES

SUPERIOR EAST  
J-1 RANCH

C.W. Campbell from the Mining Department, who sat in on the discussion of October 18, 1973, with Clark and Lewis (see memo), brought to my attention three additional points brought up by Lewis.

1. The Tom Dees patented land north of the highway might be brought into the package on the sale of the ranch and mineral rights, but probably would be a separate deal.
2. Lewis' reasonable appraisal of the grazing rights value is in the neighborhood of \$650,000.00.
3. The partnership desires an answer as soon as possible on our intent, and if favorable would then be pursued as to the details.

  
J.D. SELL

JDS:kre

cc: W.L. Kurtz  
R.B. Crist  
N. Visnes  
C.W. Campbell



*James Sell*

ASARCO - SUPERIOR EAST PROJECT

The following people were present at a meeting held on October 19, 1973, at the offices of American Smelting & Refining Company in Tucson, Arizona: Norman Visness, Charles Campbell, and James Sell, of Asarco; Leonard Lewis and Larry Clark, limited partners in D Land and Cattle Company; and Desmond Kearns of Verity & Smith. The meeting was arranged by Bob Crist of Asarco, at the request of Larry Clark.

At the beginning of the meeting, Larry Clark and Leonard Lewis stated that they and the other two limited partners, who are also from Salt Lake City, were disillusioned by the manner in which Will Dees was managing the D Land & Cattle Company. They said that as limited partners they had expected to invest a certain amount of money in the ranch and have it managed for them by Will Dees and not to have to concern themselves with any problems relating to the ranch or with any of the management aspects. They acknowledged that Will Dees and his brother Tom Dees had achieved some good things on the ranch, such as doubling the feed crop; however, they stated that they were dissatisfied with other aspects of the management. They said that one source of dissatisfaction was the conflict which had developed with Asarco, but that there were many other things with which they were dissatisfied which had nothing to do with Asarco at all. Perhaps some of the things that they had in mind were the property acquisitions which Will Dees and his brother Tom Dees have made in an area fairly close to the JI Ranch.

They said that as a result of their dissatisfaction they intended to wind up the partnership with Will Dees one way or the other. Leonard Lewis said that one possible way of doing this was by dismissing Will as the general partner or, alternatively, by selling off the property and distributing the proceeds. Preferably, they said that they would like to sell the property and then put their money into something else.

They said that if they sold the ranch that they would like to sell control of the surface interest and the mineral interest to the same party. Leonard Lewis said that ideally they would like to sell the surface interest in the ranch, which includes the fee land and all of the grazing rights, at whatever was the fair-market value of the ranch. Then they would lease the mineral rights to the same party. They stated that they did not consider the counter offer made to them orally by Bob Crist on behalf of Asarco was a reasonable offer and emphasized that they were not interested in any kind of purchase which involved a lease-back to the partnership.

They said that they wanted to have an outright sale and terminate all of their interest in the property other than retaining some rights under the lease of the minerals. They indicated that Will Dees might be interested in a lease-back setup on a personal basis but not on behalf of the partnership.

Leonard Lewis placed great emphasis at the meeting on the advisability for Asarco, as a potential operator, and the partnership as a potential mineral lessor, of keeping the surface and mineral rights under the control of a single party. He stated that in this way any conflict between surface and mineral owners would be alleviated and many of the environmental problems, such as a grazing lessee demanding that environmental impact statements be filed, would be forestalled. I pointed out to Mr. Lewis the need to draw a distinction between the benefits to the owner of the mineral rights on the fee land of also owning the surface rights, and the benefit to the owner of a federal mining claim acquiring the grazing rights of a grazing lessee which covered the same ground. I did not feel that it was appropriate to get into a lengthy discussion of this point and felt that it was sufficient just to raise the question. Mr. Lewis cited an example in Idaho where a phosphate mine operator ran into quite a few problems with the holder of surface lease rights. Again I told Mr. Lewis that it was necessary to draw a distinction between the surface mineral conflicts involved on a phosphate deposit where the mineral rights presumably were acquired pursuant to the Mineral Leasing Act rather than the 1872 mining law and the situation in which Asarco was involved. Again I did not deem it appropriate to debate the point with Mr. Lewis right then and he just continued with his emphasis of the need for maintaining the mineral and surface rights in common ownership.

Mr. Lewis wanted to know if Asarco was truly interested in negotiating the purchase of the ranch or, if not, to please let him know so that he could arrange to make a sale to other parties. He said that ideally they would like to sell the surface for fair-market value to Asarco and lease the minerals to Asarco, but that if they could not do that they would attempt to make a similar deal with another company, and failing that they would sell the surface interest in the ranch to a rancher and just hold a reservation of the mineral rights until such time as they could lease them to somebody, whether that took five, ten or fifteen years. Mr. Visness pointed out that Asarco was interested but that he could not tell Mr. Lewis to what extent Asarco was interested since he was from the mining department and that the decision on that would have to come from the exploration department and be ratified by Asarco in New York. Mr. Lewis wanted to know how long this would take, and Mr. Visness indicated that he didn't know how long this would be but that they would expedite the matter.

Mr. Lewis then said that he had been told by Mr. Dees that much of the conflict with Asarco had arisen because Asarco was trying to take advantage of technicalities and overstate his claims. Mr. Lewis said that he couldn't believe that a corporation like Asarco would operate in this way and said that he found it very difficult to believe Mr. Dees' allegations that Asarco was asserting the lack of discovery on the Dees' claims in order to overstate them. He said that, as he understood it, no mining company ever asserts lack of discovery but always recognizes the priority of location with respect to mining claims. He was assured that at no time had Asarco ever asserted the lack of discovery on any of the Dees' claims in order to establish rights of its own. He then specifically raised the question of conflict between the Stew claims owned by Will Dees and the LD 9 and 10 owned by Asarco. He said that he had heard that Asarco was now drilling a deep hole on one of Will Dees' claims. He was assured that the drilling was taking place on one of the claims owned by Inspiration Consolidated Copper Company which lay south of any mining claims to which Will Dees was asserting rights.

Leonard Lewis then said he felt that Asarco had breached the understanding which was reached between himself, Will Dees, Bob Crist and Bill Kurtz at a meeting which took place in Tucson on February 9, 1973. He said that at that meeting they had reached an understanding that Asarco was not asserting any rights whatsoever to the Stew claims which had been conveyed to Will Dees with the JI Ranch and that Asarco had no intention of interfering with Dees' rights or asserting any claims there, and that similarly the partnership would not interfere with any of Asarco's locations. He said now, contrary to that understanding and agreement, that Asarco had overstaked the Stew claims by asserting a technicality of lack of discovery. I pointed out to him that Asarco was not asserting a lack of discovery but that they were asserting that no assessment work was done on the claim for the year 1971-72 and that Asarco had located the LD 9 and 10 over the ground covered by the Stew in October, 1972. I stressed that the Asarco locations were made about five months prior to the February 9th meeting and that in no way could those locations be construed as a breach of an understanding that was reached five months later. I also pointed out to him that nobody present at our meeting had been at the prior meeting in February, and that we could not speak as to what understanding or agreement might have been reached there, but that even if this agreement had been reached with respect to the Stew claims, that the Asarco claims were already located five months earlier.

Leonard Lewis then became somewhat heated, asserting that he was amazed at the conduct of Asarco in asserting the lack of assessment work, because the partnership had done assessment work and had receipts to prove it. He said that they had been told by Will Dees that assessment work was done, that bills were sent which the limited partners paid, and that they had copies of the audited accounts showing payment for the assessment work. I told him that it might clear up a lot of misunderstandings if he would be prepared to furnish Asarco with copies of any materials he had which showed that the assessment work had been done for the year 1971-72. I said that such statements might describe the assessment work that was done and that it would then be possible to have a field examination to verify this. Mr. Lewis agreed to supply copies of any statements or other materials the partnership had which would show that the assessment work was done.

Mr. Visness said that he would check with Bill Kurtz and Bob Crist as to what understanding Bob Crist and Bill Kurtz had from the February meeting and that if, indeed, Asarco had recognized the prior rights of the Stew claims and had agreed not to interfere with them, that Asarco would now honor such an understanding, but that first of all he would have to check exactly what had happened.

Mr. Lewis and Mr. Clark then left the meeting, following a brief summary to the effect that Leonard Lewis would furnish Asarco with copies of the records that they have concerning the assessment work which was done, and that Asarco would get in touch with its New York office as to their interest in purchasing the JI Ranch, and would then get back in touch with Larry Clark or Leonard Lewis. The meeting lasted from about 9:30 a.m. to 11:30 a.m.

Mr. Visness asked me for my reactions to the meeting and I told him that it appeared that the limited partners definitely wanted to get out of the ranch and sell it, if possible. I thought that they would be amenable to sell the ranch itself for its fair-market value, which could always be established by independent appraisers on both sides, and then reach some kind of an agreement for a lease of the minerals while retaining some kind of royalty.

Desmond P. Kearns  
October 19, 1973

AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

October 26, 1973

Mr. T. C. Osborne  
Asst. Director of Exploration  
New York Office

Superior East  
Dees-J.I. Ranch

Enclosed are several file memoranda and two letters concerned with a meeting between ASARCO and J.I. Ranch personnel on October 19, 1973.

We can discuss this problem in detail during your visit here November 5th. My present feeling is to take no action until we see more core from drill hole AI-1, which has just penetrated primary sulfides in altered Pinal Schist. The sulfides consist of pyrite and chalcopyrite of marginal grade.

  
W. L. Kurtz

WLK:1b  
Encs.

cc: RBCrist  
JDSell



AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN EXPLORATION DIVISION  
P. O. BOX 5747, TUCSON, ARIZONA 85703

1150 NORTH 7TH AVENUE  
TELEPHONE 602-792-3010

November 13, 1973

Mr. Leonard J. Lewis  
Attorney-at-Law  
141 East 1st South, Suite 300  
Salt Lake City, Utah 84111

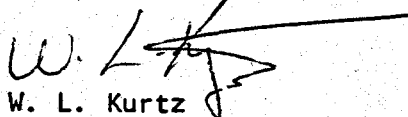
Dear Mr. Lewis:

I am replying to your letter of October 24, 1973, to Mr. Visnes.

Please be advised that ASARCO would be interested in negotiating with D Land and Cattle Company for the purchase of the JI Ranch, without cattle, at current appraised prices for ranches of this type. ASARCO would grant a royalty to D Land and Cattle Company on the production of any minerals from the fee land.

We have been advised that the "Affidavit of Labor Performed and Improvements Made" for year ending 1 September 72 on Stew 1 and 2 is not in compliance with the Federal statute dealing with geochemical and geophysical surveys as annual assessment work (30 U.S.C. Section 28-1[1970]).

Very truly yours,

  
W. L. Kurtz  
Manager of Exploration

WLK:lb

cc: TCOsborne  
NVisnes  
RBCrist

bc: DPKearns  
JDSe11

AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

November 16, 1973

FILE MEMORANDUM

J.I. Ranch  
D Land & Cattle Company

Leonard Lewis phoned today to state that they were still interested in negotiating a sale of the ranch to ASARCO and would like to meet with ASARCO in Tucson December 4th and 5th.

I informed him we would meet with him, but were only interested in purchasing the ranch, without cattle, for the present fair market price (\$355,000) with a provision for royalty on any production of minerals from the fee land. I indicated to him that our position had changed somewhat since we first contacted them and that results from the drill hole have somewhat influenced our position.

  
W. L. Kurtz

WLK:1b

cc: TCOsborne  
JHCourtright  
RBCrist  
JDSell ✓



AMERICAN SMELTING AND REFINING COMPANY  
TUCSON ARIZONA

January 24, 1974

Mr. T. C. Osborne  
Asst. Director of Exploration  
New York Office

Supplemental Exploration  
Authorization Request  
Land Purchase; JI Ranch  
Superior East Project  
Pinal County, Arizona

Dear Sir:

Shortly after the start of the Superior East Project in 1970, the JI Ranch was offered for sale to Asarco. At that time we had no positive drill information to justify purchase. The ranch consists of 316 fee acres plus Forest and State grazing leases which allow 355 cattle yearlong. The grazing leases cover all of our mining claims. The ranch was sold in April 1972 and is currently owned by D Land & Cattle Company, a limited partnership. Since the acquisition of the JI Ranch by D Land, the general partner has continually harassed our exploration effort and has overstaked our claims.

Our exploration near the JI Ranch fee land has been encouraging and indicates that additional deep exploration drilling is necessary. Drill holes A-2 and A1-1 have substantiated the existence of a porphyry copper system and have demonstrated that a chalcocite blanket, with its enriched ore, can exist beneath the cover rocks. Neither hole intersected ore grade copper, but did intersect significant amounts of primary copper mineralization (A-2: at 4317' 293' of 0.35% copper; at 4790' 150' of 0.42% copper and A1-1: at 3240' 727' of 0.11% copper). Though the A1-1 intercept contained low copper values, it is of particular interest because it contained a very high chalcopyrite to pyrite ratio suggestive of a porphyry copper core zone rather than a peripheral fringe zone. At this point in exploration the geometry of the porphyry copper system is imperfectly known and it is now conceivable that ore grade copper mineralization could occur on the JI Ranch fee land (a possibility thought quite remote upon completion of drill hole A-2).

The Limited Partners have refused our offer of \$100,000 front money for a 3-year purchase option, but have indicated that they would sell the ranch with all improvements, land, and cattle (they would retain the right to sell last year's calf crop), plus an additional 116 acres of fee land immediately north of the ranch headquarters at the current market price. They would retain a 4% NSR on any minerals produced from the fee land and unpatented mining claims Stew 1 and 2.

January 24, 1974

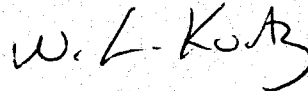
The current market price of the ranch with cattle has been appraised by Hebbard & Webb Company at \$385,000 and the excess fee land by Sun Valley Land at \$94,000, for a total current market value of \$479,000.

Hebbard & Webb state they could provide a party to manage the ranch, which should net about \$20,000 per year before depreciation and taxes. Also, Hebbard & Webb state they could find another buyer within 8 to 10 months time.

Because of the encouragement obtained in our drilling, the opportunity to clear up the claim controversies, and the opportunity to purchase at current market price, I recommend we offer the Limited Partners \$500,000 for the ranch, cattle, improvements, land, and any mining rights they may have, and reserve them a 4% NSR for production of any minerals from the fee land and lode claims Stew 1 and 2.

If you agree, please obtain approval to make D Land a firm offer. Forms 302EA and 302EB are enclosed.

Respectfully submitted,



W. L. Kurtz

WLK:1b  
Attach: Map  
Encs: Forms 302EA & 302EB

cc: NVisnes - w/o Attach. & Encs.  
JHCourtright - w/Attach. only  
RBCrist - w/o Attach. & Encs.  
✓ JDSell - w/o Attach. & Encs.  
ADCoumides - w/forms only

~~ITG~~ - JDS - NPW - WCK

Superior East Project  
J. I. Ranch

250

January 2, 1980

Mr. Tom Clary  
Rt. 1, Box 743  
Miami, AZ. 85539

Dear Tom:

This letter is to inform you of things that have come to my attention since the recent blasting on your property, particularly the blasts on December 31, 1979 and those on January 3, 1980.

During and since these blasts, a crack has appeared in our concrete slab at the back door of the house, plus a crack across the ceilings of the back porch, kitchen and dining room. Also, there are cracks in the plaster of the walls in the living room and hall. These cracks were not visible before and I feel they were caused by the blasting.

On Monday, December 31, Bob Bennett was on the hillside south of the house on ASARCO property when a large blast went off. This blast jarred rocks loose which rolled down the hill narrowly missing him.

I feel the size of the charges in these blasts are too heavy to be using within this closed basin.

Sincerely,

*Walt Lockhart*

Walt Lockhart  
JI Ranch Manager

WL/pl

cc. R. B. Crist /  
W. E. Dolph

ASARCO Incorporated

JAN - 7 1980

SW Exploration

October 30, 1981

Mr. R. L. Brown  
Director of Exploration  
ASARCO Incorporated  
120 Broadway  
New York, NY 10271

JI Ranch

Dear Mr. Brown:

In response to Mr. Graybeal's letter of October 22, 1981:

- 1) Can we sell the cows, not use the grazing rights, but still keep the grazing rights?

Under extenuating circumstances, the Regulations allow a three-year period (consecutive years) during which the grazing rights would be preserved without cows. It might be possible to have this period extended if the circumstances requiring protection of the range warranted.

- 2) Can we sub-lease the grazing rights?

No. Forest Service Grazing Regulations are very firm on this point. (not true on BLM grazing leases, which can be sub-leased.)

- 3) Can we give up some of the grazing rights, but not all of them?

On most grazing leases, this is possible - where adjoining leases are amenable to cross-over and resource benefits.

The JI Ranch or the Devils Canyon Allotment is a unitized range (State land included) defined by natural boundaries. The Forest Service Grazing Management will not consider splitting-up this allotment.

- 4) Do we need the grazing rights to provide some measure of protection for the mineral rights?

Though grazing rights do not give any legal title to mineral rights they provide a measure of protection by providing a measure of control of the surface and by providing surveillance and continued occupancy of the claim group. If and when any operation causes surface disturbance some compensation would be due the owner of the grazing rights.

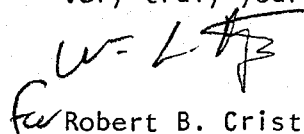
October 30, 1981

In general, the Forest Service Regulations restrict and penalize the lessee for both over-grazing and under-grazing. The browse and forage must be harvested properly to insure proper range management.

The JI Ranch Management Program has been well received in range management circles and the Forest Service would cooperate in an article for the Society of Range Management.

A June, 1976 appraisal assigned the ranch a value of \$625,000 which probably means today's value is between \$700,000 and \$750,000.

Very truly yours,

  
For Robert B. Crist

RBC/sk

cc: FTGraybeal  
WLKurtz  
WDPayne  
JDSell