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GREYHOUND TONNAGE / GRADE POTENTIAL

- 4 mineralized horizons @ py-cp → hmt - alt'd chl⁺ - chert & adjacent carb ; 3 with AuOx
- Main zone

  Min'zd/alt'd zone ≈100' max width @ 8' & 6' ore grade zones ; minimum strike length = 1200' (traceable on surface @ good Au geochem).

  Grade potential for 0.2 - 0.3 opt.

  minimum economic model ;

  1200'L x 8'W x 1000'D = 9.6 M tons

  @ 0.2 opt (≡ 1.92 M/10 wt. factor = 192,000 oz Au

  For 250,000 oz Au , need 1.25 M tons (wt factor = 10)

  At 8' mining width, need 1500' strike length / 1000' depth

  Main zone strike length "geologic potential"

  = 3000' + strike & 2 minable (+6') zones

  ⇒ 3.6 M ton (10 wt factor) @ 0.2 opt = 720,000 oz Au / 1000 depth

KAY MINE MASSIVE SULFIDE DEPOSIT

Exxon Minerals Company

M. L. Fellows

November 1982

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INTRODUCTION

Exxon Minerals Company's Kay Mine property contains a Proterozoic copper-zinc-gold volcanogenic massive sulfide deposit in the 1 to 6 million ton size range with exploration potential for increasing tonnage as well as discovering additional massive sulfide bodies. Exxon's activities over the past 10 years lead to the discovery of significant mineralization at depth beneath the old underground workings of the Kay Mine proper, as well as the discovery of another mineralized zone two miles to the northwest. Based on information available from the underground workings and limited drilling, the tonnage of proven and probable ore (using a cut-off grade of 2.5% copper equivalent) above the 3000 foot level is approximately 1.9 million short tons (Westra, 1977; p. 1). This mineralization is present in two adjacent steeply plunging ore bodies. With a 2% copper equivalent cut-off grade, the total tonnage is estimated at 6.4 million short tons. Average grade is estimated at 2.2% copper, 3.03% Zn, 1.6 ounces per ton Ag, and 0.082 ounces per ton Au. Additional drilling is needed to verify these estimates.

In the northwestern portion of the land block a 3500 foot long mineralized zone has many of the geologic characteristics of the Kay proper. This zone, called Greyhound, was prospected with three exploration diamond drill holes. One intersected a thin massive sulfide zone which assayed 1% Zn, 0.31% Cu and 0.41 ounces per ton Ag.

The Kay property is located 45 miles north of Phoenix, Arizona (Figure 1), adjacent to the community of Black Canyon City. Exxon Minerals Company controls the mineral rights to approximately 3800 acres in 195 unpatented claims (3,620 acres) and in 10 patented claims (180 acres) which Exxon owns in fee (Figure 2). These claims cover a significant part of sections 4, 5, 8, 9, 16 and 17 of T9N, R2E, and sections 29, 32 and 33 of T10N, R2E, Gila and Salt Rivers Baseline and Meridian.

EXPLORATION HISTORY

Kay Mine was discovered prior to 1900 and mined on a small scale up to 1916, producing some 700 tons of ore, 470 tons of which ran 9.1% copper, 1.06 ounces per ton silver and 0.072 ounces per ton gold. It was during this period that the No. 1 shaft was sunk (Figure 3). The major underground development of the mine took place between 1918 and 1923 when the No. 1 shaft was deepened and the

1200 foot vertical No. 4 shaft (with an internal winze to 1500 feet) was sunk and several thousand feet of development drifts were driven but no ore was shipped. The property was dormant due to litigation until 1949 when New Jersey Zinc in partnership with Shattuck-Denn Mining Company opened up the underground workings and began a program of resampling and diamond drilling. During this time 1,571 tons of ore were shipped from underground workings and from dump material, the total averaging 5.67% Cu, 0.98 ounces per ton Ag and 0.059 ounces per ton Au. Between 1953 and 1971 there were various unsuccessful efforts to revive the property. The three shafts which once provided access to the mine are now caved.

Since acquiring the property in 1972, Exxon Minerals Company has drilled 23 exploration (rotary/core) drill holes and 10 shallow air-track claim validation drill holes on various parts of the property (Figure 4). See also Table 1.

Total footage of the 23 exploration drill holes is 26,554 feet. The major part of this drilling is in the immediate vicinity of the Kay Mine where 22,333 feet were drilled in 14 holes. Ore grade intercepts were drilled in 6 of these holes, primarily at depths greater than 2000 feet below surface and beneath mineralization exposed in the underground workings. The other 9 holes were drilled on various parts of the property.

REGIONAL GEOLOGY

The Kay Mine area is at the southern end of the "Black Canyon Schist Belt" which is composed of metavolcanic and metasedimentary rocks roughly correlative with the Spud Mountain Volcanics of the Big Bug Group mapped farther to the north (Anderson, 1972). These rocks are part of a Proterozoic greenstone belt (1820 to 1770 million years old) which contains numerous volcanogenic massive sulfide deposits (Anderson & Guilbert, 1978). The rocks are metamorphosed primarily to the green-schist facies but locally reach lower amphibolite grade and have been subjected to dynamic metamorphism which has produced a strong, steeply dipping regional foliation which strikes from N-S to N30E. The rocks and contained mineralization have been subjected to a passive-slip style of deformation. Isoclinal folds are common throughout the area.

LOCAL GEOLOGY

The property covers an area of complexly interbedded volcanic, volcaniclastic and sedimentary rocks. Felsic to mafic volcanic material dominates in the east,

whereas volcaniclastics and sediments characterize the western part of the block. Several felsic pyroclastic units are present and mineralization associated with two of these units has been explored by Exxon.

Mineralization at the Kay Mine is situated at the top of a felsic volcanic edifice (called the Kay felsic pile) composed of dacitic to rhyolitic pyroclastic fragmentals ranging from fine tuff to tuff breccia (with fragments up to 12 inches long). The Kay felsic pile is roughly triangular, 5000 feet long in a north south direction and 1000 to 1500 feet wide. At the surface these rocks are heavily sericitized, limonite-stained and contain several volume % pyrite. Irregular, sporadic patches of dark green, magnesium-rich "black" chlorite with copper oxide staining are also present (Figure 3).

Massive and disseminated sulfide mineralization occurs near the top of the Kay felsic pile (southwestern side) (Figure 3), approximately 150 to 350 feet below the contact with the overlying mafic volcanic rock sequence. Intrusive or extrusive irregular quartz porphyry bodies also occur along this contact. The mafic sequence consists of thin flows of andesite and basalt separated by mafic tuffs, sedimentary rocks and chert beds. A large gabbro intrusion(?) south of Kay Mine is also part of the mafic sequence. A series of fine-grained, generally calcareous chloritic sedimentary rocks overlies the mafic sequence. A prominent pyritic-graphitic-cherty zone comprises part of the sedimentary package. Rhyolitic and dacitic tuffs and lapilli tuffs wrap around the Kay felsic pile to the north and northwest. Locally these rocks contain scattered sulfides but few discrete mineralized zones. Far to the northwest in the Greyhound area, dacitic and rhyolitic pyroclastic rocks are interbedded with andesitic tuffs and flows. As at Kay Mine proper, these volcanic rocks give way westward to sedimentary rocks containing iron formation and graphite. At Greyhound, mineralization expressed as limonite, gossan and copper oxides is spread along a strike length of 3500 feet.

In the underground workings and in drill core, low angle lamprophyre dikes cut ore and are undeformed. Plio-Pleistocene or older gravel-boulder terraces and recent river gravels cover much of the Precambrian east of Kay Mine and along the Agua Fria River which cuts through the mineralized zone.

SUBSURFACE GEOLOGY OF THE KAY MINE

Mineralization at the Kay Mine consists of at least two cigar-shaped, steeply plunging, westerly-dipping discontinuous massive and semi-massive sulfide bodies; the north ore zone and the south ore zone (Figure 3). These ore zones may once have been part of a single lens segmented during dynamic metamorphism. Economic sulfide mineralization is 150 to 350 feet stratigraphically below the mafic-felsic contact. A series of rhyolitic pyroclastic rocks, locally sulfide-bearing, separate the ore from the mafic sequence (Figures 5 & 6). One or two prominent pyritic-graphitic tuff bands occur 100 to 150 feet above the ore in these hanging wall pyroclastics.

The north ore zone breached the surface immediately north of the No. 1 shaft and is expressed as a siliceous gossan of short strike length overlain by a 1-2 foot thick siliceous dolomite bed. The immediate footwall of the north ore zone is a rhyolite tuff. At depth, these tuffs are variably chloritized and mineralized. The thickness of the north ore zone is quite variable, reaching a maximum of 80 feet on the 500 level. Maximum strike length is 400 feet on the 1000 level. Mineralization extends at least 1850 feet down plunge.

The south ore zone is not exposed at the surface, having been discovered by underground drilling. Mineralization of the south ore zone consists of massive and disseminated sulfides and fine-grained sedimentary rocks sandwiched between rhyolite lapilli tuffs (Figure 6). At depth in drill holes K-7 and K-8 there are four massive sulfide layers. Two of the massive sulfide layers are overlain by thin (3 to 15 feet thick) beds of dolomite. The rock below each massive sulfide bed is variably chloritized and in some places is massive "black" chlorite crosscut by irregular chalcopyrite and pyrite veins and veinlets--the classic stringer ore. The repetition of massive sulfide layers and dolomite beds may be due to multiple episodes of sulfide deposition or to isoclinal folding. Maximum thickness of the south ore zone is 136 feet (estimated true thickness) in drill hole K-8. Maximum strike length is 650 feet on the 1200 level. On the 1200 level a zone of disseminated sulfide with local pods of high grade copper connects the north and south ore zones. Mineralization in the south ore zone extends to at least 2,350 feet below surface.

Mineralization is of several types:

(1) Massive and semi-massive sulfide composed of variable amounts of pyrite, sphalerite, chalcopyrite, arsenopyrite, tetrahedrite and galena in quartz, sericite and chlorite gangue. In many specimens mineralogic and grain size variations impart a prominent banding to the ore.

(2) "Grey copper" ore which consists of tetrahedrite in siliceous dolomite beds.

(3) Stringer ore as mentioned above with anastomosing chalcopyrite and pyrite veins and veinlets in a massive black chlorite matrix.

DRILLING RESULTS

Of the 14 holes drilled in the Kay Mine area, six intercepted ore grade intercepts; these intercepts are shown in Table 2. Approximately 70% of all core was split and assayed. These data are useful in establishing zoning patterns.

GEOPHYSICS & GEOCHEMISTRY

Over the years a variety of electrical surveys have been conducted over the surface in different parts of the Kay block. A complex resistivity survey covered the Kay mine proper while conventional I.P. surveys of several generations were conducted over various parts of the property. CSAMT and Turam surveys were run with indifferent success. The location of each survey line is indicated in Figure 7. Some of the anomalies observed in these surveys were drilled with mixed results. There have been no systematic geochemical surveys over the entire property. A soil mercury survey and base metal anomalies in stream sediment samples confirm the known mineralization in the Kay area and identify other possible mineralized zones. Grid geochemistry over the Greyhound zone was instrumental in finding this mineralized zone.

REFERENCES

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Anderson, P., and Guilbert, J.M., 1979, The Precambrian massive sulfide deposits of Arizona - a distinct metallogenic epoch and province: Nevada Bureau of Mines and Geology, Report #33, pp. 39-48.

Westra, G., 1977, Kay Mine Project #3293, Yavapai County, Arizona: A progress report; Exxon Minerals Company proprietary report, 26 p.

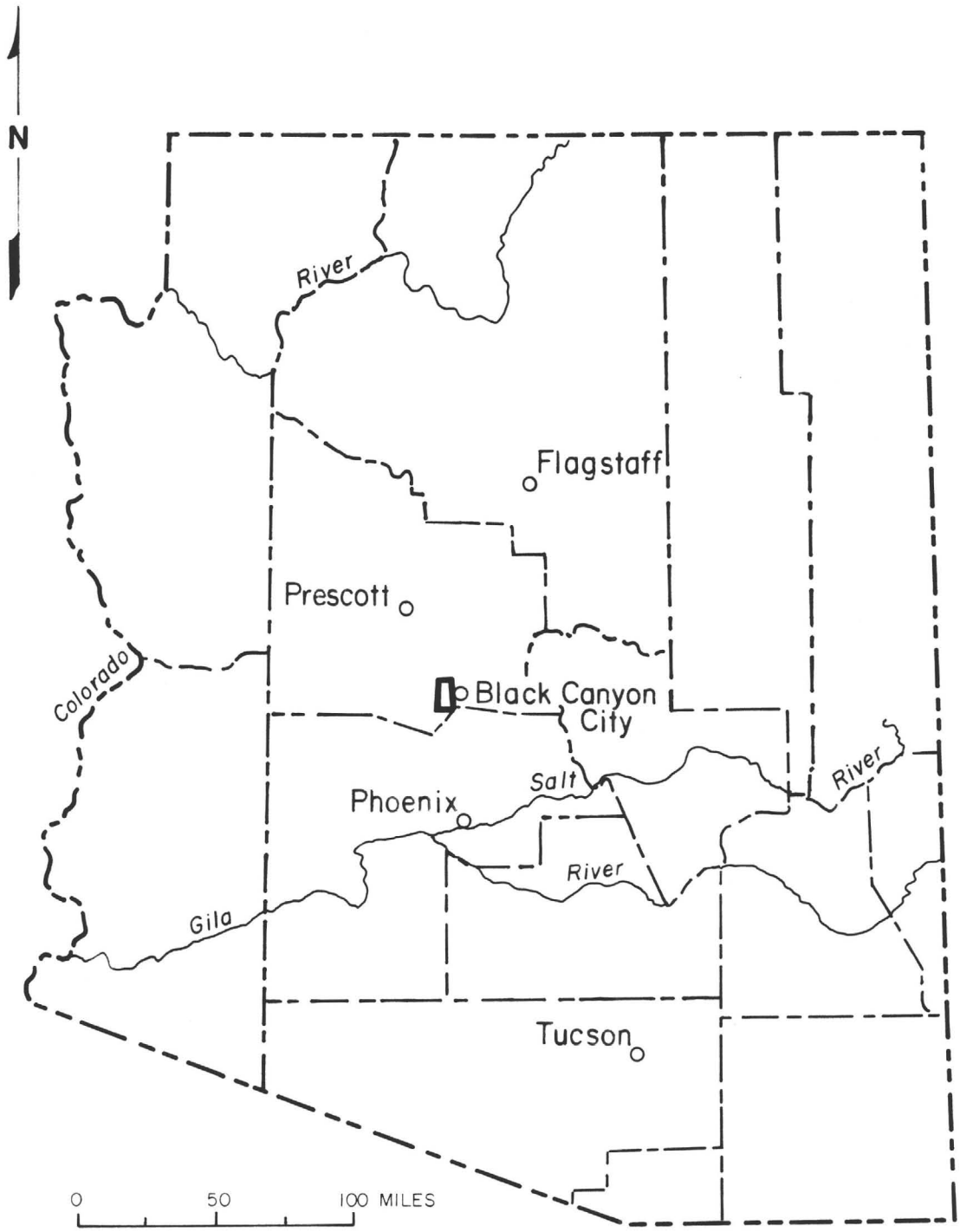

Figure 1. Index map of Arizona showing the location of the Kay property.

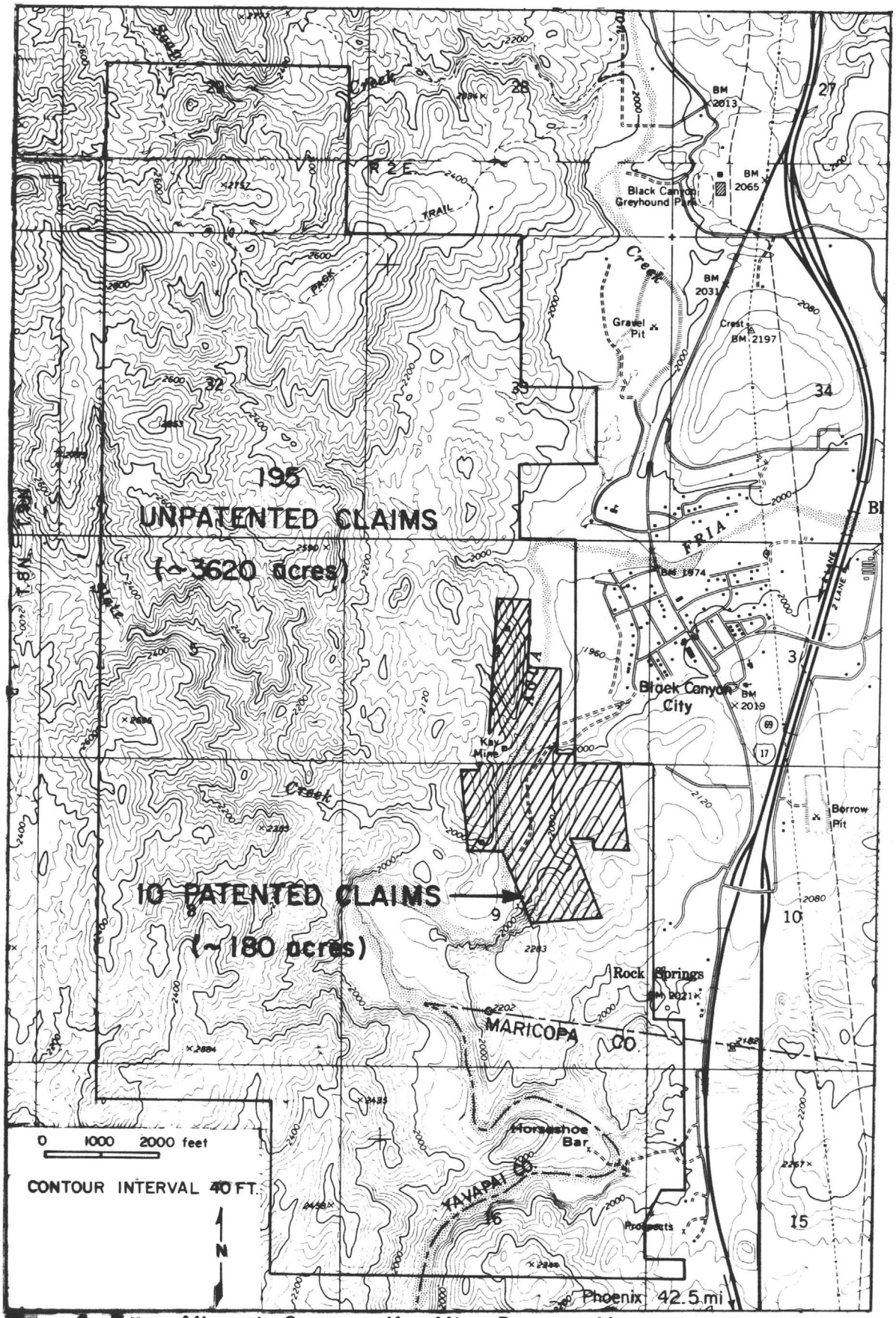

Figure 2 . Exxon Minerals Company Kay Mine Property Map.

Ex EMC Claims

Sanders Claims
(Black Cyn City)

minimum Greyhound exclusion land block

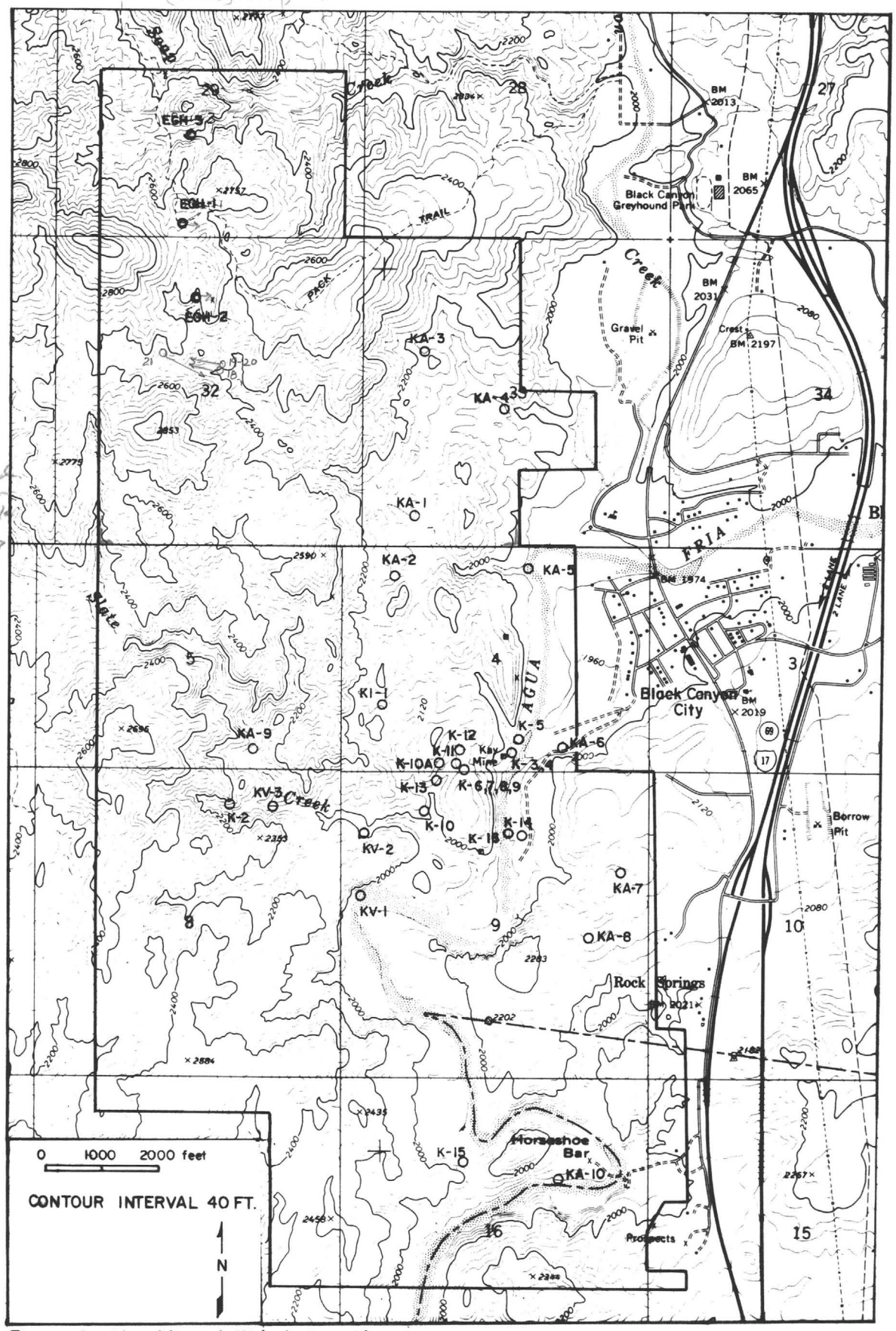

Figure 4 . Kay Mine drill hole locations.

Table I. Exxon Kay Mine drillholes

GREYHOUND #5180 AZ

Exploration Diamond Drill Holes

Drill Hole Designation	Angle from Horizon	Total Length(ft.)	Bearing	Arizona Coordinate System(ft.) North	East	Elevation (ft.)	Horizontal Departure (ft.)	True Vertical Depth(ft.)	Drill Hole Type[1]	Type Downhole Survey
EGH-1	-55°	895'	S71°E	(1,122,560)[2]	(420,820)	(2640)	644	611	D	Single Shot
EGH 2	-55°	502'	S80°E	(1,121,430)	(421,070)	(2590)	323	381	D	Acid
EGH-3	-60°	476'	S87°E	(1,124,080)	(421,000)	(2390)	266	394	D	Single Shot

Notes:

1. D = all diamond drill
2. Figures in parentheses estimated.

Table I. (Continued)

KAY MINE #3293

Exploration Diamond Drill Holes

Drill Hole Designation	Angle from Horizon(°)	Total Length(ft.)	Bearing	Arizona Coordinate System (ft.) North	East	Elevation (ft.)	Horizontal Departure	True Vertical Depth(ft.)	Drill Hole Type [1]	Type Downhole Survey
K-1	-45	510	S75E	(1,114,320)[2]	(424,460)	(2100)	(417)		D	Acid
K-2	-30	590	N75W	(1,112,500)	(421,665)	(2100)	(550)		D	"
K-3	-45	663	N75W	(1,113,463)	(426,649)	(1925)	(583)		D	"
K-4	-35	398	N75W	(1,113,463)	(426,649)	(1925)	(366)		D	"
K-5	-45	450	N75W	(1,113,704)	(426,709)	(1925)	(404)		D	"
K-6	-90	2469	N89E	1,113,164	425,758	2084	329[3] (335)	(2419)	R/D	Gyro
K-7	-90	2532	S56E	"	"	"	423	2452	R/D	Single shot
K-8	-90	2598	S40E	"	"	"	326	2554	R/D	"
K-9	-90	2700	N61E	"	"	"	503	2550	R/D	Single shot & gyro
K-10	-90	838	S28E	(1,112,450)	(425,080)	(2000)	177	816	R	Gyro
K-10A	-90	3430	S72E	1,113,287	425,325	2086	543	3360	D	Single shot Gyro
K-11	-67	1663	S73E	1,113,265	425,648	2083	1159	1125	D	"
K-12	-62	1464	S74E	1,113,477	425,684	2109	1065	962	D	Single shot
K-13	-90	1355	S77E	(1,113,085)	(425,090)	2120	(336)	1354	R/D	Gyro & single shot
K-14	-56	813	N77W	1,112,083	426,797	1954	500	639	D	Single Shot
K-15	-59	614	S66E	(1,106,328)	(425,670)	(1940)	(365)	(490)	D	Single Shot
K-16	-60	960	S78E	1,112,101	426,586	1921	717	609	D	Single Shot

Note: Some of the coordinates listed on drill hole logs are very rough estimates. The figures above are preferred values based on a careful re-evaluation in April, 1982.

1 : D = all diamond drill R/D = combined rotary and diamond drill
2 : (925) estimated figure, measured from a map or section
3 : upper figure is last measured departure; lower figure is estimated departure at T.D.

Table I. (Continued)

KAY MINE #3293

Validation Diamond Drill Holes

Drill Hole Designation[1]	Angle from Horizon(°)	Total Length (feet)	Bearing	Arizona Coordinate System North	East	Elevation (feet)	Horiz. Departure	True Vert. Depth	Drill Hole Type	Type Down Hole Survey
KV-1	-45°	204	S75°E	(1,111,020) [2]	(423,890)	(1900)	(144)	(144)	Diamond	Acid?
KV-2	-45°	319	S75°E	(1,112,010)	(424,065)	(1960)	(226)	(226)	Diamond	Acid?
KV-3	-45°	111	?	(1,112,440)	(422,490)	(2050)	?	?	Diamond	None

1. Also called KM- and KMV-

2. (321) Estimated figure, measured from a map or section.

Table 2: Kay Mine ore intercepts

	From	To	Measured Interval	True Thickness	% Cu	% Pb	% Zn	ppm Ag	ppm Au
K-6	2013	2020	7.0	4.9	1.14	.05	0.22	12	.29
	2220	2230	10.0	7.7	.79	.03	0.32	5	.07
	2244	2259	15.0	11.5	3.06	.05	0.06	12	---
	2305.6	2329.6	24.0	18.4	1.82	.01	0.03	8	.04
	2371.6	2381.6	10.0	7.1	2.11	.06	0.25	9	.34
			66.0	44.7					
K-7	2129.2	2161.7	32.5	18.2	2.82	.05	2.53	86	2.25
	2200	2223.6	23.6	16.7	1.04	.71	4.80	38	.93
	2244.8	2289.5	44.7	25.6	.63	.27	2.32	24	.72
	2335.6	2365.8	30.2	17.2	.13	.29	2.19	21	1.45
			131.0	77.7					
K-8	2218.2	2270.8	52.6	33.8	3.91	.11	1.34	25	1.72
	2298.5	2434	135.5	95.8	.21	.41	2.67	35	.82
	2490	2500	10.0	6.4	.11	.67	7.04	34	2.55
			198.1	136.0					
K-9	2165.5	2174	8.5	4.9	1.28	.07	.28	7	.08
K-10A	2890	2896.7	6.7	3.6	5.03	.04	.09	15	.33
	2916.4	2925	8.6	5.5	.53	.03	.38	12	1.14
	2948.5	2955	6.5	3.6	2.00	.01	.22	6	.26
			21.8	12.7					
K-12	928.4	945.0	16.8	16.2	1.95	.04	.14	15	.34
	968.0	978.3	10.3	9.5	.34	.20	1.17	24	.42
			27.1	25.7					

PROJECT GREYHOUND 5180 HOLE No. EGH-1

Co-ord.

Collar elev. ____ By MLF Scale ____ Date ____ P. 1

Columns: Recovery | Base Metal Mineralization | Pyrite | Limonite | Color | Structure | Rock Type | Description | Interval | Analyses Element: Cu, Mo, Pb, Zn

0–16' No Core (10% Core)

16' ANDESITIC TUFF with interbedded well laminated siltstones and argillites
1-3mm white phenos and streaks

Below 24' white cherty bands become more common
more siliceous section with scattered quartzeyes
Abn. lapilli sized flattened qtz-fspar pods

Well laminated siltstone; major lam 3-5mm

blk cht
Well laminated with siliceous partings

40.4' Laminated tuffs and sediments; strongly gth. stained gth-hmt; siliceous laminae in green chl matrix. Trace core with blk cht wk hematite along fln planes
44' Laminated argillite; thin sil bands in chl-graphitic matrix
46' Mixed argillite and intermediate tuffaceous rock from here to ~65' rock shows evidence of isoclinal, cleavage/schist... qtz
49' Strongly Lim. stained gthz hmt ... graphitic ...

Laminated intermediate tuff; strong dk green chl. laminae alt. with whitish q-f bands 1-4mm wide
grain 1cm
@ 54' 80° 3mm w/l
56.5' SILTSTONE
59' Laminated Intermediate tuff; q-feldspathic bands, frags in dk green chloritic matrix. frags to lapilli size. gthitic limonite zones frzz
66.4'
67.5' V. Thinly laminated argillite; w/ white/green streaks
Int. augen tuff. 1-4mm q-f aggregates in light green chl. network
Blotchy (fishmeat) folia
develops gritty appearance towards bottom.

folded ½cm qtz vein @ 79' nose rakes 75°
neat kink fold @ 80'

84.3' ½cm gouge zone
Laminated gritty tuffs - argillite
Locally thin white qtz partings and rarer black qtz bands

ch dh

Depth (ft)	Recovery	Color	Structure	Cu	Mo	Pb	Zn	
16–21	6/6	Olive to yellow grey	40° (90°)	35	-1	8	104	25
21–31	10/10	Olive to yellow grey	45° (70°)	34	-1	10	110	60
31–41	10/10	Olive to yellow grey	45° (80°)	56	-1	12	97	50
41–51	10/10	Std. lt. brn / Light olive grey (std)	42° (70°)	120	2	18	109	75
51–61	10/10	Med-grey blue grey / Yel. grey	46° (90°)	103	-1	14	90	1209
61–71	1/1	Blue-khaki grey	42° (72-90)	112	-1	18	96	123
71–81		Very light grey	50° (80°)	72	<1	20	110	1
81–91		Greenish grey	45° (77°)	59	<1	16	69	1
91–100		Greenish grey		29	<1	8	65	<1

PROJECT Greyhound **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M. L. Fellows Scale 1" = 10' Date ____ P. ____

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn	Ag
				Green Gray	45° (90°)		Increasingly well laminated towards bottom	vwk mod calc vls	84	<1	12	75	<1
							109 — Transitional —						
1			gthstr	Mottled	45° (77°)		Thinly laminated argillite dk green chlorite bands abnj possibly wk graphite but no strongly conductive zones; whitish streak scattered	✓	100	<1	16	75	<1
							ch, black	✓					
							112 1cm black chert band 114						
				Dk Gray			Gritty dacite(?) tuff - siltstone	o o					
							120						
5/5				Green Gray	40° (80°)		well laminated siltstone - argillite	+ +					
							white streaks in chloritic dk-med green matrix; white and black chert laminae common; carbonate partings common	+ +	119	<1	24	77	1
7/7					40° (80°)			+ +					
							2) cmp gyns cut slist.						
							Xto? tuff?						
				Dark	30 (70)		very thinly laminated and v dark green towards bottom dk cherty pods and bands increase locally very prominent gritty layers with ~1mm white to buff layer; stress crenulation bottom 2'	✓ ✓ +	70	<1	24	354	1
			hutz str				133						
6/6							gouge 1/to 1/2 in.	+					
							gtz on	✓					
							Greenish Sericite-(chl?) phyllite - v thinly laminated } strongly crenulate phyllite	wk wk	82	<1	20	61	1
							gtz partings						
7/7				Olive Gray	40		dark chlorite(?) with thin 1-2mm gtz partings						
							140						
							which						
							well laminated argillite - siltstone alt green and white laminae occasional blk stk graphite?	tr	103	<1	20	56	1
					48°		145						
	1-3% Py						graphite band locally more gritty appearance } phyllite crenulated	o wk o	111	<1	24	64	1
10/10					45° (70°)		150.4						
				Light Green Gray			Celadonitic siltstone massive s. 1mm gtz grains visible	tr	104	<1	20	57	1
			gth				which clear and white albite; ch; Celadonite - mariposite						
							165						
				Green Gray			wk celadonite; well laminated argillites medium - lt green alt. w/ white layers	-o	41	<1	16	146	1
							blk ch						
							158.6						
							ch, white						
	7-10% Py Qsr		gth	Med. Dark Gray	60° (80°)		Sericite - Graphite - Quartz - Pyrite Exhalite slump features. well laminated	o o	285	<1	20	389	1
10/10							161	o	196	<1	26	285	
							163.5						
							graphite and chert beds common; laminated to bedded (thinly) siltstones - argillites light to dk green laminae alt with whitish chert pods 1-3mm and bands common near top - decrease towards bottom	✓	102	<1	26	140	<1
7/7	1-2% dPy			Greenish Gray			167	✓	70	<1	30	89	<1
							170						
					53 (65)		1cm qtz bed						
7/4							wk calcite veins throughout	v. slig. increase in carb. partings	107	<1	18	64	1
6/6													
					58° (80)		6' white siltstone layer						
							generally thickly laminated to thin bedded alt white and green laminae 1-8mm		116	<1	18	67	1
19/10							mgt upto 1.5% mgt dissem. w/ chert in beds 1-10mm						
					60 (75)		cherty						
							mgt						
							mgt						
6/6							Qtz - Sericite - cherty lt. int. beds		90	<1	20	66	1
					40		mgt						

Depth scale: 00, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 (left); 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200 (right)

PROJECT GREYHOUND **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M.L. Fellows Scale 1" = 10' Date ____ P. ____

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn	Ag
7/7				GREENISH GRAY / LIGHT GRAY	40		2% col rns-ub @ 10° from ca	✓ ✓ wk	90	<1	20	66	1
5/5							203.7 Cherty tuff, minor chlorite trace diss py	0					
4/4	~1% dpy			MED. LIGHT GRAY	50 (80)		211.5 Laminated chloritic tuffs - argillites quite siliceous towards top	0 [rals]	62	<1	12	24	<1
5/5				LIGHT GREENISH GRAY			blk chert.	0 [vls]	50	<1	12	39	<1
5/5					55 70		silicious	-	50	<1	20	46	<1
6/6				MED GRAY			wh cht 226.5 Cherty tuff, minor chlorite 4mm gtz-tour-pyr 229	- 0 0	37	<1	14	34	<1
4/4				LIGHT GREENISH TO BLUE GRAY	50 (70)		gtz pods ch-gtz w tourmaline Siliceous laminated chloritic tuffs - argillites lam. to thin bedded whitish to clear gtz bands prominent	- - [vls]	28	<1	16	48	<1
4/4							4cm gtz-at vn	-					
7/7			sth		50 (80)		incr silicious 242.2	-	25	<1	12	45	<1
				GREENISH GRAY		gr	244.7 Dacite crystal Tuff. 40-50% (1-2mm) rounded gtz xtals in f matrix proportion and size of xtals increases towards bottom	0 0	24	<1	12	47	<1
4/4				LIGHT GREENISH GRAY			wh gtz pod 10cm graychert Laminated siliceous tuffs - cherty siliceous bands common	tr tr	75	<1	18	43	<1
5/5			sth		55° (80)		cal filled gash frs @ 30° to Caxis. 12cm graychert Laminations decrease towards bottom Dacitic appearance	-					
5/5				GREEN GRAY			5cm graychert 259	-	50	<1	20	75	<1
7/7				MED. OLIVE GRAY	45°		Crenulate fold axis rakes 40° Laminated tuffs - white streaks pods alt with chlorite. 0.5% mgt 264.2	✓ ✓ ✓	115	<1	18	65	<1
2/1			sth				silicious concentrated at top of 3cm cherty (gray) band.	Tr					
5/5			sth wash	GREEN GRAY	55 (80)		5cm graychert SILICEOUS wk mg 273 SILICEOUS TUFFS Green Sericite n chlorite Siliceous with some 1-2mm gtz xtals towards bottom	Tr 0	35	<1	8	48	<1
9/9				GREENISH GRAY - DARK GREEN	48° [70-80]		cal filled gash vls with reverse mvt. @ 10° Caxis 5cm 1-2% mgt 05-1% mgt LAMINATED - BEDDED GRITTY TUFFS - SILTSTONES 1-2% mgt 2cm cht 2-3% " cal filled fds @ 40° Caxis @ 281' shows	✓ ✓	116	<1	18	63	1
10/10			wash				Grey silicious 1cm normal mvt. 2-3% mgt 283' crenulate fold axis rakes 75° 05-1% mgt Alternating dk green/white layers laminae and spots 1/4-1% mgt cal filled gash frs @ 10-20° Caxis w reverse flexure 281-91.5 grey siliceous zone	✓ + + + +	152	<1	20	76	1
10/10					50° (80)		1/2-1% mgt Tr.	Tr					
					50°		Siliceous - mgt rich bands locally, strong	✓ Tr Tr	73	<1	14	76	<1

Depth scale: 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300

PROJECT GREYHOUND **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M. L. Fellows Scale 1" = 10' Date ____ P. ____

Depth	Recovery	Base Metal Mineralization	Pyrite Limonite	Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn	Ag
300									73	<1	14	76	<1
	5/5			GREENISH GRAY	(70)		362 — 2cm graphitic? DACITIC TUFFS - Greenish Sericite top 1-1.5' quite siliceous laminated (gritty appearance) DACITE CRYSTAL TUFF	Tr	14	<1	14	61	<1
310	6/6				50° (70)		[cal fill gash fxs]		81	<1	10	66	<1
	8/8						317.1						
320	10/10			DARK GREEN GRAY	50		Lwk mgt mgt — Laminated Chloritic tuffs argillites Bedded moderate col. white spots, laminae trace diss py, good alg chl		178	<1	60	110	<1
							mgt		179	<1	20	111	1
330	7/7			OLIVE	52 (70)		329 — V. Thinly laminated chloritic tuff-argillite - @ pink-buff stringers; Dacitic (?) crystal tuffs; 2 Crystal rich (1-3mm QE) zones separated by laminated zones similar to above pink-white silica pods-bands increase bottom 1 foot		82	<1	10	69	<1
				WH-GRN			336 ½-1mm xtals; WHITE to GREEN MOTTLED SPOTCHES - RHYOLITE CRYSTAL TUFF 1½-2mm QE TRACE DISS PY						
340	8/8	1-2% dpy wmgt.		DK-GRN-BRN-GRY	53° (65)		338 ch ch-mgt — Laminated siliceous tuffs with abundant chert-mgt-py bands py - 1-2% overall, NEAT ISOCLINAL FOLDING conc. @ mgt (generally near top of mgt band)	tr	89	<1	6	108	<1
				GRN GRAY			Siltstone - [xtal rich] 345 WELL LAMINATED TUFFS ALT dk chl and white (wonacite) bands						
	3/3			VERY LIGHT GRAY - WHITE			346.5 mgt 2-3cm; 7cm gts-ab vns; ½-1mm QE — lt green mottling - increasing to complete at top.		28	<1	20	118	<1
350					55° (70)				24	<1	112	366	<1
		1-2% py					@357 trgmental increase tal — Rhyolite tuff - [Lapilli tuff] Locally, thin 3-10cm cherty bands with 5% diss py.		13	<1	59	236	<1
	7/7								19	<1	22	60	<1
							QUITE SILICEOUS py — Siliceous bands 2-5 mm thick satin gray-green sericitic matrix 1-2mm QE common in top 4' smaller and less conspicuous near top ?		30	<1	52	95	<1
360					55°				32	<1	<6	38	<1
							362 NOT SHEARED		34	<1	8	36	<1
	5/5			WHITE - GREENISH GRAY			MOTTLED RHYOLITE CRYSTAL - LAPILLI TUFF - (Reworked tuff ?) 1-2mm QE satin green - white sericitic sil. matrix Locally siliceous white pods resemble Lapilli fragments		57	<1	<6	65	<1
370	10/10				53°				28	<1	6	45	<1
							4cm wht ch-ab pod		17	<1	6	54	<1
	8/8				6 broken		378.5 — 2-5mm sized white - gts-fspar frags		44	<1	<6	78	<1
380				DARK CHLORITIC GREEN	54° (60)		Laminated Siltstone - Argillite (tuff) Gritty appearance medium grained dark green chlorite bands 1.5mm alt with shiny chl-white laminae and <1mm thick white laminae; 2cm white - siliceous banded partings and streaks; Locally 3-10cm siliceous partings		82	<1	14	134	<1
							siliceous						
390	10/10				55 (65°)								
							silicous		93	<1	16	109	1
400	8/8				50 (70)								

PROJECT Greyhound **HOLE No.** EGH-1

Co-ord. _____ **Collar elev.** _____ **By** M. L. Fellows **Scale** 1" = 10' **Date** _____ **P.** _____

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type	Interval	Cu	Mo	Pb	Zn	Ag
6/6	Py chaos assoc with mgt-ch		gth pan	DK GREEN GRAY	(70)			173	<1	14	100	<1
								84	<1	10	119	<1
								65	<1	12	193	<1
								38	<1	8	100	<1
8/8					53 (80)			55	<1	10	143	<1
								128	<1	12	143	<1
								103	<1	10	102	<1
								64	<1	14	129	<1
								67	<1	22	820	1
9/9					56 (80)			45	<1	8	151	<1
								61	<1	16	161	<1
8/8				GREENISH GRAY				30	<1	8	136	<1
6/6				LIGHT GREEN GRAY	45° (72)			18	<1	<6	62	<1
7/7			gth shal	WHITE TO BUFF				80	<1	8	97	<1
								170 in sample	<1	12	122	<1
10/10					55° (90)			106	<1	16	112	<1
12/12					57			95	<1	12	127	<1
12/12			gth abun tr py strong wedge		57 (90)			80	<1	20	132	<1
10/10	tr py		gth pan along frs good hat. cap	DK WHITE	57 (90)			76	<1	12	90	<1
								56	<1	14	102	<1
12/12				VERY LIGHT GREEN/WHITE	54			57	<1	18	168	<1
					57			24	<1	8	61	<1

100 — 110 — 120 — 130 — 140 — 150 — 160 — 170 — 180 — 190 — 200

400 — 410 — 420 — 430 — 440 — 450 — 460 — 470 — 480 — 490 — 500

msl-ch

Transitional to less calc, more sil.

Pyrite wk to trace assoc with cal and qtz in mgt-ch bands

Siliceous

msl-ch

msl } abn gtty qtz and (cal) bands clus at, 2-4mm wide of lwr hdkch.

Silty to sandy (laminated) siltstone (more massive locally)

locally 2-4mm white-pink siliceous bands

gritty laminated

426 } white bands cal bands trans

Siliceous Siltstone – Argillite

.6mm qtz vn @ 20° to axis @ 430; 3mm @ 431

possible red brown ent or straight chert pod 4cm thin to thick laminae greenish gray

well laminated more chloritic alt gray/white bands locally more laminated

light-dk green bands 2-6mm frags white in green matrix sor DACITE XTAL TUFF

AH. 1-5mm white bands and green gritty chl

443 gray chert 2cm shows horizontal on 20° fx

SHEAR ZONE STRONG SERICITE Mixed buff green Strongly brecc

10cm blk-gray chert

gray-blk chert and chert fragments

GRITTY MAYBE SILTSTONE FINE TUFF tr gr

MAYBE ALTN NEAR tr

WKLY Laminated gritty Siltstone Tuff

57 – 5cm white crsg clast } Siliceous, clearly gone

62.5

57 } chl pods – wht gray

474.5 } Laminated not clear trans over 10cm

Rhyolite – Dacite crystal lapilli tuff

SERICITE RICH xtal lapilli tuff

57 0.3 0.7 2.5mm black clast laminations Fine clrm qtz xtals & fragments possibly to graptolite with thin zones

0.2 0.6 3-5mm black ch laminations

Structure unclear

54

STRONG OVER SERICITE

fine to medium gr – gr. lapilli tuff

bands in green sericite wisp mixing

locally lamicappearing

57

SLABBY PHYLLITE

Strongly brecc

possible in sample

FINE TUFF tr gr

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PROJECT GREYHOUND **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M.L. Fellows Scale 1" = 10' Date _____ P. _____

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn	
10/10				PALE GREEN			FRAGMENT TEXT Wavy laminat. greenish sericite Rhy tuff		50	<1	8	97	<1
10/10	wk py				60 (80)		qtz qtz qtz 517		24	<1	10	80	<1
10/10	wk py		qtz alter Fy		62		qtz {bleached RHYOLITE TUFF		38	<1	12	95	<1
10/10				PALE GREEN GRAY	55 ( )								
9/9	1% py		qtz alter Fy				Mottled green, white Rhyolite tuff. very faint <½ mm qtz eyes qtz graphite stringers??		36	<1	12	73	<1
9/9					49 (70)		544						
7/9	1% diss			PALE GREEN GRAY	61 (60)		qtz Rhyolite Tuff Pale green sericite very faint diss. py - 1% wavy laminations qtz qtz white ch-tr		43	<1	18	82	<1
7/7									102	<1	22	103	<1
5/5	py lam 1-2% diss py		core rings	WHITE BUFF	60 (60)		562 gr-py lamination White Rhyolite Crystal Tuff Abundant white sericite very fine qtz xtals >1mm Grain size increases with depth 1-2 mm qtz eyes common towards bottom	559 561 563 565	230 76 42	<1 <1 <1	18 250 30	107 679 105	<1 <1 <1
10/10					60 (80)		571 qtz - 26 qtz - 26 Mottled green white Rhyolite tuff fine qtz xtals <½ mm		12 30	<1 <1	10 10	64 80	<1 <1
10/10	1% diss py		qtz veins	PALE GREEN GRAY	65 (80)		585 qtz sharp		87	<1	26	53	<1
10/10	1-2% diss py			GREENISH GRAY	65 (80)		CHLORITIC TUFFS - KAPILLI Blotchy lime white blotches in green sericite chl matrix 4cm qtz rich band qtz rich 592.4 chl pod sharp		56	<1	16	109	<1
				WHITE			Rhyolite tuff sericitic qtz pebs @ 597 Trace tetrahedrite?		43	<1	20	74	<1

PROJECT Greyhound **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M.L. Fellows Scale 1"=10' Date ____ P. ____

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn
10/10					68 (80)				26	<1	12	83
							603.5					
10/10				PALE GREEN	59 (70)		Alt green - white Rhyolite tuff; siliceous bands 1-3mm alt bands; fine <½mm xtals		25	<1	8	82
							612					
10/10				WHITE GREEN	62 (70)		Qtz Crystal tuff ~1mm qtz xtals in white ser.		26	<1	6	64
							622					
				PALE GREEN (GRAY)			GREEN TOUGH LAMINATE TUFF; Fine qtz eyes set in green and white ser matrix		15	<1	6	68
							628					
10/10				WHITE - BUFF	61 (65)		SCM banded WHITE RHYOLITE TUFF; qtz-ser aggregates <1mm (occ qtz eyes <1mm) in ser. lam produced by veinlets in ser. and qtz partings and also green ser partings	(vs)	27	<1	<6	52
					(70)							
					60 (75)		637.7 3 chalky					
10/10				VLIGHT (GREEN) (GRAY)			RHYOLITE TUFF INTER LAMINATED white-green (?) sericite; Tr disc py	tr	45	<1	8	56
							645		52	3	<6	72
	2-5 Py			VERY LIGHT (GREEN) (GRAY)			BLOTCHY RHYOLITE TUFF - LAPILLI TUFF		51	5	<6	63
	1-2% Py						647.7 SILICEOUS RHYOLITE TUFF prominent sulfide laminations		58	5	270	392
9/10	7-10% Py			LT GRAY	60 (75)		650.5 Rhyolite Lapilli Tuff: Strong Sericite; Ser - Qtz frags - flattened in Ser - py - sl magnetite		32	4	34	728
									46	6	134	506
	10-15 Py			WHITE			4cm Fine ±1mm laminations		34	4	22	118
3.5/4.0	Py-Sl						Massive Sulfide: Py (50) Sl (20%) Qtz (20%) Chlorite (10%); Gouge Zone: 1-5mm semi-ref to m.s. shows frags chert, sulfide in clay skin		46	4	72	183
							659		900	6	1,00	.199
									156	1	24	336
7/2			wh sil points		65 (60)		DACITE TUFF		36		<6	174
									27	3	<6	121
5.5/6	Trace scattered Py			GRAY-BLUE GRAY			63.0 63.5 qtz - ab - Tour VNT - py; c 70-80° to Core		26	1	<6	119
							Fine (<1mm) aggregates of qtz-tour in forestgreen matrix of chlorite; Trace disseminated Py		18	<1	12	115
5/5					70 ( )			(cls)				
							Coarse tuff 2-3mm qtz-tour aggregates; wkly laminated tuffs		26	<1	16	314
8/8												
					65		} gray rhyolite? fine					
8/9									23	<1	8	154
6/6					62 (80)		coarse 2-3mm qtz grains					
							691					
				GRAY, LIGHT			1-2% Py + sph finely dissem; Rhyolite-Dacite tuff; alt - white - green sericite laminae; sha qtz hard stained bleached		38	<1	8	103

PROJECT GREYHOUND **HOLE No.** EGH-1

Co-ord. _____ Collar elev. _____ By M.L. Fellows Scale 1"=10' Date ____ P. ____

Recovery	Base Metal Mineralization	Pyrite Limonite	Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn
700			BUFF TO WHITE	65 (75)		CRENULATED wavy laminated Dacite green gray silicous faint <1/2-1 qtz eyes common		45	<1	6	158
710	10/10		GREENISH GRAY	68 (80)	710.6	FINE CHLORITIC TUFFS 1-2mm white xtals common near center 1 1/2 cm beds nearby. DISTINCTIVE GRAY WHITE RHYOLITE Abund. 1-3mm qtz eyes in aphanitic gray sil. matrix	chl	24	<1	16	188
720	10/10		MEDIUM LIGHT GRAY	65 (65)	720.5	trans Siliceous white Fine Rhyolite Crystal tuff 1-2mm qtz eyes 1-2% diss as black spots		41	<1	12	129
730	5/5		WHITE	65 (80)				57	<1	6	99
740	2/2 3/3 0/0	LOST SAMPLE?				622-650 very shiny broken into 1cm chips		33	<1	10	83
750	10/10			70	qtz 750.8	Fine bedded? crystal tuff beds 1/2 cm or less thick, black - hard dist more abt.		30	<1	8	60
760	5/5 1/1 2/2			72	755.5	chloritic beds common coarser tuff		32	<1	8	95
770	5/5 5/5	sphene	WHITE	67 (80)		Siliceous beds 1/2-1cm thick with qtz eyes 1-3mm white grey tuff separated by faint greenish white sericite trace dis. sul-hmt? no mag-sperrite		41	<1	12	140
780	5/5 5/5		BLUE GREENISH GRAY	63 (40)	770	bar chem xtsr qtz-tourm xtl 777.5 chloritic exhalative chlorite Dacite tuff - crystal tuff 1-3mm qtz-feldspar eyes aggregate in greenish matrix	chl	24	<1	14	107
790	4/4		VERY LIGHT GRAY-WHITE	65 (40)	Fire	Fine Rhyolite tuff no qtz xtls chiefly sericite trace sul thin ser flm sheets trace py smeared out along flm locally intensely broken.		17	<1	10	101
								17	<1	8	105
								24	<1	10	109
800				65 (40)		Grab sil 3-4cm chips. Sweary strong biling		26	<1	8	147

PROJECT Greyhound **HOLE No.** EGH-1

Co-ord. _____ **Collar elev.** _____ **By** M L Fellows **Scale** 1" = 10' **Date** _____ **P.** _____

Recovery	Base Metal Mineralization	Pyrite Limonite	Color	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn
							0	29	<1	14	130
								36	<1	18	115
5/5	5-7% PY trace		WHITE TO LIGHT GREY	22°			0	24	<1	34	155
								37	<1	24	117
								24	<1	10	123
								34	<1	6	64
5/5							0	26	<1	6	66
5/5				68		sta chl + carb	0				
5/5						1-2mm sta eyes the most common text possible lapilli aspect i.e. 5mm bands, sil in or matrix	0	28	<1	<6	103
5/5						trans on 4cm	0				
5/5	1-2% PY		VIOLET BROWN OPAQUE	67 (48)		Dacite xtal tuff trans	Tr (calc)	19	<1	8	61
5/5	2-3% PY		PINK GRAY			trans	0 (calc)				
5/5	1-2% PY		VERY PALE GREENISH GRAY	70		Dacite xtal tuff 3-7mm sil. bands w/ qtz eyes 1.2mm bleached to white on rims giving banded appearance qtz eye common	0	20	<1	8	89
5/5						colinitic incr chl and thin qtz bands	tr (calc)				
						849 trans	tr (calc)				
5/5	trace disp PY		GREEN GRAY	72°		Fine tuff, ichlorite no xtals	0	26	<1	8	114
						859					
5/5	trace disp PY		PALE GREEN GRAY	69		Dacite tuff green - white sericite with local splotches of chl. ½-1mm qtz xtals	0	61	<1	14	126
						869 sharp					
5/5	1% PY		GREEN GRAY	79		wh chert tuff tuff	Fine chloritic tuff ½-1cm chert bands 4-5cm apart	0			
						Dacite xtal tuff	0	30	<1	10	70
5/5			PALE GREEN GRAY	71			0				
5/5				73		890 trans	0 (calc)	18	<1	<6	58
5/5							0	41	<1	32	66
						Fault tuff - abun chl wisps with trans qtz eye throughout	0	292	<1	28	452
						chert - pillow T.D.					

STATE AZ COUNTY _____ QUAD _____ DATE SUBMITTED _____

SAMPLE NO. 133 TYPE CORE PULP GEOLOGIST J. DAVIDSON

PAGE 1 OF 3

REMARKS Samples were retailed prior to analyses.

SAMPLE	PPM Au
16-20	<.02
20-30	<.02
30-40	<.02
40-50	<.02
50-60	<.02
60-70	<.02
70-80	<.02
80-90	<.02
90-100	<.02
100-110	<.02
110-120	<.02
120-130	<.02
130-133	<.02
133-140	<.02
140-145	<.02
145-150.4	<.02
150.4-155	<.02
155-158.6	<.02
158.6-161	.05
161-163.5	.04
163.5-167	.04
167-170	.02
170-180	.03
180-190	.03
190-207.7	<.02
207.7-211.5	<.02
211.5-220	<.02
220-226.5	<.02
226.5-229	<.02
229-235	<.02
235-242.2	<.02
242.2-244.7	<.02
244.7-250	<.02
250-260	<.02
260-265	<.02
265-273	<.02
273-280	<.02
280-290	<.02
290-302	<.02
302-310	<.02
310-317	<.02
317-325	<.02
325-330	<.02
330-338	<.02
338-344	.14
344-350	<.02
350-352	.22
352-354	.12
354-356	<.02
356-358	.08

EXXON MINERALS CO., USA

SIGNED Marlon H. Whitlatch DATE 7/9/84

STATE A7 COUNTY _____ QUAD _____ DATE SUBMITTED _____

SAMPLE NO. 133 TYPE _____ GEOLOGIST J. DAVIDSON

PAGE 2 OF 3

REMARKS Samples were rerolled prior to analyses.

SAMPLE		PPM Au
358-360		<.02
360-362		<.02
362-365		<.02
365-370		<.02
370-375		<.02
375-380		<.02
380-390		<.02
390-400		<.02
400-402		<.02
402-404		<.02
404-406		<.02
406-408		<.02
408-410		<.02
410-412		<.02
412-414		<.02
414-416		<.02
416-418		<.02
418-420		<.02
420-426		<.02
426-437		<.02
437-440		<.02
440-446		<.02
446-450		<.02
450-460		<.02
460-470		<.02
470-474.5		<.02
474.5-480		<.02
480-485		<.02
485-490		.03
490-500		.03
500-510		<.02
510-520		<.02
520-530		.02
530-540		.02
540-550		<.02
550-559		<.02
559-561		<.02
561-563		.03
563-565		<.02
565-570		<.02
570-580		<.02
580-585		<.02
585-592.4		<.02
592.4-600		<.02
600-605		<.02
605-615		<.02
615-622		<.02
622-630		.02
630-640		<.02
640-643		<.02

EXXON MINERALS CO., USA

SIGNED Martin H. Hibbitts DATE 7/9/84

STATE AZ COUNTY _____ QUAD _____ DATE SUBMITTED _____

SAMPLE NO. 183 TYPE _____ GEOLOGIST J. DAVIDSON

PAGE 3 OF 3

REMARKS Samples were reselled prior to analyses.

SAMPLE	PPM Au
663.5-670	<.02
670-680	<.02
680-691	<.02
691-700	<.02
700-707	<.02
707-711	<.02
711-720.5	<.02
720.5-730	<.02
730-744	<.02
744-750	<.02
750-760	<.02
760-770	<.02
770-780	<.02
780-785	<.02
785-790	<.02
790-795	<.02
795-800	<.02
800-805	<.02
805-810	<.02
810-811	.02
811-813	.05
813-814	<.02
814-815	<.02
815-820	<.02
820-830	<.02
830-840	<.02
840-850	<.02
850-860	<.02
860-870	<.02
870-880	<.02
880-885	<.02
885-890	.03
890-895	.07

EXXON MINERALS CO., USA

SIGNED Martin H. Hibbetts DATE 7/9/84

PROJECT GREYHOUND (HOLE 1) PROJECT NO. 5180 SUBMITTAL NO. 79-19-36

STATE Ariz. COUNTY _____ QUAD _____ DATE SUBMITTED 8-14-79

SAMPLE NO. 6 TYPE Core GEOLOGIST M. Fellows

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS As to follow later.

SAMPLE EGH-1			PPM Cu	% Cu		PPM Mo	PPM Pb	% Pb	PPM Zn	% Zn	PPM Mn	% Mn	% Fe		PPB Hg
16-20			35			<1	8		104			0.10	4.87		25
20-30			34			<1	10		110			0.10	4.48		60
30-40			56			<1	12		97		910		4.61		50
40-50			120			2	18		109			0.15	8.76		75
50-60			103			<1	14		90			0.13	8.54		1209
60-70			112			<1	18		96			0.15	8.81		123

EXXON MINERALS CO., USA

DATE 8/22/79

ANALYTICAL REPORT

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180-1 SUBMITTAL NO. 79-20-23

STATE AZ COUNTY QUAD DATE SUBMITTED 8/24/79

SAMPLE NO. 37 TYPE CORE GEOLOGIST M. FELLOWS

STORAGE BOX NO. PAGE 1 OF 1

REMARKS As to follow later.

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Mn	% Mn	% Fe	PPB Hg
330-338	82	<1	10	69	<1		0.12	4.82	5
338-344	89	<1	6	108	<1		0.17	9.40	5
344-350	28	<1	20	118	<1		0.13	3.91	5
350-352	24	<1	112	356	<1	742		2.47	50
352-354	13	<1	54	236	<1	733		2.57	<5
354-356	19	<1	22	60	<1	732		3.02	<5
356-358	30	<1	52	95	<1	950		3.39	<5
358-360	32	<1	<6	38	<1	700		2.44	<5
360-362	34	<1	8	36	<1	678		2.42	<5
362-365	57	<1	<6	65	<1	742		2.83	5
365-370	28	<1	6	45	<1	899		2.50	5
370-375	17	<1	6	54	<1	709		3.04	<5
375-380	44	<1	<6	78	<1	936		4.01	5
380-390	82	<1	14	134	<1		0.18	6.73	<5
390-400	93	<1	16	109	1		0.19	7.72	5
400-402	173	<1	14	100	<1		0.13	9.26	<5
402-404	84	<1	10	119	<1		0.12	7.52	<5
404-406	65	<1	12	193	<1		0.18	6.47	<5
406-408	38	<1	8	100	<1		0.16	5.63	<5
408-410	55	<1	10	163	<1		0.21	7.12	<5
410-412	128	<1	12	143	<1		0.17	9.71	5
412-414	103	<1	10	102	<1		0.15	5.74	10
414-416	64	<1	14	124	<1		0.23	7.48	5
416-418	67	<1	22	320	1		0.28	10.4	5
418-420	45	<1	8	151	<1		0.10	4.29	<5
420-426	51	<1	16	161	<1		0.16	5.81	<5
426-437	30	<1	8	136	<1		0.12	5.28	<5
437-440	18	<1	<6	62	<1	549		2.60	5
440-446	80	<1	8	97	<1		0.10	5.67	5
446-450	170	<1	12	122	<1		0.18	7.51	<5
450-460	106	<1	16	112	<1		0.17	7.05	<5
460-470	95	<1	12	127	<1		0.16	7.65	5
470-474.5	80	<1	20	132	<1		0.15	7.44	5
474.5-480	76	<1	12	90	<1		0.15	4.55	10
480-485	56	<1	14	102	<1	859		3.23	15
485-490	57	<1	18	108	<1	940		3.36	5
490-500	24	<1	8	61	<1	465		2.13	5

EXXON MINERALS CO., USA

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS.
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

Project 5180
JOB # 023284
RECEIVED 8-29-79
REPORTED 9-6-79

SAMPLE NUMBER		Arsenic PPM					
EGH:							
16-20		24					
20-30		14					
30-40		26					
40-50		139					
50-60		255					
60-70		94					

SEP 1979 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 8888 Dnyanendra Amrutlal Shah DATE SIGNED 9-6-79 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-6

STATE AZ COUNTY QUAD DATE SUBMITTED 8/30/79

SAMPLE NO. 13 TYPE Core GEOLOGIST M Fellows

STORAGE BOX NO. PAGE 1 OF 1

REMARKS Au, Hg + As to follow later

EGH-1 SAMPLE		PPM Cu	PPM Mo	PPM Pb	PPM Zn	% Zn	PPM Au	PPM Mn	% Mn	% Fe	PPM Ag	PPB Hg
643-645	2	52	3	<6	72		<.02	455		2.62	<1	103
645-647	2	51	5	<6	63		<.02	470		2.48	<1	76
647-649	2	58	5	270	392		<.02	403		3.78	<1	363
649-651	2	32	4	34	728		<.02	354		2.24	<1	504
651-653	2	46	6	134	506		<.02	248		2.59	<1	1090
653-655	2	34	4	22	118		<.02	236		2.23	<1	65
655-657	2	46	4	72	183		<.02	585		2.63	<1	146
657-658	1	900	6	180		0.19	0.44	458		2.12	1	5365
658-659	1	156	1	24	336		<.02	731		3.21	<1	2099
659-660	1	36	1	<6	174		<.02		0.10	3.64	<1	81
660-661	1	27	3	<6	121		<.02	859		3.92	<1	49
661-663	2	26	1	<6	119		<.02	670		4.06	<1	97
663-663.5	0.5	69	2	24	90		<.02		0.26	4.45	<1	190
645 - 659	14'	114	4.5	91	444		.05	413		2.66	<1	854
							0015			"		
										6% Py		
massive sulfide at 658' no pulps												
		1300	15	238	1.00						14	

ratio Au to Zn

$\frac{0.44}{0.19} = \frac{X}{1.00}$

Au to Cu:

$\frac{.44}{900} = \frac{X}{1300}$

Au = 2.3 ppm 0.07 o/t

Hg + Mo - 9/14/79

EXXON MINERALS CO., USA

SIGNED

DATE 9/4/79

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-6

STATE AZ COUNTY QUAD DATE SUBMITTED 8/30/79

SAMPLE NO. 13 TYPE Core GEOLOGIST M Fellows

STORAGE BOX NO. PAGE 1 OF 1

REMARKS Au, Hg + As to follow later

EGH-1 SAMPLE		PPM Cu	PPM Mo	PPM Pb	PPM Zn	% Zn	PPM Au	PPM Mn	% Mn	% Fe	PPM Ag	PPB Hg
643-645	2	52	3	<6	72		<.02	455		2.62	<1	103
645-647	2	51	5	<6	63		<.02	470		2.48	<1	76
647-649	2	58	5	270	392		<.02	403		3.78	<1	363
649-651	2	32	4	34	728		<.02	354		2.24	<1	504
651-653	2	46	6	134	506		<.02	248		2.59	<1	1090
653-655	2	34	4	22	118		<.02	236		2.23	<1	65
655-657	2	46	4	72	183		<.02	585		2.63	<1	146
657-658	1	900	6	180		0.19	0.44	458		2.12	1	5365
658-659	1	156	1	24	336		<.02	731		3.21	<1	2099
659-660	1	36	1	<6	174		<.02		0.10	3.64	<1	81
660-661	1	27	3	<6	121		<.02	859		3.92	<1	49
661-663	2	26	1	<6	119		<.02	670		4.06	<1	97
663-663.5	0.5	69	2	24	90		<.02		0.26	4.45	<1	190
645 - 655	14'	114	4.5	91	444		.05	413		2.66	<1	854
							.0015			"		
										6% Fy		
Massive sulfide at 658' no pulps												
		1300	15	238	1.00						14	

Ratio Au to Zn

$\frac{0.44}{0.19} = \frac{X}{1.00}$

Au to Cu:

$\frac{.44}{900} = \frac{X}{1300}$

Au = 2.3 ppm 0.07 oz/t

Hg + Mo - 9/14/79

EXXON MINERALS CO., USA

SIGNED

DATE 9/4/79

ANALYTICAL REPORT

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-6

STATE AZ COUNTY _____ QUAD _____ DATE SUBMITTED 8/30/79

SAMPLE NO. 13 TYPE Core GEOLOGIST M Fellows

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS Au, Hg + As to follow later

EGH-1 SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	% Zn	PPM Au	PPM Mn	% Mn	% Fe	PPM Ag	PPB Hg
643-645	52		<6	72			455		2.62	<1	
645-647	51		<6	63			470		2.48	<1	
647-649	58		270	392			403		3.78	<1	
649-651	32		34	728			354		2.24	<1	
651-653	46		134	506			248		2.59	<1	
653-655	34		22	118			236		2.23	<1	
655-657	46		72	183			585		2.43	<1	
657-658	900		180		0.19		458		2.12	1	
658-659	156		24	336			731		3.21	<1	
659-660	36		<6	174				0.10	3.64	<1	
660-661	27		<6	121			859		3.92	<1	
661-663	26		<6	119			670		4.06	<1	
663-663.5	69		24	90				0.26	4.45	<1	

EXXON MINERALS CO., USA

ANALYTICAL REPORT

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-6

STATE AZ COUNTY QUAD DATE SUBMITTED 8/30/79

SAMPLE NO. 13 TYPE Core GEOLOGIST M Fellows

STORAGE BOX NO. PAGE 1 OF 1

REMARKS Au, Hg + As to follow later

EGH-1 SAMPLE		PPM Cu	PPM Mo	PPM Pb	PPM Zn	% Zn	PPM Au	PPM Mn	% Mn	% Fe	PPM Ag	PPB Hg
643-645	2	52	3	<6	72		<.02	455		2.62	<1	103
645-647	2	51	5	<6	63		<.02	470		2.48	<1	76
647-649	2	58	5	270	392		<.02	403		3.78	<1	363
649-651	2	32	4	34	728		<.02	354		2.24	<1	504
651-653	2	46	6	134	506		<.02	248		2.59	<1	1090
653-655	2	34	4	22	118		<.02	236		2.23	<1	65
655-657	2	46	4	72	183		<.02	585		2.63	<1	146
657-658	1	900	6	180		0.19	0.44	458		2.12	1	5365
658-659	1	156	1	24	336		<.02	731		3.21	<1	2099
659-660	1	36	1	<6	174		<.02		0.10	3.64	<1	81
660-661	1	27	3	<6	121		<.02	859		3.92	<1	49
661-663	2	26	1	<6	119		<.02	670		4.06	<1	97
663-663.5	0.5	69	2	24	90		<.02		0.26	4.45	<1	190
645 - 655	14'	114	4.5	91	444		.05	413		2.66	<1	854
							.0015			"		
										6% Py		

EXXON MINERALS CO., USA

Hg + Mo - 9/19/79

ANALYTICAL REPORT

PROJECT GREYHOUND(EGH-1) PROJECT NO. 5130 SUBMITTAL NO. 79-21-9

STATE AZ COUNTY QUAD DATE SUBMITTED 9/1/79

SAMPLE NO. 53 TYPE CORE GEOLOGIST M. Fellows

STORAGE BOX NO. PAGE 1 OF 2

REMARKS

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Co	PPM Ni	PPM Mn	% Mn	% Fe	PPB Hg
500 -510	50	<1	8	97	<1	7	14		0.13	2.41	6
510 -520	24	<1	10	80	<1	8	<5	442		2.46	<6
520 -530	38	<1	12	95	<1	9	6	474		2.58	<6
530- 540	36	<1	12	73	<1	9	11		0.13	2.59	<6
540 -550	43	<1	18	82	<1	10	<5	624		2.61	<6
550 -559	102	<1	22	103	<1	11	6	938		2.85	6
559 -561	230	<1	18	107	<1	6	7	960		2.77	60
561 -563	76	<1	250	679	<1	7	<5	514		2.92	476
563 -565	42	<1	30	105	<1	8	8		0.11	2.44	90
565 -570	12	<1	10	64	<1	8	<5	289		1.77	6
570 -580	30	<1	10	80	<1	6	9		0.12	2.46	12
580 -585	87	<1	26	53	<1	7	6	713		2.48	12
585 -592.4	56	<1	16	109	<1	11	7	941		4.33	6
592.4-600	43	<1	20	74	<1	7	5	694		2.63	18
600 -605	26	<1	12	83	<1	8	10		0.11	3.01	18
605 -615	25	<1	8	82	<1	5	<5	397		2.51	<6
615 -622	26	<1	6	64	<1	6	<5	349		1.81	<6
622 -630	15	<1	6	68	<1	6	8		0.10	2.21	6
630 -640	27	<1	<6	52	<1	5	<5	463		2.00	18
640 -643	45	<1	8	56	<1	5	6	963		1.83	6
(Previously split)											
663.5-670	18	<1	12	115	<1	9	<5	745		4.21	24
670 -680	26	<1	16	314	<1	16	25		0.18	5.53	<6
680 -691	23	<1	8	154	<1	14	8		0.10	1.80	90
691 -700	38	<1	8	103	<1	7	<5		0.10	3.81	1048
700 -707	45	<1	6	158	<1	6	12		0.11	2.59	6
707 -711	24	<1	16	188	<1	24	14		0.17	5.58	12
711 -720.5	41	<1	12	129	<1	<5	7	390		2.13	6
720.5-730	67	<1	6	99	<1	5	9		0.10	1.75	12
730 -744	33	<1	10	93	1	5	5	555		1.82	6
744 -750	30	<1	8	60	<1	<5	6		0.10	1.24	12
750 -760	32	<1	8	95	<1	<5	<5	769		1.98	<6
760 -770	41	<1	12	140	<1	<5	10		0.12	2.22	<6
770 -780	24	<1	14	107	<1	7	5	849		2.98	<6
780 -785	17	<1	10	101	<1	9	6		0.10	3.54	66
785 -790	17	<1	8	105	<1	6	11		0.16	3.48	121
790 -795	24	<1	10	109	<1	8	12		0.18	3.97	6
795 -800	26	<1	8	147	<1	5	7	936		4.46	18
800 -805	29	<1	14	130	<1	9	13		0.19	4.55	18
805 -810	36	<1	18	115	<1	11	12		0.17	4.64	<6
810 -811	24	<1	34	153	<1	10	6		0.10	4.22	<6
811 -813	37	<1	24	117	<1	9	9		0.12	4.21	12
813 -814	24	<1	10	123	<1	8	6	883		3.86	6
814 -815	34	<1	6	64	<1	7	<5	611		2.31	18
815 -820	26	<1	6	66	<1	8	7		0.11	3.00	24
820 -830	28	<1	<6	103	<1	6	<5	720		2.48	24
830 -840	19	<1	8	61	<1	6	8		0.10	2.20	24
840 -850	20	<1	8	89	<1	9	<5	726		3.10	18
850 -860	26	<1	8	114	<1	9	8		0.10	3.92	36
860 -870	61	<1	14	126	<1	7	<5	605		2.79	24

ANALYTICAL REPORT

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-21-9

STATE Az COUNTY QUAD DATE SUBMITTED 9/1/79

SAMPLE NO. 53 TYPE CORE GEOLOGIST M. Fellows

STORAGE BOX NO. PAGE 2 OF 2

REMARKS

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Co	PPM Ni	PPM Mn	% Mn	% Fe	PPB Hg
870 -880	30	<1	10	70	<1	13	10		0.14	3.81	24
880 -885	18	<1	<6	58	<1	6	<5	571		2.81	6
885 -890	41	<1	32	66	<1	6	<5	662		3.09	18
890 -895	292	<1	28	452	<1	10	5		0.10	3.61	241

ANALYTICAL REPORT

PROJECT GREYHOUND PROJECT NO. 5180 SUBMITTAL NO. 79-20-26

STATE AZ COUNTY Yvp QUAD Black Canyon DATE SUBMITTED 9/5/79

SAMPLE NO. 1 TYPE core chip GEOLOGIST M Fellows

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Co	PPM Ni	% Mn	% Fe
EGH-16580	0.31	15	238	1.00	14	30	15	0.13	19.6

EXXON MINERALS CO., USA

ANALYTICAL REPORT

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-20

STATE Ariz. COUNTY QUAD DATE SUBMITTED 9-6-79

SAMPLE NO. 20 TYPE Drill Core GEOLOGIST M. Fellows

STORAGE BOX NO. PAGE 1 OF 1

REMARKS As to follow later.

SAMPLE EGH		PPM Cu	% Cu		PPM Mo	PPM Pb	% Pb	PPM Zn	% Zn	PPM Ag	PPM Fe	% Fe	PPM Mn	% Mn	PPB Hg	
180-190		116			< 1	18		67		1		6.84		0.11	15	
190-207.7		90			< 1	20		66		1		6.34		0.10	10	
207.7-211.5		62			< 1	12		24		< 1		2.83	508		5	
211.5-220		50			< 1	12		39		< 1		3.06	688		5	
220-226.5		50			< 1	20		45		< 1		3.36	724		5	
226.5-229		37			< 1	14		34		< 1		2.95	655		15	
229-235		28			< 1	16		48		< 1		3.41	697		5	
235-242.2		25			< 1	12		45		< 1		3.29	791		5	
242.2-244.7		24			< 1	12		47		< 1		2.99	668		< 5	
244.7-250		75			< 1	18		43		< 1		3.02	605		< 5	
250-260		50			< 1	20		75		< 1		3.48	731		< 5	
260-265		115			< 1	18		65		< 1		5.89		0.13	10	
265-273		35			< 1	8		48		< 1		3.61	756		< 5	
273-280		116			< 1	18		63		1		6.12		0.14	5	
280-290		152			< 1	20		76		1		6.97		0.12	5	
290-302		73			< 1	14		76		< 1		5.48		0.11	5	
302-310		34			< 1	14		61		< 1		3.78	787		< 5	
310-317		81			< 1	10		66		< 1		3.89	733		< 5	
317-325		178			< 1	60		110		< 1		8.79			< 5	
325-330		179			< 1	20		111		1		7.78			5	

EXXON MINERALS CO., USA

PROJECT GREYHOUND (EGH-1) PROJECT NO. 5180 SUBMITTAL NO. 79-20-13

STATE Ariz. COUNTY _____ QUAD _____ DATE SUBMITTED 8-24-79

SAMPLE NO. 17 TYPE Drill core GEOLOGIST M. Fellows

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS As to follow later

SAMPLE EGH	PPM Cu	% Cu	PPM Mo	PPM Pb	% Pb	PPM Zn	% Zn	PPM Ag	% Fe	PPM Mn	% Mn	PPB Hg
70-80	72		<1	20		110		1	5.94		0.10	32
80-90	59		<1	16		69		1	5.54		0.10	30
90-100	29		<1	8		65		<1	4.46	792		5
100-110	34		<1	12		75		<1	4.66	879		<5
110-120	100		<1	16		73		<1	6.90		0.15	<5
120-130	119		<1	24		77		1	7.41		0.12	5
130-133	70		<1	24		354		1	7.16		0.10	5
133-140	82		<1	20		51		1	6.10	940		<5
140-145	103		<1	20		56		1	6.39		0.11	<5
145-150.4	111		<1	24		64		1	7.26		0.10	15
150.4-155	164		<1	20		57		1	6.97		0.13	108
155-158.6	41		<1	16		146		1	8.73		0.12	100
158.6-161	285		<1	20		339		1	11.4		0.11	167
161-163.5	196		<1	26		285		1	12.3		0.10	1778
163.5-167	102		<1	26		140		<1	7.07		0.10	252
167-170	70		<1	30		89		<1	6.45		0.10	36
170-180	107		<1	18		64		1	6.73		0.11	20

EXXON MINERALS CO., USA

SIGNED [signature] DATE 9/26/79

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

Playground
5180-EGH-1:

JOB # 023355
RECEIVED 9-21-79
REPORTED 10-11-79

SAMPLE NUMBER		Arsenic PPM					
70-80		92					
80-90		59					
90-100		14					
110-110		21					
110-120		76					
120-130		31					
130-133		191					
133-140		35					
140-145		38					
145-150.4		14					
150.4-155		193					
155-158.6		31					
158.6-161		26					
161-163.5		21					
163.5-167		26					
167-170		14					
170-180		5					
180-190		2					
190-207.7		4					
207.7-211.5		7					
211.5-220		2					
220-226.5		7					
226.5-229		< 2					
229-235		2					
235-242.2		2					
242.2-244.7		2					
244.7-250		5					
250-260		26					
260-265		17					
265-273		9					

Hibbetts
10-11-79

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Exxon Company
Tucson

Page 2 of 3

JOB # 023355 Continued
RECEIVED
REPORTED

SAMPLE NUMBER		Arsenic PPM					
273-280		12					
280-290		21					
290-302		5					
302-310		7					
310-317		7					
317-325		5					
325-330		7					
330-338		17					
338-344		2					
344-350		5					
350-352		26					
352-354		17					
354-356		14					
356-358		85					
358-360		2					
360-362		24					
362-365		12					
365-370		2					
370-375		5					
375-380		14					
380-390		21					
390-400		12					
400-402		12					
402-404		17					
404-406		5					
406-408		2					
408-410		12					
410-412		5					
412-414		2					
414-416		2					

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Exxon Company
Tucson

JOB # 023355 Continued

RECEIVED

REPORTED

SAMPLE NUMBER		Arsenic PPM					
416-418		9					
418-420		9					
420-426		5					
426-437		5					
437-440		12					
440-446		17					
446-450		14					
450-460		7					
460-470		5					
470-474.5		4					
474.5-480		7					
480-485		14					
485-490		14					
490-500		7					

Shah
10-11-79

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

WM. WRIGHT
ARIZONA REG. NO. 5975

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

5180-EGH-1:

JOB # 023355
RECEIVED 9-21-79
REPORTED 10-11-79

SAMPLE NUMBER		Arsenic PPM					
70-80		92					
80-90		59					
90-100		14					
110-110		21					
110-120		76					
120-130		31					
130-133		191					
133-140		35					
140-145		38					
145-150.4		14					
150.4-155		193					
155-158.6		31					
158.6-161		26					
161-163.5		21					
163.5-167		26					
167-170		14					
170-180		5					
180-190		2					
190-207.7		4					
207.7-211.5		7					
211.5-220		2					
220-226.5		7					
226.5-229		< 2					
229-235		2					
235-242.2		2					
242.2-244.7		2					
244.7-250		5					
250-260		26					
260-265		17					
265-273		9					

OCT 1979
RECEIVED
TUCSON
MINERALS

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.
REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

Exxon Company
Tuccson

JOB # 023355 Continued
RECEIVED
REPORTED

SAMPLE NUMBER		Arsenic PPM					
273-280		12					
280-290		21					
290-302		5					
302-310		7					
310-317		7					
317-325		5					
325-330		7					
330-338		17					
338-344		2					
344-350		5					
350-352		26					
352-354		17					
354-356		14					
356-358		85					
358-360		2					
360-362		24					
362-365		12					
365-370		2					
370-375		5					
375-380		14					
380-390		21					
390-400		12					
400-402		12					
402-404		17					
404-406		5					
406-408		2					
408-410		12					
410-412		5					
412-414		2					
414-416		2					

OCT 1979 RECEIVED TUCSON MINERALS

1 ppm = 0.0001% 1 troy oz./ton = 34.285 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Exxon Company
Tucson

JOB # 023355 Continued
RECEIVED
REPORTED

SAMPLE NUMBER		Arsenic PPM					
416-418		9					
418-420		9					
420-426		5					
426-437		5					
437-440		12					
440-446		17					
446-450		14					
450-460		7					
460-470		5					
470-474.5		4					
474.5-480		7					
480-485		14					
485-490		14					
490-500		7					

OCT 1979 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 8888 Dnyanendra Amrutlal Shah DATE SIGNED 10-11-79 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

ACCT 0004

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

Greyhound DDH #1
5180

EGH-1:

Project 5180
JOB # 023445
RECEIVED 10-11-79
REPORTED 11-6-79

SAMPLE NUMBER	Arsenic PPM	Sample Number	Arsenic PPM	Sample Number	Arsenic PPM		
70-80	105	273-280	2	416-418	5		
80-90	52	280-290	7	418-420	7		
90-100	11	290-302	4	420-426	10		
100-110	20	302-310	5	426-437	7		
110-120	120	310-317	5	437-440	12		
120-130	42	317-325	2	440-446	7		
130-133	240	325-330	7	446-450	22		
133-140	55	330-338	10	450-460	5		
140-145	62	338-344	10	460-470	5		
145-150.4	25	344-350	11	470-474.5	2		
150.4-155	267	350-352	17	474.5-480	10		
155-158.6	122	352-354	17	480-485	7		
158.6-161	35	354-356	17	485-490	5		
161-163.5	42	356-358	120	490-500	5		
163.5-167	2	358-360	22				
167-170	15	360-362	30				
170-180	5	362-365	22				
180-190	2	365-370	10				
190-207.7	< 2	370-375	12				
207.7-211.5	12	375-380	20				
211.5-220	10	380-390	32				
220-226.5	7	390-400	17				
226.5-229	12	400-402	27				
229-235	2	402-404	15				
235-242.2	5	404-406	22				
242.2-244.7	< 2	406-408	20				
244.7-250	2	408-410	16				
250-260	5	410-412	11				
260-265	6	412-414	15				
265-273	5	414-416	10				

Shah 11-6-

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

EGH-1:

Project 5180
JOB # 023445
RECEIVED 10-11-79
REPORTED 11-6-79

SAMPLE NUMBER	Arsenic PPM	Sample Number	Arsenic PPM	Sample Number	Arsenic PPM
70-80	105	273-280	2	416-418	5
80-90	52	280-290	7	418-420	7
90-100	11	290-302	4	420-426	10
100-110	20	302-310	5	426-437	7
110-120	120	310-317	5	437-440	12
120-130	42	317-325	2	440-446	7
130-133	240	325-330	7	446-450	22
133-140	55	330-338	10	450-460	5
140-145	62	338-344	10	460-470	5
145-150.4	25	344-350	11	470-474.5	2
150.4-155	267	350-352	17	474.5-480	10
155-158.6	122	352-354	17	480-485	7
158.6-161	35	354-356	17	485-490	5
161-163.5	42	356-358	120	490-500	5
163.5-167	2	358-360	22		
167-170	15	360-362	30		
170-180	5	362-365	22		
180-190	2	365-370	10		
190-207.7	< 2	370-375	12		
207.7-211.5	12	375-380	20		
211.5-220	10	380-390	32		
220-226.5	7	390-400	17		
226.5-229	12	400-402	27		
229-235	2	402-404	15		
235-242.2	5	404-406	22		
242.2-244.7	< 2	406-408	20		
244.7-250	2	408-410	16		
250-260	5	410-412	11		
260-265	6	412-414	15		
265-273	5	414-416	10		

NOV 1979 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 8888 Dnyanendra Amrutlal Shah DATE SIGNED 11-6-79 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Greyhound
Project 5180

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

JOB # 023444
RECEIVED 10-11-79
REPORTED 10-31-79

SAMPLE NUMBER		Sulfur %					
EGH-1: 580		26.51	.5	.50%	Py		
				.31%		.11	
				.03		.32%	

REGISTERED ASSAYER CERTIFICATE NO. 5875 WILBUR D. WRIGHT Date Signed Arizona U. S. A.

OCT 1979 RECEIVED TUCSON MINERALS

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

Project 5180

JOB # 023444
RECEIVED 10-11-79
REPORTED 10-31-79

SAMPLE NUMBER		Sulfur %					
EGH-1: 580		26.51					

10/31/79

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

ACCT 0004

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BL
PHONE 602—884-58
884-58

Project 5180-1

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

JOB # 023504
RECEIVED 10-25-79
REPORTED 11-8-79

SAMPLE NUMBER		Arsenic PPM		Sample Number	Arsenic PPM		
500-510		13		750-760	8		
510-520		8		760-770	18		
520-530		18		770-780	10		
530-540		31		780-785	8		
540-550		142		785-790	5		
550-559		23		790-795	8		
559-561		23		795-800	9		
561-563		18		800-805	8		
563-565		13		805-810	13		
565-570		23		810-811	10		
570-580		6		811-813	13		
580-585		13		813-814	8		
585-592.4		16		814-815	14		
592.4-600		33		815-820	8		
600-605		9		820-830	20		
605-615		13		830-840	4		
615-622		21		840-850	3		
622-630		4		850-860	6		
630-640		5		860-870	4		
~~640-643~~		4		870-880	8		
663 ~~643~~-670		13		880-885	5		
670-680		18		885-890	10		
680-691		23		890-895	9		
691-700		8					
700-707		10					
707-711		8					
711-720.5		12					
720.5-730		13					
730-744		8					
744-750		6					

Shahet 11-

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Project 5180-1

JOB # 023504
RECEIVED 10-25-79
REPORTED 11-8-79

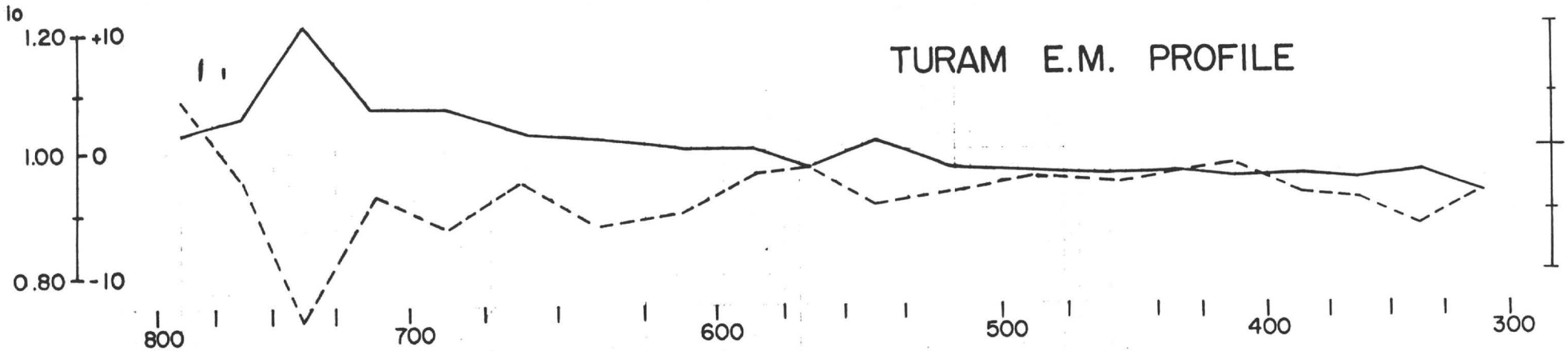
Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

SAMPLE NUMBER		Arsenic PPM		Sample Number	Arsenic PPM		
500-510		13		750-760	8		
510-520		8		760-770	18		
520-530		18		770-780	10		
530-540		31		780-785	8		
540-550		142		785-790	5		
550-559		23		790-795	8		
559-561		23		795-800	9		
561-563		18		800-805	8		
563-565		13		805-810	13		
565-570		23		810-811	10		
570-580		6		811-813	13		
580-585		13		813-814	8		
585-592.4		16		814-815	14		
592.4-600		33		815-820	8		
600-605		9		820-830	20		
605-615		13		830-840	4		
615-622		21		840-850	3		
622-630		4		850-860	6		
630-640		5		860-870	4		
640-643		4		870-880	8		
643-670		13		880-885	5		
670-680		18		885-890	10		
680-691		23		890-895	9		
691-700		8					
700-707		10					
707-711		8					
711-720.5		12					
720.5-730		13					
730-744		8					
744-750		6					

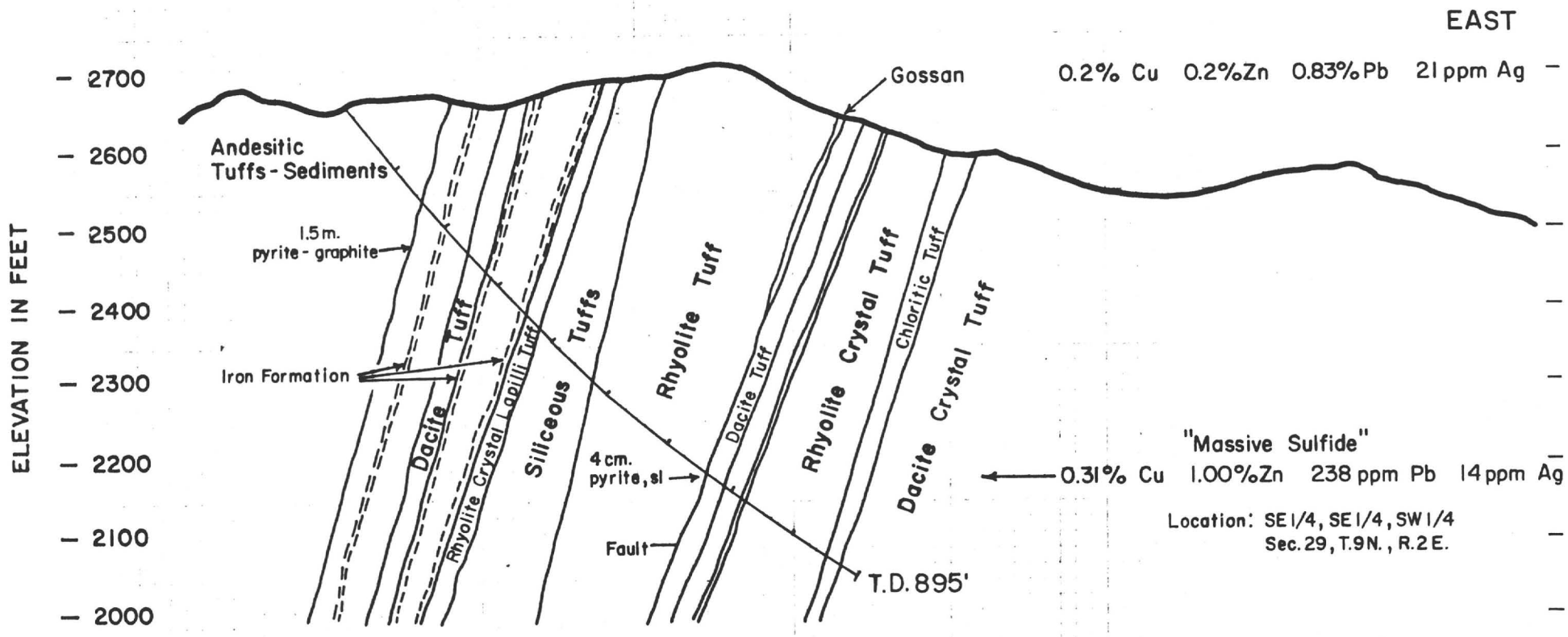
REGISTERED ASSAYER CERTIFICATE NO. 8888 Dnyanendra Amrutlal Shah ARIZONA U.S.A.
SIGNED 11-8-79

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

GREYHOUND EGH-1 TARGET SUMMARY



GEOLOGIC CROSS SECTION (looking N.20E.)



I MINERALS CO. U.S.A.	AREA GREYHOUND	TITLE EGH-1 CROSS SECTION	
Southwest Office	CO. & ST. YAVAPAI Co., ARIZONA	BY M.L.FELLOWS	
N. RENO SILVER CITY	SCALE 0 200' 400'	PROJ. NO. 5180	DATE 9-6-79 FILE NO.

file

EXXON MINERALS COMPANY, U.S.A.
2425 N. Huachuca Drive
Tucson, Arizona 85705

June 12, 1979

TO: A. R. DAHL

FROM: T. C. PATTON TCP

RE: GREYHOUND DRILLING AUTHORITY #5180 AZ

Attached are the Exploration Drilling Authority and Drill Request specifications for our Greyhound massive sulfide prospect. The exact hole location will depend on the final EM interpretation which should be complete within two weeks.

We would appreciate Land Department assistance in obtaining permission to pump about 15,000 gallons of water from the Agua Fria River. A memo describing our procedure last year is attached.

Also note that the area of our proposed drill hole falls within the BLM Williams Mesa area (#2-085) which has been identified as having possible wilderness values. A BLM map of the area is attached with Sec. 29, T9N, R2E shown in yellow.

T.C.P.

sfl

Encl.

AUTHORITY NUMBER _____

PROJECT NUMBER 5180

EXPLORATION DRILLING AUTHORITY

Minerals Department

BLOCK GREYHOUND PRINCIPAL MINERAL Copper TYPE TARGET Massive Sulfide

STATE Arizona COUNTY Yavapai TOTAL AUTHORITY $25,000

APPROXIMATE NO. HOLES One (1) FEET 1000

HOLE LOCATION(S) AS PER ATTACHED PLAT:

Sections 29, 32, T9N, R2E

REASON FOR RECOMMENDATION:

Test of possible massive Cu-Zn sulfide body as suggested by Turam E.M. anomaly coincident with visible surface evidence of mineralization. Fulfill assessment requirements for 1979.

OTHER: Starting date: August

Completion date: August 31

Require land Dept. assistance in securing permission to take water (15,000 gal.) from Agua Fria River

Approval is granted for exploration drilling and related drill hole costs within the above total money limit.

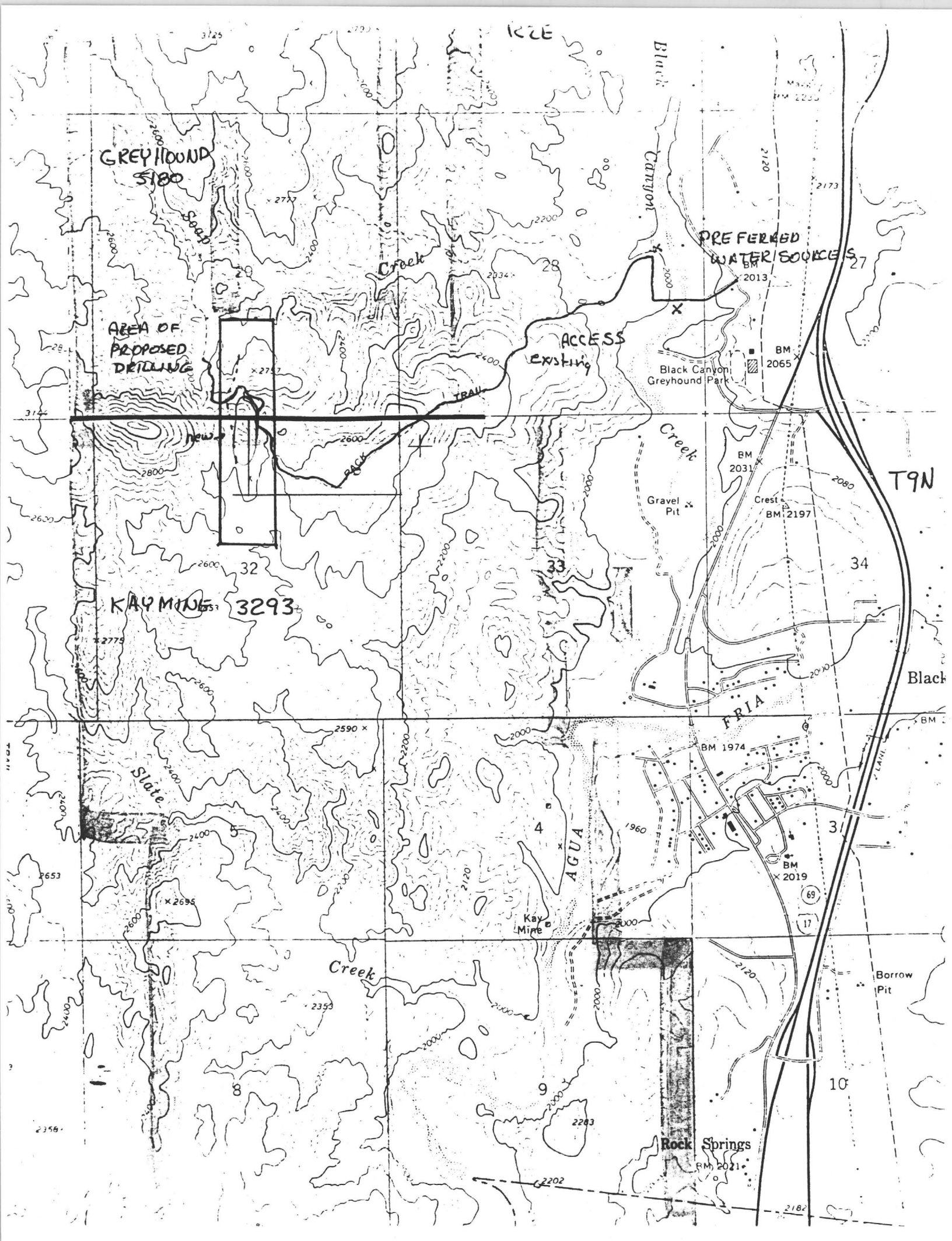
RECOMMENDED BY: Michael Fellows T. C. Patton DATE: 6/13/79

ENDORSED BY: _____ DATE: _____

ENDORSED BY: _____ DATE: _____

AUTHORIZED BY: _____

DATE: _____


GREYHOUND
5180
Soap
Creek
AREA OF
PROPOSED
DRILLING
new
ACCESS
Existing
TRAIL
BACK
PREFERRED
WATER SOURCES
Black
Canyon
Creek
BM
2013
BM
2065
Black Canyon
Greyhound Park
BM
2031
Gravel
Pit
Crest
BM 2197
T9N
KAY MINE
3293
FRIA
BM 1974
Slate
Creek
AGUA
Kay
Mine
BM
2019
Borrow
Pit
Rock Springs
BM 2021
Black

90-0072-1

MEMORANDUM

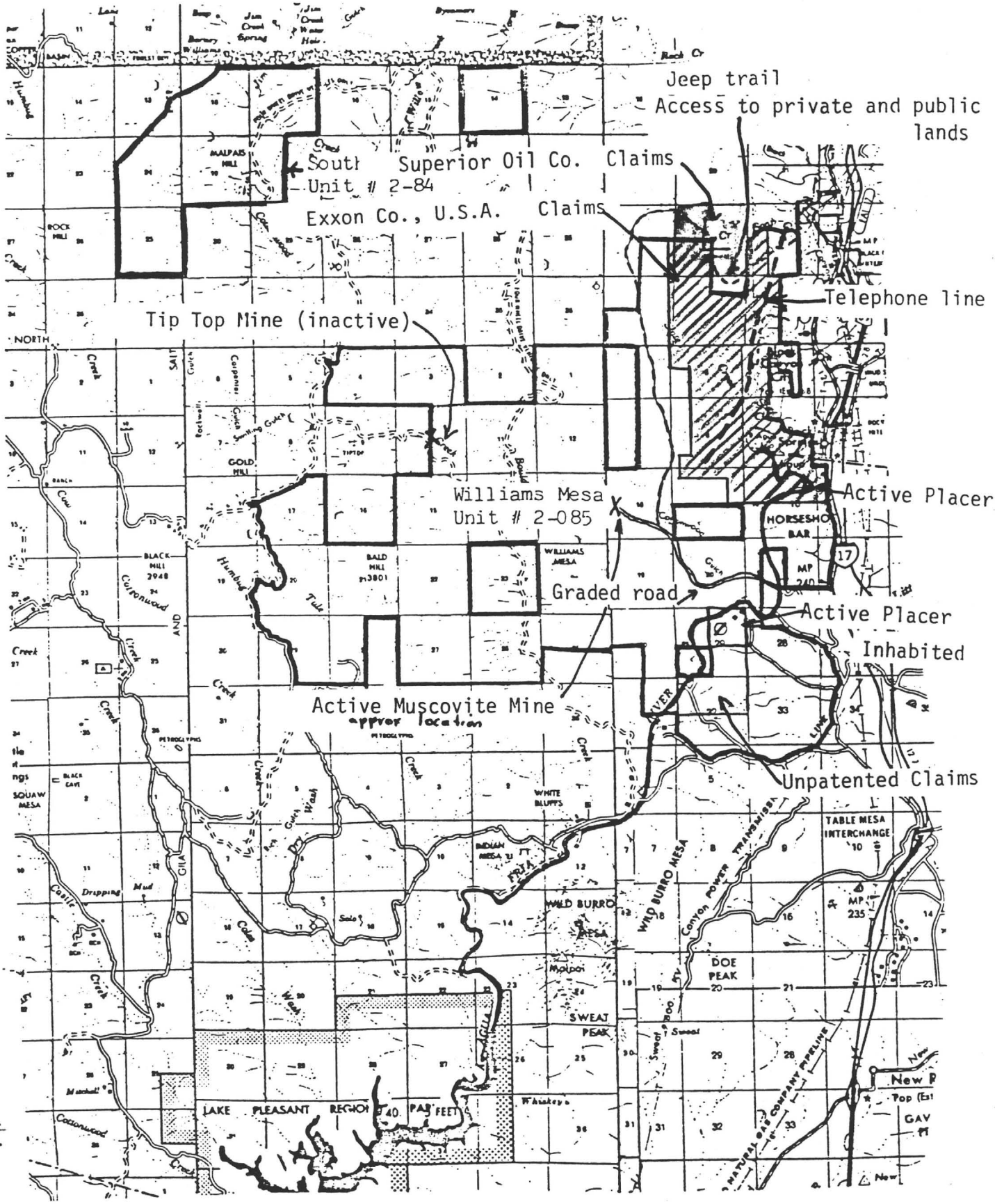
FILE	SUBJECT: 1978 Water Use - Kay Mine #3293 - Drilling	
FROM: T. C. PATTON (TCP)	DATE: 10-10-78	FILE NO.

Prior to beginning hole K-15 in the Horseshoe Bend area, our land department was asked to investigate the possibility of pumping water from the Agua Fria River rather than hauling it from Black Canyon City. Jay Berry contacted Mr. Dick Yancy, President of the Maricopa County Water District (ph. no. 602-933-8251) and obtained permission to pump 5000 gallons of water. Mr. Yancy asked that we notify him if (1) we used more than 5000 gallons, and (2) when we completed our drill hole.

On Sept. 25 I called Mr. Yancy and told him that we had used approximately 5000 gallons of water and would require an additional 3000-5000 gallons to finish the job. He gave us permission to finish the job. On Oct. 6 I told Mr. Yancy that we had completed the job on Oct. 3 and had used about 10,000 gallons of water.

T.C.P.

sfl


Jeep trail
Access to private and public lands
South Superior Oil Co. Claims
Unit # 2-84
Exxon Co., U.S.A. Claims
Telephone line
Tip Top Mine (inactive)
Williams Mesa
Unit # 2-085
Active Placer
Graded road
Active Placer
Inhabited
Active Muscovite Mine
approx location
Unpatented Claims
MALPAIS HILL
ROCK HILL
NORTH
GOLD HILL
BLACK HILL 2948
BALD HILL
WILLIAMS MESA
HORSESHOE BAR
MP 240
17
WHITE BLUFFS
INDIAN MESA
WILD BURRO MESA
TABLE MESA INTERCHANGE
MP 235
DOE PEAK
SWEAT PEAK
SQUAW MESA
LAKE PLEASANT RECREATION AREA

MINERALS DEPT.: Drill Request and Project Specifications

Date 6/1/79

Project Name, No. and Geologist Greyhound #5180 AZ M. L. Fellows

2 Miles NW (direction) From Black Canyon City, AZ (town)

County Yavapai State Ariz. Sec., T&R(s) 29-32 T9N R2E

Starting Date _____ Approx. Completion Date _____

Possibility oil/gas sands (flow) penetrated? Very remote

Artesian flow? No

Type of Drill Diamond No. of Drills 1 Shifts/Day 2-3

No. of Holes 1 Est. Total Footage 1000'

Max. Hole Depth 1000' Sample Requirements NX core

Vertical and/or Angle Angle Min. Degrees from Hor. 60

Core Size (Bedrock) NX Hole Size (T.D.) NX

Overburden Lithology Shallow soil Est. Thickness 1'

Bedrock Lithology and Depths Steeply dipping schistose volcanic rocks

Drill Site(s) Accessibility Good

Will any drill sites be located where a drill fluid or cuttings spill/ discharge could get into stream, river, lake, marsh, etc. Yes X No ____

Water Source Agua Fria River - or purchase

Water available within 1 mile (feet) (miles) from drill area

Max. elev. diff. between water source and drill sites 800'

Est. drilling contractor money that must be spent: $6000 by 9-1-79

Project on Indian lands or on US Gov't land that is not claims. Yes ___ No X

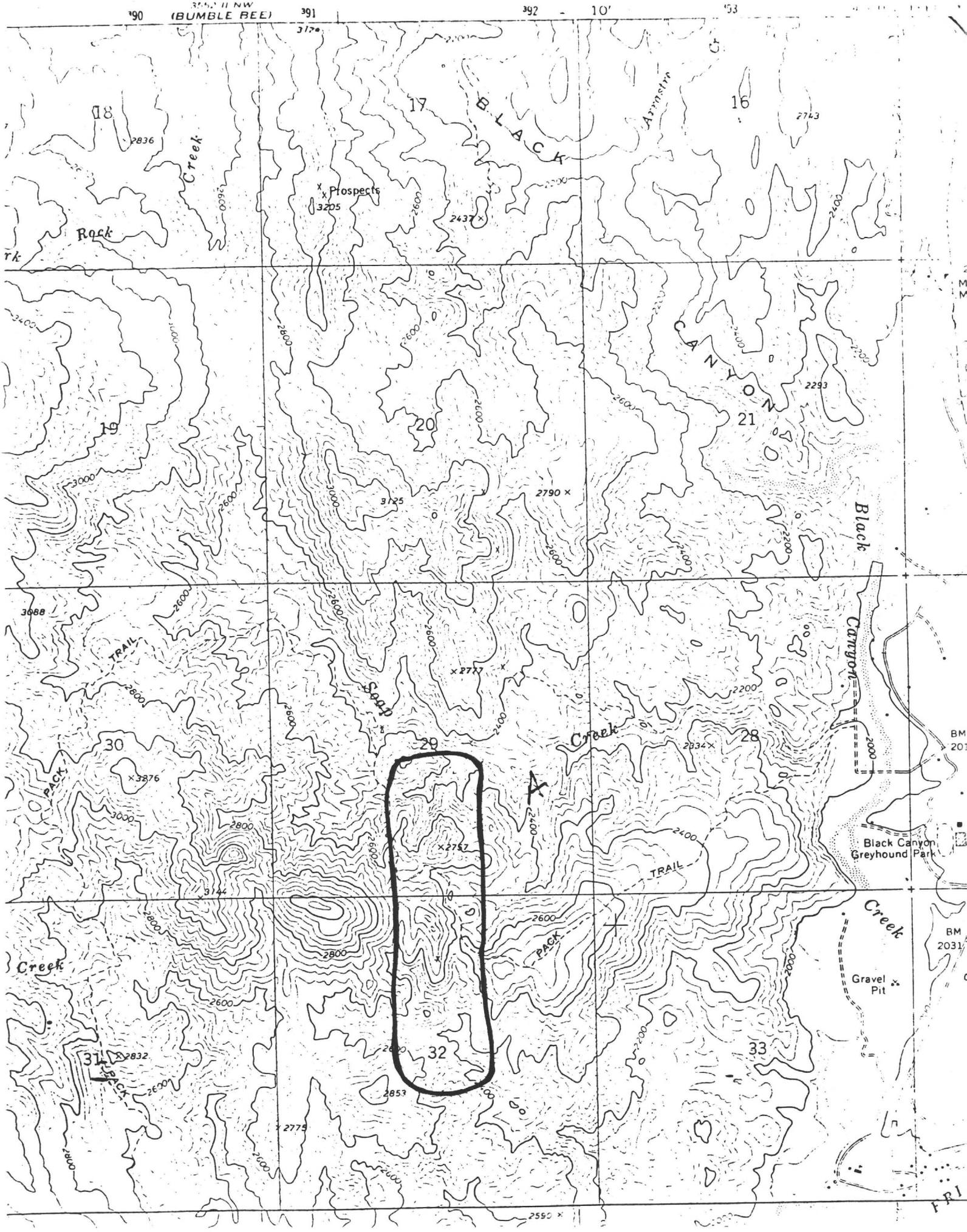
Do permits (USFS etc) issued to Exxon involve contractor compliance: Yes X No ___

Contractor Preference _____

Special Problems - Note on back of this page

NOTE: Access roads, drill sites, pits, core boxes and sample sacks to be furnished by Exxon unless otherwise noted.

6/78


(BUMBLE BEE)
390
391
392
10'
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31
32
33
BLACK
CANYON
Rock
Creek
Prospects
3205
2437
2743
2836
2293
3125
2790
3088
2777
Soap
Creek
Black
Canyon
TRAIL
PACK
3876
2757
3144
2834
Black Canyon
Greyhound Park
Gravel
Pit
2832
2853
2779
2590

Black Canyon
Soap Creek
Slate Creek
AGUA
Creek
TRAIL
PACK
EGH-1
Black Canyon Greyhound Park
Gravel Pit
Kay Mine
BM 1974
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3144
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2853
2775
3193
2590
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2403
2925
2358

FILE KAY MINE #3293
HOLE 19A
JFM

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TBL 009
January 31, 1985
PROJECT NO. 3293-19A
570-575 TO 652.5-655

EXXON MINERALS COMPANY U.S.A.
260-B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 7 Drill Core Samples

ITEM	SAMPLE NUMBER		Cu (ppm)	Pb (ppm)	Zn (ppm)
1	570-575		860.	<5.	2100.
2	640-644		25.	<5.	140.
3	644-646.5	2.5'	1300.	220.	425.
4	646.5-648.5	2'	20000.	445.	20000.
5	648.5-651.5	3'	3900.	150.	21000.
6	651.5-652.5	1'	102000.	560.	64000.
7	652.5-655		340.	<5.	110.
	weighted assay	8.5'	1.85%	288ppm	1.78%

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TBL 009
January 31, 1985

ITEM	SAMPLE NUMBER		Ag (ppm)	Au (ppm)	
1	570-575		.4	.15	Reruns
2	640-644		<.2	.04	
3	644-646.5	2.5'	4.4	9.30	
4	646.5-648.5	2'	13.0	>10.00*	22 + 27 (Nugget o
5	648.5-651.5	3'	1.6	.46	
6	651.5-652.5	1'	32.0	>10.00*	20 + 12 "
7	652.5-655		<.2	.03	
	weighted assay	8.5'	8.68 ppm (0.253 oz/T)		

*NOTE: Fire assay analysis to follow.

REGISTERED ASSAYER CERTIFICATE NO. 9425 WILLIAM L. LEHMBECK ARIZONA

William L. Lehmbeck
Manager 7/1/85

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

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REPORT OF ANALYSIS

JOB NO. TBL 009
January 31, 1985
PROJECT NO. 3293-19A
570-575 TO 652.5-655

EXXON MINERALS COMPANY U.S.A.
260-B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 7 Drill Core Samples

ITEM	SAMPLE NUMBER	Cu (ppm)	Pb (ppm)	Zn (ppm)
1	570-575	860.	<5.	2100.
2	640-644	25.	<5.	140.
3	644-646.5	1300.	220.	425.
4	646.5-648.5	20000.	445.	20000.
5	648.5-651.5	3900.	150.	21000.
6	651.5-652.5	102000.	560.	64000.
7	652.5-655	340.	<5.	110.

RECEIVED FEB 1985 RENO MINERALS

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TBL 009
January 31, 1985

ITEM	SAMPLE NUMBER	Ag (ppm)	Au (ppm)
1	570-575	.4	.15
2	640-644	<.2	.04
3	644-646.5	4.4	9.30
4	646.5-648.5	13.0	>10.00 *
5	648.5-651.5	1.6	.46
6	651.5-652.5	32.0	>10.00 *
7	652.5-655	<.2	.03

*NOTE: Fire assay analysis to follow.

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

JFM

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. TBL 009A
February 7, 1985
PROJECT NO. 3293-19A
570-575 TO 652.5-655
PAGE 1 OF 1

EXXON MINERALS COMPANY U.S.A.
260-B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 2 Pulp Samples

ITEM	SAMPLE NUMBER	FIRE ASSAY Au (oz/t)	ppm	
4	646.5-648.5 2'	1.215	(41.6)	
6	651.5-652.5 1'	.350	(12.0)	
3	644 - 646.5 2.5'		9.4 ppm	fire assay reported verbally, not charged
5	648.5 - 651.5 3'		(.46 ppm AA)	

weighted assay 8.5' @ 14.13 ppm = .412 oz/t

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

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REPORT OF ANALYSIS

JOB NO. TBL 009A
February 7, 1985
PROJECT NO. 3293-19A
570-575 TO 652.5-655
PAGE 1 OF 1

EXXON MINERALS COMPANY U.S.A.
260-B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 2 Pulp Samples

ITEM	SAMPLE NUMBER	FIRE ASSAY Au (oz/t)
4	646.5-648.5	1.215
6	651.5-652.5	.350

EXXON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 9425 WILLIAM L. LEHMBECK DATE SIGNED Arizona

William Lehmbeck
Manager

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Bo 0106
Tucson, Arizona 85703
(602) 622-4836

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Kay Mine

REPORT OF A YSIS

CORRECTED COPY
JOB NO. TBL 009A
February 13, 1985
PROJECT NO. 3293-19A
570-575 TO 652.5-655
PAGE 1 OF 1

EXXON MINERALS COMPANY U.S.A.
260-B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 3 Pulp Samples

ITEM	SAMPLE NUMBER	IRE ASSAY Au (oz/t)
3	644-646.5	.275 *
4	646.5-648.5	1.215
6	651.5-652.5	.350

*NOTE: Item No. 3 Sample No. 644-646.5 ad d to report.

REGISTERED ASSAYER CERTIFICATE NO. 9425 WILLIAM L. LEHMBECK ARIZONA U.S.A.

William L. Lehmbeck
Manager

2/13/85

For ge
IDA

SHASTA ANALYTICAL GEOCHEMISTRY LABORATORY

1240 Redwood Boulevard, Redding, California 96003 (916) 244-4441

Date: March 4, 1985
Client: Exxon Minerals
260B Coney Island Drive
Sparks, NV 89431-6314
Att: John McKnight
Date Received: 2/25/85

No. of Samples/Job No.: 7/4088
Analytical Methods: Fire Assay, 1 assay ton (Au); A.A.(Au)
Results in oz./ton:
Results in ppm: Au

Sample #	Au*	Au**
KM-570-575	0.21	
640-644	0.05	
644-646.5	6.34	8.28
646.5-648.5	8.76	35.18(Average)
648.5-651.5	0.44	
651.5-652.5	4.61	11.16
652.5-655	0.06	

*A.A.(only)
**Fire Assay, 1 assay ton (only)

By: Bruce Knowlton, Fire Assayer
By: Brendan McMahon, Analytical Geochemist
Verified: Vern Peterson, Laboratory Manager

ND: No Detection
MS: Missing Sample
1 Troy oz/ton: 34.286 ppm
NA: Not Analyzed
IS: Insufficient Sample
1 ppm: 0.0292 Troy oz/ton
T: Trace

This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves, we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

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REPORT OF ANALYSIS

JOB NO. TBL 011
February 21, 1985
3239-KM-19A-280-290

EXXON MINERALS COMPANY, U.S.A.
260 B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 15 Drill Core Samples

ITEM	SAMPLE NUMBER	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppm)	Ag (ppm)
1	3239-KM-19A-280-290	20.	<5.	35.	<.02	<.2
2	3239-KM-19A-290-300	25.	<5.	65.	<.02	<.2
3	3239-KM-19A-300-310	20.	<5.	40.	<.02	<.2
4	3239-KM-19A-310-320	15.	<5.	40.	<.02	<.2
5	3239-KM-19A-320-330	15.	<5.	50.	<.02	.2
6	3239-KM-19A-330-340	20.	<5.	80.	<.02	<.2
7	3239-KM-19A-340-350	20.	<5.	110.	<.02	<.2
8	3239-KM-19A-350-360	15.	<5.	105.	<.02	<.2
9	3239-KM-19A-360-370	15.	<5.	125.	<.02	<.2
10	3239-KM-19A-370-380	15.	<5.	170.	<.02	<.2
11	3239-KM-19A-380-390	20.	<5.	85.	<.02	<.2
12	3239-KM-19A-390-400	20.	<5.	90.	<.02	<.2
13	3239-KM-19A-400-410	20.	<5.	90.	<.02	<.2
14	3239-KM-19A-410-420	15.	5.	95.	<.02	<.2
15	3239-KM-19A-420-430	25.	<5.	160.	<.02	<.2

REGISTERED ASSAYER CERTIFICATE NO. 9425 WILLIAM L. LEHMBECK STATE OF ARIZONA

William Lehmbeck
Manager

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Bo 0106
Tucson, Arizona 85703
(602) 622-4836

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REPORT OF ANAL SIS

JOB NO. TBL 012
February 26, 1985
3293-KM-19A 430-440/695-704

EXXON MINERALS COMPANY U.S.A.
260 B Coney Island Drive
Sparks, Nevada 89431-6314

Analysis of 28 Drill Core Samples

ITEM	SAMPLE NUMBER	C (p)	Pb (ppm)	Zn (ppm)
1	3293-KM-19A 430-440	1	5.	80.
2	3293-KM-19A 440-450	1	<5.	70.
3	3293-KM-19A 450-460	4	20.	130.
4	3293-KM-19A 460-470	2	10.	115.
5	3293-KM-19A 470-480	15	50.	180.
6	3293-KM-19A 480-490	45	<5.	90.
7	3293-KM-19A 490-500	<5	<5.	70.
8	3293-KM-19A 500-510	10.	<5.	110.
9	3293-KM-19A 510-520	65.	5.	105.
10	3293-KM-19A 520-530	140.	<5.	65.
11	3293-KM-19A 530-540	15.	<5.	130.
12	3293-KM-19A 540-550	30.	<5.	105.
13	3293-KM-19A 550-560	15.	<5.	120.
14	3293-KM-19A 560-570	25.	5.	295.
15	3293-KM-19A 575-580	70.	<5.	175.
16	3293-KM-19A 580-590	55.	5.	520.
17	3293-KM-19A 590-600	35.	<5.	550.
18	3293-KM-19A 600-610	25.	5.	450.
19	3293-KM-19A 610-620	265.	10.	375.
20	3293-KM-19A 620-630	40.	20.	195.
21	3293-KM-19A 630-640	25.	<5.	115.
22	3293-KM-19A 655-660	90.	5.	85.
23	3293-KM-19A 660-670	20.	5.	75.
24	3293-KM-19A 670-680	<5.	5.	40.
25	3293-KM-19A 680-688	5.	5.	55.

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

ITEM	SAMPLE NUMBER	Cu (ppm)	Pb (ppm)	Zn (ppm)
26	3293-KM-19A 688-690	65.	<5.	75.
27	3293-KM-19A 690-695 *	<5.	<5.	60.
28	3293-KM-19A 695-704	<5.	10.	95.

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TBL 012
February 26, 1985

ITEM	SAMPLE NUMBER	Au (ppm)	Ag (ppm)
1	3293-KM-19A 430-440	<.02	<.2
2	3293-KM-19A 440-450	<.02	<.2
3	3293-KM-19A 450-460	.03	1.8
4	3293-KM-19A 460-470	.07	.2
5	3293-KM-19A 470-480	.03	.2
6	3293-KM-19A 480-490	<.02	<.2
7	3293-KM-19A 490-500	<.02	<.2
8	3293-KM-19A 500-510	<.02	<.2
9	3293-KM-19A 510-520	<.02	<.2
10	3293-KM-19A 520-530	<.02	.2
11	3293-KM-19A 530-540	<.02	<.2
12	3293-KM-19A 540-550	<.02	<.2
13	3293-KM-19A 550-560	<.02	<.2
14	3293-KM-19A 560-570	<.02	<.2
15	3293-KM-19A 575-580	<.02	<.2
16	3293-KM-19A 580-590	<.02	<.2
17	3293-KM-19A 590-600	<.02	<.2
18	3293-KM-19A 600-610	<.02	<.2
19	3293-KM-19A 610-620	.02	.2
20	3293-KM-19A 620-630	<.02	<.2
21	3293-KM-19A 630-640	<.02	<.2
22	3293-KM-19A 655-660	<.02	<.2
23	3293-KM-19A 660-670	<.02	<.2
24	3293-KM-19A 670-680	<.02	<.2
25	3293-KM-19A 680-688	<.02	<.2

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

JOB NO. TBL 012
February 26, 1985

ITEM	SAMPLE NUMBER	Au (ppm)	Ag (ppm)
26	3293-KM-19A 688-690	<.02	<.2
27	3293-KM-19A 690-695 *	<.02	<.2
28	3293-KM-19A 695-704	<.02	<.2

*NOTE: This sample was marked 690-700.

William L. Lehmbeck
Manager

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

EGH-1

	UNCORRECTED DIR	CORRECT.	DRIFT
100	S 83 E (-14)	S69E	37° 53
200	S 82 E	S68 E	38.5 51.5
300	S83E	S69E	40.5 (49.5)
400	S78E	S64E (Abundant mst in this int)	43 (47)
500	S84E	S70E	46 (44°)
600	S85E	S71 E	49.5 (40.5)
700	S87E	S73 E	53 (37.5)
800	S87E	S73E	55° (35)
875	S87E	S73E	58° (32)

$$\frac{55-32}{8.75} = 2.63$$

Achieved $\approx$ $\frac{23}{9} = 2.5°/100'$

Expected 1.6 °/100'

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Structure	Rock Type

PROJECT [illegible] **HOLE No.** EGH-1

Co-ord. [illegible] **Collar elev.** [illegible] **By** _____ **Scale** 1"=100' **Date** 9-5-79 **P.** 1

INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn

0

100

200

300

400

500

600

700

800

900

000

[illegible] RHYOLITE [illegible]

Iron pyrite - chlorite - quartz exhalite

Magnetite - chert

FINE DACITE TUFF

[illegible] CHLORITIC TUFFS AND [illegible] CRYSTAL TUFFS

Magnetite - chert beds

RHYOLITE CRYSTAL LAPILLI TUFF

[illegible] RHYOLITE TUFFS

Magnetite - chert

RHYOLITE TUFF

[illegible] pyrite - chloritic - quartz

FAULT

DACITE TUFF

RHYOLITE CRYSTAL TUFF

Pyritic Rhyolite

FINE DACITE CRYSTAL TUFF

T.D. 895. 8-30-79

Pyrite Graphite

Blue-chert Black - I.F.

Magnetite

Fine Fracture Sericite

DRILL HOLE TERMINATION REPORT

PROJECT GREYHOUND PROJ. NO. 5180

HOLE NO. EGH-1

COMPLETION DATE 8-30-79

TOTAL DEPTH 895 '

RESULTS No ore. Intercepted narrow pyrite-sphalerite zone @ 658' which was cut by a fault. This zone is too thin to explain Turam E.M. anomaly on surface. Sulfide material assays 0.31% Cu, 238 ppm Pb, 1.00% Zn, 14 ppm Ag.

DRILL SITE RESTORATION:

COMPLETION DATE 9/26/79

DRILLING CERTIFICATE AND RELEASE:

DATE SIGNED N.A.

~~Dart~~

PROJECT NUMBER 5180

Tucson

EXPLORATION DRILLING AUTHORITY

Minerals Department

BLOCK GREYHOUND PRINCIPAL MINERAL Copper TYPE TARGET Massive sulfide

STATE Arizona COUNTY Yavapai TOTAL AUTHORITY $22,500

APPROXIMATE NO. HOLES One (1) FEET 550'

HOLE LOCATION(S) AS PER ATTACHED PLAT:

Section 29, T9N, R2E

RECEIVED
JUN 2 1981
EXXON MINERALS COMPANY
EXPLORATION-LAND, DENVER

REASON FOR RECOMMENDATION:

Test of possible massive Cu-Zn sulfide mineralization as suggested by surface evidence of mineralization; copper, lead, zinc and mercury geochemical anomalies; and anomalous I.P. response. This hole will fulfill approximately one half of the assessment requirements for 1981 (Sycamore drill hole ES-2 will fulfill the remainder of the assessment requirements).

OTHER

Starting date: Immediately following the completion of Sycamore drill hole ES-2.
New road will require State of Arizona approval (approximately 400' in length)
Permission to extract water from the well has been granted by the owner, Marvin Hatch.

Approval is granted for exploration drilling and related drill hole costs within the above total money limit.

RECOMMENDED BY: John W. Davidson DATE: May 22, 1981

ENDORSED BY: DATE:

ENDORSED BY: DATE:

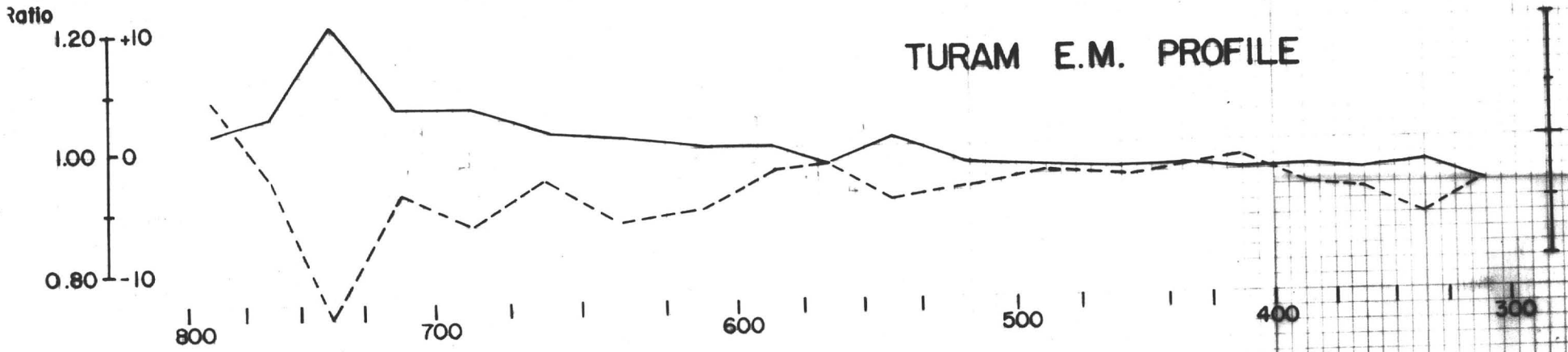
AUTHORIZED BY: DATE: June 2, 1981

DRILLING AUTHORITY
LAND CLEARANCE
Date 06/18/81
Landman's Initials M.L.S.

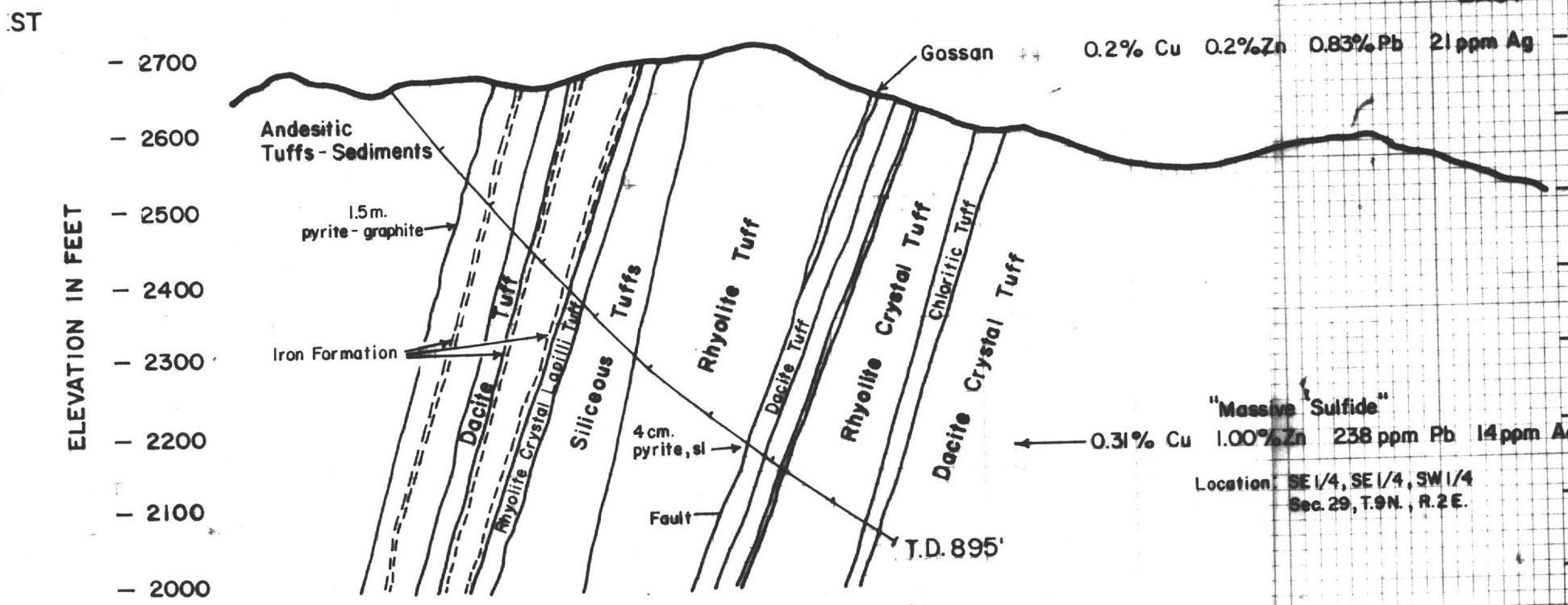
JUN 1981 RECEIVED TUCSON MINERALS

Noted: RJR 6/18/81

GREYHOUND EGH-1 TARGET SUMMARY



GEOLOGIC CROSS SECTION (looking N.20E.)



ON MINERALS CO. U.S.A.	AREA GREYHOUND	TITLE EGH-1 CROSS SECTION	
Southwest Office	CO. & ST. YAVAPAI Co., ARIZONA	BY M.L.FELLOWS	
SON - RENO SILVER CITY	SCALE 0 200' 400'	PROJ. NO. 5180	DATE 9-6-79 FILE NO.

DRILL HOLE RECORD Summary Log

PROJECT Greyhound (5180) DRILL HOLE NO EGH-2 SCALE 1" = 100' PAGE NO. 1 OF 1

LENGTH	% Fe_2O_3	ASSAYS Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes	Limonite	Pyrite	Cpy.	Sericite		STRUCT.	ROCK	Lithology, Alteration, and Structure
							hematite after pyrite disseminated throughout rhyolite unit. maximum concentration is 2-3 vol. percent		abdt. hem. after py.						Rhyolite Crystal Tuffs
															interbedded white to buff tuffs and silver-gray tuffs
															andesite lapilli tuff horizon
100'															Rhyodacite Crystal-Lapilli Tuff
							Lapilli are abundant from 140' to 146'					stringer pyrite			Dacite Crystal-Lapilli Tuff
							thin black chlorite horizons are common								
200'															Rhyolite Crystal Tuff
															dacite lithic tuff horizon
															dacite tuffs and crystal-lithic tuffs
															coarse rhyodacitic crystal-lithic tuff
												stringer pyrite			Rhyolite Crystal Tuff - white to buff
							abdt. thin horizons of black chlorite and chert								thin dacite crystal tuff and chert horizon
300'															Silver-Gray Rhyolite Tuff
							numerous black chlorite horizons								
							*2 vol.% arsenopyrite								Dacite Crystal-Lapilli Tuff
							3-5 vol. % pyrite in stringers								Rhyodacite to Dacite Crystal Tuff
400'															dacite crystal tuff
							Carbonate (disseminated) abundant								Dacite Lapilli Tuff
															Rhyodacite Crystal-Lapilli Tuff
							2 vol. % stringer pyrite								
500'							T.D.: 502'								Rhyolite Crystal-Lapilli Tuff
															Dacite Crystal-Lapilli Tuff

11

File

DRILL HOLE RECORD **Summary Log**

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-2 SCALE 1" : 100' PAGE NO. 1 OF 1

Depth	% Fe_2O_3	ASSAYS Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes	Limonite	Pyrite	Cpy.	Sericite	STRUCT.	ROCK	Lithology, Alteration, and Structure
							hematite after pyrite disseminated throughout rhyolite unit. maximum concentration is 2-3 vol. percent		abdt. hem after py.					Rhyolite Crystal Tuffs
														interbedded white to buff tuffs and silver-gray tuffs
														andesite lapilli tuff horizon
0'														Rhyodacite Crystal-Lapilli Tuff
							Lapilli are abundant from 140' to 146'							Dacite Crystal-Lapilli Tuff
											stringer pyrite			
							thin black chlorite horizons are common							Rhyolite Crystal Tuff
200'														dacite lithic tuff horizon
														dacite tuffs and crystal-lithic tuffs
														coarse rhyodacitic crystal-lithic tuff
											stringer pyrite			Rhyolite Crystal Tuff - white to buff
							abdt. thin horizons of black chlorite and chert							thin dacite crystal tuff and chert horizon
00'														Silver-Gray Rhyolite Tuff
							numerous black chlorite horizons							
							≈2 vol.% arsenopyrite							Dacite Crystal-Lapilli Tuff
							3-5 vol. % pyrite in stringers							Rhyodacite to Dacite Crystal Tuff
														dacite crystal tuff
00'														
							carbonate (disseminated) abundant							Dacite Lapilli Tuff
														Rhyodacite Crystal-Lapilli Tuff
							2 vol. % stringer pyrite							Rhyolite Crystal-Lapilli Tuff
00'							T.D.: 502'							Dacite Crystal-Lapilli Tuff

DRILL HOLE RECORD

PROJECT Greyhound (5180) DRILL HOLE N EGH-2 SCALE 1":20' PAGE NO. 1 OF 4

LENGTH	core run recovery	% Fe_2O_3	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes	Limonite	Pyrite	Chalcopy.	Sphaler.	Galena	Quartz veins	Carbonate	Graphite	Sericite	Talc	Tourmal.		STRUCT.	ROCK	Lithology, Alteration, Structure
		0.00						Driller: Longyear (Norm Crowley) Spudded: 3-19-80 10" began coring - NCWL core															0-10': No core - result of casing - lithology: same as below Rig orientation: S 80°E and -55° from horizontal
	70	0.00	17	6	8	72	<1	goethite > hematite															: PreCambrian Rhyolite Crystal Tuff
20		0.00	12	3	6	113	<1	hematite and or goethite common. Occur as whisps and as stainings on parting planes.															a fine-to-medium grained white to buff - to grey very schistose rock. Kinking is very common.
	70	0.00	16	3	6	116	<1	hematite after pyrite disseminated through matrix. maximum concentration - 2-3 volume percent															matrix: comprised of quartz feldspar? sericite and minor talc. Alternating bands of quartz + feldspar and sericite + talc. Sericite generally only in thin horizons along which rock breaks. Content of sericite extremely variable. Some areas all quartz matrix and other areas all sericite matrix.
40		0.00	81	4	8	51	<1	NOTE: all angles in log measured to core axis. Core axis is -55° from horizontal												conductivity tested with ohm meter: results - no conductive zones to 150'			Quartz phenocrysts are extremely variable in size, shape, and abundance: size: 0.1 - 0.2 inches shape: subhedral resorbed grains to anhedral prolate grains abundance: 0.0% to 12%
	90	0.00	25	4	10	93	<1																Black chert zones: variable in abundance (always minor) but always very thin and contain some tourmaline (black non-magnetic mineral commonly in needles)
60	95							-3-22-80 goethite only on partings															Carbonate: associated with limonite - limonite zones fizz.
	90	0.00	53	6	6	105	<1	NOTE: S at left edge of log represents location of skelaton samples.															Quartz phenocrysts decrease in size and abundance as progress down hole.
		0.00	14	3	8	37	<1	minor goethite on partings															Silver-grey to grey black variety of Rhyolite Crystal tuff. Upper contact somewhat brecciated Quartz phenocrysts very variable in abundance. Basic composition: same as above rhyolite
80		0.00	24	11	6	65	<1	hematite goethite abundant on partings minor goethite on partings hematite															White to buff rhyolite crystal tuff. Similar to 1st crystal tuff except slightly more silicic. Contains several <1/2" interbeds of grey crystal tuff. minor interbeds of white rhyolite crystal tuff
		0.00	37	9	12	113	<1	limonite (hematite) veinlets and clots are increasing															Chloritic andesitic lapilli tuff. Cut by many quartz veins minor 3/8" clots of quartzofeldspathic material. also several chloritic horizons. Some intervals are rhyodacitic in composition. - at 96 feet silver grey rhyolites increase towards bottom.
100		0.02	21	9	6	65	<1	goethite abundant at 105' little to no goethite															1' horizon of white rhyolite crystal tuff
		0.00	26	8	10	115	<1	very high chlorite content rhyolite horizon few quartz phenocrysts															Rhyodacitic Crystal lapilli Tuff - a green-white rock containing quartz phenocrysts (decrease in abundance down hole) and quartzo-feldspathic and chloritic lithic fragments. Chlorite content increases down hole.
120		0.01	78	12	8	102	<1	sericite common throughout rock and only record abnormally high conc.															Dacitic Crystal lapilli Tuff. quartz, feldspar, sericite, chlorite matrix. Contains quartz phenocrysts and lapilli of quartz and feldspar and lapilli of chlorite
		0.00	29	10	12	79	<1																
140		0.00	24	12	8	93	<1	NOTE: all pyrite above 155' is actually hematite after pyrite															White rhyolite crystal tuff but contains numerous quartzofeldspathic and very silicic lithic fragment Dacitic Crystal lapilli Tuff

DRILL HOLE RECORD

PROJECT Greyhound (5180) DRILL HOLE No. EGH-2 SCALE 1":20' PAGE NO. 2 OF 4

Length	Core run recovery	% Fe_2O_3	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes
		0.05	32	1	6	143	<1	3-26-80 1st fresh pyrite occurs as stringers along schistosity planes concentration 5-5 vol % very fine grained
160		0.0045	66	3	10	313	<1	
		0.00	42	3	6	192	<1	pyrite in deformed black chlorite - pyrite cross-cuts schistosity and is 1st evidence of remobilized sulfides
180		0.01	37	3	6	199	<1	predominately disseminated pyrite
		0.06	28	2	<6	178	<1	pyrite stringers are variable in abundance and always parallel schistosity
200		0.0045	31	3	<6	115	<1	mostly disseminated pyrite
	95	0.0045	30	3	<6	146	<1	
220		0.00	50	3	<6	153	<1	
		0.0045	36	3	<6	141	<1	2% hematite after magnetite
240		0.00	14	4	6	180	<1	pyrite in stringers 4-1-80 Down hole survey on 4-1-80 acid survey indicates hole inclination is 51.8°
	95	0.00	12	3	<6	80	<1	As of 4-1-80 average run is 28' per eight hour shift
260		0.00	13	4	8	89	<1	
		0.00	20	3	6	76	<1	
280		0.01	10	1	<6	92	<1	NOTE: T in pyrite column designates trace amounts of pyrite
	80	0.00	9	2	<6	97	<1	majority of pyrite occurs as fine .1-2mm disseminated grains

Limonite | Pyrite | Cpy. | Sph. | Galena | Qtz vein | Carbonate | Graphite | Sericite | Talc | Tourmal. | Tops | STRUCT. | ROCK

Pyrite in stringers

Pyrite in stringers

quartz stringers very abundant

(fragments of dacite in breccia) (typical succession)

Lithology, Alteration and Structure

chlorite content is higher here than in initial occurrence of this lithology

Phenocryst abundance is gradually decreasing - average abundance is 1-2%

average length of lapilli = ¼"
first occurrence of black chlorite horizons
166' - small isoclinal fold wavelength = 1"
167': abdt. ½"-1" boudons and small horizons of a rhyodacite crystal tuff : 167'-168'
164 - lapilli = ¼" length
black chlorite horizons from 170'-177'
at 171 last black chlorite horizon ½-¾" thick and contains 1" pyrite which cross cuts schistosity also cut by quartz veinlets
rhyodacite crystal lithic tuff horizon 178'-179'
numerous small black chlorite horizons
181' small fold axis parallel to schistocity at 181'
188-189': horizon of rhyolitic crystal lapilli tuff
190-192 - quartz boudons abundant
quartz phenocrysts increase to 3-5 vol. %
quartz boudons increase in abundance
Rhyodacite crystal lapalli tuff - quartz phenocrysts confined to silicic horizons
Kinking of schosity planes common in this interval
Rhyolite Crystal Tuff - very white - matrix: quartz, sericite, feldspar, and minor chlorite. chlorite abdt decreases as go down hole. qtz phenocrysts: 3-5% - many prolate - and average .1-.2" diameter
very minor black chlorite horizons
Kinking common 210-211: numerous black chlorite
Quartzite at 211
Dacitic Lithic Tuff: 211-214: abdt green sericite chlorite
Rhyolite Crystal tuff 214-223
Dacitic Crystal Lithic Tuff - rhyodacitic from 227-229 phenocrysts - .1-.2" + 3-5 vol. %
Dacitic Tuff - chlorite + sericite matrix - no phenocryst cut by abdt qtz veins - many tightly folded
Rhyodacitic brecciated crystal tuff - MILL ROCK fragment size increase down hole
Rhyolite Breccia - MILL ROCK - 235-237: actually is a felsic - fine to medium grained lapilli tuff
Rhyolite Crystal Tuff - white with minor black chlorite horizons - qtz phenocrysts - 7% yellow chlorite/sericite horizons common

matrix: quartz feldspar and sericite along parting planes. Quartz phenocrysts: 0.1" diameter and 3-5 vol. %. minor lapilli at depth. and small black chlorite horizons
254': folded + refolded black chlorite horizon

Dacite Crystal Tuff - resorbed quartz phenocrysts and some prolate phenocrysts. Also lapilli which increase in conc. down hole. Fragmental Volcanic
Chert horizon: contains variable amts of chlorite and hematite - these give the rock a green + pink coloration. At 268 observe injection of rhyolite crystal tuff into chert.
Alternating bands of black chlorite and quartz seams
Gray quartz - feldspar - crystal tuff - very fissile and high sericite content. Looks rhyolitic in como. but not as siliceous as typical rhyolite
White Rhyolite Crystal Tuff

light to dark grey in color. is still a crystal tuff and has a very high sericite content. Similar to rock at 167 but less siliceous and more sericitic here
becomes more silicic and rhyolitic down hole

DRILL HOLE RECORD

PROJECT Greyhound (5180) DRILL HOLE N EGH-2 SCALE 1":20' PAGE NO. 3 OF 4

LENGTH	Core run recovery	% Fe2O4	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes
		0.03	13	3	10	71	<1	
		0.03	39	1	<6	72	<1	
20		0.04	30	1	8	62	<1	
		0.01	13	3	<6	69	<1	hematite
340	95	0.01	27	3	12	93	<1	344'-347': arsenopyrite and pyrite in quartz veins which cross-cut schistosity. arsenopyrite = 2%; steel grey color and .1-.5" diameter
	80 90	0.00	28	3	20	204	<1	goethite
360		0.00	32	1	<6	120	<1	
		0.00	39	<1	52	491	<1	pyrite in stringers 3-5 vol. %
380	70 80	0.00	22	4	36	176	<1	
	80	0.00	21	3	<6	150	<1	NOTE ← good deal of brass on core: check with geochemistry →
400	80	0.00	18	3	6	135	<1	-4-8-80° intense sericite — goethite
	80	0.05	17	3	18	116	<1	
420	85	0.00	21	4	12	108	<1	
		0.48	20	1	12	112	1	quartz vein at 434' & 436' — may be the same vein repeated through folding
440	80	0.00	16	2	14	113	<1	

Limonite, Pyrite, Cpy., Sph., Gal., Qtz veins, Carbonate, Graphite, Sericite, Talc, Tourmal, Arsenopy, STRUCT., ROCK

Lithology, Alteration and Structure

White rhyolite crystal tuff horizon

white rhyolite horizon

numerous small black chlorite horizons and whisps throughout entire unit

unit becomes more silicic and rhyolitic down hole.

White Rhyolite Crystal Tuff - 2-3% hematite after magnetite

unit contains small whisps on schistosity planes of grey to black relatively soft - non-magnetic unidentified mineral

Dacitic Crystal Lapilli Tuff - contains 2-5% of above unidentified mineral

White Rhyolite Crystal Tuff - contains numerous small black chlorite horizons and no grey to black whisps of unidentified mineral

Quartz phenocrysts - largest av. size seen as yet 0.2" diameter

Pink to Dark Green Rhyodacite to Dacite Crystal Tuff

quartz phenocrysts 0.2-0.3" diameter

White Rhyolite Crystal Tuff

Rhyolite-Quartz-Feldspar-Crystal Tuff - white to pale green to pink color minor qtz-feldspar lapilli

Dacite Crystal Tuff - very chloritic with qtz phenocryst also many sericite interbeds some areas look sedimentary

Rhyolite Crystal Tuff

quartz phenocrysts av 1-2% - less abdt than previous rhyolites

minor chlorite interbeds throughout unit

½" thick dacite beds

1-2" dacite bed

422-423 dacite lapilli tuff

quartz phenocrysts: <1%; rock approaches a rhyolite tuff

Dacite Lapilli Tuff - fine grained and very chloritic. lapilli are slightly more felsic numerous carbonate horizons

Rhyodacite Crystal Lapilli Tuff - Qtz phenocryst 2-3% and 0.1-.2 vol. %

DRILL HOLE RECORD

PROJECT Greyhound (5180) DRILL HOLE N EGH-2 SCALE 1":20' PAGE NO. 4 OF 4

LENGTH	Core run recovery	% Fe_2O_3	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes	Limonite	Pyrite	Cpy.	Sph.	Gal.	Qtz veins	Carbonate	Graphite	Sericite	Talc	Tourmal	STRUCT.	ROCK	Lithology, Alteration and Structure
		0.00	30	6	12	98	<1															Rhyodacite Crystal Lapilli Tuff
460																						
	85	0.09	18	4	10	65	<1															Dacite Lapilli Tuff horizon
																						size of quartz phenocrysts increase down hole
	85	0.06	10	6	18	47	<1	Down hole survey on 4-10-80. acid survey. indicates hole inclination is 41-42°														very fragmental rock
480																						
		0.09	32	15	82	184	<1	487': several thin, but continuous pyrite stringers. Pyrite: 2% volume.														Rhyolite Crystal Lapilli Tuff - very sericitic
	85																					chlorite content increases down hole
	80	0.00	16	17	14	64	<1															gradational lower contact
																						Rhyodacite Crystal Lapilli Tuff
500																						Dacite Crystal Lapilli Tuff - gradational upper contact. phenocrysts abdt increasing down hole
																						Hole terminated on 4-11-80 at a depth of 502'

FINAL DRILL HOLE DATA PACKAGE

Project	Project No.	Hole No.
Greyhound	5180	EGH-2

- ✓ Starting Report
- ✓ Termination Report
- ✓ Cost Summary
- ✓ Summary Logs
- ✓ Detailed Geological Log
- ✓ Assay Log
- ✓ Lefax Form

Date Submitted: June 10, 1980

DRILL HOLE STARTING REPORT

PROJECT GREYHOUND PROJ. NO. 5180 HOLE NO. EGH-2

LOCATION: STATE Arizona COUNTY Yavapai

CLAIM NO./LEASE KM-150/L554052 T 9N R 2E SEC 32 ELEV 2560'

COORDINATES (if surveyed)

DISTANCE FROM N AND W SECTION LINES 1000' south and 2400' east from the N & W section lines of Section 32

PROPOSED DEPTH 500' BEARING S80°E INCLINATION -55° from horizontal

TARGET OBJECTIVE Massive sulfide mineraliztion coincident with visible surface evidence of mineralization and Turam E.M. anomaly

CONTRACTOR Longyear

DATE SPUDDED March 19, 1980

MISC. REMARKS:

DRILL HOLE TERMINATION REPORT

PROJECT Greyhound PROJ. NO. 5180

HOLE NO. EGH-2

COMPLETION DATE April 11, 1980

TOTAL DEPTH 502 feet

RESULTS No massive sulfide mineralization was intercepted in hole EGH-2. However 3-5 volume percent stringer pyrite occurred at depths of 156', 371' and 487'; and 2 percent arsenopyrite (remobilized) was encountered from 344' to 347'. It is concluded that the mineralization in hole EGH-2 is too sparsely concentrated to explain the surface Turam E.M. anomaly.

DRILL SITE RESTORATION:

COMPLETION DATE _____

DRILLING CERTIFICATE AND RELEASE:

DATE SIGNED _____

DRILL HOLE COST SUMMARY

PROJECT Greyhound PROJ. NO. 5180 HOLE NO. EGH-2

DRILL SITE PREPARATION		240.00
DRILL SITE RESTORATION		
ROAD BUILDING		2535.00
DIRECT DRILLING COSTS		
CORE	502 FT.	17,983.95
HAMMER/ROTARY	____ FT.	
CORE GEOCHEMISTRY		269.50
THIN SECTIONS		
MISCELLANEOUS		

==========

TOTAL COST	21,028.45
TOTAL FOOTAGE	502'
COST PER FOOT	41.89

IF DRILLING CONTINUED THROUGH THE SEPT. 1 ASSESSMENT DEADLINE, PLEASE FILL IN THE FOLLOWING INFORMATION:

DRILLING EXPENSE UNTIL NOON, SEPT. 1	
DRILLING EXPENSE AFTER NOON, SEPT. 1	

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-2 SCALE 1":20' PAGE NO. 1 OF 4

LENGTH	core run recovery	% Fe_2O_3	ASSAYS (PPm) Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes
		0.00						Driller: Longyear (Norm Crowley) Spudded: 3-19-80 10" began coring - NCWL core
	70	0.00	17	6	8	72	<1	goethite > hematite
20		0.00	12	3	6	113	<1	hematite and or goethite common. Occur as whisps and as stainings on parting planes.
	70	0.00	16	3	6	116	<1	hematite after pyrite disseminated through matrix. maximum concentration - 2-3 volume percent
40		0.00	81	4	8	51	<1	NOTE: all angles in log measured to core axis. Core axis is -55° from horizontal
	90 95	0.00	25	4	10	93	<1	-3-22-80° goethite only on partings
60	90	0.00	53	6	6	105	<1	NOTE: S at left edge of log represents location of skelaton samples.
		0.00	14	3	8	37	<1	minor goethite on partings
80		0.00	24	11	6	65	<1	hematite goethite abundant on partings minor goethite on partings hematite
		0.00	37	9	12	113	<1	limonite (hematite) veinlets and clots are increasing
100		0.02	21	9	6	65	<1	goethite abundant at 105' little to no goethite
		0.00	26	8	10	115	<1	very high chlorite content rhyolite horizon few quartz phenocrysts
120		0.01	78	12	8	102	<1	sericite common throughout rock and only record abnormally high conc.
		0.00	29	10	12	79	<1	
140		00	24	12	8	93	<1	NOTE: all pyrite above 155' is actually hematite after pyrite

Mineralization columns: Limonite, Pyrite, Chalcopy, Sphaler., Galena, Quartz veins, Carbonate, Graphite, Sericite, Talc, Tourmal.

conductivity tested with ohm meter: results - no conductive zones to 150'

STRUCT. ROCK

Lithology, Alteration, Structure

0-10': No core - result of casing - lithology: same as below
Rig orientation: S 80°E and -55° from horizontal.

: PreCambrian Rhyolite Crystal Tu

a fine-to-medium grained white to buff - to grey very schistose rock. Kinking is very common.

matrix: comprised of quartz feldspar? sericite and minor talc. Alternating bands of quartz + feldspar and sericite + talc. Sericite generally only in thin horizons along which rock breaks. Content of sericite extremel variable. Some areas all quartz matrix and other areas all sericite matrix.

Quartz phenocrysts are extremely variable in size, shape, and abundance:
size: 0.1 - 0.2 inches
shape: subhedral resorbed grains to anhedral prolate grains
abundance: 0.0 % to 12 %

Black chert zones: variable in abundance (alway minor) but always very thin and contain some tourmaline (black non-magnetic mineral commonly in needles)

Carbonate: associated with limonite - limonite zones fizz.

Quartz phenocrysts decrease in size and abundance as progress down hole.

Silver-grey to grey black variety of Rhyolite Crysta tuff. Upper contact somewhat brecciated. Quartz phenocrysts very variable in abundance Basic composition: same as above rhyolite

White to buff rhyolite crystal tuff. Similar to 1st crys tuff except slightly more silicic. Contains sever <1/2" interbeds of grey crystal tuff.

minor interbeds of white rhyolite crystal tuff

Chloritic andesitic lapilli tuff. Cut by many quartz ve

minor 3/8" clots of quartzofeldspathic material. also several chloritic horizons. Some intervals are rhyodacitic in composition. - at 96 feet silver grey rhyolites increase towards bottom.

1' horizon of white rhyolite crystal tuff

Rhyodacitic Crystal lapilli Tuff - a green-white rock containing quartz phenocrysts (decrease in abundance down hole) and quartzo-feldspat and chloritic lithic fragments. Chlorite con increases down hole.

Dacitic Crystal lapilli Tuff. quartz, feldspar, seric chlorite matrix. Contains quartz phenocrysts and lapilli of quartz and feldspar and lapilli of chlor

White rhyolite crystal tuff but contains numer quartzofeldspathic and very silicic lithic fragm

Dacitic Crystal lapilli Tuff

MOLLEN-HAUER SURVEYING COMPANY

COMPANY _____ JOB NO. EGH-2 PAGE OF

PROSPECT NO. Greyhound LOCATION BCC. DATE _____

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE		VERTICAL DEPTH (sine)		TRUE VERTICAL DEPTH		SECTION	COURSE DEVIATION		DRIFT DIRECTION			COORDINATE DIFFERENCES (cos, sine) NORTH		SOUTH		EAST		WEST		RECTANGULAR COORDINATES NORTH		SOUTH		EAST		WEST	
	125'	125'	55°		102	39	102	39		71	70	S	80	E			12	45	70	61					12	45	70	61		
	361	236	51	8	185	46	287	85		145	94	S	80	E			25	34	143	72					37	79	214	34		
	502	141	41	5	93	43	381	28		105	60	S	80	E			18	34	104	00					56	13	318	34		
																											S 80	E	323	25

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-2 SCALE 1":20' PAGE NO. 2 OF 4

LENGTH	core run recovery	% Fe_3O_4	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes
		0.05	32	1	6	143	<1	3-26-80 1st fresh pyrite occurs as stringers along schistosity planes concentration 3-5 vol % very fine grained
160		0.0045	66	3	10	313	<1	
		0.00	42	3	6	192	<1	pyrite in deformed black chlorite - pyrite cross-cuts schistosity and is 1st evidence of remobilized sulfides
180		0.01	37	3	6	199	<1	predominately disseminated pyrite
		0.06	28	2	<6	178	<1	pyrite stringers are variable in abundance and always parallel schistosity
200		0.0045	31	3	<6	115	<1	mostly disseminated pyrite
	95	0.0045	30	3	<6	146	<1	
220		0.00	50	3	<6	153	<1	
		0.0045	36	3	<6	141	<1	2% hematite after magnetite
240		0.00	14	4	6	180	<1	pyrite in stringers 4-1-80 Down hole survey on 4-1-80 acid survey indicates hole inclination is 51.8°
	95	0.00	12	3	<6	80	<1	As of 4-1-80 average run is 28' per eight hour shift
260		0.00	13	4	8	89	<1	
		0.00	20	3	6	76	<1	
280		0.01	10	1	<6	92	<1	NOTE: T in pyrite column designates trace amounts of pyrite
	80	00	9	2	<6	97	<1	majority of pyrite occurs as fine .1-2mm disseminated grains

Limonite | Pyrite | Cpy. | Sph. | Galena | Qtz veins | Carbonate | Graphite | Sericite | Talc | Tourmal. | Tops | STRUCT. | ROCK

pyrite in stringers

pyrite in stringers

quartz stringers very abundant

(fragments of dacite in breccia) (typical succession)

Lithology, Alteration and Structure

chlorite content is higher here than in initial occurrence of this lithology

Phenocryst abundance is gradually decreasing average abundance is 1-2%

average length of lapilli = ¼"
first occurrence of black chlorite horizons
166' - small isoclinal fold wavelength = 1"
167: abdt. ½"-1" boudons and small horizons of rhyodacite crystal tuff : 167'-168'
169 - lapilli = ¼" length
black chlorite horizons from 170'-177'
at 171' last black chlorite horizon ½-¾" thick and contains 1" pyrite which cross cuts schistosit
also cut by quartz veinlets
rhyodacite crystal lithic tuff horizon 178'-179'
numerous small black chlorite horizons
181' - small fold axis parallel to schistocity at 181'
188-189' horizon of rhyolitic crystal lapilli tuff
190-192 - quartz boudons abundant
quartz phenocrysts increase to 3-5 vol. %
quartz boudons increase in abundance
Rhyodacite crystal lapalli tuff - quartz phenocrysts contin to silicic horizons
Kinking of schosity planes common in this int
Rhyolite Crystal Tuff - very white - matrix: quartz sericite, feldspar, and minor chlorite
chlorite abdt decreases as go down hole.
qtz phenocrysts: 3-5% - many prolate - and average .1-.2" diameter
very minor black chlorite horizons
Kinking common 210-211: numerous black chlorit
Quartzite at 211
Dacitic Lithic tuff : 211-214: abdt green sericite chl
Rhyolite Crystal tuff 214-223
Dacitic Crystal Lithic Tuff - rhyodacitic from 227-22
phenocrysts - .1-.2" + 3-5 vol. %
Dacitic Tuff - chlorite + sericite matrix - no phenoc
cut by abdt qtz veins - many tightly folded
Rhyodacite brecciated crystal tuff = MILL ROCK
fragment size increase down hole.
Rhyolite Breccia - MILL ROCK - 235-237 : actually is a felsic - fine to medium grained lapilli tuf
Rhyolite Crystal Tuff - white with minor black chlorite horizons - qtz phenocrysts - 1%
yellow chlorite/sericite horizons common
matrix: quartz feldspar and sericite along par planes. Quartz phenocrysts: 0.1" diameter and 3-5 vol. %. minor lapilli at depth.
and small black chlorite horizons
254' folded + refolded black chlorite horiz
Dacite Crystal Tuff - resorbed quartz phenocrysts and some prolate phenocrysts. Also lapilli and increase in conc. down hole. Fragmental
Chert horizon: contains variable amts of chlorite and hematite - these give the rock a green pink coloration. At 268 observe injection of rhyolite crystal tuff into chert.
Alternating bands of black chlorite and quartz seri
Gray quartz - feldspar - crystal tuff - very fissile an high sericite content. Looks rhyolitic in cor but not as siliceous as typical rhyolite
White Rhyolite Crystal Tuff
light to dark grey in color. is still a crystal tuff and has a very high sericite content. Similar to rock at 167' but less siliceous and more sericitic here. becomes more silicic and rhyolitic down h

DRILL HOLE RECORD

PROJECT Greyhound (5180) DRILL HOLE NO. E&H-2 SCALE 1" = 20' PAGE NO. 3 OF 4

LENGTH	Core run recovery	% Fe_2O_3	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes	Limonite	Pyrite	Cpy.	Sph.	Gal.	Qtz veins	Carbonate	Graphite	Sericite	Talc	Tourmaline	Arsenopy	STRUCT.	ROCK	Lithology, Alteration and Structure
			ASSAYS (ppm)																				
		0.03	13	3	10	71	<1																White rhyolite crystal tuff horizon
		0.03	39	1	<6	72	<1																white rhyolite horizon
320		0.04	30	1	8	62	<1																numerous small black chlorite horizons and whisps throughout entire unit unit becomes more silicic and rhyolitic down hole.
		0.01	13	3	<6	69	<1	hematite															White Rhyolite Crystal Tuff - 2-3% hematite after magnetite
340																							unit contains small whisps on schistosity plan of gr to black relatively soft - non-magnetic unidentified mineral
	95	0.01	27	3	12	93	<1	344'-347': arsenopyrite and pyrite in quartz veins which cross-cut schistosity. arsenopyrite = 2%; steel grey color and .1-.5" diameter															Dacitic Crystal Lapilli Tuff - contains 2-5% of above unidentified mineral
	80																						
	90	0.00	28	3	20	204	<1	goethite															White Rhyolite Crystal Tuff - contains numerous small black chlorite horizons and no grey to black whisps of unidentified miner
360																							
		0.00	32	1	<6	120	<1																Quartz phenocrysts - largest av. size seen as y 0.2" diameter
		0.00	39	<1	52	491	<1	pyrite in stringers 3-5 vol. %															Pink to Dark Green Rhyodacite to Dacite Crystal T quartz phenocrysts 0.2-0.3" diameter
380	70																						White Rhyolite Crystal Tuff
	80	0.00	22	4	36	176	<1	NOTE ← good deal of brass on core: check with geochemistry →															Rhyolite-Quartz-Feldspar-Crystal Tuff - white to pale green to pink color minor qtz-feldspar lapilli
	80	0.00	21	3	<6	150	<1																Dacite Crystal Tuff - very chloritic with qtz phenoc also many sericite interbeds some areas look sedimentary
400								-4-8-80°															Rhyolite Crystal Tuff
	80	0.00	18	3	6	135	<1	intense sericite — goethite															quartz phenocrysts av 1-2% - less abdt than previous rhyolites minor chlorite interbeds throughout unit
		0.05	17	3	18	116	<1																½" thick dacite beds
420	80																						1-2" dacite bed 422-423 dacite lapilli tuff
	85	0.00	21	4	12	108	<1																quartz phenocrysts: <1%; rock approache a rhyolite tuff
		0.48	20	1	12	112	1	quartz vein at 434' & 436' may be the same vein repeated through folding															Dacite Lapilli Tuff - fine grained and very chloritic. Lapilli are slightly more felsic numerous carbonate horizons
440																							
		.00	16	2	14	113	<1																Rhyodacite Crystal Lapilli Tuff - Qtz phenoc

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-2 SCALE 1":20' PAGE NO. 4 OF 4

LENGTH	Core run recovery	% Fe_2O_3	Cu	Mo	Pb	Zn	Ag	Mineralization and misc. notes
460		0.00	30	6	12	98	<1	
	85	0.09	18	4	10	65	<1	
	85	0.06	10	6	18	47	<1	Down hole survey on 4-10-80. acid survey. indicates hole inclination is 41-42°
480		0.09	32	15	82	184	<1	487': several thin but continuous pyrite stringers. Pyrite: 2% volume.
	85 80	0.00	16	17	14	64	<1	
500								

ASSAYS (ppm)

Columns: Limonite, Pyrite, Cpy., Sph., Gal., Qtz veins, Carbonate, Graphite, Sericite, Talc, Tourmal, STRUCT., ROCK

Lithology, Alteration and Structure

Rhyodacite Crystal Lapilli Tuff

Dacite Lapilli Tuff horizon

size of quartz phenocrysts increase down hol

very fragmental rock

Rhyolite Crystal Lapilli Tuff - very sericitic

chlorite content increases down hole
gradational lower contact

Rhyodacite Crystal Lapilli Tuff

Dacite Crystal Lapilli Tuff - gradational upper contact. phenocrysts abdt increasing down hole

Hole terminated on 4-11-80 at a depth of 502

PROJECT Greyhound (EGH-2) PROJECT NO. 5180 SUBMITTAL NO. 80-23-3

STATE Az COUNTY _____ QUAD _____ DATE SUBMITTED 3-25-80

SAMPLE NO. 14 TYPE NC Core GEOLOGIST J. Davidson

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS S. To Follow Later.

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Mn	% Mn	% Fe
EGH-2								
10-20	17	6	8	72	< 1	344		3.21
20-30	12	3	6	113	< 1	593		3.74
30-40	16	3	6	116	< 1	576		3.19
40-50	81	4	8	51	< 1	342		1.77
50-60	25	4	10	93	< 1	638		2.45
60-70	53	6	6	105	< 1	715		2.61
70-80	14	3	8	37	< 1	388		1.98
80-90	24	11	6	65	< 1		0.11	2.38
90-100	37	9	12	113	< 1		0.14	3.22
100-110	21	9	6	65	< 1		0.13	2.34
110-120	26	8	10	115	< 1		0.13	2.75
120-130	78	12	8	102	< 1		0.15	2.93
130-140	29	10	12	79	< 1		0.12	2.17
140-150	24	12	8	93	< 1		0.12	2.09

EXXON MINERALS CO., USA

SIGNED [signature] DATE 4/11/80

DIAMOND DRILL ASSAY LOG

PROJECT Greyhound
Project No. 5180

DATE STARTED 3-19-80
DATE COMPLETED 4-11-80

SHEET No. 1
HOLE No. EGH-2

COORDINATES see starting report

COLLAR ELEVATION 2560' **BEDROCK ELEVATION** 2560'

FOOTAGE		Interval	Measd. CORE Recov.	% Recov.	HOLE SIZE	COPPER		MOLY		LEAD		ZINC		SILVER		GOLD	
From	To					ppm	%	ppm	%	ppm	%	ppm	%	ppm	oz./ton	ppm	oz./ton
10	20	10'	9	90	NC	17		6		8		72		<1			
20	30		9	90		12		3		6		113		<1			
30	40		10	100		16		3		6		116		<1			
40	50		10	100		81		4		8		51		<1			
50	60		9.5	95		25		4		10		93		<1			
60	70		9.8	98		53		6		6		105		<1			
70	80		10	100		14		3		8		37		<1			
80	90		10	100		24		11		6		65		<1			
90	100		10	100		37		9		12		113		<1			
100	110		10	100		21		9		6		65		<1			
110	120		10	100		26		8		10		115		<1			
120	130		10	100		78		12		8		102		<1			
130	140		10	100		29		10		12		79		<1			
140	150		10	100		24		12		8		93		<1			
150	160		10	100		32		1		6		143		<1			
160	170		10	100		66		3		10		313		<1			
170	180		10	100		42		3		6		192		<1			
180	190		10	100		37		3		6		199		<1			
190	200		10	100		28		2		<6		178		<1			
200	210		9.8	98		31		3		<6		115		<1			
210	220		10	100		30		3		<6		146		<1			
220	230		10	100		50		3		<6		153		<1			
230	240		10	100		36		3		<6		141		<1			
240	250		10	100		14		4		6		180		<1			
250	260		9.8	98		12		3		<6		80		<1			
260	270		10	100		13		4		8		89		<1			
270	280		10	100		20		3		6		76		<1			
280	290		10	100		10		1		<6		92		<1			
290	300		9.4	94		9		2		<6		97		<1			
300	310		10	100		13		3		10		71		<1			
310	320		10	100		39		1		<6		72		<1			
320	330		10	100		30		1		8		62		<1			
330	340		10	100		13		3		<6		69		<1			
340	350		9.2	92		27		3		12		93		<1			
350	360		9.5	95		28		3		20		204		<1			
360	370		10	100		32		1		<6		120		<1			
370	380		9.0	90		39		<1		52		491		<1			
380	390		7.7	77		22		4		36		176		<1			
390	400		9.5	95		21		3		<6		150		<1			
400	410		9.4	94		18		3		6		135		<1			
410	420		9.4	94		17		3		18		116		<1			
420	430		9.2	92		21		4		12		108		<1			
430	440		10	100		20		1		12		112		1			
440	450		9.5	95		16		2		14		113		<1			
450	460		10	100		30		6		12		98		<1			
460	470		9.3	93		18		4		10		65		<1			
470	480		9.5	95		10		6		18		47		<1			
480	490	↓	10	100		32		15		82		184		<1			
490	502	12'	10.5	88	↓	16		17		14		64		<1			

DIAMOND DRILL ASSAY LOG

PROJECT Greyhound
Project No. 5180

DATE STARTED 3-19-80
DATE COMPLETED 4-11-80

SHEET No. 1
HOLE No. EGH-2

COORDINATES see starting report

COLLAR ELEVATION 2560' BEDROCK ELEVATION 2560'

FOOTAGE		Interval	Measd. CORE Recov.	% Recov.	HOLE SIZE	COPPER		MOLY		LEAD		ZINC		SILVER		GOLD	
From	To					ppm	%	ppm	%	ppm	%	ppm	%	ppm	oz./ton	ppm	oz./ton
10	20	10'	9	90	NC	17		6		8		72		<1			
20	30		9	90		12		3		6		113		<1			
30	40		10	100		16		3		6		116		<1			
40	50		10	100		81		4		8		51		<1			
50	60		9.5	95		25		4		10		93		<1			
60	70		9.8	98		53		6		6		105		<1			
70	80		10	100		14		3		8		37		<1			
80	90		10	100		24		11		6		65		<1			
90	100		10	100		37		9		12		113		<1			
100	110		10	100		21		9		6		65		<1			
110	120		10	100		26		8		10		115		<1			
120	130		10	100		78		12		8		102		<1			
130	140		10	100		29		10		12		79		<1			
140	150		10	100		24		12		8		93		<1			
150	160		10	100		32		1		6		143		<1			
160	170		10	100		66		3		10		313		<1			
170	180		10	100		42		3		6		192		<1			
180	190		10	100		37		3		6		199		<1			
190	200		10	100		28		2		<6		178		<1			
200	210		9.8	98		31		3		<6		115		<1			
210	220		10	100		30		3		<6		146		<1			
220	230		10	100		50		3		<6		153		<1			
230	240		10	100		36		3		<6		141		<1			
240	250		10	100		14		4		6		180		<1			
250	260		9.8	98		12		3		<6		80		<1			
260	270		10	100		13		4		8		89		<1			
270	280		10	100		20		3		6		76		<1			
280	290		10	100		10		1		<6		92		<1			
290	300		9.4	94		9		2		<6		97		<1			
300	310		10	100		13		3		10		71		<1			
310	320		10	100		39		1		<6		72		<1			
320	330		10	100		30		1		8		62		<1			
330	340		10	100		13		3		<6		69		<1			
340	350		9.2	92		27		3		12		93		<1			
350	360		9.5	95		28		3		20		204		<1			
360	370		10	100		32		1		<6		120		<1			
370	380		9.0	90		39		<1		52		491		<1			
380	390		7.7	77		22		4		36		176		<1			
390	400		9.5	95		21		3		<6		150		<1			
400	410		9.4	94		18		3		6		135		<1			
410	420		9.4	94		17		3		18		116		<1			
420	430		9.2	92		21		4		12		108		<1			
430	440		10	100		20		1		12		112		1			
440	450		9.5	95		16		2		14		113		<1			
450	460		10	100		30		6		12		98		<1			
460	470		9.3	93		18		4		10		65		<1			
470	480		9.5	95		10		6		18		47		<1			
480	490		10	100		32		15		82		184		<1			
490	502	12'	10.5	88		16		17		14		64		<1			

DRILL HOLE COST SUMMARY

Project Greyhound (5180)

State Arizona

Contractor Longyear

Drill Hole EGH-2

DATE	DRILL DEPTH	DRILL SIZE	REAM DEPTH	REAM HOURS	CASE DEPTH	CASE HOURS	CASE SIZE	CEMENT DEPTH	CEMENT HOURS	MISC. HOURS HOURS	MISC. HOURS REASON	ADDITIVES Lo Loss (50)	Dextrid (50)	Walnut Flr. (40)	KCL (gall) (100)	Mud Seal (40)	Impermax (50)	Condet (5 gal)	Desiel (gal)	WATER TRUCK LOADS/GALLONS	WATER TRUCK MILEAGE	WATER TRUCK RENTAL	MOB CHARGE /HOURS	MISC. CHARGES ROAD / SITE	COST TO DATE	COST /PER FOOT
3-17-80										8	Mobilization														1155.00	
3-18-80										8	Rigging Up	1	1	1	1	1			5	1/1000	5	955/mo.				
3-19-80	0'-13'	NC			10'	1	5 5/8			2	Rigging Up								5							
										2	Lost Circulation															
3-20-80	32	NC								2	Lost Circulation				3				5	1/1000	5					
3-21-80	64	NC								1	Lost Circulation								5							
3-22-80	77	NC								1	Hole Condition				1					1/1000	5					
3-24-80	107	NC								1	Hole Condition	1	1		2					1/1000	5					
3-25-80	146	NC																								
3-26-80	184	NC								2	Lost Circulation			1	1		1		13	1/1000	5					
3-27-80	225	NC																								
3-28-80	245	NC								2	Lost Circulation															
3-31-80	252	NC								1	Hole Condition							1							9661.96	38.34
4-1-80	274	NC								1	Inclination Test	1	1		2				8	1/1000	5					
4-2-80	297	NC																								
4-3-80	317	NC								2	Lost Circulation				2				6							
4-4-80	347	NC								2	Lost Circulation				2		1			1/1000	5					
4-5-80	362	NC																								
4-7-80	392	NC										1			1				3							
4-8-80	422	NC											1		1				3							
4-9-80	449	NC													1											
4-10-80	474	NC								1	Inclination Test				1					1/1000	5					
4-11-80	502	NC																								
4-14-80										2	Demobilization															
4-15-80										6	Standby (moving rig)														17983.95	35.8

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

Project 5180

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

EGH-2:

JOB # 024379
RECEIVED 4-21-80
REPORTED 4-24-80

SAMPLE NUMBER		S %					
150-160		.261					
160-170		.659					
170-180		.316					
180-190		.357					
190-200		.165					
200-210		.137					
210-220		.151					
220-230		.096					
230-240		.261					

REGISTERED ASSAYER
CERTIFICATE NO.
8888
Dnyanendra
Amrutlal Shah
DATE SIGNED 4-24-80
Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

S1679

OUTHWESTERN ASSAYERS & CHEMISTS, INC.

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Project 5180

JOB # 024379
RECEIVED 4-21-80
REPORTED 4-24-80

obetts
Drive
35705

EGH-2:

	S %					
	.261					
	.659					
	.316					
	.357					
	.165					
	.137					
	.151					
	.096					
	.261					

Shahatt
4-24-80

pm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

006

S1679

T NO. 5180

SUBMITTAL NO. 80-23-38

DATE SUBMITTED 4-9-80

GEOLOGIST J. Davidson

PAGE 1 OF 1

RS & CHEMISTS, INC.

AYERS
517
A 85725

710 E. EVANS BLVD.
PHONE 602—884-5811
884-5812

Project 5180

JOB # 024379

RECEIVED 4-21-80

REPORTED 4-24-80

M		PPM Zn		PPM Mn		% Fe		PPM Ag		
		143		321		2.12		<1		
		313		416		3.31		<1		
		192		459		2.85		<1		
		199		494		3.42		<1		
		178		591		3.15		<1		
		115		581		2.70		<1		
		146		579		2.95		<1		
		153		493		2.89		<1		
		141		591		3.67		<1		

Shahatt
4-24-80

1 ppm = 0.0292 troy oz./ton
2,000 lb. ton.

006

XXON MINERALS CO., USA

DATE 4/16/80

PROJECT GREYHOUND (EGH-2) PROJECT NO. 5180 SUBMITTAL NO. 80-24-6

STATE AZ COUNTY _____ QUAD _____ DATE SUBMITTED 4-22-80

SAMPLE NO. 26 TYPE core GEOLOGIST J. Davidson

STORAGE BOX NO. _____ PAGE 1 OF 1

REMARKS _____

SAMPLE	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Mn	% Mn	% Fe
240-250	14	4	6	180	<1	313		3.41
250-260	12	3	<6	80	<1	319		2.98
260-270	13	4	8	89	<1	328		2.54
270-280	20	3	6	76	<1	312		2.14
280-290	10	1	<6	92	<1	265		2.36
290-300	9	2	<6	97	<1	281		2.81
300-310	13	3	10	71	<1	268		2.42
310-320	39	1	<6	72	<1	303		2.32
320-330	30	1	8	62	<1	286		1.76
330-340	13	3	<6	69	<1	359		1.96
340-350	27	3	12	93	<1	734		3.27
350-360	28	3	20	204	<1	551		2.40
360-370	32	1	<6	120	<1	704		2.51
370-380	39	<1	52	491	<1	890		2.71
380-390	22	4	36	176	<1	764		2.54
390-400	27	3	<6	150	<1	860		3.14
400-410	18	3	6	135	<1	517		2.13
410-420	17	3	18	116	<1	393		1.72
420-430	21	4	12	108	<1	742		2.62
430-440	20	1	12	112	1	917		3.82
440-450	16	2	14	113	<1	861		3.50
450-460	30	6	12	98	<1	745		3.34
460-470	18	4	10	65	<1	504		2.74
470-480	10	6	18	47	<1	596		2.72
480-490	32	15	82	184	<1	506		2.56
490-502	16	17	14	64	<1		0.16	2.63

EXXON MINERALS CO., USA

SIGNED [signature] DATE 5/2/80

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

Project 5180-2

JOB # 024561
RECEIVED 5-22-80
REPORTED 6-2-80

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

SAMPLE NUMBER		S PPM					
240-250		.76%					
250-260		.36%					
260-270		.49%					
270-280		.20%					
280-290		.12%					
290-300		325					
300-310		795					
310-320		520					
320-330		575					
330-340		160					
340-350		.42%					
350-360		.22%					
360-370		820					
370-380		.52%					
380-390		.13%					
390-400		325					
400-410		465					
410-420		160					
420-430		220					
430-440		270					
440-450		.10%					
450-460		.22%					
460-470		.14%					
470-480		245					
480-490		.17%					
490-502		930					

JUN 1980 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 5875 WILBUR D. WRIGHT Date Signed 6/2/80 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton
* Gold and Silver reported in troy oz. per 2,000 lb. ton.

ACCT 0004

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

REGISTERED ASSAYERS
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-884-5811
884-5812

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

Project 5180-2

JOB # 024560
RECEIVED 5-22-80
REPORTED 6-2-80

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705

SAMPLE NUMBER		S PPM					
10-20		300					
20-30		220					
30-40		165					
40-50		275					
50-60		135					
60-70		110					
70-80		165					
80-90		190					
90-100		245					
100-110		190					
110-120		190					
120-130		245					
130-140		165					
140-150		300					

JUN 1980 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE No. 5875 WILBUR D. WRIGHT Date Signed 6/2/80 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

006

PROJECT NUMBER 5180

EXPLORATION DRILLING AUTHORITY

Minerals Department

BLOCK GREYHOUND PRINCIPAL MINERAL Copper TYPE TARGET Massive sulfide

STATE Arizona COUNTY Yavapai TOTAL AUTHORITY $22,500

APPROXIMATE NO. HOLES One (1) FEET 550'

HOLE LOCATION(S) AS PER ATTACHED PLAT:

Section 29, T9N, R2E

RECEIVED
JUN 2 1981
EXXON MINERALS COMPANY
EXPLORATION-LAND, DENVER

REASON FOR RECOMMENDATION:

Test of possible massive Cu-Zn sulfide mineralization as suggested by surface evidence of mineralization; copper, lead, zinc and mercury geochemical anomalies; and anomalous I.P. response. This hole will fulfill approximately one half of the assessment requirements for 1981 (Sycamore drill hole ES-2 will fulfill the remainder of the assessment requirements).

OTHER

Starting date: Immediately following the completion of Sycamore drill hole ES-2.
New road will require State of Arizona approval (approximately 400' in length)
Permission to extract water from the well has been granted by the owner, Marvin Hatch.

Approval is granted for exploration drilling and related drill hole costs within the above total money limit.

RECOMMENDED BY: John W. Dawson DATE: May 22, 1981

ENDORSED BY: DATE:

ENDORSED BY: DATE:

AUTHORIZED BY: DATE: June 2, 1981

DRILLING AUTHORITY
LAND CLEARANCE
Date 06/18/81
Landman's Initials M.L.S.

Noted: 6/18/81

JUN 1981 RECEIVED TUCSON MINERALS

EXXON MINERALS COMPANY
2425 N. Huachuca Drive
Tucson, Arizona 85745

July 8, 1982

TO: G. WESTRA

FROM: J. DAVIDSON

RE: EVALUATION OF GREYHOUND DRILL HOLE EGH-3

Attached is the final data package for Greyhound drill hole EGH-3. This hole was designed to intersect the down dip projection of a sequence of intermediate to silicic Precambrian age pyroclastic rocks which are extremely anomalous in copper, arsenic and mercury, and which have an anomalously low resistivity at an approximate depth of 400'.

Drill hole EGH-3 was spudded on July 13th and terminated on July 24th at a length of 476'. No economic mineralization was encountered, however, numerous thin horizons of massive arsenopyrite, pyrite and chalcopyrite were intersected between 380' and 400'. It is concluded that these thin uneconomic horizons of massive sulfide are the source of both the geophysical anomaly and the surface geochemical anomalies. No additional drilling will be conducted in the vicinity of hole EGH-3.

John W. Davidson
J.W.D.

sfl

Encl.

STATE AZ COUNTY _____ QUAD _____ DATE SUBMITTED _____

SAMPLE NO. 49 TYPE _____ GEOLOGIST J. DAVIDSON

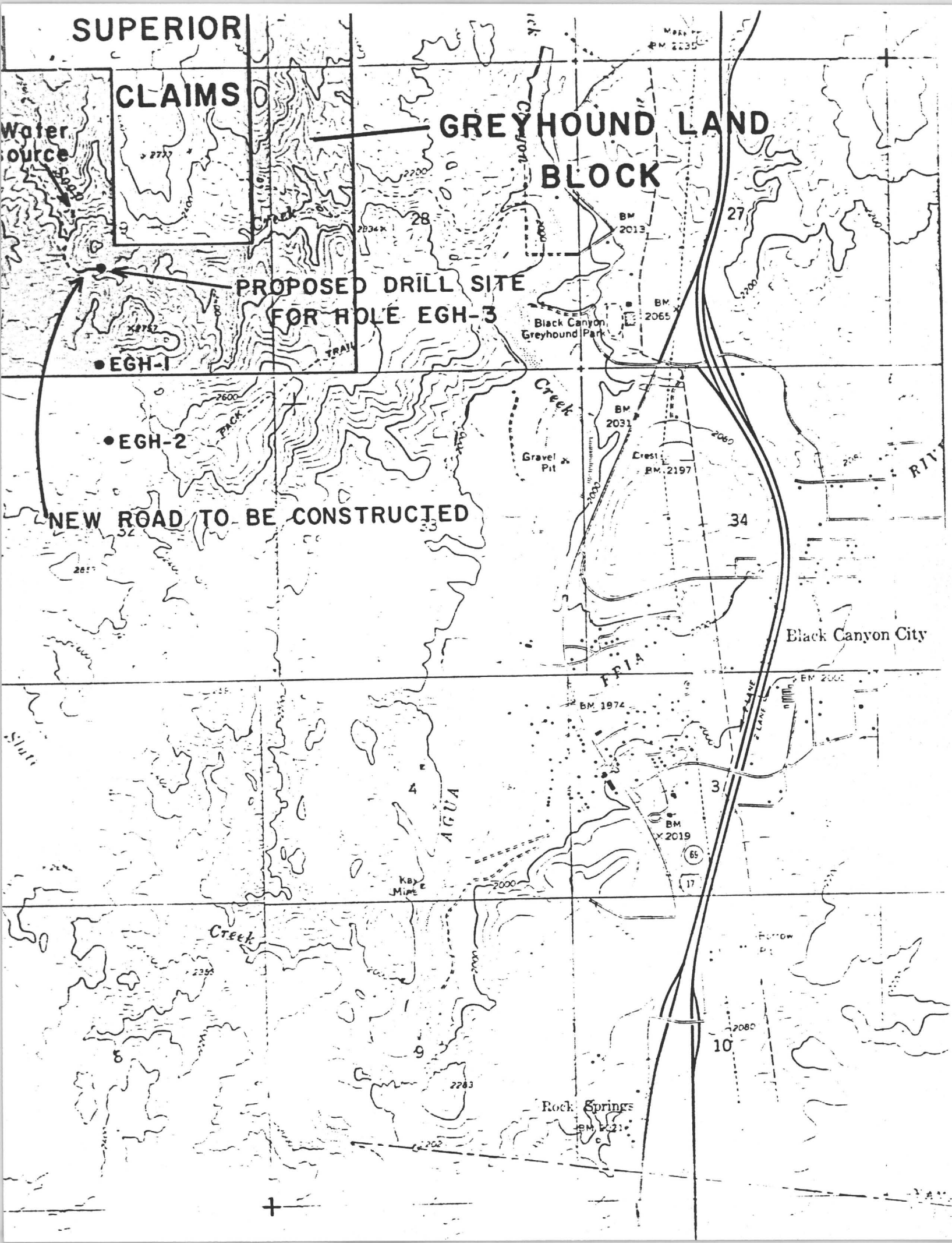
PAGE 1 OF 1

REMARKS Samples retalled prior to analyses.

SAMPLE	PPM Au
EGH-2 10-20	<.02
20-30	<.02
30-40	<.02
40-50	<.02
50-60	<.02
60-70	<.02
70-80	<.02
80-90	<.02
90-100	<.02
100-110	<.02
110-120	<.02
120-130	<.02
130-140	<.02
140-150	<.02
150-160	<.02
160-170	<.02
170-180	<.02
180-190	<.02
190-200	<.02
200-210	<.02
210-220	<.02
220-230	<.02
230-240	<.02
240-250	<.02
250-260	<.02
260-270	<.02
270-280	<.02
280-290	<.02
290-300	<.0
300-310	<.02
310-320	<.02
320-330	<.02
330-340	<.02
340-350	<.02
350-360	<.02
360-370	<.02
370-380	<.02
380-390	<.02
390-400	<.02
400-410	<.02
410-420	<.02
420-430	<.02
430-440	<.02
440-450	<.02
450-460	<.02
460-470	<.02
470-480	<.02
480-490	.02
490-502	<.02

EXXON MINERALS CO., USA

SIGNED Martin H. Hitchcock DATE 7/9/84


SUPERIOR
CLAIMS
Water Source
GREYHOUND LAND BLOCK
PROPOSED DRILL SITE FOR HOLE EGH-3
EGH-1
EGH-2
NEW ROAD TO BE CONSTRUCTED
Black Canyon Greyhound Park
Gravel Pit
Black Canyon City
Rock Springs
Creek
TRAIL
PACK
AGUA
BM 2013
BM 2065
BM 2031
BM 2197
BM 1974
BM 2019
BM 2000
28
27
34
33
32
4
3
1
9
8
10

FINAL DRILL HOLE DATA PACKAGE

Project	Project No.	Hole No.
Greyhound	5180 Az	EGH-3

✓	Starting Report
✓	Termination Report
✓	Cost Summary
✓	Summary Logs
✓	Detailed Geological Log
✓	Assay Log
✓	Lefax Form

Date Submitted: November 3, 1982

5180 EGH-3

DRILL HOLE STARTING REPORT

PROJECT GREYHOUND PROJ. NO. 5180 HOLE NO. EGH-3

LOCATION: STATE Arizona COUNTY Yavapai

CLAIM NO./LEASE Claim no. 106 Lease no. L557224 T 9N R 2E SEC 29 ELEV 2400'

COORDINATES (if surveyed)

DISTANCE FROM N AND W SECTION LINES 3450' south and 2350' east of the N and W boundaries of section 29

PROPOSED DEPTH 500' BEARING N89°E INCLINATION -60° from horizontal

TARGET OBJECTIVE Massive sulfide deposit with potential for 20 MT of 2.5 to 3.0% copper equivalent.

CONTRACTOR Longyear

DATE SPUDDED July 13, 1981

MISC. REMARKS:

DRILL HOLE COST SUMMARY

PROJECT Greyhound PROJ. NO. 5180 HOLE NO. EGH-3

DRILL SITE PREPARATION		637.51
DRILL SITE RESTORATION		
ROAD BUILDING		4,000.00
DIRECT DRILLING COSTS		19,515.26
CORE	476 FT.	
HAMMER/ROTARY	FT.	
CORE GEOCHEMISTRY		210.00
THIN SECTIONS		
MISCELLANEOUS demobilization: 650.00 casing: 42.00		692.00

++

TOTAL COST	25,054.77
TOTAL FOOTAGE	476 Feet
COST PER FOOT	52.64

IF DRILLING CONTINUED THROUGH THE SEPT. 1 ASSESSMENT DEADLINE, PLEASE FILL IN THE FOLLOWING INFORMATION:

DRILLING EXPENSE UNTIL NOON, SEPT. 1	
DRILLING EXPENSE AFTER NOON, SEPT 1	

DRILL HOLE TERMINATION REPORT

PROJECT GREYHOUND PROJ. NO. #5180

HOLE NO. EGH-3

COMPLETION DATE July 24, 1981

TOTAL DEPTH Length: 476'

RESULTS Drill hole EGH-3 intersected the target horizon, however, no economic mineralization was encountered. The target was intersected at a length of 380' and consisted of many thin zones of massive arsenopyrite, pyrite and chalcopyrite, in intermediate to silicic pyroclastic rocks. It is concluded that the thin, uneconomic horizons of massive sulfide are the source of both the geophysical anomaly and the surface geochemical anomalies.

DRILL SITE RESTORATION:

COMPLETION DATE _____

DRILLING CERTIFICATE AND RELEASE:

DATE SIGNED _____

file loc. 5180

PROJECT Greyhound **STATE** Arizona **COUNTY** Yavapai **DRILL HOLE** EGH-3

LOCATION 3450' FNL and 2350' FWL section 29 T9N., R2E., Yavapai Co., Az. **EXXON COORN.** NA **ELEVATION: COLLAR** ≈2400' **GROUND** ≈2400'

HOLE DIRECTION N89°E and -60° (from horizontal) **HOLE COMM. (date)** July 13, 1981 **INTERVALS OF INTEREST:**

CASING DEPTH:

FT.	SIZE
0-7'	4" casing

HOLE TERMINATED (date) July 24, 1981 **FT.** **ASSAYS**

TOTAL ~~DEPTH~~ Length: 476'

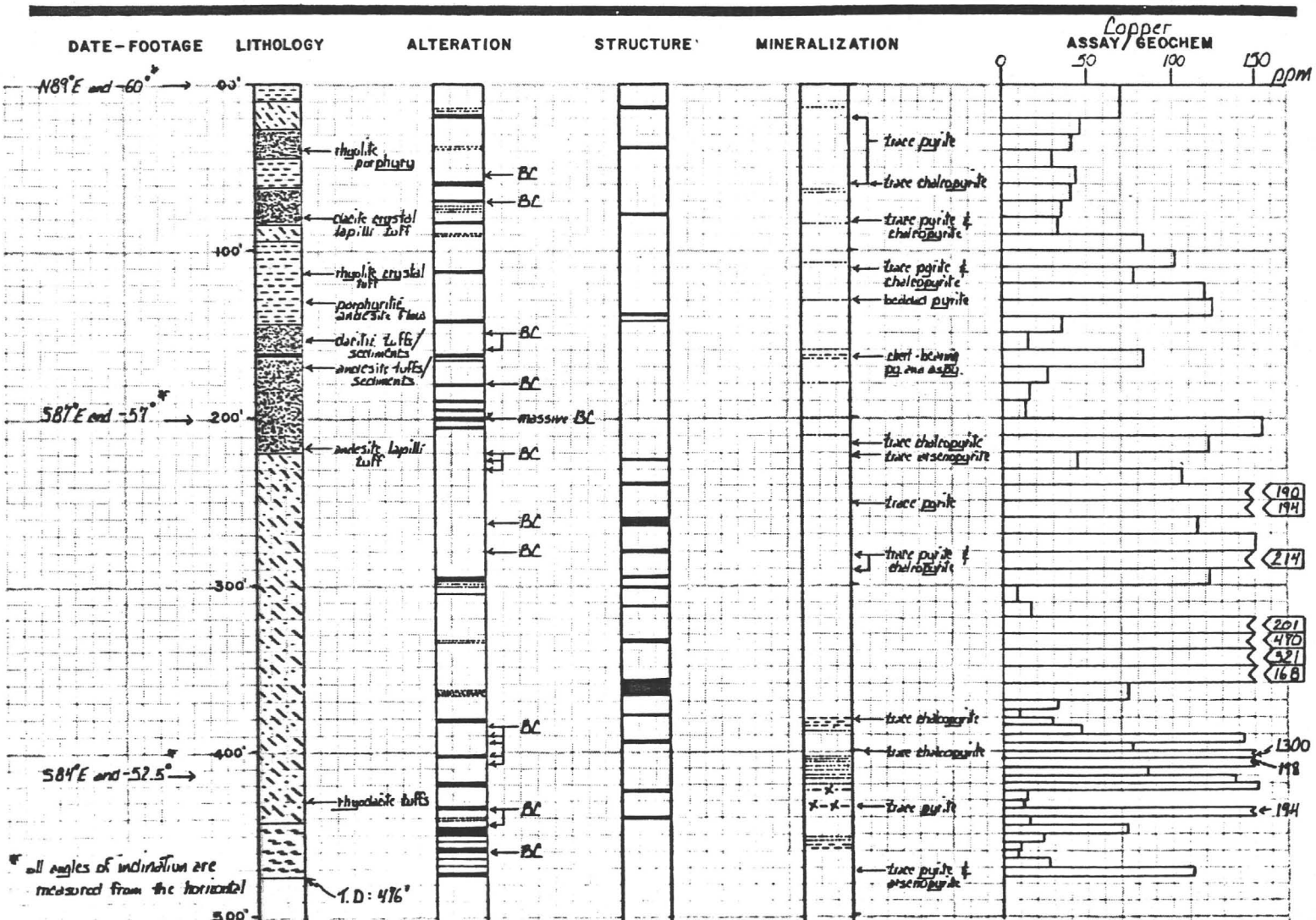
HOLE SIZES W/DEPTH

0-7': 6¼" rock bit

7-476': NC wireline core

DRILLED BY Longyear **LOGS - SURVEYS RUN** down hole directional survey **LOGGED BY** J. W. Davidson

LITHOLOGY	ALTERATION	STRUCTURE	MINERALIZATION
Andesite Tuffs/Sediments	Sericitization	Brecciated Zones	Pyrite (≤1 vol %)
Dacite Tuffs crystal tuffs & crystal lapilli tuffs	Silicification		Chalcopyrite (≤1 vol %)
Rhyolite Tuffs crystal tuffs & crystal lapilli tuffs	BC Black Chlorite		Arsenopyrite (≤1 vol %)
Exhalite/Chert			
Rhyodacite Tuffs and crystal tuffs			



* all angles of inclination are measured from the horizontal

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-3 SCALE 1"=20' PAGE NO. 1 OF 4

LENGTH	DRILL RUN RECOVERY	% Fe_3O_4	Cu	Pb	Zn	Ag	As	S tot
		0.087	70	12	76	<1		
		—	47	14	67	<1		
		—	41	12	66	<1		
		0.18	30	14	57	<1		
		1.39	44	14	89	<1		
		0.11	41	12	74	<1		
		0.016	35	6	68	<1		
		—	34	6	68	<1		
		—	83	16	103	<1		
		0.024	101	20	120	<1		
		0.06	77	12	126	<1		
		0.74	120	20	194	<1		
		—	124	16	117	<1		
		80						
		—	35	12	86	<1		

ASSAYS

Mineralization and misc. notes

Hole orientation: N89°E -60°
spudded: July 13 1981
terminated:
total length: 476'
drillers: Longyear – Kent Vaughn

*Cross hatching in structure column indicates zones of intense fracturing
* All angles are measured to core axis

1% disseminated pyrite in a number of thin carbonate + quartz horizons

Thin andesite tuff/sediment horizon
Qtz phenocrysts: 0.1" diameter + 3-5%

Qtz eyes: 0.25" maximum and <6%

*All iron oxides from 7'-66' = goethite

Thin magnetite-chert horizon
% magnetite = 2.4%
Iron oxide in matrix gives rock purple color
Average magnetite content: 0.13%

1" thick magnetite + quartz horizon (IF)

Average magnetite content: 1.52%
Cherty horizon containing 6.25% mag.

Magnetite-bearing chert horizons

Fine grained horizon of oxidized iron formation
Cherty iron formation
Goethite on foliation and fracture planes
A 1" dark green cherty horizon containing ≤1% pyrite
Brich red transported limonites on on foliation-fracture surfaces

1% subrounded grains of pyrite

Fracture controlled goethite surrounded by bleached sericite halos

From 96' to 128': carbonate occurs as thin horizons parallel to foliation

1% pyrite in a thin chert horizon

Average magnetite content: 0.15%
Trace pyrite and chalcopyrite in a cross cutting quartz veinlet

2, very thin <0.05" horizons of pyrite parallel to foliation

Average magnetite content: 0.20%

Pyrite concentration: 2%

Thin hematite coatings on foliation or schistosity surfaces

Goethite coatings on fracture surfaces

Goethite on fracture surfaces

Limonite | Pyrite | Cpy | Arsenopyrite | Qtz veins | Carbonate | Sericite | Black chlorite | Silicification | Surveys | Schistosity | STRUCT. | ROCK

Casing to 7 feet

Lithology, Alteration, and Structure

Andesite Tuff/Sediment - a dark green, very chloritic, equigranular, tuffaceous rock containing many thin carbonate horizons parallel to foliation unit also contains many thin magnetite + chert horizons
Thin horizon containing 2.03% magnetite

Dacite Crystal Tuff - a pale green chlorite + sericite + quartz matrix encompassing 0.1" quartz phenocrysts + 10% of the rock (maximum concentration)
Rhyolite Crystal Tuff - a white quartz + sericite matrix surrounding ≤0.1" diameter quartz phenocrysts - phenocrysts constitute 5% of the rock
Dacite Tuff/Sediment - a fine grained, equigranular, tuffaceous rock containing numerous thin (≤.5") horizons of sericite and quartz (rhyolite)
Rhyolite Tuff - a fine grained, tuffaceous rock composed of quartz and seri.
Thinly Interbedded Dacite Tuffs and Rhyolite Tuffs

Rhyolite Crystal Tuff - white tuffaceous matrix surrounding subhedral 0.05" diameter quartz phenocrysts + 2% of rock
unit is locally flesh to pale pink in color

Purple Rhyolite Porphyry - purple, quartz + sericite matrix containing quartz and feldspar phenocrysts. Qtz eyes: 0.075" diameter + 3% of rock
feldspars: 0.1" euhedral crystals + 10% of rock
Rhyolite Crystal Tuff - white unit containing <.05" euhedral black grains + 1-2 of rock - possibly magnetite. Qtz phenocrysts: 0.05" max and ≤2% of ro

Andesite Tuff/Sediment - dark green, equigranular rock containing many thin carbonate + quartz horizons - very gradational upper contact
unit also contains many thin ≤2" magnetite + quartz horizons - iron formatio

numerous magnetite-bearing chert horizons at 50° to core axis
trace chalcopyrite in cross-cutting quartz veinlet
at 59' have 3" fragment of chert cut by many quartz + sericite veinlets whi do not cut surrounding rock matrix
Rhyolite Crystal Tuff - unit contains many thin chert and/or magnetite horizo thinly bedded unit - average bed thickness = 0.3" in width
Rhyolite Tuff - very thinly bedded white to pink fine grained quartz and sericite rock

Rhyolite Crystal Tuff - quartz phenocrysts: 3% of rock and average size = 0.05" diameter
Dacite Crystal Lapilli Tuff - quartz eyes: 0.03" diameter and = 5% of roc lapilli: quartz and sericite, = 0.5-0.7" long and = 15% of rock
Rhyolite Tuff - white fine grained rhyolite unit which contains several thin (<0.5") horizons of rhyolite crystal tuff
Dacite Crystal Tuff - a fine grained, chlorite, sericite, and quartz matrix encompassing quartz phenocrysts = 0.1" average and = 10% of rock
89'-93': numerous thin horizons of red and purple chert

Andesite Tuff/Sediment - a dark green, fine grained, very homogeneous rock containing many alternating interbeds of carbonate and sericite
unit contains an occasional but minor amount of subhedral quartz phenocrysts. Maximum concentration: 1%. Average concentra = 0.5%
rock has become more massive and less fissile as a result of an increase in thickness of individual beds
≤1% of rock = 0.1" diameter euhedral, unaltered magnetite grains
8"-thick red horizon, quartz eyes = 7% of rock and size = 0.05"
Rhyolite Crystal Tuff - Qtz eyes: 2% of rock and constitute ≤0.025" diame.

Andesite Tuff/Sediment
see description above

thin ≤1" thick rhyolite crystal tuff horizon
thin (≤½") thick chert horizon containing both disseminated and banded pyri
Porphyritic Andesite flow - 0.05" euhedral flow oriented plagioclase phenocrysts in a fine grained dark green chloritic matrix - phenocrysts constitute 20% of rock

Andesite Tuff/Sediment - very thinly bedded and very massive equivale to the above units

Dacite Tuffs/Sediments - fine grained, pale green rock, identical to unit a 20'

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-3 SCALE 1"=20' PAGE NO. 2 OF 4

LENGTH	core run recovery	% Fe_3O_4	Au	Pb	Zn	Ag	As	S tot	Mineralization and misc. notes
			15	16	78	<1			
0'		0.39	82	18	130	<1			Intense goethite staining on foliation surfaces Numerous thin iron formations, average magnetite content: 1.30% Cherty horizon containing 1% diss. pyrite and trace arsenopyrite Cherty horizon containing 2% diss. pyrite and 1% arsenopyrite
			28	20	62	<1			
0'			16	<6	25	<1			Interval contains many thin black chlorite horizons - a few contain pyrite and/or arsenopyrite
			15	<6	16	<1			interval contains feldspar phenocrysts feldspars: euhedral: 0.1" and = 5% Unit appears to have experienced minor silicification and only locally-intense silicification
0'		0.23	154	10	59	<1			Magnetite content at 201' = 4.95% 1% pyrite in a sericitized and black chlorite altered rhyolite Zone of intense deformation; cherts vary from 40° to 90° dip
			121	18	76	<1			Trace chalcopyrite in a black chlorite horizon that cross cuts bedding Isoclinally folded chert horizon; fold axis: 70°∠ and λ: 1.2"
0'			44	18	92	<1			3" wide milky white quartz veins with intermixed carbonate Black chlorite alteration is probably related to the quartz veins - at least interval 221-229' is
			106	14	61	<1			
0'			190	24	80	<1			
			194	20	76	<1			Trace of pyrite in a quartz phenocryst Sericite in this interval occurs as thin halos around quartz filled shear zones
0'			115	12	71	<1			
			150	16	70	<1			5" wide milky white quartz vein black chlorite may be related to this 1% disseminated 0.1" euhedral pyrite
0'			214	18	68	<1			1% disseminated pyrite, grains average 0.1" in diameter Pyrite occurs within or at the margins of the more felsic horizons
		0.097	121	12	78	<1			Average magnetite content: 0.072% Trace chalcopyrite with chalcocite coating Average magnetite content: 0.16% magnetite occurs as 0.05" euhedral grains Intense sericitization is related to

Surveys: 50.07°E and ±5°

Lithology, Alteration, and Structure

Rhyolite Tuff - a very fine grained, white quartz and sericite tuffaceous rock containing <1% horizons of rhyolite crystal tuff
Dacite Tuff/Sediment - identical to unit at 20'
Rhyolite Tuff - approximately 1-3% of the rock is comprised of wisps of black chlorite - wisps < 0.1" in length
numerous thin cherty iron formations. Exhaustive interval - all cherts or iron formations
Andesite Tuffs/Sediments
Rhyolite Crystal Tuff - qtz phenocrysts: 0.1-0.2" and = 6% of rock
Rhyolite Tuff - a pale buff colored, fine grained, very fissile, quartz and sericite tuffaceous rock
pyrite-bearing, black chlorite abundant to large shear zone
Rhyolite Crystal Tuff - white to buff colored rock - excellent looking rock
quartz phenocrysts: 0.2" diameter and = 6% of rock
quartz phenocrysts: 0.3" diameter and constitute 15% of rock
quartz eyes: 0.2" average diameter and constitute 4% of rock
note increase in sericite content of matrix
quartz eyes: 0.3" average diameter and constitute 8% of rock
massive black chlorite containing 3% disseminated and stringer pyrite
1' of massive black chlorite
Rhyolite Lapilli Tuff - matrix: quartz and sericite, sericite: 65% of mat
lapilli = quartz and/or sericite and constitute from 2-60% of rock
average length: 2"
1' of massive black chlorite - rock has experienced complete alteratio
thin horizon of dacite lapilli tuff
thinly interbedded rhyolite tuffs and grey rhyolite lapilli tuffs
Andesite Lapilli Tuff - andesite matrix surrounding lithic fragments (<1%) and lapilli of quartz and sericite. Lithic fragments: qtz + serici
many boudinaged chert horizons
Dacite Crystal Tuff - 20'-27': rock intensely chloritized and appears to be andesitic but contains <0.1" euhedral quartz and plagioclase phenocrysts which comprise 5% of rock
end of feldspar phenocrysts - below here: only quartz phenocrysts and these = 0.05" and constitute 3% of rock
1' thick dacite tuff bed
quartz and feldspar phenocrysts = 25% of rock
qtz = ≤0.05" and 10% feldspar = ≤0.05" and 15% of rock
interbedded (1" thick beds) dacite crystal tuff and rhyolite crystal t
Dacite Crystal Lapilli Tuff - dacite matrix surrounding qtz eyes = 0.05" diameter and 2% of rock. Lapilli = qtz ± sericite ± feldspar and constitute from 0-7% of rock
qtz phenocrysts: 0.05" and 25% of rock
" : 0.075" and 8% of rock
lapilli: qtz + feldspar = 0.4" long and constitute 7% of rock
intensely chloritized rock: qtz phenocrysts: 0.1" and = 3% of rock; lapilli: qtz + feldspar: 0.4" long and = 2 vol
qtz phenocrysts: ≤0.1" diameter and constitute 3% of rock; lapilli: 2% o
" : 0.1"-0.3" diameter and = 5% of rock
Dacite Tuff - a fine grained equigranular tuffaceous rock
Dacite Lapilli Tuff: lapilli: qtz + sericite and = 1-3% of rock, max length: 2
Thinly Interbedded Dacite Crystal Tuffs and Rhyolite Tuffs
50% rt and 50% dct rt: qtz + sericite + 0.3" euhedral magnetite
Dacite Crystal Tuffs - quartz phenocrysts: 0.05" diameter and constitute 15-30% of the rock
Thinly Interbedded Dacite Crystal Tuffs and Rhyolite Tuffs
Dacite Crystal Tuff - qtz phenocrysts: 0.05" and = 20% of rock
Dacite Lapilli Tuff - lapilli: qtz + sericite + feldspar + magnetite: 5% of roc
numerous thin rhyolite tuff horizons: all ≤ ½" wide
Dacite Crystal Tuff - qtz eyes: 0.035" and constitute up to 15% of the r
Dacite Crystal Lapilli Tuff - lapilli: qtz + sericite + feldspar + magnetite: 5%
Dacite Crystal Tuff - qtz phenocrysts: 0.1" max diameter = 3% of rock (max)
obscure change in color of rock from a dark green to a steel grey

Tr volume % magnetite in a rhyolite tuff

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-3 SCALE 1":20' PAGE NO. 3 OF 4

LENGTH	CORE RECOVERY	% Fe_3O_4	ASSAYS Cu	Pb	Zn	Ag	As	S tot
			9	8	80	<1		
			17	10	83	<1		
0'			201	16	142	<1		
			470	14	131	<1		
10'			321	18	90	<1		
			168	12	84	<1		
60'			74	12	85	<1		
	90		32	8	39	<1		
			10	14	43	<1		
80'			30	18	38	<1		
			48	10	70	<1		
			142	10	100	<1		
			76	14	101	<1		
00'			1300	18	180	<1		
			198	16	65	<1		
			85	10	25	<1		
			137	26	70	<1		
20'			151	12	49	<1		
			15	<6	30	<1		
			13	10	32	<1		
			194	24	59	<1		
40'			15	12	29	<1		
			71	12	57	<1		

Mineralization and misc. notes

4" zone of massive graphite-bearing sericite

Quartz phenocrysts: 0.1" diameter and <10%

Carbonate occurs as disseminations in a 3" thick grey chert

Disbursed magnetite: 10% of rock cubes' euhedral and av. 0.075"

Many thin hematite coatings on foliation-schistosity surfaces

320'-331': carbonate occurs as thin coatings on foliation surfaces

Sericitization is a result of shearing and brecciation adjacent to fault

Carbonate occurs as thin (1/8" thick) horizons parallel to bedding

Graphitic sericite dominates matrix

Dacite Crystal Tuff horizon: qtz eyes: 0.075" and = 3% of rock

Carbonate is disseminated along small fractures in a chert

Intense goethite staining along schistosity surfaces

Very bleached zone - due to shearing

rocks are white

3" thick massive quartz and feldspar veinlet

Hematite occurs as thin coatings on foliation surfaces

379': 0.2" thick horizon of intermixed arsenopyrite and chalcopyrite

arsenopy: 2% cpy: tr

grains average diameter: ≤0.05"

" are not fractured

Black chlorite occurs as discontinuous whisps on schistosity surfaces

2% disseminated pyrite in 0.3" horizons

Many thin boudinaged cherty horizons

1% disseminated pyrite

Quartz vein is displaced ≤2" by movement along a shear zone

2% disseminated pyrite

Thin dacite crystal tuff horizon

quartz phenocrysts: 0.075" and 2% of rk

1% disseminated pyrite

2" to 4" wide milky white quartz veins containing pyrite

1% pyrite in a 0.5" cherty zone

Several thin horizons of arsenopy, pyrite and chalcopyrite. Total zone: 2% aspy > cpy > py

Numerous thin (0.3"-1.0") horizons of massive arsenopyrite, pyrite, chalcopyrite and quartz

Hematite occurs as both thin coatings on foliation surfaces and as anastomosing veinlets

Lithology, Alteration, and Structure

rock has a high concentration of a steel grey very fetusse pyrite - it appears to be sericite that contains minor amounts of graphite. The graphite-bearing sericite comprises the rock matrix. rock is a crystal tuff with qtz phenocrysts averaging 0.1" diameter and varying from 3-15% of rock

8" zone of massive graphite-bearing sericite - rock is dark grey to black but is not black chlorite

beginning to get horizons of green dacitic material within the grey sericite

Dacite Tuff/Sediment - a fine grained dark green tuffaceous rock containing alternating carbonate horizons

carbonate horizons occur every 0.25" and have a maximum thickness of

thin horizon of dacite crystal tuff: qtz eyes: 0.1" and 10% of rock

½" thick ankerite veinlet: golden brown carbonate

drastic decrease in carbonate content of rock - rock has become very fiss

chloritic matrix containing 0.1" euhedral magnetite: 2-3% of the rock

alternating with the chlorite are thin carbonate horizons

Interbedded Dacitic Tuffs and Dacite Lapilli Tuffs - dacitic tuff horizo containing 3% magnetite alternate with lapilli tuff horizons - matrix consists of chlorite and graphite-bearing sericite chl > graphitic s

Dacite Tuffs/Sediments - fine grained chlorite rock - tuffaceous - containin alternating horizons of carbonate - rock is dark grey to black due to graphite-bearing sericite.

graphite-bearing sericite: 60% chlorite: 25% carbonate: 15%

Dacite Tuff - thin chloritic horizons alternate with qtz and sericite felsic horizons chlorite > graphite-bearing sericite

Dacite Crystal Tuff - quartz phenocrysts: 0.05" and = 4% of rock

thin horizon containing 0.05" euhedral feldspar phenocrysts: 10% of

quartz phenocrysts: 1-2% and average diameter = 0.05"

rocks are pale green and appear to be rhyodacitic. - I believe they are still dacitic but are slightly bleached by shearing

quartz phenocrysts: 0.075" and ≤ 1% of rock

Dacite Tuffs - dark green, fine grained, tuffaceous, homogeneous roc

arsenopyrite occurs in discrete horizons and ranges in abundance f 1-4 volume % maximum concentration: at 383'

numerous chert containing 3% intermixed pyrite, arsenopyrite, and chalcopyr

py > aspy > cpy

dacite crystal tuff containing ≤0.1" qtz eyes: 15% of rock

alternating horizons of dacitic tuffs and crystal tuffs

Dacite Crystal Tuff

below here rock becomes much finer grained and more tuffaceous

Dacite Tuffs

trace pyrite and 1% pyrite in a thin silicus zone - abundant black chlori

3-7% disseminated pyrite - grains: euhedral and up to 0.2" in diameter

some grains are very prolate

drastic decrease in grain size of pyrite grains decrease from 0.2" to pyrite grains are so small - it is almost impossible to distinguish them wi a 10X hand lens

3/4" horizon of pyrite and arsenopyrite in a gangue of qtz sulfides: 4% of ro

thin chert containing 2% disseminated pyrite

entire unit has experienced at least slight silicification

2% disseminated pyrite and arsenopyrite

thin <1' horizon of silicified rhyolite tuff containing tr. amts of pyrit

Rhyodacite Tuffs - a very fine grained, silicified, tuffaceous rock composed of quartz sericite and chlorite. Color - pale green

Dacite Tuffs

thin horizon of arsenopyrite: total zone ≤1%

1" zone: arsenopyrite: 84%, chalcopyrite: 4% quartz: 12%

1" zone: " 94% " 2% " 4%

0.3" zone: " 76% " 4% " 20%

Rhyodacite Tuff - a pale green very silicic tuffaceous equigranular to comprised of quartz sericite and chlorite

S 84°E and -52.5°

PROJECT Greyhound (5180) DRILL HOLE NO. EGH-3 SCALE 1"=20' PAGE NO. 4 OF 4

NGTH	Core Dia recovery	% Fe_2O_3	Cu	Pb	Zn	Ag	As	S tot	Mineralization and misc. notes
			23	8	63	<1			1% disseminated euhedral pyrite
			10	12	32	<1			trace disseminated arsenopyrite and 1% pyrite Numerous thin horizons of arsenopyrite total concentration: 1%
0'			9	10	36	<1			
			27	10	58	<1			Carbonate occurs as thin coatings on foliation surfaces
			111	10	323	<1			Quartz phenocrysts: 0.1" and <5%
0'									

Limonite | Pyrite | Clay | Arsenopyrite | Arc-veins | Carbonate | Sericite | Biotite chlorite | Silicification | Servals | Schistosity | STRUCT. | ROCK

Lithology, Alteration and, Structure

1' of a rhyolite tuff: quartz + sericite + 1% disseminated 0.1" euhedral p

rhyodacite tuff containing 0.1" horizons of rhyolite tuff repeated every 1

Rhyodacite Tuff - silicified
from 57-60' rock is grey in color due to increase silicification

trace amounts of disseminated pyrite and arsenopyrite average grain size: 0.05"

Rhyodacite Crystal Tuff
quartz phenocrysts: 0.05 - 0.1" in diameter and constitute 2% of

DIAMOND DRILL ASSAY LOG

PROJECT Greyhound
Project No. 5180 Az
COORDINATES 3450' FNL and 2350' FWL section 29, T9N; R2E Yavapai County, Arizona

DATE STARTED July 13 1981
DATE COMPLETED July 24 1981

SHEET No. 1 of 2
HOLE No. EFH-3

COLLAR ELEVATION ~2400' BEDROCK ELEVATION ~2400'

FOOTAGE From	FOOTAGE To	Interval	Measd. CORE Recov.	% Recov.	HOLE SIZE	COPPER ppm	COPPER %	MOLY ppm	MOLY %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz./ton	GOLD ppm	GOLD oz./ton
7	20	13			NC	70				12		76		<1			
20	30	10				47				14		67					
30	40					41				12		66					
40	50					30				14		59					
50	60					44				14		89					
60	70					41				12		74					
70	80					35				6		68					
80	90					34				6		68					
90	100					83				16		103					
100	110					101				20		120		<1			
110	120					77				12		126					
120	130					120				20		194					
130	140					124				16		117					
140	150					35				12		86					
150	160					15				16		78					
160	170					82				18		130					
170	180					28				20		62					
180	190					16				5		25					
190	200					15				5		16					
200	210					154				10		59		<1			
210	220					121				18		76					
220	230					44				18		92					
230	240					106				14		61					
240	250					190				24		80					
250	260					194				20		76					
260	270					115				12		71					
270	280					150				16		70					
280	290					214				18		68					
290	300					121				12		78					
300	310					9				8		80		<1			
310	320					17				10		83					
320	330					201				16		142					
330	340					470				14		131					
340	350					321				18		90					
350	360					168				12		84					
360	370					74				12		85					
370	375	5				32				8		39					
375	380					10				14		43					
380	385					30				18		38					
385	390					48				10		70					
390	395					142				10		100					
395	400					76				14		101					
400	405					1300	0.13			18		180		<1			
405	410					198				16		65					
410	415					85				10		25					
415	420					137				26		70					
420	425					151				12		49					
425	430					15				5		30					

DIAMOND DRILL ASSAY LOG

PROJECT Greyhound
Project No. 5180

DATE STARTED
DATE COMPLETED

SHEET No. 2 of 2
HOLE No. EGH-3

COORDINATES _____ _____ COLLAR ELEVATION _____ BEDROCK ELEVATION _____

FOOTAGE		Interval	Measd. CORE Recov.	% Recov.	HOLE SIZE	COPPER		MOLY		LEAD		ZINC		SILVER		GOLD	
From	To					ppm	%	ppm	%	ppm	%	ppm	%	ppm	oz./ton	ppm	oz./ton
430	435	5			NC	13				10		32		<1			
435	440					194				24		59					
440	445					15				12		29					
445	450					71				12		57					
450	455					23				8		63					
455	460					10				12		32					
460	465					9				10		36					
465	470					27				10		58					
470	476	6				111				10		323		<1			

MOLLEN-HAUER SURVEYING COMPANY

COMPANY _____ JOB NO. EGH-3 PAGE OF 1

PROSPECT NO. GREYHOUND LOCATION _____ DATE _____

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE		VERTICAL DEPTH		TRUE VERTICAL DEPTH		SECTION	COURSE DEVIATION		DRIFT DIRECTION			(DS) COORDINATE DIFFERENCES (DS) SCALE NORTH		SOUTH		EAST		WEST		RECTANGULAR COORDINATES NORTH		SOUTH		EAST		WEST	
	100	100	60		86	60	86	60		50	00	N	89	E		87			49	99				87			49	99		
	302	202	57		169	41	256	01		110	02	S	87	E			5	76	109	87					4	89	159	86		
	476	174	52	5	138	04	394	05		105	92	S	84	E			11	07	105	34					15	96	265	20		
																										S	86.56	E	265	68

ANALYTICAL REPORT

PROJECT GREYHOUND EGH-3 PROJECT NO. 5180

STATE AZ COUNTY QUAD

SAMPLE NO. 25 TYPE NC CORE

SUBMITTAL NO. 81-34-4

DATE SUBMITTED 2 SEP 81

GEOLOGIST J. DAVIDSON

PAGE 1 OF 1

REMARKS

SAMPLE	PPM Cu	% Cu	PPM Pb	% Pb	PPM Zn	% Zn	PPM Ag
7-20	70		12		76		<1
20-30	47		14		67		<1
30-40	41		12		66		<1
40-50	30		14		57		<1
50-60	44		14		89		<1
60-70	41		12		74		<1
70-80	35		6		68		<1
80-90	34		6		68		<1
90-100	83		16		103		<1
100-110	101		20		120		<1
110-120	77		12		126		<1
120-130	120		20		194		<1
130-140	124		16		117		<1
140-150	35		12		86		<1
150-160	15		16		78		<1
160-170	82		18		130		<1
170-180	28		20		62		<1
180-190	16		<6		25		<1
190-200	15		<6		16		<1
200-210	154		10		59		<1
210-220	121		18		76		<1
220-230	44		18		92		<1
230-240	106		14		61		<1
240-250	190		24		80		<1
250-260	194		20		76		<1

EXXON MINERALS CO., USA

SIGNED [illegible] DATE 9/22/81

ANALYTICAL REPORT

PROJECT GREYHOUND EGH-3 PROJECT NO. 5180

STATE AZ COUNTY QUAD

SAMPLE NO. 32 TYPE NC CORE

SUBMITTAL NO. 81-34-8

DATE SUBMITTED 9 SEP 81

GEOLOGIST J. DAVIDSON

PAGE 1 OF 1

REMARKS As and S will follow later.

SAMPLE	PPM Cu	% Cu	PPM Pb	% Pb	PPM Zn	% Zn	PPM Ag	PPM Au
260-270	115		12		71		<1	<.02
270-280	150		16		70		<1	<.02
280-290	214		18		68		<1	<.02
290-300	121		12		78		<1	<.02
300-310	9		8		80		<1	<.02
310-320	17		10		83		<1	<.02
320-330	201		16		142		<1	<.02
330-340	470		14		131		<1	<.02
340-350	321		18		90		<1	<.02
350-360	168		12		84		<1	<.02
360-370	74		12		85		<1	<.02
370-375	32		8		39		<1	<.02
375-380	10		14		43		<1	<.02
380-385	30		18		38		<1	<.02
385-390	48		10		70		<1	<.02
390-395	142		10		100		<1	<.02
395-400	76		14		101		<1	<.02
400-405		0.13	18		180		<1	<.02
405-410	178		16		65		<1	<.02
410-415	85		10		25		<1	<.02
415-420	137		26		70		<1	<.02
420-425	151		12		49		<1	<.02
425-430	15		<6		30		<1	<.02
430-435	13		10		32		<1	<.02
435-440	194		24		59		<1	.09
440-445	15		12		29		<1	<.02
445-450	71		12		57		<1	<.02
450-455	23		8		63		<1	<.02
455-460	10		12		32		<1	<.02
460-465	9		10		36		<1	<.02
465-470	27		10		58		<1	<.02
470-476TD	111		10		323		<1	<.02

EXXON MINERALS CO., USA

SIGNED [signature] DATE 9/29/81

COPPER STATE ANALYTICAL LAB., INC.

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

REGISTERED ASSAYER
P. O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD
PHONE 602-884-5811
884-5812

Exxon Minerals Company
Att: J. Davidson
2425 Hucahuca Drive
Tucson, Arizona 85705

JOB # 000399
RECEIVED 10/2/81
REPORTED 10/27/81
INVOICE # C0602
Proj. Geryhound 5180

SAMPLE NUMBER	As ppm	Cu ppm	Pb ppm	Zn ppm	Au ppm	S ppm
EGH-3 370-375	29					630
275-380	.071					0.13%
380-385	0.70%					0.41%
385-390	87					0.85%
390-395	15					0.25%
395-400	6					0.56%
400-405	8	0.12%	4	146		1.54%
405-410	26					4.87%
410-415	15					0.88%
415-420	27					0.42%
420-425	37					0.35%
425-430	2					0.26%
430-435	109	6	6	34	0.02	410
435-440	0.80%					0.76%
440-445	35					385
445-450	43					495
450-455	19					990
455-460	46					330
465-470	26					385
470-476 T.D.	47					0.10%

OCT 1981 RECEIVED TUCSON MINERALS

REGISTERED ASSAYER CERTIFICATE NO. 8888 Dnyanendra Amrutlal Shah DATE SIGNED 10-27-81 Arizona U. S. A.

1 ppm = 0.0001% 1 troy oz./ton = 34.286 ppm 1 ppm = 0.0292 troy oz./ton

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

PROJECT KAY MINE

REPORT NO. C-7-11

SAMPLE TYPE Slurry Samples; Hammer Drill NO. OF SAMPLES 64

DATE SUBMITTED 6-16-72

SUBMITTED BY T.D. Erwin

REMARKS

PROJECT NO. # 3293

Core STORAGE ~~[illegible]~~

PAGE OF PAGES 1 of 2

SAMPLE CONCENTRATION

Sample No.	Tube No.	PPM Cu	PPM Pb	PPM Zn	PPM Ag
KM-1	Core				
105-110		85	16	110	1
110-115		190	18	95	1
115-120		146	17	75	<1
120-125		165	19	90	1
125-130		104	19	70	1
130-135		90	17	95	1
135-140		117	18	90	1
140-145		156	19	185	<1
145-150		116	25	200	<1
150-155		115	19	120	<1
155-157		260	34	235	14
157-164		107	51	165	1
164-169		104	21	105	<1
169-174		110	23	165	1
174-176		72	22	90	1
176-181		73	22	130	1
181-186		141	25	135	<1
186-191		123	24	180	1
191-192		127	29	170	1
192-195		64	16	130	<1
195-201		132	22	210	<1
201-203		122	25	105	<1
203-204		250	44	260	<1
KMA #1	Cuttings				
0-10		400	2500	70	<1
10-20		405	100	95	<1
20-30		530	202	65	<1
30-40		380	180	55	<1
40-50		255	340	55	<1
50-60		510	580	65	<1
60-70		485	460	75	<1
70-80		460	440	510	1
80-90		320	500	120	<1
90-100		320	260	130	<1
100-110		150	980	100	<1
KMA #1A					
0-12		780	98	975	1
12-24		240	2000	360	<1
24-33		240	340	550	<1
33-42		140	600	930	<1
42-54		170	1550	420	1
54-60		150	180	325	<1

PROJECT KAY MINE · VALIDATION KMV-1 (KMV-2)

REPORT NO. 72-14-3

SAMPLE TYPE DRILL CORE

NO. OF SAMPLES 9

DATE SUBMITTED 6-26-72

SUBMITTED BY T. Erwin

REMARKS Beaker digest

PROJECT NO. 3293

STORAGE ~~BOX NO.~~ [redacted]

PAGE OF PAGES

SAMPLE CONCENTRATION 2/100 .5 GRAMS

Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn
70-275	1	46	91	85
75-280	2	107	40	125
80-285	3	150	50	250
85-290	4	200	51	335
90-295	5	142	52	330
95-300	6	110	36	175
00-305	7	155	75	135
05-310	8	140	48	235
10-315	9	70	39	205