PROJECT Kay Mine PAGE 1
D.D.H. No. ~~KM #2~~ SCALE 1" = 20' BY TOV
CO-OR KMV-2 COLLAR EL 2970 DATE June 1972

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type	Description
20					
75				Cal. Chl. Schist	
80					
85	Py-Po				Massive py & Lim after py 10-20% sulfides
95					
	Py-Po				Thin band of graphite and py > Po 3-5% Sulfides
80				Cal Chl. Schist	w/ minor graphite-py bands
					unmineralized Cal. Chl Schist
95					
					Graphite bearing. Cal. Chl. Schist w/ weak Py-Po bands Total Sulfides = 2-5%
	Py-Po				Silicious graphite-chlorite schist w/ sulfides (Po-Py) = 4-8%
					Silicious-graphite bearing brecciated schist Total sulfides 5-10% Py > Po >> cpy
					Silicious-graphite schist-foliated w/ concordant qtz. bands 5-7% sulfides py ≥ Po
					Silicified chl. Schist. less graphite 1 inch Po band @ 221'.

Note this hole ~~at~~ analyzed for Cu, Pb, Zn and Ni.
All values in parts per-million
Forty Five degree angle hole in S75°E direction.

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	~~Pb~~ Pb	Zn	Ni
0'	36'	110	24	135	56
36'	41'	95	19	87	60
41'	46'	90	19	85	70
46'	51'	85	20	97	74
51'	56'	100	17	119	56
56	62'	113	17	106	22
~~100~~ 62'	67'	100	18	87	34
67'	72'	123	22	151	25
72'	77	110	24	103	24
77	-135	No Analysis Core splitting very difficult			
135'	140'	100	21	181	17
140'	145'	85	21	161	22
145'	150'	110	23	204	24
150'	155'	88	20	170	19
155'	160'	93	23	240	17
160'	165'	155	36	285	22
165'	170'	118	29	180	19
170'	175'	103	25	150	16
~~175~~ 175'	180' 2+	160	24	150	17
180'	185'	85	22	171	16
185'	190'	75	22	154	17
190	200	115	28	221	14

PROJECT Kay Mine PAGE 2
D.D.H. No. ~~KMII-2~~ SCALE 1"=20' BY T.D.H.
CO-OR KMV-2 COLLAR EL _____ DATE _____

% Core Recovery	Mineralzn	Alteration	Structure	Rock Type	Description
					200
					220
	Py, Po				Very graphitic breccia-zone 10-15% sulfides Py ≥ Po @ 228' 3/8" % band.
	Py, Po				Silicious - graphitic schist w/ well developed foliation @ 236.5 chrysocolla (?) 2-5% sulfides
	cpy (?)				240
95					Higher graphitic, sulfide material
					260
					Brecciated-silicious-carbonaceous-schist 10-17% total sulfides Py > Po
					Silicious low graphite low sulfide schist
	Py, Po				280
					-6-12% sulfide Cal. Chl. Schist
	Py Po				Silicious carbonaceous Sulfide rich schist Total sulfides 10-20%
					Intermittent Cal-Chl Schist w/ graphite rich sulfide rich material. Total Sulfides 3-6%
					300
					TD=319 320

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	Pb	Zn	Ni
200'	205'	88	24	175	17
205'	210'	68	25	195	14
210'	215'	65	18	120	16
215'	220'	90	21	140	16
220'	225'	160	42	298	17
225'	230'	320	60	177	15
230'	235'	90	30	205	18
235'	240'	103	23	188	22
240'	245'	93	21	185	19
245'	250'	88	20	135	17
250'	255'	145	25	174	19
255'	260'	165	20	155	19
260'	265'	118	19	142	18
265'	270'	133	24	103	15

PROJECT KAY MINE — ~~KM-3~~ KV-3

REPORT NO. 72-14-9

SAMPLE TYPE CORE volog

NO. OF SAMPLES 11

DATE SUBMITTED 7-13-72

SUBMITTED BY T.D. IRWIN

REMARKS KV-3

PROJECT NO. ~~#~~ 3293

CORE STORAGE ~~BOX NO.~~

PAGE ____ OF ____ PAGES

SAMPLE CONCENTRATION 2/100 .5 GRAM

~~KM-3~~

Sample No	Tube No			PPM Cu			PPM Pb			PPM ZN	1.17N 37.1 .2013	F= 2906	PPM Ni
71-77	12			185	2.0		40	17.9	.0857	263	13.9	.0450	19
77-78	13			250	2.2		44	20.5	.0906	306	15.0	.0706	21
78-82	14			240	1.7		34	20.7	.1007	309	15.7	.0782	22
82-83.5	15			107	1.6		32	13.0	.0605	185	13.9	.0450	19
83.5-86	16			310	4.0		80	28.1	.1433	545	19.0	.0915	27
86-88	17			192	2.2		44	24.5	.1221	465	15.3	.0721	21
88-93	18			110	1.7		34	14.7	.0691	212	15.0	.0706	21
93-98	19			120	1.0		20	14.4	.0675	207	13.3	.0615	19
98-103	20			152	1.4		28	12.9	.0600	184	13.4	.0625	18
103-108	21			138	1.3		26	16.8	.0797	245	17.5	.0825	24
108-111	22			129	1.8		36	15.7	.0742	228	16.4	.0775	23
T.D													
							Zn						
							18	2.7		F=			
				18 Pb	2.5		58	17.1	.0814	3071			
				5 Pb	13.4		10X	76.1	.1314	3805			

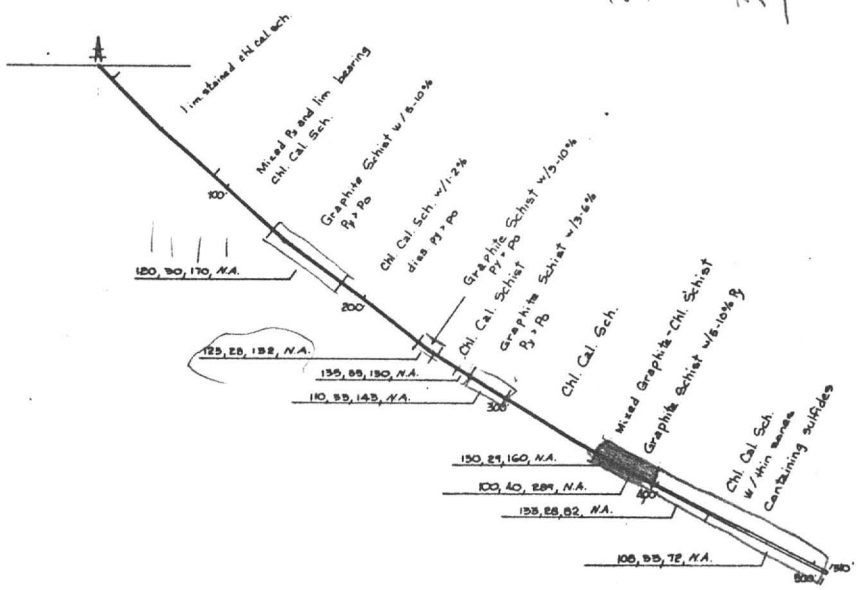
3

KAY MINE #1

File # 5293
Drillings

137 - 185
241 - 253
271 - 299
362 - 398

Kay Mine # 1
TD = 510'
Scale 1" = 50'
Azimuth S75°E



Note: Arrangement of values
Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #1 Cross Section	
	CO. & BY. Yavapai, Arizona	BY T.D. Irwin	
	SCALE 1" = 50'	PROJ. NO. 5293	DATE Jan. 78	FILE NO.

PROJECT KAY MINE

SAMPLE TYPE DRILL CORE NO. OF SAMPLES

REMARKS

CORE, STORAGE ~~BOX NO.~~

REPORT NO. 72-16-20

DATE SUBMITTED 11-20-72

SUBMITTED BY TOM IRWIN

PROJECT NO. 3293

PAGE 2 OF 2 PAGES

SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu		PPM Pb	PPM Zn
3293-1		—		—	—
		—		—	—
434'-438'	40	125	1.1	28	77
438'-442'	41	110	1.2	30	76
442'-446'	42	105	1.3	33	72
446'-450'	43	105	1.2	30	74
450'-455'	44	98	1.0	25	87
455-460'	45	115	1.8	20	76
460'-465'	46	115	1.0	25	65
465'-470'	47	105	1.0	23	64
470'-475'	48	81	1.0	25	55
475'-480'	49	105	1.0	25	62
480'-485'	50	120	1.5	38	77
485'-490'	51	125	1.8	45	70
490'-495'	52	100	1.7	43	67
495'-500'	53	95	2.0	50	64
500'-505'	54	110	1.8	45	74
505'-510'	55	120	1.4	35	85

PROJECT: KAY MINE DDH-1

SAMPLE TYPE: DRILL CORE

NO. OF SAMPLES: 55

REMARKS:

CORE STORAGE ~~BOX NO.~~

REPORT NO. 72-16-20

DATE SUBMITTED 11-20-72

SUBMITTED BY TOM IRWIN

PROJECT NO. 3293

PAGE 1 OF 2 PAGES

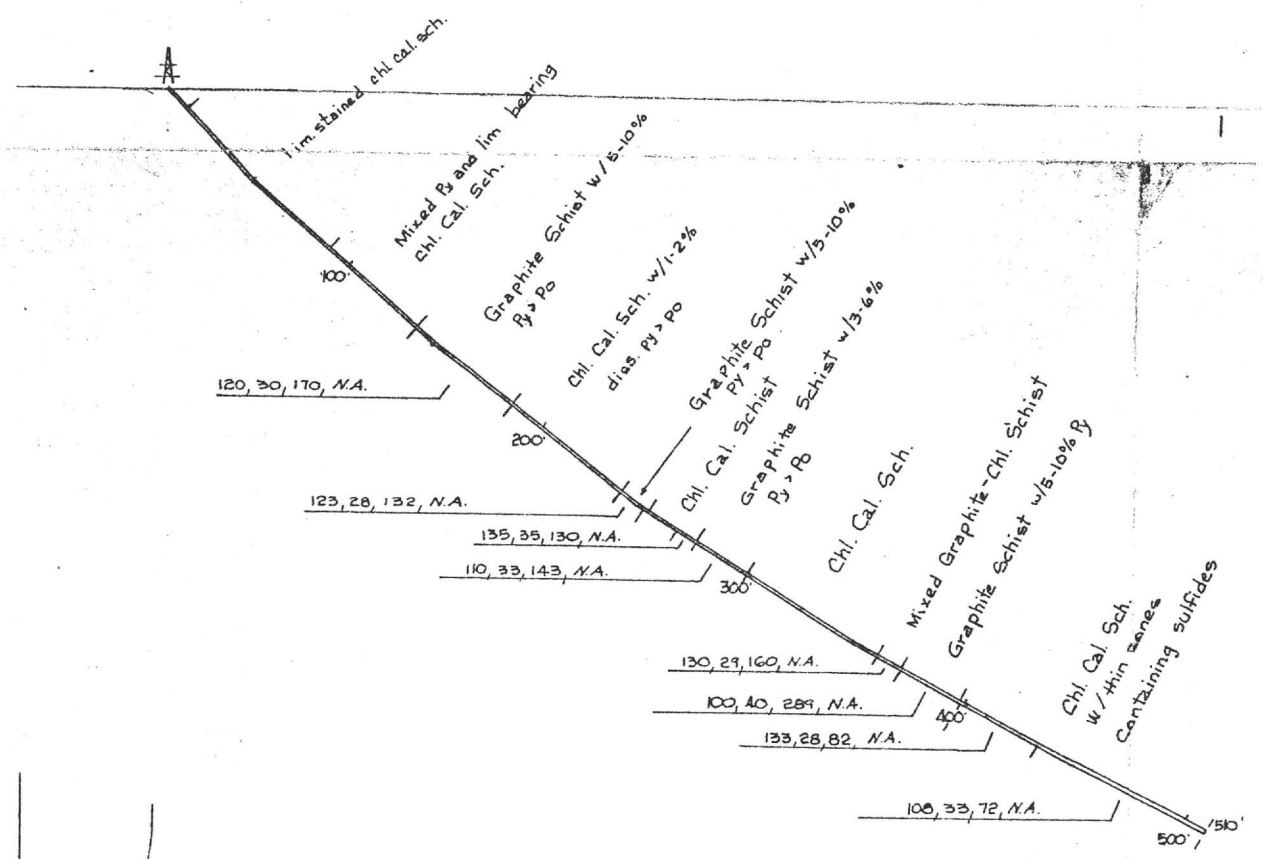
SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu	1876 20	PPM Pb	PPM Zn
3293-1		—		—	—
		—		—	—
137'-149'	1	120	1.0	48	115
149'-153'	2	155	1.2	33	145
153'-157'	3	105	1.5	38	205
157'-161'	4	96	1.1	28	155
161'-165'	5	120	1.2	30	130
165'-169'	6	130	1.2	25	150
169'-173'	7	88	1.1	28	125
173'-177'	8	115	1.2	30	155
177'-181'	9	135	.9	23	350
181'-185'	10	140	.8	20	170
		—		—	—
241'-245'	11	150	1.2	30	120
245'-249'	12	115	1.1	28	140
249'-253'	13	105	1.0	25	135
		—		—	—
267'-271'	14	~~135~~	~~1.4~~	~~35~~	~~130~~
271'-275'	15	110	1.2	35	165
275'-279'	16	98	1.2	33	120
279'-283'	17	90	1.2	30	135
283'-287'	18	135	1.3	33	160
287'-291'	19	105	1.3	33	165
291'-295'	20	110	1.2	30	135
295'-299'	21	125	1.5	38	120
		—		—	—
362'-366'	22	120	1.0	25	135
366'-370'	23	140	1.3	33	185
370'-374'	24	92	1.1	28	140
374'-378'	25	89	1.0	25	135
378'-382'	26	97	1.2	30	140
382'-386'	27	120	1.9	48	265
386'-390'	28	130	1.7	43	205
390'-394'	29	81	2.8	70	940
394'-398'	30	89	1.3	33	195
398'-402'	31	110	.9	23	92
402'-406'	32	120	.8	20	83
406'-410'	33	115	1.5	38	83
410'-414'	34	115	1.3	33	81
414'-418'	35	210	1.2	30	82
418'-422'	36	150	1.2	30	84
422'-426'	37	135	1.1	28	65
426'-430'	38	115	1.0	25	85

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	PROJECT Kay Mine Co-ord. Collar elev. By Scale 1"=100' Date P. HOLE No. K-1	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
0							0 Casing					
90		Tr g			70/		Sericite schist thin lam pale cream fine grained very few quartz eyes or feldspar phenoxts. Rhyolite tuff fault					
10%							100 Sericite schist fine grained thin laminated grey to creamy grey mixed Rhyolite tuff with quartz eyes and without quartz eyes — flaser bedded					
		2-5 Py					Siliceous graphphitic-pyritic schist fine grained grey and black exhalite.					
							200 No structural Information Skelotonized core 300					
		1 Py					400 Chlorite schist dark green to medium green medium grained plagioclase phenocrysts Andesite tuff SKELOTONIZED. Core 500 End of Hole 510					

KAY MINE 1

Kay Mine # 1
TD = 510'
Scale 1" = 50'
Azimuth S75°E



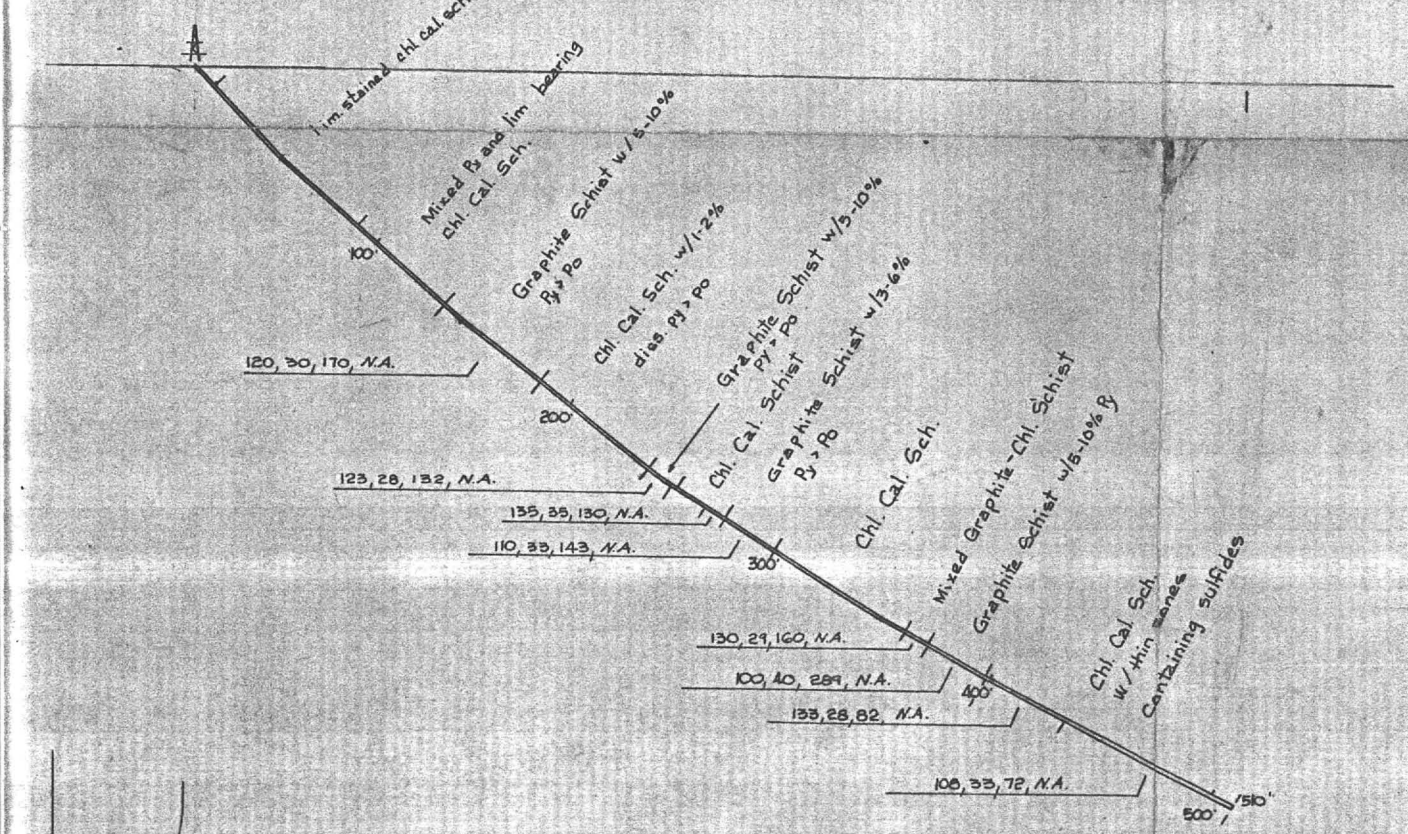
Location: 1,1
42
Elevation
21

Arrangement of values
Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE
	CO. & ST. Yavapai, ARIZONA	
	SCALE	

KAY MINE #1

Kay Mine # 1
TD = 510'
Scale 1" = 50'
Azimuth S75°E



Location: 1,11
A2
Elevation
21.

Arrangement of values
Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D
	CO. & ST. Yavapai, ARIZONA	
	SCALE 1" = 50'	PROJ

PROJECT Kay Mine HOLE No. K-2

Co-ord. _____ Collar elev. _____ By GP Scale 1"=100' Date _____ P. 1

Recovery	Base Metal Mineralization	Pyrite Limonite	Gougue	Alteration	Structure	Rock Type	Description	Interval	Cu	Mo	Pb	Zn
0							Casing					
95+					50 ∠ S2	g + d	mgr mgn					
							massive gn blk chl					
"					65 ∠ S2	g + d	100 mgr blk to gn blk Flaser bd in pt					
"					70 ∠ S2	d	mgr dk gn blk 200					
"		7-10 Py			70 ∠	ex	graph & SiO_2 + py					
"					70 ∠	c	mgr mgn					
"		1-2 Py			70 ∠	ex	SiO_2 graph					
"					75 ∠ sk	g + d	mgr m to dk gn					
						ex	300 fgr blk graph + SiO_2 + 2% py					
"					± ∠ 75 ∠	g	mgr mgn no S_2					
		2-4%			70 ∠	ex	fgr blk SiO_2 graph py					
95+		2-5%			75 ∠	ex + g	400 g + graph blgn S_2 75° blk to gn blk on S_1 fgr SiO_2 + graph + py 10% g blk to gn blk					
95+				75	75 ∠	c + d	mgr pl gn to gn blk graph on S_1 SiO_2 rich					
		Tr			80 ∠	g + ex	g + graph: f to m gr gy gn to blk Flaser bedded					
95		Tr	ser		80 ∠	c	500 mgr m to dk gn					
95					80 ∠	g	ex + g fgr Flaser bd: dk gn to gy gn Flaser bd in pt graph on S_1					
95		Tr			90 ∠ 80 ∠	g	gy gn mgr					
							EOH					
							600					

Recovery	Base Metal Mineralizatn	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	PROJECT Reg Mine Co-ord. Collar elev. By GP Scale 1"=100' Date P. HOLE No. K-2	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
							Casing					
					50		Chlorite schist medium grained medium green thin bedded mixed with thin beds CO_3 rich sediments Tuffaceous seds.					
95+												
							chlorite schist massive medium grained greenish black andesite flow?					
							100					
					65 S_2		chlorite schist fine to medium grained greenish black to black flaser bedded in sedimentary sections. andesite tuff with thin bedded CO_3 rich sediments grading in to unit below					
							chlorite schist fine to medium grained dark greenish black andesite tuff.					
					70 S_2							
							200					
		7-10 py	7-10				graphitic silicious pyritic exhalite black fine grained					
							Chlorite schist medium grained medium green sediments					
							silicious graphitic pyritic exhalite black. fine grained					
		1-2 py Tr					Silicious chlorite schist medium grained medium green with CO_3 in sediments thin bedded tuffs and sediments					
		2-3					300 graphitic pyritic silicious exhalite					
					90		chlorite schist medium grained, medium green CO_3 rich					
		Tr					sediments including thin beds limestone. No S_2					
					70							
		2					Silicious graphitic pyritic exhalite					
							400 Silicious graphitic pyritic exhalite with 10% sediments CO_3 rich					
		2-5					graphite increases down hole black to greenish black.					
							Silicious chlorite schist medium grained to fine grained					
		Tr			60		mixed tuff and sediments 10% exhalite					
		Tr					Chlorite schist mixed flaser bedded graphite silicious exhalite and CO_3 rich sediments. medium to fine grained green to black					
							500					
					80		Chlorite schist medium grained medium green sediments					
		2					graphitic silicious exhalite mixed with CO_3 rich sediments					
					S_2		Chlorite schist fine to medium grained green to black. Flaser bedded in part					
					70		Chlorite schist medium grained, medium green thin bedded					
					60		CO_3 rich					
							E.O.H					
							600 TD = 590					

K-2 -30° to N 75 W

only weak mzn.

Hor Dep estm 550'

PROJECT Kay Mine HOLE No. K-2

Co-ord. _____ Collar elev. _____ By GP Scale 1" = 100 Date _____ R. _____

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	
0							Casing
95+					50 ∠	g+ d	th bd mgr mgn
95+					65 ∠ S2	g + d	100 d mass, gn blk blk to gn blk fgr to mgr Flasa bd
95+					70 ∠ S2	d	fgr to mgr dk gn blk 200
95		7-10 py			70 ∠	ex	graph + SiO2 + py blk
95					70 ∠	c	mgr mgn
95		1-2 py			70 ∠	ex	SiO2 + graph + py blk
95		Tr			70 ∠	g+ d	mgr gg-gn
95		Tr			90 ∠ 75 ∠	g	300 ex graph + SiO2 + 2-3% py blk mgr gn no S2
95		2			70 ∠	ex	Si graph py blk
95		2-5			75 ∠	ex + g	SiO2 + graph + 10% seds graph increases ↓ blk to gn blk
95		Tr			80 ∠	c + d	pl gn mgr to fgr SiO2 rich 10% ex
		Tr			80 ∠	g+ ex	g + graph flaser bd in to fgr gn to blk
					80 ∠	c	500 mgr mgn
		2			80 ∠		ex + g graph gn to blk
						g	gn to blk S2 Flaser bd. in part
					70 ∠ 80	g	mgn mgr th bd.
							EOH
							600
							700

INTERVAL	ANALYSES ELEMENT				
	Cu	Mo	Pb	Zn	

PROJECT KAY MINE DDH F2

REPORT NO. 72-13-2

SAMPLE TYPE Drill core

NO. OF SAMPLES 15

DATE SUBMITTED 1-23-73

SUBMITTED BY T.D. IRWIN

REMARKS

PROJECT NO. 3293

CORE STORAGE ~~BOX~~ NO.

PAGE 1 OF 1 PAGES

SAMPLE CONCENTRATION ≤ 1/100 .5G

Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn
3293-2				
298-305	33	225	45	245
379-383	34	140	37	200
383-387	35	190	47	225
387-391	36	190	55	180
391-394	37	93	34	98
401-407	38	320	66	300
407-413	39	175	49	230
418-423	[illegible]	150	60	185
423-428	[illegible]	105	48	150
428-433	[illegible]	110	50	140
433-438	[illegible]	150	57	155
438-449	[illegible]	140	46	100
449-460	[illegible]	120	50	125
528-534	46	175	49	185
534-537	47	145	56	130

PROJECT: RAY MINE (2)

REPORT NO. 72-16-22

SAMPLE TYPE CORE

NO. OF SAMPLES 9

DATE SUBMITTED 12-6-72

SUBMITTED BY TOM ERWIN

REMARKS

PROJECT NO. 3293

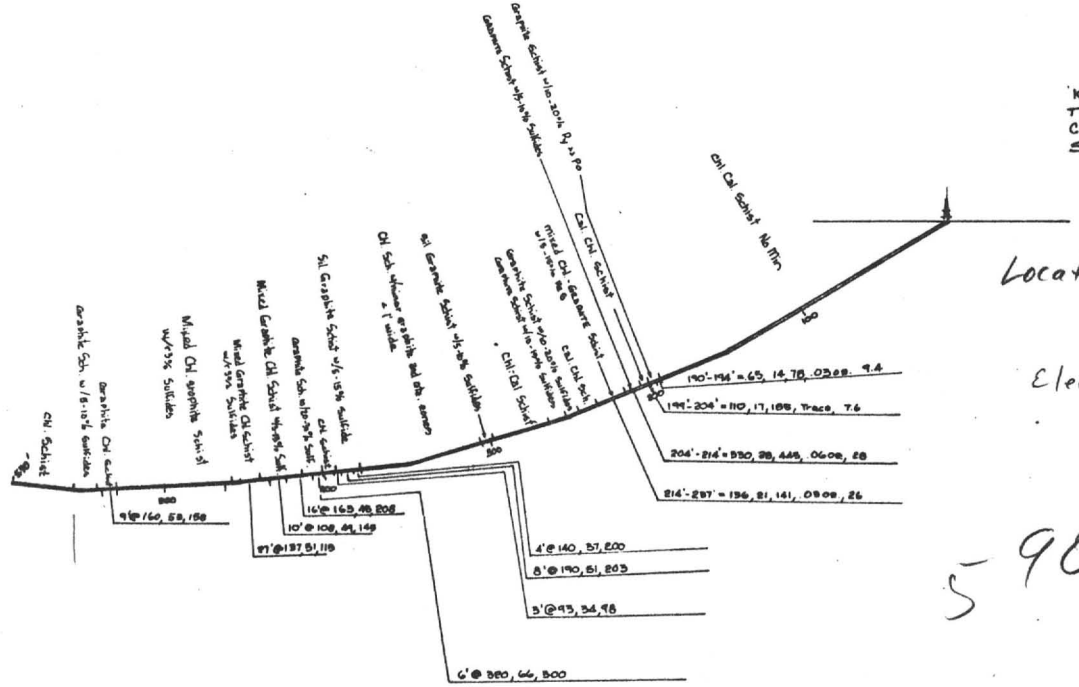
STORAGE BOX NO.

PAGE 1 OF 1 PAGES

S: IE CONCENTRATION

Sample No	Tube No	PPM Ag	PPM Cu	1.178 Mo 0.0 .2218	Fe 5275	PPM Ni	Co	PPM Pb	PPM Zn
90-194	1	1	65	[illegible]	.1778	9.38	1.0	14	78
99-204	2	<1	110	[illegible]	.1439	7.59	1.8	17	185
04-209	3	2	245	47.0	.2832	14.94	1.3	24	340
209-214	4	2	415	10X 16.4	.0778	41.00	1.6	34	550
214-219	5	1	105	10X [illegible]	.1079	56.90	5.3	22	155
19-224	6	1	170	[illegible]	.2147	11.33	1.0	17	180
24-229	7	1	120	44.7	.2573	13.57	1.2	22	170
229-234	8	1	145	10X 14.0	.0655	34.60	1.6	28	125
234-237	9	<1	140	[illegible]	.2403	12.68	1.4	15	75
NITED KEEDS		55		2.2	.0097	0.57	4.2	1050	
PRINCE MINE		19		3.7	.0164	0.87	10.0	72	
K-MINE		104		2.2	.0097	0.57	12.9	300	

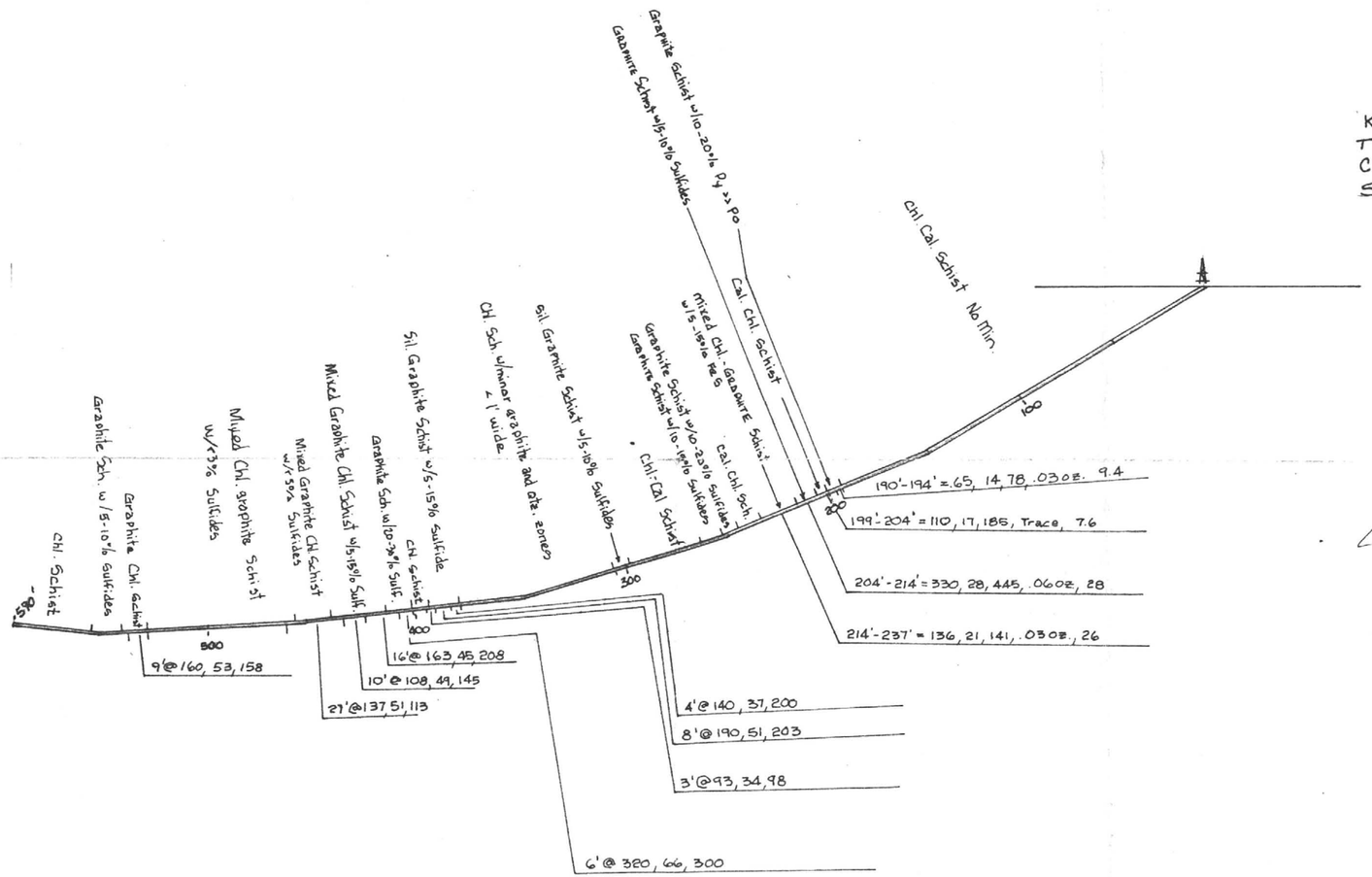
KAY MINE #2



NOTE: Arrangement of values Cu, Pb, Zn, Ag, Ni

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA	TITLE D.H. #2 CROSS SECTION	
	CO. & BY Yavapai, Arizona		BY T.D. Irwin
	SCALE 1" = 50'	PROJ. NO. 3293	DATE 1-23-79 FILE NO.

Kay Mine No. 2
TD = 590'
Collar -30°, A_z = N 75°W
Scale 1" = 50'



Location: 1,113,704 N
426,709 E

Elevation: ~1925

Arrangement of values Cu, Pb, Zn, Ag, Ni

TD = 590'

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H.#2 CROSS SECTION		
	CO. & ST. Yavapai, ARIZONA		BY T.D. Irwin	
	SCALE 1" = 50'	PROJ. NO. 3293	DATE 1-25-73	FILE NO.

PROJECT KAY MINE #3293 HOLE No. K-3

Co-ord. ~1,113,540 N ~426,600 E

Collar elev. ~1925 By R. Rowe Scale 1"=20' Date 1-77 P. 1

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	Cu	ppm Au	Pb	Zn
00							SPUD 12-18-72 N 75°W -45° No core Rock bit 5 4/00 or 450? NX CORE					
20												
75							Sericite quartz schist (felsic tuff)					
50				med grey		60°	- sty fol - vf.g to f.g. matrix - f-m xtals becoming common below 45' (up to 30%)					
80												
40 98+						variable 55-65°						
95												
90												
60 80						56°	↓ beg. finer grained, perhaps clastic in nature					
90				med grey grn			- mod fol QUARTZ SERICITE SCHIST - 40-70% m.g. Xtals 30-60% f.g. matrix - locally lapelli Xtal [lapelli] tuff Lithic frags.					
30		3% gae/hot					Clay-sericite gouge (fault zone)					
80 15							↓ beg v. siliceous, minor core recovery					
98+						55-65°	Quartz sericite schist					
98+ 100												
95												
98+				med grey			(felsic xtal lithic lapelli tuff)					
98+							- sty foliated csc grained tuff - 10-30% f.g. tuff - 10-30% Xtals 1-3 mm - 20-60% stretched lapelli frags 4-20 mm consisting of ϕ lithic frags + Xtal tuff frags.					
98+ ? 120						60°						
98+												
98								235		30	82	
95							Quartz sericite schist					
40 98+		[py]					- mod fol (felsic qtz eye tuff) - 60-80% f-mg. ϕ matrix 20-40% ϕ frags + qtz eyes 2-10 mm (mostly prob. fsp Xtals)					
98+						55°						
98+												
98+		1-2% gae				62°						
85												
160 90		2% py										
							- mod fol Qtz sericite schist		20		<10	38
95						48°	- mg. xtal tuff w/ f.g. matrix - relatively massive (felsic xtal tuff) - loc py in general	NA	62		11	59
180 95		py										
	60-70% [qtz]			m. grey w/ pale grn tint			Qtz sericite schist					
98						42°	- mod fol (felsic Xtal lithic lapelli tuff) - m.g. tuff matrix w/ 20-50% lithic lapelli frags - locally would be considered "Qtz eye" tuff					
200												

PROJECT KAY MINE #3293 HOLE No. K-3

Co-ord. _____ Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 2

Recovery	Base Metal Mineralization	Pyrite Limonite	Color	Foliation	Rock Type	Description	Interval	Cu	ppm Au	Pb	Zn	ppm Ag
95						Sericite-quartz schist (felsic xtal tuff)						
98+						- sty fol						
98+						- relatively massive						
98+			m. gry			- med. gr.						
95		py				- 5-10% v.f.g. tuff wisps						
98+		[1% py]	loc pale grn tint		45°							
75												
30		4% py				Locally core recovery v. poor		26	.	37	72	
30												
98+		py										
40		[1% py]										
0		[tr]										
98+					36°							
98+						↓ beg. fine grained xtal tuff with a slightly banded texture due to v.f.g. tuff lam.						
98+												
98+												
98+												
85												
50						- med grained Quartz sericite schist						
98+						- mod foliated (felsic xtal tuff. loc sedim in part)						
90					34°	- weakly lam texture due to 10-40% v.f.g. tuff lam or wisps;						
98+						30-80% ½-2mm xtals						
80		2% py gr	lt gry slightly tan			locally appears sedimentary						
30								92		26	60	
98+						- locally contains abundant cse tuff or lapilli lithic frags						
98+					30°	- 295-309 v. sericitic						
98+						- pyrite v. fine grained, dissem'd						
95												
95												
95												
98+		py [1%]			26°							
98+												
90												
98+												
1	cpy					1% recovery: mineralized zone ?? Cpy seen in chips	←	.22		70	125	1
90							←	2.58		59	.26	39
85						@ 350', 354', 386', 391'						
85						recovery NIL. Tom Irwin just assayed little nubs of core which may or may not represent interval						
75					24°							
80												
90						(graphitic ?) Quartz sericite schist (felsic xtal tuff)						
0	No recovery mineralized ??	1-2% py				- foliation irregular (irregular broken in core box)	←	200		50	95	4
15					24°	- loc v. siliceous, loc v. sericitic						
50						- blotchy texture, perhaps do do shearing	←	105		110	80	2
90						- basically a m.-g. xtal tuff						
90						- 374 to 392 may contain a little graphite ??						

pyrite v.f.g. dissem'd

PROJECT KAY MINE #3293 HOLE No. K-3

Co-ord. _____ Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P.3

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
100 90 95 90 75 75 75 70		1-2% M				21°	as above						
20 0? 98+ 98+ 0 90 85 45 50 90 95 95 85 50 90 95 95 95 95 95 98+ 95 90 70 70 60 60 60 40 30		1% Py [2%]		M. gry tan		26° 20-25° 22°	sand to Coarse may have come in from above; Sericite quartz schist (felsic tuff) - stg fol - f to med gr. - distinct wispy, lenticular + boudinage texture - looks like xtal-lithic tuff w/ fine tuff matrix, all of which has been shr'd somewhat; NX CORE; BX CORE		210		25	87	
		[25% Py]							195		23	170	
500 60 0 0 75 90 98+ 75 90 90 90 98+ 95 40 10 50 75 98+ 90 98+ 90 95 75 90 80 80 90 90 90 90 90 90 95 98+ 90		goe; Py; [1% Py]; 5% Py		buff tan; lt tan buff		25° 21° 10-20° 15-20° 15°	stg fault gouge Clay++; Quartz sericite schist (felsic siliceous tuff) - poorly foliated - cse grained tuff 20-80% ghosty ϕ fragments 80-20% v.f. tuff lam, wisps, lens; v. irregular - uniform texture; Quartz sericite schist (felsic xtal tuff) - med fol - fine to med gr. xtal tuff 40-60% xtals ½-1mm 60-40% fg tuff as lam, wisps etc; Quartz sericite schist (felsic tuff) - stg fol - granular texture fine to med grained intermixture of Qtz + sericite.	NA; NA	59		30	52	
									780		21	255	2
									9600		90	810	3
									160		20	100	
									145		32	89	
									120		43	85	
									36		32	45	
									840		580	56	1
									93		40	50	
									275		38	50	
								NA					

PROJECT KAY MINE # 3293 HOLE No. K-3

Co-ord. _____ _____

Collar elev. _____ By R. Rowe Scale 1" = 20' Date 1-77 P. 4

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	Ppm Au	Pb	Zn	Ppm Ag
98+							as above						
98+						13°	Chlorite sericite quartz schist (intermediate tuff)						
98+				med			- stg fol						
98+				9'N			- lamination, elongated texture, quite irregular						
95		1% py		9'7			- f-m.g. xtal (sandy?) tuff w/ 30% fine sericite tuff lam						
98+							20% frac & laminae						
98+							-						
98+													
90													
98+						14°	Chlorite calcite schist						
98+							- stg fol						
95							- mod lam						
95				dk			- 5 to 20% limy lam						
95				9'N			5 to 20% 1/2-2 mm tuff frags						
95							20-80% f.g. & matrix						
98+						10-12°	- lam, wispy texture						
95													
98+													
98+													

TERMINATE: T.D. 663'

1-20-73

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrp	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
as	arsenopyrite

grn	green
gry (gy)	grey
bn	brown
bu	blue
yel	yellow
f.gr (f.g.)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
cre	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed.	sediment
lam	laminated
stg	strong
inter	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
sh'd	sheared

PROJECT [illegible]

Co-ord. ~1,113,540 N ~420,600 E — HOLE No. K-3

Collar elev. ~1925 — By R. Rowe — Scale 1" = 20' — Date 1-77 — P. 1

Recover	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Typ	Description	INTERVA	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
							SPUD 12-18-72 N 75° W −45° No core Rock bit NX CORE						
75 50 90 95 95 90 80				mod grey		60° rainbow 55-65° 56°	Sericite quartz schist (felsic tuff) - sto foliated - v.f.g to f.g. matrix - f-m xtals becoming common below 45' (up to 30%) ↓ beg finer grained, perhaps clastic in nature						
90				mod grey grn			- mod foliated QUARTZ SERICITE SCHIST - 40-60% m.g xtals 30-60% f.g. matrix - locally lapelli Xtal [lapelli] tuff - locally lapelli lithic frags.						
15		3% gnc hot					Clay-sericite gouge (Fault Zone) ↓ beg v siliceous. minor core recovery						
60'				mod grey		55-65° 60°	Quartz sericite schist (felsic xtal lithic lapelli tuff) - sto foliated cse grained tuff - 10-30% f.g. tuff - 10-30% Xtals 1-3 mm - 20-60% structural lapelli frags 4-20 mm consisting of ϕ lithic frags + Xtal tuff frags.		235		30	82	
		[illegible]				55°	Quartz sericite schist (felsic qtz eye tuff) - mod foliated - 60-80% f-mg ϕ matrix 20-40% ϕ frags + qtz eyes 2-10 mm (many prob. fsp xtals)						
		1-2% gnc				66°							
90		25% qtz							20		<10	38	
35		1%				48°	Otz sericite schist - mod foliated - m.g. xtal tuff w/ f.g. matrix - relatively massive - loc cy in laminae (felsic xtal tuff)	NA	62		11	59	
	blebs of cpy			mod grn grn hist		42°	Otz sericite schist (felsic Xtal Lithic Lapelli tuff) - mod foliated - m.g. tuff matrix w/ 30-50% lithic lapelli frags - locally would be considered "Otz eye" tuff						

PROJECT [illegible]

Co-ord. _____ HOLE No. K-3

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 2

Recover	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
95							Sericite-quartz schist (felsic xtal tuff)						
							- sty fol						
							- relatively massive						
98+				m grY			- med. gr.						
95		py					- 5-10% v.f.g. tuff wisps						
98+		[1%]		loc pale grn tint		45°							
75		py											
30		4% py					locally core recovery v. poor		26		37	72	
30													
98+		py [1%]											
40		[tr]											
0						36°							
98+							↓ beg. fine grained xtal tuff with a slightly banded texture due to v.f.g. tuff lam.						
98+													
98+													
98+													
85							- med grained Quartz sericite schist						
95+							- mod foliated (felsic xtal tuff. loc sedim in part)						
90						34°	- mostly lam texture due to 10-40% v.f.g. tuff lam or wisps.						
80		2% py gn		lt gry			30-80% ½-2mm xtals						
30							locally appears sedimentary		92		26	60	
98+				slightly tan			- locally contains abundant cse tuff or lapilli lithic frags						
98+						30°	- 295-309 v. sericitic						
98+							- pyrite v. fine grained, dissem'd						
95													
95													
95													
95+		py [1%]				26°							
98+													
90													
1	cpy						1% recovery: mineralized zone ?? Cpy seen in chips	←	.22		70	125	1
90								←	2.58		59	.26	39
85							@ 350', 354', 386', 391' recovery v.l. Tom Irwin just assayed little nubs of core which may or may not represent intervals						
85													
75						24°							
80													
80													
0	no recovery mineralized zone ??	1-2% py					Quartz sericite schist (graphitic ?) (felsic xtal tuff)						
							- foliation irregular (irregular broken in core box)	←	200		50	95	4
15						24°	- loc v. siliceous, loc v. sericitic						
80							- blotchy texture, perhaps do do shrying	←	105		110	80	2
50							- basically a m.g. xtal tuff						
90							- 374 ± 392 may contain a little graphite ??						

PROJECT [illegible]

Co-ord. _____ HOLE No. K-3

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 3

Recovery	Base Metal Mineralization	Pyrite Limonite	Color	Foliation	Rock Type	Description	INTERVAL	Cu	ppm Au	Pb	Zn	ppm Ag
		1-2% M			21'	as above						
		1% PY [2%]	M gry tan		26'	Sand to Carbon may have come in from above Sericite quartz schist (felsic tuff) - stg fol - f to med gr. - distinct wispy, lenticular + boudinage texture - looks like xtal-lithic tuff w/ fine tuff matrix, all of which has been shr'd somewhat						
					20-25°							
					22°	NX CORE BX CORE						
		[25% PY]						210		25	87	
								195		23	170	
		gve	buff tan		25°	stg fault goose clay++ Quartz sericite schist (felsic siliceous tuff) - poorly foliated - cse grained tuff 20-80% ghosty ϕ fragments 80-20% v.f. tuff lam, wisps, lens: v. irregular - uniform texture	NA					
		PY [1% PY]			21°			59		30	52	
					10-20°							
					15-20°							
		5% PY	lt tan buff		15°	Quartz sericite schist (felsic xtal tuff) - mod fol - fine to med gr. xtal tuff 40-60% xtals ½-1mm 60-40% fg tuff or lam, wisps Quartz sericite schist (felsic tuff) - stg fol - granular texture. fine to med granial intermixture of qtz + sericite.	NL	780 9640 160 145 120 36 840 93 275		51 90 20 32 43 32 580 40 38	235 810 100 89 95 45 56 50 50	2 3 1

PROJECT [illegible]

Co-ord. _____ HOLE No. K-3

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 4

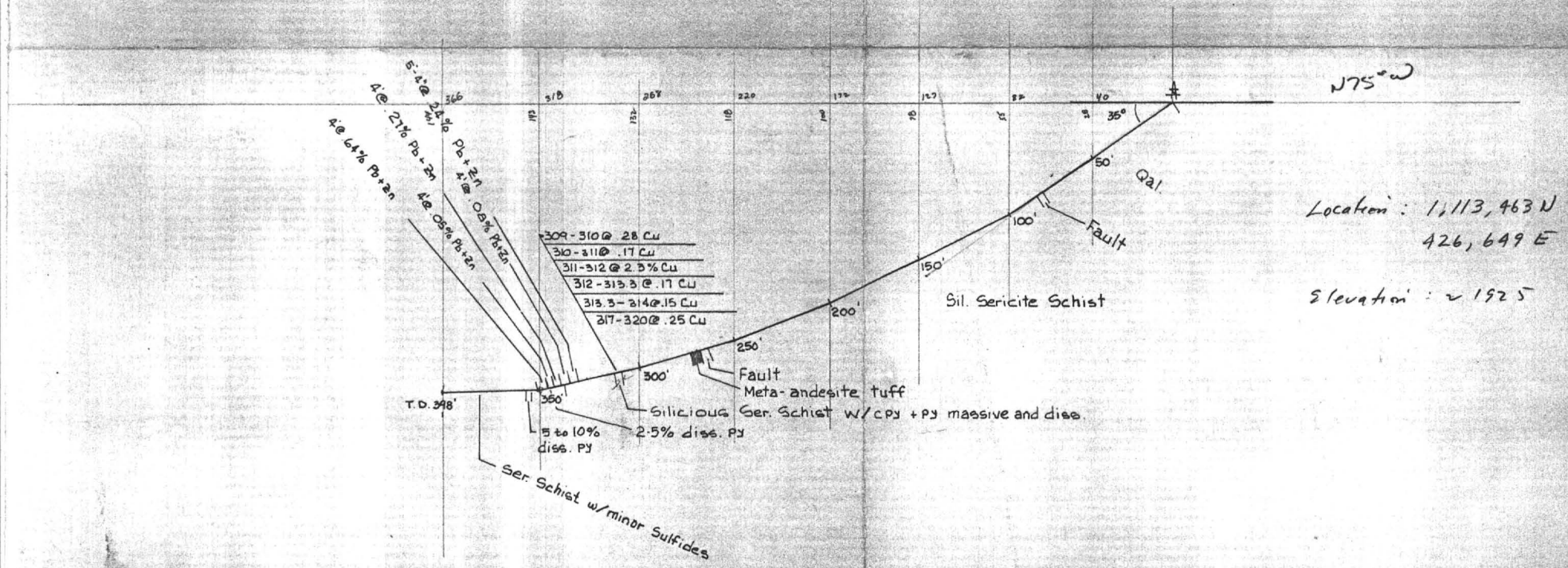
Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
							as above						
98+ 98+ 98+ 98+ 98+ 98+ 90		1% Py		mod gr/N gr/g		13°	Chlorite sericite quartz schist (intermediate tuff) - stg fol - laminated, elongated texture, quite irregular - f-m.g. xtal (sandy?) tuff w/ 30% fine sericite tuff lam 20% frie & laminae						
98+ 98+ 95 95 75 85 95 95 98+ 95+				dk gr/N		14° 10-12°	stg fol Chlorite calcite schist - mod lam - 5 to 20% limy lam 5 to 20% ½-2 mm tuff frags 20-80% f.g. & matrix - lam, wispy texture intermediate-mafic limy tuffaceous sediment						
							TERMINATE: T.D. 6.63' 1-20-73						

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrys	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
ac	chalcopyrite

grn	green
gr(gry)	grey
bn	brown
bk	black
yel	yellow
f.gr(fg)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
cc	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed.	sediment
lam	laminated
stg	strong
inter	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
shr'd	sheared

Kay Mine #4
Collar @ 35°
Nx

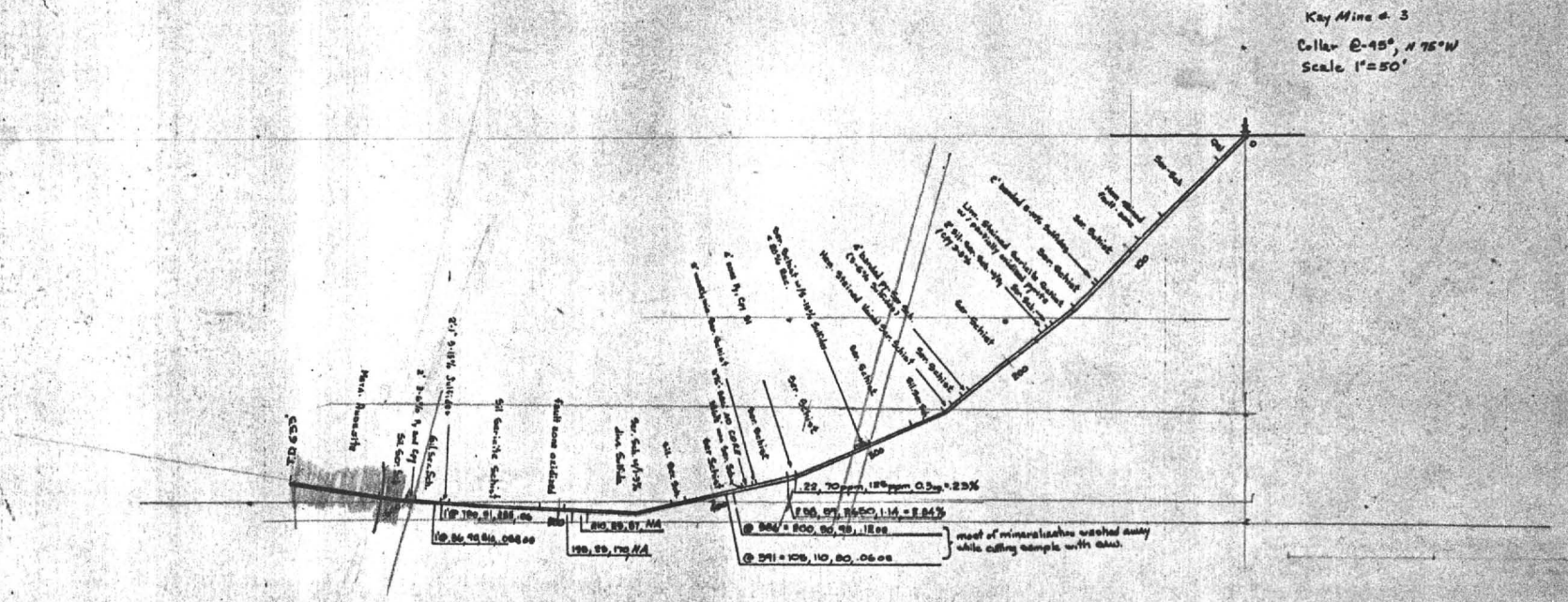


Location: 1,113,463 N
426,649 E

Elevation: ~ 1925

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #4 Cross Section	
	CO. & ST. Yavapai Arizona	BY T.D. Irwin	
	SCALE 1" = 50'	PROJ. NO. 3293	DATE Feb. '73	FILE NO.

KAY MINE #3



Note: Arrangement of values
Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #3 CROSS SECTION	
	CO. & ST. Yavapai, Arizona		BY T.G. Irwin
	SCALE 1"=50' 100 N 90	PROJ. NO. 3295	DATE Jan. 78	FILE NO.

PROJECT NAME - No. KAY MINE-3293 Location T8N, R2E, S4 County Yavapai State Arizona

Date Started 12-18-72

Date Completed 1-20-73

HOLE No. K-3

Sheet No. 1

DIAMOND DRILL ASSAY LOG

Coordinates ~1,113,540 N, ~426600 E Collar Elevation ~1925 Bedrock Elevation

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
127	129	2.0						235		30		82					
161	164	3.0						20		<10		38					
169	171	2.0						62		11		59					
231	235	4.0						26		37		72					
301	309	8.0						92		26		60					
350		-						2200		70		125		1			
354		-							2.58	59		2650		39			
386		-						200		50		95		4			
391		-						105		110		80		2			
476	486	10.0						210		25		87					
486	495	9.0						195		23		170					
522.5	525	2.5						59		30		52					
566	567	1.0						780		51		255		2			
569	570	1.0						8600		90		810		3			
570	574	4.0						160		20		100					
574	578	4.0						145		32		89					
578	582	4.0						120		43		85					
582	586	4.0						36		32		45					
586	588	2.0						840		380		56		1			
588	594	6.0						93		40		50					
594	598	4.0						275		38		50					

Core stubs of core assayed with these intervals. May or may not be representative

PROJECT Kay Mine DDH-3 K-3

REPORT NO. 72-16-30

SAMPLE TYPE Drill Core NO. OF SAMPLES 4

DATE SUBMITTED 1-12-73

SUBMITTED BY Tom Irwin

REMARKS Check Cu!

PROJECT NO. 3293

Core STORAGE ~~BOX NO.~~

PAGE 1 OF 1 PAGES

SAMPLE CONCENTRATION 2/100 .5 GRAM

Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn	PPM Ag
3293-3		—	—	—	—
		—	—	—	—
350'	122	2200	70	125	1
354'	123	2.58%	59	2650	39
386'	124	200	50	95	4
391'	125	105	110	80	2

PROJECT Kay Mine DDH-3 K-3

REPORT NO. 72-16-3

DATE SUBMITTED 1-22

SUBMITTED BY Tom I

SAMPLE TYPE Drill Core

NO. OF SAMPLES 7

PROJECT NO. 3293

PAGE 1 OF 1 PAG

REMARKS

Core STORAGE ~~BOX NO.~~

SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn	PPM Ag
3293-3		-	-	-	
		-	-	-	
		-	-	87	
476'-486'	111	210	25	170	
486'-495'	112	195	23	52	
522.5'-525'	113	59	30	255	2
566'-567'	114	780	51	810	3
569'-570'	115	8600	90	100	
570'-574'	116	160	20	89	
574'-578'	117	145	32		

PROJECT KAY MINE DDH-3

REPORT NO. 72-16-39

SAMPLE TYPE Drill core

NO. OF SAMPLES

DATE SUBMITTED 1-23-73

SUBMITTED BY T.D. IRWIN

REMARKS

PROJECT NO. 3293

STORAGE BOX NO.

PAGE 1 OF PAGES

SAMPLE CONCENTRATION 2/100 .5G.

Sample No	Tube No	PPM Cu	PPM Pb	PPM ZN	PPM Ag
3293-3					
578-582	28	120	43	85	
582-586	29	36	32	45	
586-588	30	840	380	56	1
588-594	31	93	40	50	
594-598	32	275	38	50	

PROJECT SAY MINE DDH-3

REPORT NO. 12-18-3

SAMPLE TYPE Drill core

NO. OF SAMPLES 5

DATE SUBMITTED 1-23-73

SUBMITTED BY T.D. IRWIN

REMARKS

PROJECT NO. 3293

Core STORAGE ~~BOX NO.~~

PAGE 1 OF ____ PAGES

SAMPLE CONCENTRATION 2/100 GM.

Sample No	Tube No	PPM Cu	PPM Pb	PPM ZN
3293-3				
27-129	48	235	30	82
161-164	49	20	<10	38
169-171	50	62	11	59
231-235	51	[illegible]	37	72
301-309	52	32	26	60

PROJECT Kay Mine HOLE No. 3

Co-ord. _____ Collar elev. _____ By GP Scale 1" = 100' Date _____ R. L.

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type		INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
							Casing					
95		Gn fine			30	b	cm gy th bd fgr					
95							d					
30		Tr				b	fgr gy fish meat texture					
					40		100					
					45	b	fgr to mgr occ g tr eyes "a" ??					
		Tr					200					
					50	b	231-235 50% Rec 20% Py 243-252 50% Rec					
25					65	b	300					
					70	a + chl ↓ c	10% c mgr plgn 80% c mgr mgn					
75		Tr Py			70	a+b b	10% a mgr fish meat mgy 400 either fault or very difficult to core decrease grain size ↓					
60					80							
75		Tr Py				b	500 mariposite ??					
50		Tr Py					fgr plgn gy					
75	Tr Cpy	2%					vfgr plcm 600					
					80	a+b	10-15% b mto fgr gn gy Sz					
							EOH TD = 663'					
							700					

K-3 -45° to N75W

Hole Dep estm'd 490'

Core lost - 4' "ore zone" 350-354

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	PROJECT Key Mine — Co-ord. — Collar elev. — By GP — Scale 1"=100 — Date — P. — HOLE No. KM-3	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
							Casing					
95						30%	Sericite schist fine grained grey thin laminated few phenocrysts. Rhyolite tuff					
							4' zone Andesite tuff					
30							Fault					
							100 Fish meat texture					
						40%						
							fault					
						45%						
							200 very fine grained minor chlorite					
						50%	occaisonal mgr qtz eyes					
							231-235 50% Rec 20% py					
							243-252 50% Rec					
							Fault					
25						65%	300					
60		Tr py					Sericite schist + chlorite schist interbedded 10% chlorite schist increasing to 50% chlorite schist at 374. Sericite schist as above but with qtz eyes. Chlorite schist is silicious pale green and medium grained					
70		Tr py			70%		Sericite schist interbedded with sericite schist with quartz					
							400 eyes 10% beds have qtz eyes. medium grained with fish meat texture creamy grey					
							fault					
60												
25					80%							
		Tr py					500 fault					
					90%		manposite??					
50							fault					
85	Tr cpy	2 py										
							600					
					80%		Chlorite schist $CaCO_3$ rich medium grained medium to dark green interbedded with 10% Sericite schist					
							Fault — END of Hole					
					90%		TD 663					

Kay Mine # 3

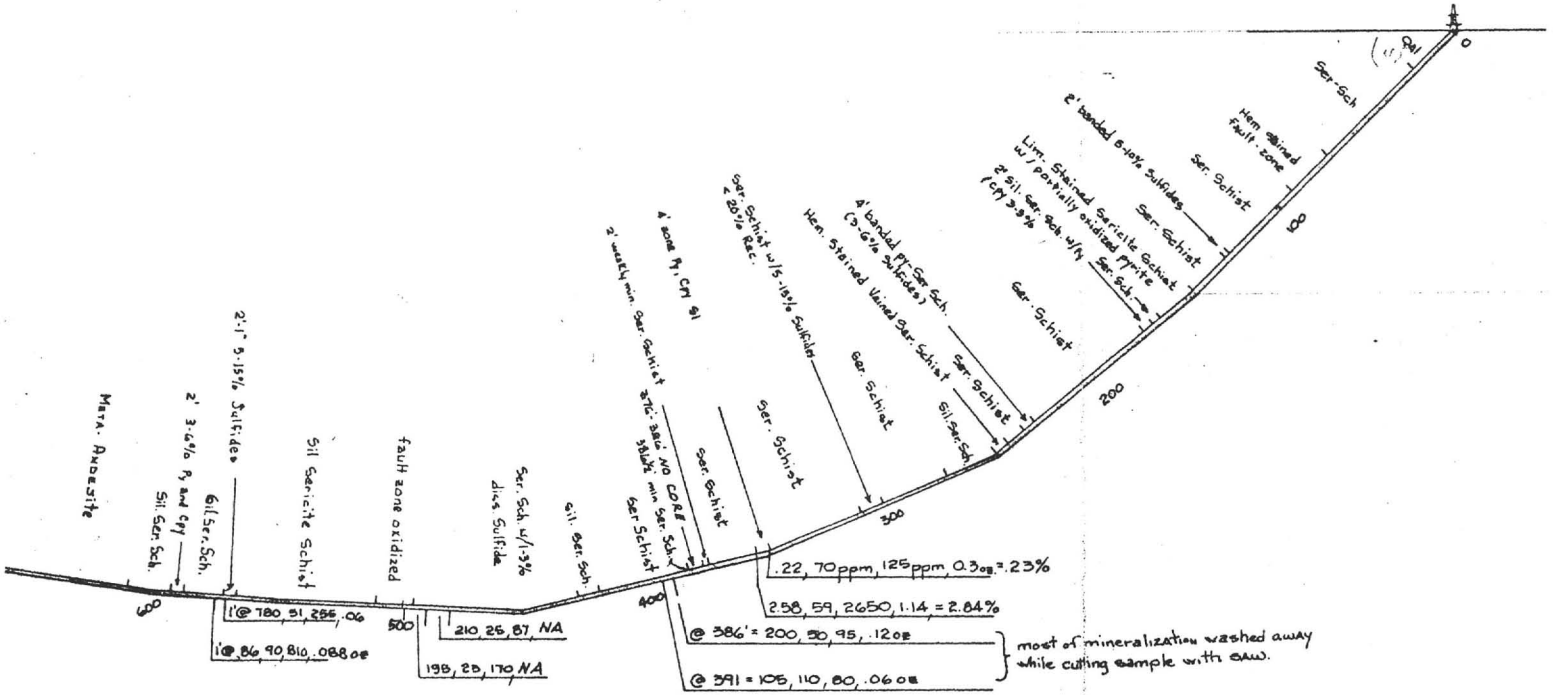
Collar @-45°, N 75°W

Scale 1"=50'

1,113,463 N

426,649 E

~1925' Elevation



Note: Arrangement of values
Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #3 CROSS SECTION	
	CO. & ST. Yavapai, Arizona		BY T.D. Irwin
	SCALE 1" = 50'	PROJ. NO. 3293	DATE Jan. 73 / FILE NO.

Kay Mine # 3

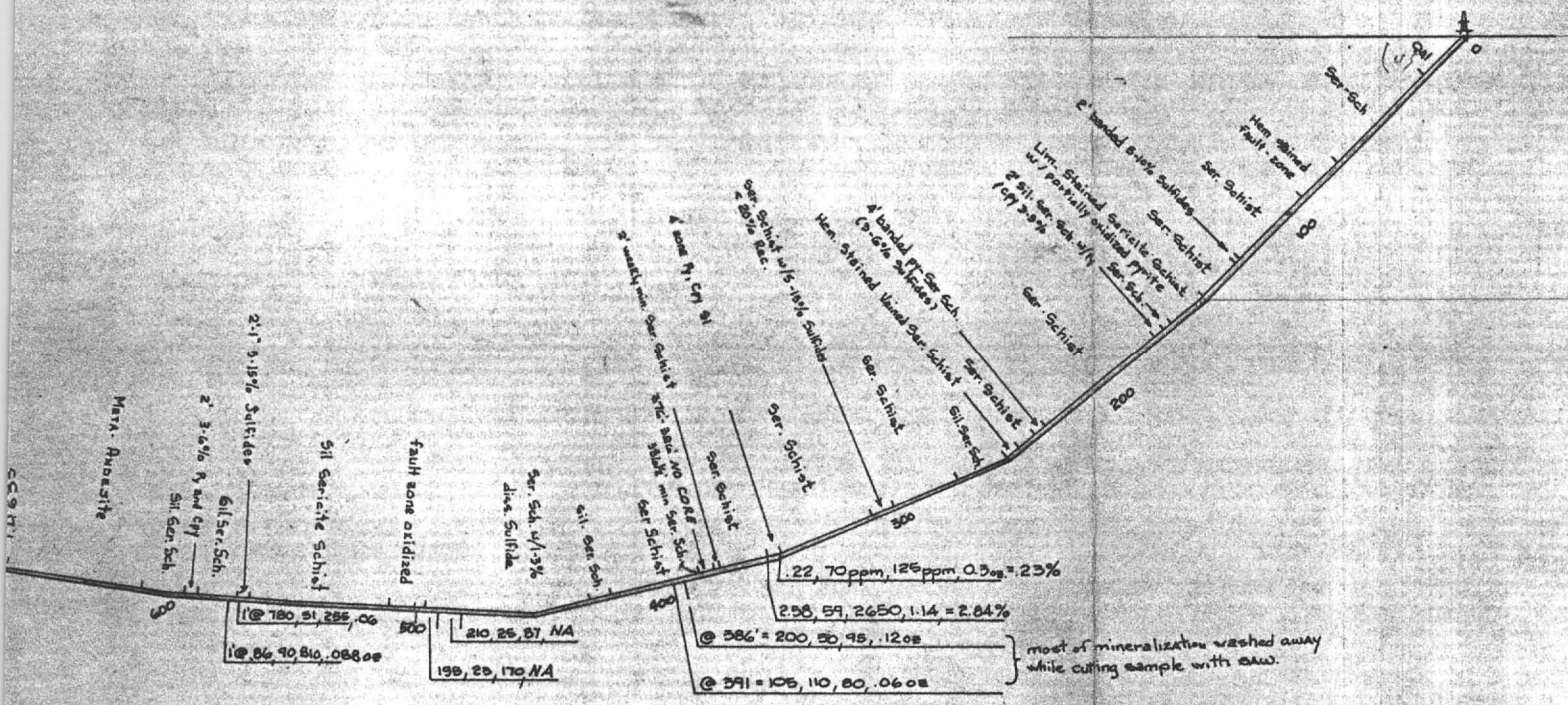
Collar @-45°, N 75°W

Scale 1"=50'

1,113,463 N

426,649 E

~1925' Elevation



Note: Arrangement of values Cu, Pb, Zn, Ag, Cu equivalent

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #3 CROSS SECTION	
	CO. & ST. Yavapai, Arizona		BY T.D. Irwin
	SCALE 1" = 50'	PROJ. NO. 3293	DATE Jan. 73	FILE NO.

PROJECT KAY MINE #3293
Co-ord. ~1,113,540 N ~426,600 E
Collar elev. ~1925 By R. Rowe Scale 1"=20' Date 1-77 P. 1

HOLE No. K-4

Reco.	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type		INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
							SPUD 1-22-73 N75°W -30°						
							NO CORE Rock bit						
							NX CORE						
		~1% fnt gos diss. & fol		m gry tan		41° 51° 45° 42° 43° 43°	Quartz Sericite schist (felsic xtal tuff) - mod fol - med to cse g. xtal tuff 60-90% 1-2mm [2-3mm] xtals 10-20% fine tuff lam, wisps & scales - has a longitudinal appearing coarse texture - locally ◊ frags 3-5mm common gradational contact						
		py		m gry		38° 36°	Quartz sericite schist felsic xtal tuff - mod fol - m.g. xtal tuff. Minor fine tuff matrix - relatively uniform & massive. Has faint wk laminated appearance } a little blk ◊ bordering a qtz vein						

PROJECT KAY MINE #3293 HOLE No. K-4

Co-ord. _____ Collar elev. _____ By R. Rowe Scale 1" = 20' Date 1-77 P. 2

Recov.	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	Interval	Cu	ppm Au	Pb	Zn	ppm Ag
200													
		1-2% gr		m gry		32°	Quartz sericite schist - mod fol small shr. med gr xtal tuff (felsic xtal lithic tuff) locally csc gr. + commonly containing sparse to locally lithic frag up to 5 mm - relatively massive unit with minor amount of f.g. tuff matrix						
220						28°							
						25°							
240		Py		m gry		30°	Quartz sericite schist - mod fol (felsic xtal tuff) - very massive m.g. xtal tuff w/ minor f.g. tuff matrix. - homogeneous						
						28°							
260	cpy	10 py											
		1-2% [py] [5%]				32°	262-291 wk shr'ing w/ hat stain + spotty qtz veining Quartz sericite schist (felsic xtal. tuff) - stg fol - wiggular texture: patchy-lenticular - varies med-csc grained xtal tuff locally common lithic frag up to 5 mm - 5-20% f.g. tuff lam.						
280													
					m gry	25°							
300		[py]											
	cpy	1-2% py							.27	Tr	14	170	2
	lam	[5%]				20°	pyrite dissem'd cpy blotchy ← mineralized zone more massive than above or below.		.17	Tr	14	135	2
									2.30	.17	13	670	8
									.17	.17	110	760	8
									.53	Tr	19	330	2
									.52	Tr	16	135	.1
									350	Tr	14	210	4
320									.13	Tr	770	.24	5
								NA					
							Core split before logging. Formal intervals broken. Unable to set angle. But looks to vary 5-15°		89		350	850	
									110		340	920	
340							Quartz sericite schist (felsic xtal tuff) - stg fol - f to mg xtal tuff - relatively massive + homogeneous - wk py, sphalerite, galena locally present in laminae		110		300	730	
	cl gr	py [1-3%]							132		465	990	
									180		410	1230	
									100		400	830	
									94		300	740	
		3-5% py		mod gry					140		900	1300	
									120		770	1010	
360		1-3% py [2-3%]							140		920	1290	
									115		465	1280	
									88		270	880	
									87		260	450	
								NA					
									64		140	230	
									77		165	250	
									47		130	210	
									49		90	270	
380									81		100	250	
									30		40	170	
									46		42	280	
									62		92	400	
									72		125	880	
									69		41	170	
									44		15	120	
									40		38	150	
00							TD 398' TERM 2-6-73						

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrys	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
ar	arsenopyrite

grn	green
gy (gray)	grey
bn	brown
bl	blue
yel	yellow
f.gr (fg)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
cc	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed	sediment
lam	laminated
stg	strong
inter	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
shr'd	sheared

Recover	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Co-ord. ~1,113,540 N ~426,600 E / Collar elev. ~1925 By R. Rowe Scale 1"=20' Date 1-77	HOLE No. K-4 P. 1	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag

SPUD 1-22-73
N75°W -30°

NO CORE
Rock bit

NX CORE

95
95
98+
90
98+
90
95+
95
95
90
90
98+
98+
98+
95+
98+
98+
98+

~1% hem goe disst. & fol

M grey tan

41°
51°
45°
42°
43°
43°

Quartz sericite schist
(felsic xtal tuff)
- mod fol
- med to coarse g. xtal tuff
  60-90% 1-2mm [2-3 mm] xtals
  10-20% fine tuff lam, wisps & streaks
- has a "lenticular" appearing coarse texture
- locally ϕ frags 3-5 mm common

gradational contact

py

M grey

38°
36°

Quartz sericite schist
felsic xtal tuff
- mod fol
- m.g. xtal tuff. Minor fine tuff matrix
- relatively uniform & massive. Has faint wk laminated appearance

} a little blk ϕ bordering a qtz vein

PROJECT

Co-ord. _____ HOLE No. K-4

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 2

Recover	Base Metal Mineralization	Pyrite Limonite	Color	Foliation	Rock Type	Description	INTERVAL	Cu	ppm Au	Pb	Zn	ppm Ag
200												
220		1-2% py	M. gry		32° 28°	Quartz sericite schist - mod fol (felsic xtal lithic tuff) small shr. med gr xtal tuff Locally csc gr. + commonly containing sparse to locally lithic frags up to 5 mm - relatively massive unit with minor amount of f.g. tuff matrix						
240		py	M. gry		35° 30° 28°	Quartz sericite schist - mod fol (felsic xtal tuff) - very massive m.g. xtal tuff w/ minor f.g. tuff matrix. - homogeneous						
260	cpy	10 py			~ 32° ~	262-291 wk shr'ing w/ hot stain + spotty qtz veining Quartz sericite schist (felsic xtal tuff) - stg fol - migulen texture: patchy - lenticular - varies med-csc stained xtal tuff locally common lithic frags up to 5 mm - 5-20% f.g. tuff lam.						
280		1-2% hot [5%]		M. gry	25°							
300		[py]										
320	cpy tenn	1-2% py [5%]			20°	pyrite disseminated cpy blotchy ← mineralized zone more massive than above & below.		.34 .13 .26 .13 .13 .13 350 .13	Tr .13 Tr Tr Tr Tr Tr Tr	4 4 16 16 4 4 4 4	110 110 110 110 110 110 210 .24	5 5 5 5 5 5 5 5
340							NA					
								99		350	850	
								110		340	820	
								110		300	730	
								182		465	940	
								180		410	1230	
								100		400	830	
								94		300	740	
								140		900	1300	
								130		770	1010	
								140		920	1290	
								115		465	1280	
								88		270	880	
								87		260	450	
							NA					
								64		140	230	
								71		165	250	
								47		130	210	
								49		90	270	
								81		100	250	
								30		40	170	
								46		42	280	
								62		92	400	
								72		125	880	
								69		41	170	
								44		15	120	
								40		38	150	
360	py py py py py py	py py py py py py	mod gry			Quartz sericite schist - stg fol (felsic xtal tuff) - f to mg xtal tuff - relatively massive & homogeneous - wk py, sphalerite, galena locally present in laminae						
380		py				Core split before logging. Formed v. thin broken unable to get profile. But looks to vary 5-50°						
400												

TD 398' TERM 2-6-73

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrys	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
ai	dreinopyrite

grn	green
gy(gry)	grey
bn	brown
bu	blue
yel	yellow
f.gr(f.g.)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
cc	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed.	sediment
lam	laminated
stg	strong
inter	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
shr'd	sheared

PROJECT NAME - No. KAY MINE-3293 Location T8N, R2E, S4 County Yavapai State Arizona

Date Started 1-22-73

Date Completed 2-6-73

HOLE No. K-4

Sheet No. 1

DIAMOND DRILL ASSAY LOG

Coordinates ~1,113,540 N, ~426,600 E Collar Elevation ~1925 Bedrock Elevation

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
309	310	1.0							.27	42		170		2		Tr			
310	311	1.0							.17	41		135		2		.17			
311	312	1.0							2.30	43		670		8		.17			
312	313.3	1.3							.17	110		180		2		Tr			
313.3	314	.7							.15	79		220		2		Tr			
314	315	1.0						33		40		125		-1		Tr			
315	317	2.0						350		46		210		-1		Tr			
317	320	3.0							.13	770			.24	5		Tr			
									.32	251		828		3					
329.8	335	5.2						89		350		850							
335	338	3.0						110		340		920							
338	340	2.0						110		300		730							
340	341	1.0						135		465		990							
341	343	2.0						180		410		1230							
343	345	2.0						100		400		830							
345	350	5.0						94		300		740							
350	352	2.0						140		900		1300							
352	354	2.0						120		770		1010							
354	355.9	1.9						140		920		1290							
355.9	360	4.1						115		465		1280							
360	363	3.0						88		270		880							
363	365	2.0						87		260		450							
		35.2						110 ppm		436		946							
367	370	3.0						64		140		230							
370	371	1.0						71		165		250							
371	374	3.0						47		130		210							
374	377	3.0						49		90		270							
377	379	2.0						81		100		250							
379	382	3.0						30		40		170							
382	384	2.0						46		42		280							
384	387	3.0						62		92		400							
387	390	3.0						72		125		880							
390	392	2.0						69		41		170							
392	395	3.0						44		15		120							
395	398	3.0						40		38		150							
		31						54		81		288							

Kay Mine Drilling

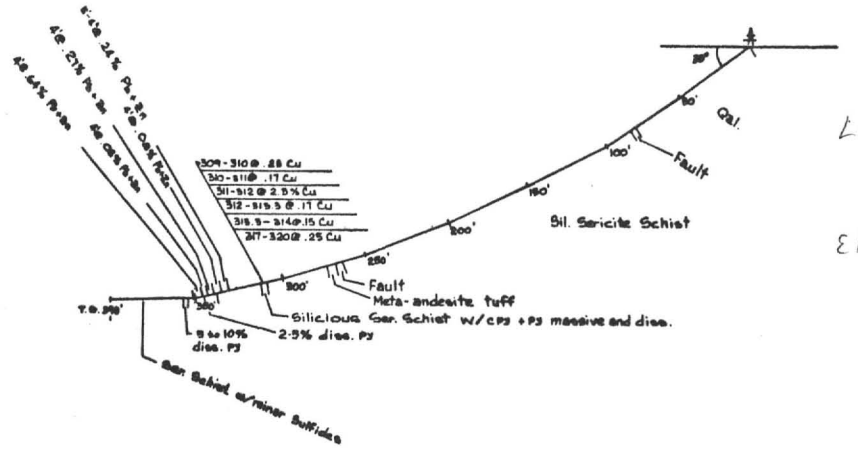
KAY MINE #4

Kay Mine #4
Collar @ 35°
Nx

N 75° W
- 35°

Location 1,113,463
426,649E

Elevation ~ 1925



EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #4 Cross Section	
	CO & ST Yavapai Arizona	BY T.D. Irwin	
	SCALE 1" = 50' 100'	PROJ NO 3293	DATE Feb. '73 FILE NO

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	PROJECT _____ Co-ord. _____ Collar elev. _____ By G. Parsons Scale ____ Date ____ P. ____ HOLE No. K-4	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
0												
100												
95												
200												
300												
400							T – 399					
							K-4 – 30					

(4) Mine DDH-4

73-18-7

DRILL CORE

8

2-1-73

REMARKS

SUBMITTED BY Tom Irwin

PROJECT NO. 3293

Core STORAGE ~~BOX NO~~

PAGE 1 OF 1 PAGES

SAMPLE CONDITION

Sample No	Tub No	PPM Cu	PPM Pb	PPM Zn	PPM Ag
3293-4					
309'-310'	1	2150	42	170	2
310'-311'	1	1720	41	135	2
311'-312'	1	.[illegible]%	43	670	[illegible]
312'-313.3'	1.3	[illegible]	110	180	2
313.3-314'	.7	14[illegible]	79	220	2
314-315'	1	33	40	125	<1
315'-317'	2	250	46	210	<1
317'-320'	3	1260	770	2300	5
	11'				

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

DUPLICATE

Certificate No. 59080

TUCSON, ARIZONA 85702 Feb 10th 1973

Sample Submitted by Mr. Exxon Company USA

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
proj 3293-4		$ PPM					
309-310	Trace	Tr					
310-311	0.005	.17					
311-312	0.005	.17					
312-313.3	Trace	Tr					
313.3-314	Trace	Tr					
314-315	Trace	Tr		23			
315-317	Trace	Tr					
317-320	Trace	Tr					

3293 Drilling DDH4

Space Use this

DH4

* Gold Figured $35.00 per oz. Troy

Charges $ 20.00

Very respectfully,

Ben P. Jacobs

4

PROJECT BAY MINE # 4

REPORT NO. 73-18-8

SAMPLE TYPE SLUDGE

NO. OF SAMPLES

DATE SUBMITTED 2-8-73

SUBMITTED BY T.D. IRWIN

REMARKS

PROJECT NO. 3293

STORAGE BOX NO.

PAGE 1 OF 1 PAGES

SAMPLE CONCENTRATION 2/100 .56 gm

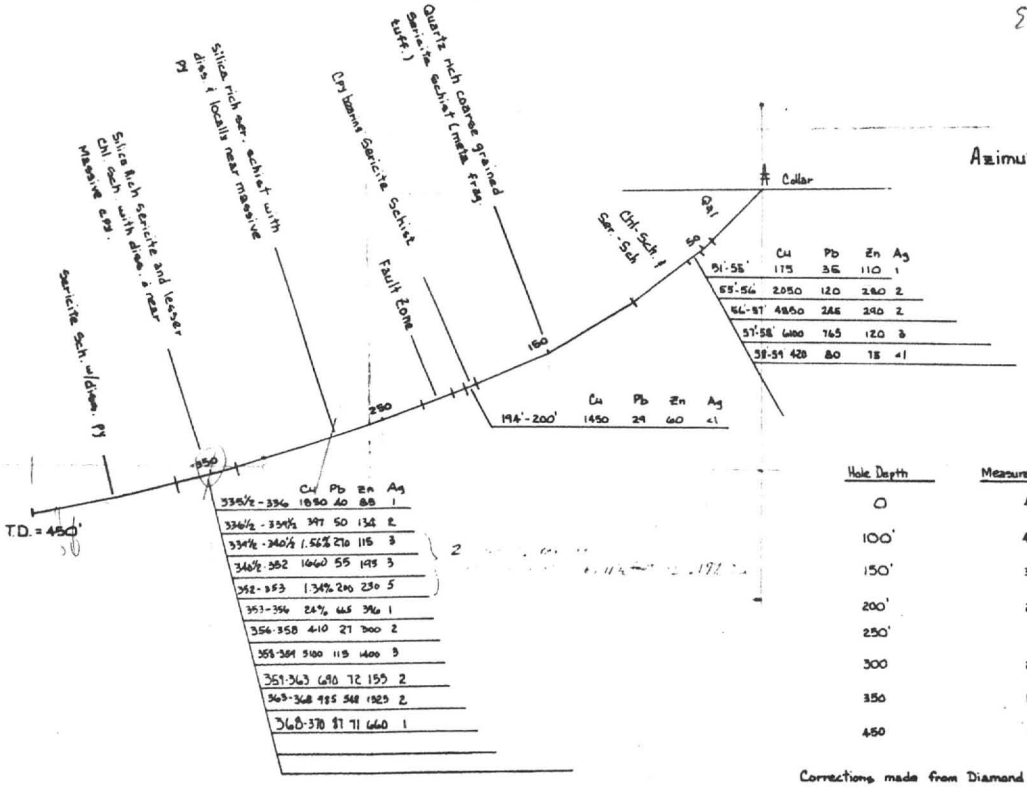
Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn
3293-4				
329.8-335	163	89	350	850
335-338	164	110	340	920
338-340	165	110	300	730
340-341	166	135	465	990
341-343	167	180	410	1230
[redacted]	343-345	100	400	830
345-350	16[redacted]	94	300	740
350-352	170	140	900	1300
352-354	171	120	770	1010
354-355.9	172	140	920	1290
355.9-360	173	115	465	1280
360-363	174	88	270	880
363-365	175	87	260	450
367-370	176	64	140	230
370-371	177	71	165	250
371-374	178	47	130	210
374-377	179	49	90	270
377-379	180	81	100	250
379-382	181	30	40	170
382-384	182	46	42	280
384-387	183	62	92	400
387-390	184	72	125	880
390-392	185	69	41	170
392-395	186	44	15	120
395-398	187	40	38	150

4

KAY MINE *5

Location: 1,113,704N
426,709E

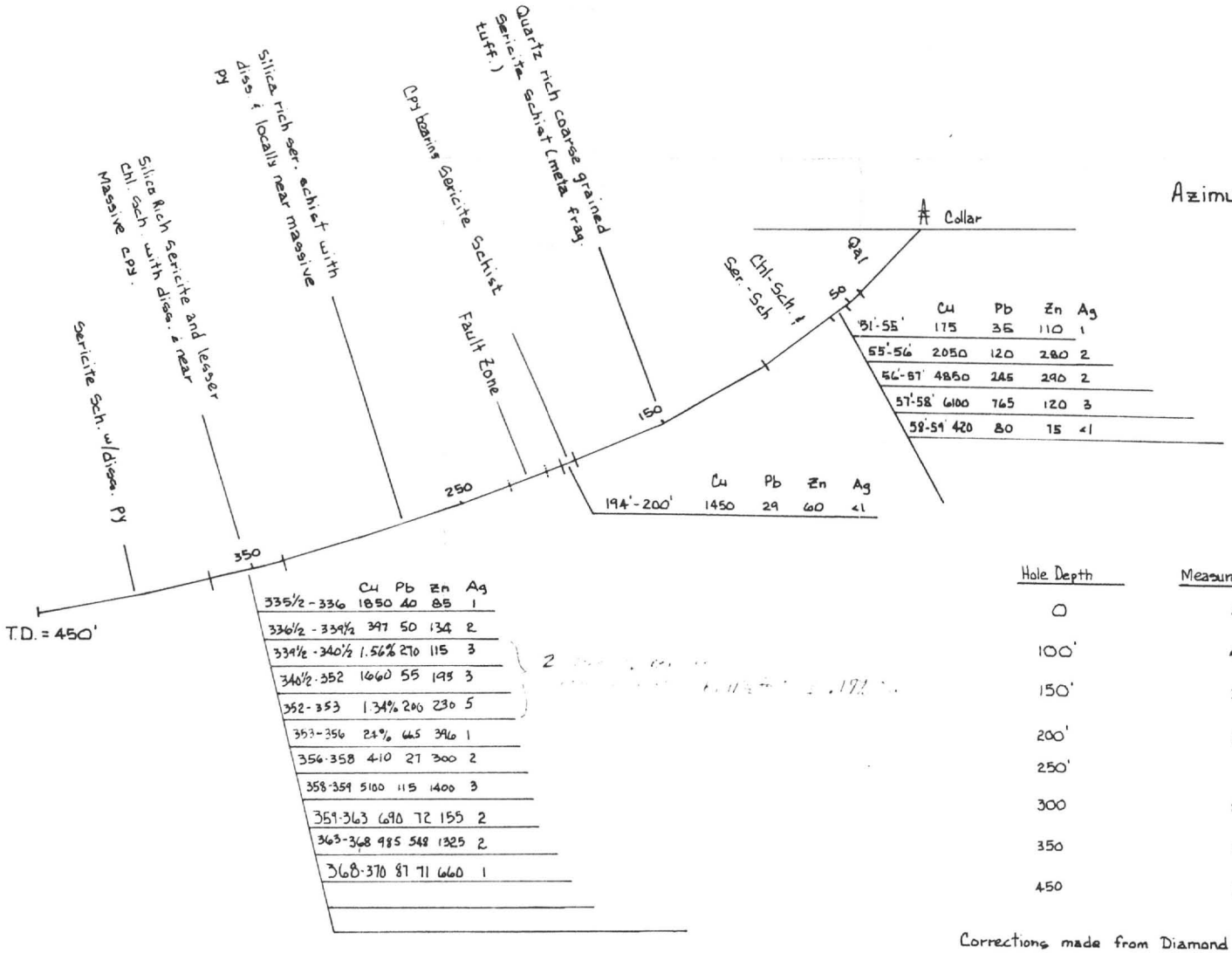
Elevation ~1925'



Hole Depth	Measured Inclination	Corrected Inclination
0	44½°	44½°
100'	44°30'	37°
150'	37°30'	30°
200'	28°30'	22
250'	25°	19°30'
300	20°30'	15°15'
350	18°30'	13°20'
450	13°30'	10°00'

Corrections made from Diamond Drill Handbook P. 447

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #5 Cross Section
	CO & ST Yavapai, Arizona	BY T.D. Irwin



Location: 1,113,704 N
426,709 E

Elevation: ~1925'

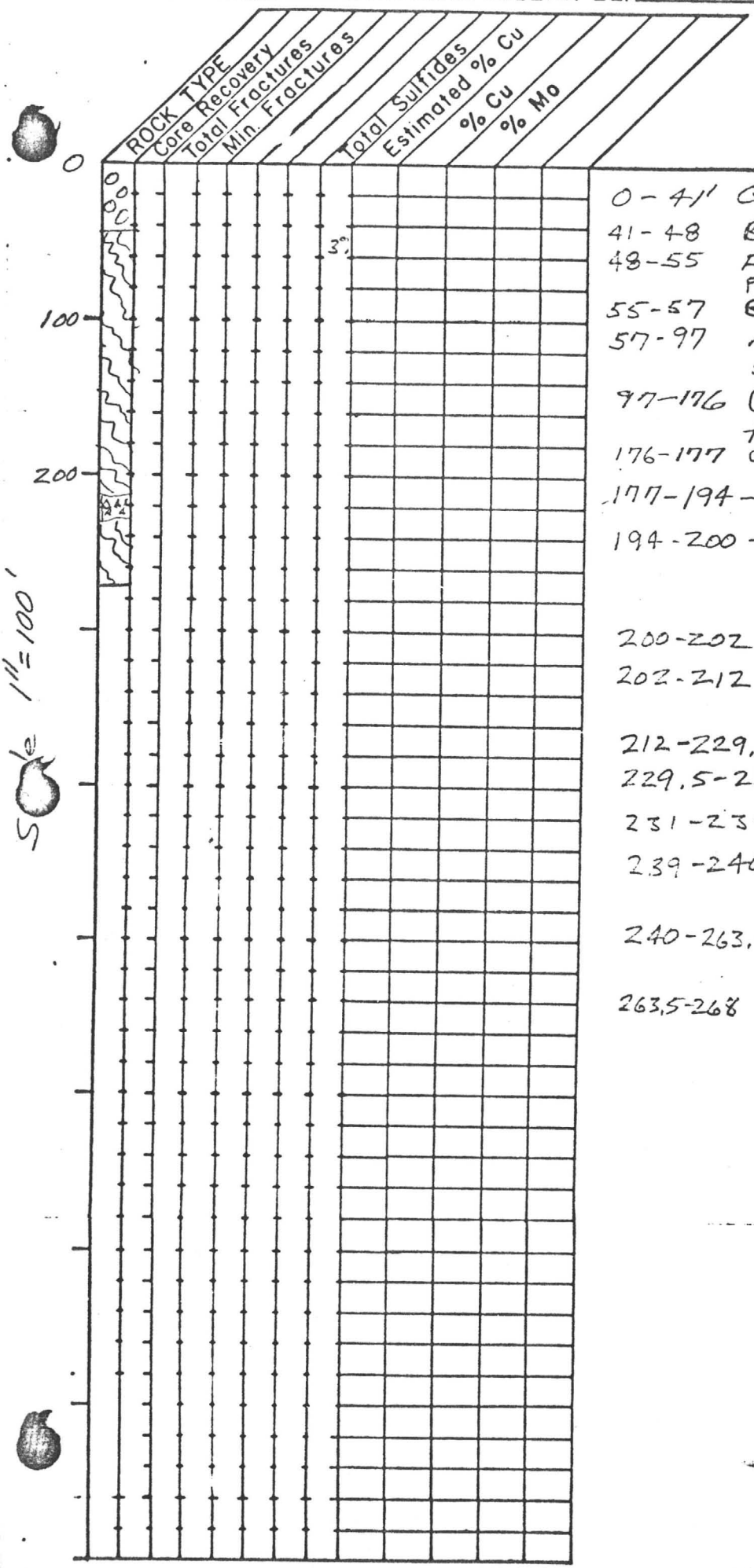
Hole Depth	Measured Inclination	Corrected Inclination
0	44½°	44½°
100'	44°30'	37°
150'	37°30'	30°
200'	28°30'	22
250'	25°	19°30'
300	20°30'	15°15'
350	18°30'	13°20'
450	13°30'	10°00'

Corrections made from Diamond Drill Handbook P. 447

EXXON COMPANY, U.S.A. MINERALS DEPARTMENT	AREA KAY MINE	TITLE D.H. #5 Cross Section	
	CO. & ST. Yavapai, Arizona		BY T.D. Irwin
	SCALE 1"=50'	PROJ. NO. 3293	DATE 3-6-73 FILE NO.

PROJECT No. 3293 HOLE K5 FROM 0 TO ____ PAGE ____ OF ____

COOR. ____ COLLAR EL. ____ T.D. ____ LOGGED BY ED X



GEOLOGIC NOTES

0-41' Qal

41-48 Blue Chl. Sch

48-55 Fine grained gray ser. sch w/4" py rich zone @ 52'

55-57 Blue Chl. Sch w/ 1-4% cpy

57-97 Mixed Blue Chl. Sch and grey ser. sch, w/ minor py & cpy

97-176 Coarse grained meta fragmental tuff - widely spaced 1" wide qtz vns.

176-177 Qtz Eye Ser. Sch

177-194 - Same As 97-176

194-200 - Qtz. rich Ser. Sch w/ widely spaced 1/8 to 1/4 inch cpy bands

200-202 Same as 176-177

202-212 Mixed silic. ser. sch. and Qtz eye sch.

212-229.5 Red Hem. Stained Fault zone

229.5-231 Blue Chl Sch

231-239 Meta Fragmental Tuff

239-240 Oxidized lim. stained bull quartz.

240-263.5 Same as 231-239 w/ 1% diss py

263.5-268 shattered hem. stained bull qtz rich. ser. sch

PROJECT KAY MINE #3293 HOLE No. K-5

Co-ord. ~1,113,700 N ~426,700 E

Collar elev. ~1925' By R. Rowe Scale 1"=20' Date 1-77 P.1

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	Cu	Pb	Zn	Ag
							SPUD 2-8-73 N75°W -45°					
							No Core Rock bit					
							NX CORE					
5							only a few pieces of core in box. Looks like some mafic dike rock. wouldn't put much faith in these pieces being representative of the interval.					
80		py		dk gry	62°		Stg alt ¢					
85							Quartz sericite blk ¢ schist					
85				gry grn								
98+					60°		fine grained tuff (felsic lithic xtal [lapelli] tuff)					
75		2% py										
90	1% cpy	1% py		dk gry			Stg alt ¢		175	35	160	1
98+							- strong smooth foliation					
75							- wk to loc moderate blk ¢ in matrix					
98+							- course textured					
90					55°		40-90% siliceous frags 3-5 mm					
75							60-10% m.g. xtal matrix w/ weak to loc abun blk ¢					
							- sparce lapelli 5-15 mm (silicified)					
98+							Quartz sericite blk ¢ schist					
98+							- stg smooth fol. (felsic xtal tuff)					
98+		gal		m gry			- f to m.g. xtal tuff					
75					61°		- faint laminated texture					
90							- uniform texture throughout					
							- v. wk black ¢, locally abundant					
95							Quartz sericite schist					
98+					59°		(tuffaceous sal. sediment?)					
98+		2% gal-bnt diss.		m gry w/ purplish tint			- stg fol					
98+							- course g. sandstone? w/ strong tuffaceous matrix, both ash + m.g. xtals					
							- locally sparce lapelli size mafic frags.					
98+					56°		- galbnt indicative of 2% T.S. disseminated					
98+							Quartz sericite schist					
98+					56°		- stg fol (felsic xtal tuff)					
98+							- m.g. xtal tuff locally f.g.					
98+		py					- ghosty images of 5-10 mm stretched lapelli clasts locally common					
98+					50°							
98+							- qtz veins common up to 3" wide					
98+							- uniform texture					
98+					43°							
98+												
98+					43°							
95							Quartz sericite schist					
70							- stg fol (felsic xtal lithic tuff)					
98+					38°		- variable texture fine to coarse grained tuff					
90							- locally sericitic, locally siliceous					
70							- locally xtal rich locally lithic rich					
95	cpy?						lapelli frags locally present		1460	29	60	<1

PROJECT KAY MINE # 3293 HOLE No. K-5

Co-ord. _____ Collar elev. _____ By R. Rowe Scale 1" = 20' Date 1-77 P. 2

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	Cu	ppm Au	Pb	Zn	ppm Ag
200													
98+							as above						
98+													
98+													
90													
60													
90													
50													
75							wk shrng w/some clay						
40													
90													
10													
120 30		hvy staining											
0							strong clay gouge						
50													
98+							sharp contact into solid hanging wall						
98+					43°		Quartz sericite schist (felsic lithic xtal tuff)						
98+		[goe]					stg vns w/goe						
240 98+					40°		mod fol						
98+				dk			- csc tuff to lapelli tuff						
98+		[1-2% blotchy py]		gry	40°		10-50% angular lithic chips 3-10 mm						
98+	dl						matrix m-csc xtal tuff						
98+							- locally some wk blk ¢						
260 98+					35-45°								
98+							Quartz sericite schist (felsic xtal tuff)						
90				m. gry									
98+							- stg fol						
98+							- m.g. xtal tuff.						
280 95		2-4% goe [pnt]		tan brn	40°		- locally zones containing lithic lapelli frags						
90							- relatively coarse textured, loc mottled loc wk laminated.						
98+													
98+				m gry									
98+													
80													
65													
300 90					40°		- generally v. minor f.g. tuff lam.						
90													
98+		py					- 335 to 350 wk blk ¢, locally mod stg.						
98+													
90													
75													
90													
320 0					30°		↑ NX CORE						
90							↓ BX CORE						
90		[goe]											
90													
50													
90													
75					29°								
90				dk gry-blk			stg blk ¢						
340 90		1% py											
90													
90	1% cpy												
10				m. gry									
30													
98+		goe 2-15% py			35°		Quartz sericite schist (felsic tuff)	1840		50	86	1
95				wht.			- stg fol	1410		31	150	1
90	[cpy]						- f.g. tuff, commonly containing 10-20% v.f.g. tuff wisps, bands + lam	1420	.005	22	92	1
360 95								1450	.005	28	140	2
95		1-10% py						1690	Tr	50	210	4
95				Lt gry tan						28	82	1
95								2350	Tr	39	270	6
98+					30°		- smooth texture containing tuff lam + pyrite lam.	90	Tr	105	235	2
90								1410	Tr	320	220	5
90								1620	.01	22	92	1
90								2360	.02	26	180	3
98+								410	.005	27	300	2
90								5160	.08	115	1400	3
90								690		72	155	2
90								1850		53	200	1
90								860		255	530	3
90								650		235	3260	2
98+								87		71	660	1
70					32°		Quartz sericite schist (felsic xtal tuff)						
380 75							- stg fol						
90							- f to med g. xtal tuff						
60					30°		5-10% v.f.g. tuff lam + wisps	NA					
90							- distinctly coarser than above unit						
90							- pyrite v.f.g in 1/8" bands.						
90													
90													
90													
85													
90													
10													
400													

PROJECT KAY MINE # 3293 HOLE No. K-5

Co-ord. _____ _____

Collar elev. _____ By R. Rowe Scale 1" = 20' Date 1-77 P. 3

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
10, 10, 80, 80, 90, 95, 95, 90, 90, 80, 80, 80, 90, 90, 90, 90, 90, 20		2% py diss + blebs		Lt gry	30°, 27°, 26°			35		493	1365	1
10, 60, 90, 90, 90		[35%]						65		96	965	1
								91		145	1800	1
								~~78~~		~~140~~	~~165~~	~~1~~
								30		143	110	1
								49		99	200	2
								38		112	127	2
								40		778	435	2
								37		91	150	1
								31		75	235	2
					25°			36		71	120	1
80								28		39	78	1

Ol/c sericite schist (felsic xtal tuff)

- stg foliated, slightly irregular
- fine-med gr. xtal tuff
- relatively massive & uniform textured
- pyrite occurs as discrete blebs & streaks in laminae. Uniformly distributed

TD 450'

TERMINATE: 3-5-73

395 - 450 - 55'

45 ppm Cu
196 " Pb
595 " Zn
1.3 Ag
Zn/Cu = 13.22

335.5 - 368 = 32.5'

1796 Cu
90 Pb
448 Zn
2.61 Ag
Zn/Cu = 0.25

240 - 270

366 Cu
14 Pb
72 Zn
Zn/Cu / 0.20

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrys	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
ac	arsenopyrite

grn	green
gry (gry)	grey
bn	brown
bl	blue
yel	yellow
f.gr (f.g.)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
crs	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed.	sediment
lam	laminated
stg	strong
inter	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
shr'd	sheared

Co-ord. ~1,113,700 N ~426,700 E **HOLE No. K-5**

Collar elev. ~1925' By R. Rowe Scale 1"=20' Date 1-77 P.1

Recover	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	ppm Au	Pb	Zn	ppm Ag
							SPUD 2-8-73 N75°W -45° No Core Rock bit NY CORE						
5							only a few pieces of core in box. Looks like some mafic dike rock. wouldn't put much faith in these pieces being representative of the interval.						
80 85 85 98+		pg		dk gy gy gn	62°		stg alt &						
75		2% py			60°		Quartz sericite blk & schist fine grained tuff (felsic lithic xtal [lapelli] tuff)						
90	1% cpy	1% py		dk gy			stg alt &		175		35	110	1
98+ 75 98+ 90 75					55°		- strong smooth foliation - wk to loc moderate blk & in matrix - course textured 40-90% siliceous frags 3-5 mm 60-10% m.g. xtal matrix w/ trend to loc abun blk & - sparse lapelli 5-15 mm (stretched)						
95+ 98+ 98+ 75		gal		m gy	61°		Quartz sericite blk & schist (felsic xtal tuff) - stg smooth fol. - f to m.g. xtal tuff - faint laminated texture - uniform texture throughout - v. wk black &, locally abundant						
95 98+ 98+ 98+		2% gal-limonite stn.		m gy w/ purple tint	59°		Quartz sericite schist (tuffaceous sal. sediment?) - stg fol - coarse g. sandstone? w/ strong tuffaceous matrix, both ash + m.g. xtals - locally sparse lapelli size wspy frags. - gal/limonite indicative of 1% T.S. disseminated						
98+					56°								
98+ 98+ 98+ 98+ 98+ 98+ 98+ 98+ 98+ 98+		py			50°		Quartz sericite schist (felsic xtal tuff) - stg fol - m.g. xtal tuff locally f.g. - ghosty images of 5-10 mm stretched lapelli clasts locally common - qtz vn's common up to 3" wide - uniform texture						
					50°								
					43°								
					43°								
95 70 90 90 75 75	cpy				38°		Quartz sericite schist (felsic xtal lithic tuff) - stg fol - variable texture fine to coarse grained tuff - locally sericitic, locally siliceous - Locally xtal rich locally lithic rich lapelli frags locally present		1460		29	60	<1

PROJECT _____ HOLE No. K-5

Co-ord. _____ _____

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 2

Recover	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	Cu	ppm Au	Pb	Zn	ppm Ag
							as above						
							wk shring w/some clay						
		hvy staining					strong clay Gouge						
							sharp contact into solid hanging wall						
					45°		Quartz sericite schist (felsic lacke xtal tuff) lapelli						
		[gou]					str vis of gou - mod fol						
				dk	40°		- cse tuff to lapelli tuff						
		[+20% blk chty py]		gry	40°		10-50% angular lithic chips 3-10 mm matrix m-cse xtal tuff						
	al						- locally some wk blk ¢						
					35-45°								
				m. gry			Quartz sericite schist (felsic xtal tuff)						
							- sty fol						
							- m.g. xtal tuff.						
		2-4% gou [chrt]		tan brn	40°		- locally zones containing lithic lapelli frags						
				m gry			- relatively coarse textured, loc mottled loc wk laminated.						
					40°		- generally v. minor f.g. tuff lam						
		py					- 335 to 350 wk blk ¢, locally mod sty.						
					30°		NY CORE / BX CORE						
		[gou]											
					29°		sty blk ¢						
		1% py		dk gry-blk					1840		80	85	1
	1% py			m. gry					1440		86	150	2
									1420		86	78	1
									1550	.005	98	165	2
									1690	Tr	50	210	4
											28	82	1
									2350	Tr	89	270	6
		gou 2-15% py			35°		Quartz sericite schist (felsic tuff)		90	Tr	105	235	2
	[cpy]			wht.			- sty fol		135	Tr	500	210	5
							- f.g. tuff, commonly containing 10-20% v.f.g. tuff wisps, bands + lam		1620	.01	88	92	1
		1-10% py							2360	.02	95	180	2
									410	.005	27	300	2
									0160	.02	115	1400	3
									690		72	155	2
									1850		53	200	1
									860		255	520	3
				Lt gry tan					650		235	3250	2
					30°		- smooth texture containing tuff lam + pyrite lam.		87		71	660	1
		10-20% py [gou]											
					32°		Quartz sericite schist (felsic xtal tuff)						
							- sty fol						
					30°		- f to med g. xtal tuff 5-10% v.f.g. tuff lam + wisps	NA					
							- distinctly coarser than above unit						
							- pyrite v.f.g in < 1/4" bands.						

PROJECT

Co-ord. _____ HOLE No. K-3

Collar elev. _____ By R. Rowe Scale 1"=20' Date 1-77 P. 3

Recover	Base Met. Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	INTERVAL	ANALYSES ELEMENT Cu	Au ppm	Pb	Zn	Ag ppm
					30°			35		493	1365	1
								65		96	965	1
								91		145	1800	1
					27°			~~78~~		~~140~~	~~105~~	~~1~~
		2%		Lt				30		143	110	1
		py		gry				49		99	200	2
		diss + veinlets			26°			38		112	127	2
20								40		778	435	2
		[3%]						37		91	150	1
90								31		75	235	2
					25°			36		71	120	1
50								28		39	78	1

Ol: sericite schist (felsic xtal tuff)

- sty foliated, slightly irregular
- fine-med gr. xtal tuff
- relatively massive & uniform textured
- pyrite occurs as discrete blebs & streaks in laminae. Uniformly distributed

TD 450'

TERMINATE: 3-5-73

Abbreviations & Symbols

bio	biotite
c	calcite
¢	chlorite
ep	epidote
fsp	feldspar
qtz	quartz
kaol	kaolinite
ser (z)	sericite
ϕ	silica
Tc	talc
py	pyrite
cpy(cp)	chalcopyrite
sl	sphalerite
gn	galena
cc	chalcocite
tn	tennantite
mgt	magnetite
chrys	chrysocolla
mal	malachite
goe (g)	goethite
jar (j)	jarosite
hmt	hematite
sp. hmt	specular hematite
ac	chalcopyrite

grn	green
gr(grey)	grey
bn	brown
bk	black
wh	white
f.gr (f.g.)	fine grained
gr	grain
v	very
dk	dark
fn	fine
med	medium
cc	coarse
w/	with
vl	veinlet
vn	vein
fx	fracture
bedg.	bedding
sed.	sediment
lam	laminated
stg	strong
intr	intermediate
[X]	sporatic
X^{++}	very abundant
X^{+}	abundant
X	common
X^{-}	sparce
$X^{=}$	trace
beg	becoming
fol	foliated
shr'd	sheared

PROJECT KAY MINE (K-5) (Ariz) SUBMITTAL No. 77-2-35

SAMPLE TYPE NX-Core No. OF SAMPLES 6 SUBMITTED BY R.G.Rowe DATE 3/8/77

REMARKS PROJECT No. 3293-5

STORAGE BOX No. PAGE I OF I PAGES

SAMPLE CONCENTRATION

SAMPLE No.				PPM Cu	% Cu			PPM Mo		PPM Pb	% Pb		PPM Zn	% Zn		PPM Ag	
240-245	5			216				1		14			50			<1	
245-250	5			163				4		11			49			<1	
250-255	5			710				1		15			85			<1	
255-260	5			745				7		25			110			<1	
260-265	5			227				<1		10			70			<1	
265-270	5			136				2		11			65			<1	
	30'			366				2.67		14			72				

3/10/77

PROJECT NAME - No. KAY MINE-3293 Location T8N, R2E, S4 County Yavapai State Arizona

Date Started 2-8-73

Date Completed 3-5-73

HOLE No. K-5

Sheet No.

DIAMOND DRILL ASSAY LOG

Coordinates ~1,113,700 N, ~426,700 E Collar Elevation ~1925 Bedrock Elevation

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
51	55	4.0						175		35		110		1					
55	56	1.0						2050		120		280		2					
56	57	1.0						4850		245		290		2					
57	58	1.0						6100		765		120		3					
58	59	1.0						420		80		75		<1					
194	200	6.0						1450		29		60		<1					
240	245	5.0						216		14		50		<1					
245	250	5.0						163		11		49		<1					
250	255	5.0						710		15		85		<1					
255	260	5.0						745		25		110		<1					
260	265	5.0						227		10		90		<1					
265	270	5.0						136		11		65		<1					
335.5	336.5	1.0						1850		40		85		1					
336.5	337.5	1.0						41		31		150		1					
337.5	338.5	1.0						460		46		155		3					
338.5	339.5	1.0						690		72		98		1					
339.5	340.5	1.0							1.56	270		115		3			.005		
340.5	341.5	1.0						1850		60		170		2			.005		
341.5	343.5	2.0						1690		50		210		4			Tr		
343.5	346	2.5								28		82		1					
346	350	4.0						2350		39		270		6			Tr		
350	352	2.0						90		105		235		2			Tr		
352	353	1.0							.34	200		230		5			Tr		
353	354.8	1.8						1620		48		92		1			.01		
354.8	356	1.2						5360		85		700		2			.03		
356	358	2.0						410		27		300		2			.005		
358	359	1.0						5100		115		1400		3			.03		
359	363	4.0						690		72		155		2					
363	364	1.0						1050		53		200		1					
364	366	2.0						860		255		520		3					
366	368	2.0						650		235		3250		2					
368	370	2.0						87		71		660		1					
395	404	9.0						35		493		1365		1					
404	407	3.0						65		96		965		1					
407	413.4	6.4						91		145		1800		1					
413.4	414.4	1.0						78		140		165		1					
414.4	419.4	5.0						30		143		110		1					
419.4	424.4	5.0						49		99		200		2					
424.4	429.4	5.0						38		112		127		2					
429.4	432	2.6						40		778		435		2					
432	436	4.0						37		91		150		1					
436	440	4.0						31		75		235		2					
440	445	5.0						36		71		120		1					
445	450	5.0						28	.45	39		78		1					

PROJECT Kay Mine DDH (5)

SAMPLE TYPE core NO. OF SAMPLES 5

REMARKS

core STORAGE ~~BOX NO.~~

REPORT NO. 73-18-10

DATE SUBMITTED 2-22-73

SUBMITTED BY Ken Irwin

PROJECT NO. 3293

PAGE 1 OF 1 PAGES

PLE CONCENTRATION 2/100 .5

Sample No	Tube No	PPM Cu	PPM Pb	PPM Zn	PPM Ag
3293-5	—	—	—	—	—
51-55	15	175	35	110	1
55-56	16	2050	120	280	2
56-57	17	4850	245	290	2
57-58	18	6100	765	120	3
58-59	19	420	80	75	<1

PROJECT DRY MINE #(5)

SAMPLE TYPE drill core NO. OF SAMPLES 21

REMARKS

STORAGE BOX NO.

REPORT NO. 73-12

DATE SUBMITTED 3-2-73

SUBMITTED BY T.D. IRWIN

PROJECT NO. 3293

PAGE 1 OF 1 PAGES

SAMPLE CONCENTRATION 4/100 1GRAM

Sample No	Tube No			PPM Cu			PPM Pb			PPM Zn			PPM Ag		Ozs. Per Ton
3293-5															
194-200	194			1450			29			60		<	1		
335½-336½	195			1850			40			85			1		
336½-337½	196			41			31			150			1		
337½-338½	197			460			46			155			3		
338½-339½	198			690			72			98			1		
339½-340½	199			1.56%			270			115			3		.005
340½-341½	200			1850			60			170			2		.005
341½-343½	201			1690			50			210			4		Tr
343½-346	202			[illegible]			28			82			1		
346-350	203			2350			39			270			6		Tr
350-352	204			90			105			235			2		Tr
352-353	205			.34%			200			230			5		Tr
353-354.8	206			1620			48			92			1		.01
354.8-356	207			3360			85			700			2		.03
356-358	208			410			27			300			2		.005
358-359	209			5100			115			1400			3		.03
359-363	210			690			72			155			2		
363-364	211			1050			53			200			1		
364-366	212			860			255			520			3		
366-368	213			650			235			3250			2		
368-370	214			87			71			660			1		

PROJECT Kay Mine #5

SAMPLE TYPE Drill core NO. OF SAMPLES 12

REMARKS

REPORT NO. 73-18-18

DATE SUBMITTED 3-6-73

SUBMITTED BY Tom Irwin

PROJECT NO. 3293

PAGE 1 OF 1 PAGES

core STORAGE ~~BOX NO.~~

SAMPLE CONCENTRATION 4/100 .5 gram

Sample No	Tube No	Cu	Mo	Pb	Zn	Ag
3293-5	—			—	—	
395-404	36	35	.010 3	493	1365	1
404-407	37	65	.010 3	96	965	1
407-413.4	38	91	.005 1	145	1800	1
413.4-419.4	39	78	.005 1	140	165	1
419.4-419.4	40	30	.010 3	143	110	1
419.4-424.4	41	49	.005 1	99	200	2
424.4-429.4	42	38	.005 1	112	127	2
429.4-432	43	40	.010 3	778	435	2
432-436	44	37	.010 3	91	150	1
436-440	45	31	.015 4	75	235	2
440-445	46	36	.010 3	71	120	1
445-450	47	28	.010 3	39	78	1

1435 S. 10th AVE.
P. O. BOX 1689

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59089

TUCSON, ARIZONA 85702 Mar. 8 1973

Sample Submitted by Mr. Exxon Company - U.S.A.

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
3293-5		$					
339½ - 340½	0.005						
340½ - 341½	0.005						
341½ - 346.	Trace						
346 - 350.	Trace						
350. - 352	Trace						
352 - 353	Trace						
353 - 354.8	0.01						
354.8 - 356	0.005						
356 - 358	0.005						
358 - 359	0.03						

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P. JACOBS
Dec. 31, 19 73
Arizona U.S.A.

* Gold Figured $35.00 per oz. Troy

Charges $ 27.50

Very respectfully, Ben P. Jacobs

5

5

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	PROJECT Kay Mine — HOLE No. 5 — Co-ord. — Collar elev. — By GP — Scale 1=100 — Date — P.	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
							Casing					
60		G		5%	30		qtz. sericite schist fine grained mixed with chlorite-meta sediments and graphitic andesite flaser bedded					
90		Tr py		chl	35		Siliceous chlorite schist fine grained pale green					
					40		Quartz sericite schist fine grained creamy yellow grey green. rhyolite tuff					
							100					
					50							
					50		200 fault zone					
							Quartz sericite schist with few quartz eyes and rock fragments					
							Lapilli tuff medium grained grey					
							OS in 60' – 242					
							300					
							reduce to BQ					
					45							
							sheared zone					
					60		400					
					60		End of Hole — TD = 450'					
							500					
							600					
							700					

PROJECT Ray Mines HOLE No. K-5

Co-ord. _____ Collar elev. _____ By GP Scale 1"=100 Date _____ R. _____

Recovery	Base Metal Mineralization	Pyrite Limonite	Gaugue	Alteration	Structure	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
0							Casing					
60		b			30 ∠	b+c	b+c + 2" bands S.O. ex Gch fine mgr to cgr cmgy Flaser bd					
90		tr py	5% cl		35 ∠	c	fgr plgn					
					40 ∠	b						
					50 ∠	b						
					50 ∠	b						
						a	mgr gy ^ggl "Lapilli tuff					
						b						
							Reduce to BQ					
					45 ∠							
					60 ∠							
					60 ∠							
							TD 450					

0 100 200 300 400 500

-45° to N75W

55-58 (3) = 0.43 Cu
339.5-343.5 (4) = 0.64 Cu
Dep estm'd 300'

PROJECT NAME - No. KAY MINE 5275 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. ____

Coordinates 1,113,164 N, 425,758 E Collar Elevation 2084' Bedrock Elevation 2054'

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
30	40	10.0						310									
40	50							315									
50	60							290									
60	70							330									
70	80							220									
80	90							225									
90	100							210									
100	110							230									
110	120							210									
120	130							385									
130	140							225									
140	150							240									
150	160							195									
160	170							190									
170	180							210									
180	190							190									
190	200							195									
200	205	5.0						165									
205	210							175									
210	215							160									
215	220							155									
220	225							190									
225	230							180									
230	235							160									
235	240							160									
240	245							165									
245	250							150									
250	255							165									
255	260							150									
260	265							165									
265	270							170									
270	275							155									
275	280							150									
280	290	10.0						160									
290	295	5.0						145									
295	300							135									
300	305							145									
305	310							165									
310	315							150									
315	320							155									
320	325							165									
325	330							165									
330	335							160									
335	340							150									
340	345							165									
345	350							170									

PROJECT NAME - No. KAY MINE 5249 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 2

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
350	355	5.0						160									
355	360							160									
360	365							145									
365	370							160									
370	375							165									
375	380							165									
380	385							155									
385	390							160									
390	395							165									
395	400							165									
400	405							200									
405	410							165									
410	415							155									
415	420							160									
420	425							165									
425	430							165									
430	435							160									
435	440							150									
440	445							150									
445	450							175									
450	455							150									
455	460 A							150									
455	460 B							195									
460	465							165									
465	470							155									
470	475							165									
475	480		SAMPLE MISSING														
480	485							185									
485	490							200									
490	495		SAMPLE MISSING														
495	500							185									
500	505							190									
505	510							215									
510	515							180									
515	520							190									
520	525							155									
525	530							155									
530	535							165									
535	540							185									
540	545							180									
545	550							210									
550	555							175									
555	560							160									
560	565							150									
565	570							150									
570	575	↓						140									

PROJECT NAME - No. KAT MINE [illegible] Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 3

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
575	580	5.0						140									
580	585							140									
585	590							140									
590	595							170									
595	600							160									
600	605							145									
605	610							175									
610	615							160									
615	620							145									
620	625							170									
625	630							160									
630	635							175									
635	640							160									
640	645							160									
645	650							145									
650	655							160									
655	660							170									
660	665							140									
665	670							140									
670	675							125									
675	680							155									
680	685							155									
685	690							155									
690	695							175									
695	700							175									
700	705							145									
705	710							175									
710	715							165									
715	720							180									
720	725							180									
725	730							170									
730	735							175									
735	740							190									
740	745							230									
745	750							200									
750	755							200									
755	760							205									
760	765							170									
765	770							175									
770	775							175									
775	780							140									
780	785							155									
785	790							175									
790	795							195									
795	800							185									
800	805							185									

PROJECT NAME - No. KAY MINE 5493 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 9

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
805	810	5.0						200									
810	815							225									
815	820							155									
820	825							150									
825	830							150									
830	835							140									
835	840							155									
840	845							175									
845	850							140									
850	855		SAMPLE MISSING														
855	860							150									
860	865							160									
865	870							160									
870	875							175									
875	880							175									
880	885							145									
885	890							155									
890	895							165									
895	900							160									
900	905							185									
905	910							175									
910	915							175									
915	920							165									
920	925							140									
925	930							150									
930	935							115									
935	940							115									
940	945							130									
945	950							130									
950	955							120									
955	960							140									
960	965							155									
965	970							150									
970	975							135									
975	980							150									
980	985							150									
985	990							155									
990	995							170									
995	1000							180									
1000	1005		SAMPLE MISSING														
1005	1010							180									
1010	1015							180									
1015	1020							160									
1020	1025							165									
1025	1030							160									
1030	1035	↓						170									

PROJECT NAME - No. KAY MINE 5275 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 5

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
1035	1040	5.0						175											
1040	1045							170											
1045	1050							180											
1050	1055							190											
1055	1060							185											
1060	1065							180											
1065	1070							180											
1070	1075							160											
1075	1080		SAMPLE MISSING																
1080	1085							170											
1085	1090							175											
1090	1095							210											
1095	1100							165											
1100	1105							180											
1105	1110							165											
1110	1115							165											
1115	1120							155											
1120	1125							155											
1125	1130							160											
1130	1135							175											
1135	1140							170											
1140	1145							145											
1145	1150							165											
1150	1155							165											
1155	1160							145											
1160	1165							150											
1165	1170							165											
1170	1175							155											
1175	1180							175											
1180	1185							180											
1185	1190							175											
1190	1195							165											
1195	1200							175											
1200	1205							180											
1205	1210							175											
1210	1215							175											
1215	1220							170											
1220	1225							180											
1225	1230							155											
1230	1235							155											
1235	1240							165											
1240	1245							180											
1245	1250							135											
1250	1255							140											
1255	1260							135											
1260	1265	↓						135											

PROJECT NAME - No. KAY MINE 5275 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 6

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
1265	1270	5.0						125											
1270	1275							125											
1275	1280							140											
1280	1285							150											
1285	1290							160											
1290	1295							160											
1295	1300							160											
1300	1305							165											
1305	1310							165											
1310	1315							165											
1315	1320							180											
1320	1325							165											
1325	1330							175											
1330	1335							190											
1335	1340							180											
1340	1345							185											
1345	1350							155											
1350	1355							155											
1355	1360							160											
1360	1365							180											
1365	1370							180											
1370	1375							150											
1375	1380							160											
1380	1385							165											
1385	1390							185											
1390	1395							150											
1395	1400							165											
1400	1405							180											
1405	1410							160											
1410	1415							170											
1415	1420							160											
1420	1425							155											
1425	1430							190											
1430	1435							165											
1435	1440							180											
1440	1445							170											
1445	1450							165											
1450	1455							170											
1455	1460							185											
1460	1465							165											
1465	1470							180											
1470	1475							175											
1475	1480							180											
1480	1485							150											
1485	1490							140											
1490	1495							140											
1495	1500							150											

PROJECT NAME - No. KAT MINE 5275 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. E

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.		COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
2115	2120	5.0							60		50		122		-1			
2120	2125	5.0								.15	250		305		5			
2125	2130	5.0							650		184		290		2		.12	
2130	2135	5.0							720		192		340		-1			
2135	2138	3.0								.625		.14	510		13		.18	
2138	2140	2.0							55		67		300		-1			
2140	2145	5.0								.38		.41	615		9		1.54	
2145	2150	5.0							150		205		353		-1			
2150	2155	5.0								.13	200		425		-1		-.02	
2155	2160	5.0							102		79		335		-1		.06	
2160	2165	5.0							26		180		320		-1			
2165	2169	4.0							360		340		615		-1			
2169	2170.6	1.6	5.0	.95	.15	.60	6	.14		.424	950			.825	5		.19	
2170.6	2174	3.4								1.20		.18		.495	7		.12	
2174	2180	6.0							980		145		613		1		.08	
2180	2185	5.0							350		780		590		1			
2185	2190	5.0							450		620		620		2			
2190	2195	5.0								.44		.18	618		4		.48	
2195	2200	5.0							25		20		146		-1			
2200	2206.6	6.6	6.6'	.72	.02	.02	-	-		.72	180		217		-1		-.02	
2206.6	2208.6	2.0								.333	60			.135	2		-.02	
2208.6	2210	1.4							32		40		174		-1		.04	
2210	2215	5.0							28		15		185		-1			
2215	2220	5.0							438		25		400		-1			
2220	2230	10.0	10'	.79	.03	.32	5	.07		.79	260			.32	5		.07	
2230	2234	4.0		1.01 Cu equiv			1230		650		135		425		2		-.02	
2234	2238	4.0								.20	810		935		4		-.02	
2238	2240.5	2.5								.51	140		390		2		-.02	
2240.5	2244	3.5							840		38		525		1		-.02	
2244	2246.6	2.6								1.94	230		630		5		-.02	
2246.6	2249	2.4	15'	3.06	.06	.06	12	-	280		58		560		1		-.02	
2249	2254	5.0		3.19 Cu equiv			38.66			3.84	540		670		15		-.02	
2254	2259	5.0								4.32	750		645		16		-.02	
2259	2264	5.0							900		85		300		3		-.02	
2264	2269	5.0								.19	80		500		11		-.02	
2269	2275	6.0								.16	75		350		-1		.04	
2275	2280	5.0							118		74		248		-1		-.02	
2280	2285	5.0								.23	55		285		1		-.02	
2285	2290	5.0								.28	96		346		3		.08	
2290	2297.6	7.6	7.6'	.80	.04	.03	3	.05		.80	355		290		3		.05	
2297.6	2300	2.4								.16	92		290		3		1.50	
2300	2305.6	5.6								.625	380		375		6		.48	
2305.6	2308.5	2.9	2.4'	1.82	.01	.03	8	.04		3.84	82		390		10		.26	
2308.5	2310	1.5		1.90 Cu equiv			23.06			1.10	48		285		4		-.02	
2310	2316.2	6.2								3.02	145		305		10		-.02	

PROJECT NAME - No. KAY MINE 5249 Location Black Canyon County Yavapai State Arizona

Date Started _____

Date Completed _____

HOLE No. K-6

Sheet No c

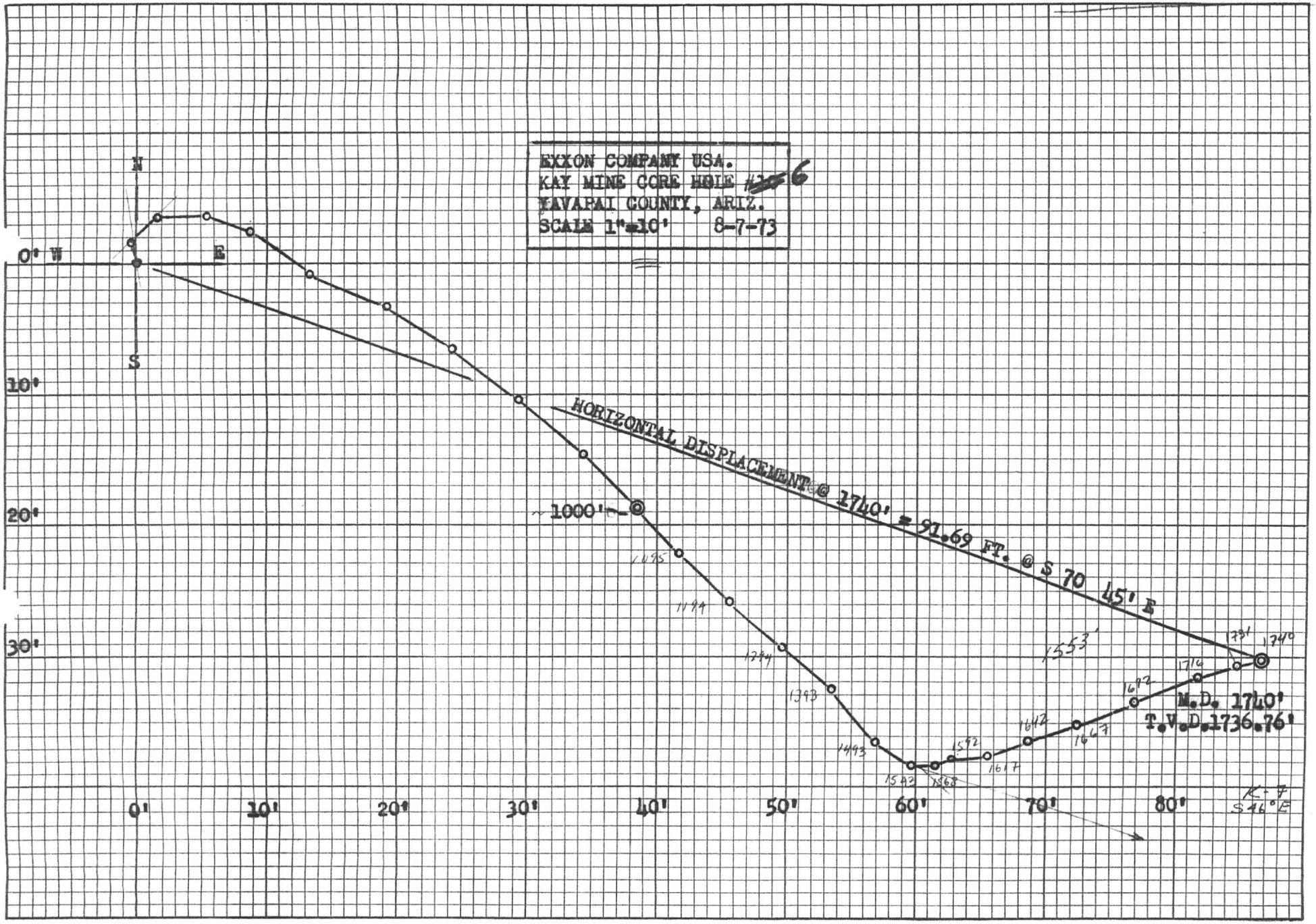
DIAMOND DRILL ASSAY LOG

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.		COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
2316.2	2317.7	1.5								.108	78		120		2		-.02	
2317.7	2319.9	2.2								1.01	50		260		5		-.02	
2319.9	2326.6	6.7								.184	58		220		3		-.02	
2326.6	2329.6	3.0								2.86	300		290		18		.07	
2329.6	2335	5.4							900		67			.13	5		.29	
2335	2340	5.0							180		98		900		1		.11	
2340	2350	10.0								.12	100		800		3		.19	
2350	2357.1	7.1							700		54		190		2		-.02	
2357.1	2363	5.9								.365	130		275		5		.09	
2363	2371.6	8.6							800		28		800		2		.09	
2371.6	2376.4	4.8	10'	2.11	.06	.25	9	.34		.20	260			.182	5		.11	
2376.4	2381.6	5.2		2.38	Composite		*28.88			3.87	860			.32	12		.55	
2381.6	2385	3.4							455		135			.30	2		.12	
2385	2390	5.0							75		200		600		2			
2390	2400	10.0							95		210		900		2			

K+E 10 X 10 TO THE INCH 46 0703
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

INTERIM REPORT



The Parsons Surveying Company Arizona

COMPANY Effron Company USA JOB NO. 62121 & 62125 PAGE 1 OF 2

PROSPECT NO. Kaymine # 1 & 6 LOCATION Black Canyon City DATE 3-7-73

Measured Depth	Correct Depth	Course Length	Drift Angle		Vertical Depth		True Vertical Depth		Section	Course Deviation		Drift Direction			Coordinate Differences North		South		East		West		Rectangular Coordinates North		South		East		West	
100	100	100	1		99	98	99	98				N	8	W	1	73						24	1	73						24
200	197	99	1	1/2	98	97	198	95				N	46	E	1	82			1	88			3	55			1	64		
300	299	100	2		99	94	298	89				N	87	E		18			3	49			3	73			5	13		
400	398	99	2	1/4	98	92	397	81				S	67	E			1	53	3	61			2	20			8	74		
500	498	100	3	1/4	99	84	497	65				S	56	E			3	17	4	70						97	13	44		
600	597	99	3	1/2	98	82	596	47				S	67	E			2	39	5	62					3	36	19	06		
700	697	100	3	1/2	99	81	696	28				S	54	E			3	59	4	94					6	95	24	00		
800	796	99	3	3/4	98	79	795	07				S	55	E			3	75	5	36					10	70	29	36		
900	896	100	3	3/4	99	79	894	86				S	51	E			4	12	5	08					14	82	34	44		
1000	995	99	3	1/4	98	84	993	70				S	43	E			4	15	3	87					18	97	38	31		
1100	1095	100	2	3/4	99	88	1093	58				S	45	E			3	39	3	39					22	36	41	70		
1200	1194	99	3		98	96	1192	54				S	48	E			3	50	3	89					25	86	45	59		
1300	1294	100	3		99	86	1292	40				S	51	E			3	29	4	07					29	15	49	66		
1400	1393	99	3		98	96	1391	36				S	47	E			3	57	3	83					32	72	53	49		
1500	1493	100	3		99	86	1491	22				S	42	E			3	89	3	50					36	61	56	99		
1550	1543	50	3	1/2	49	91	1541	13				S	59	E			1	58	2	61					38	19	59	60		
1575	1568	25	4	1/4	24	93	1566	06				S	84	E				19	1	04					38	35	61	44		
1600	1592	24	3	3/4	23	95	1590	01				N	68	E		58			1	46					37	80	62	90		
1625	1617	25	5	3/4	24	87	1614	88				N	87	E		10			2	50					37	70	65	40		
1650	1642	25	7	3/4	24	77	1639	65				N	69	E	1	21			3	15					36	49	68	55		

The Parsons Surveying Company Arizona

COMPANY Affon Company USA JOB NO. 62125- PAGE OF

PROSPECT NO. Kaybiner #6 LOCATION Black Canyon City DATE 8-7-73

Measured Depth	Correct.	COURSE LENGTH	DRIFT ANGLE	VERTICAL DEPTH	TRUE VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	SOUTH	EAST	WEST	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
1675	1667	25	8 3/4	24 71	1664 36			N 69 E	1 37		3 55			35 12	72 10	
1700	1692	25	11 3/4	24 48	1688 81			N 71 E	1 69		4 82			33 43	76 92	
1725	1716	25	12	24 45	1713 28			N 71 E	1 70		4 92			31 73	81 84	
1740	1731	15	12	14 67	1727 96			N 71 E	93		2 95			30 80	84 79	
* 1749	1740	9	12	8 80	1736 76			N 72 E	58		1 78			30 22	86 57	
1750			12°					N 75° E								
Sing Shs ~~1800~~																
1825	~~1825~~		13°					N 78° E								

0

D Horizontal Displacement @ 1740 FT = 91.69 FT @ S70° 45' E

The Parsons Surveying Company Arizona

COMPANY Exxon Company USA JOB NO. 62144 TD 2469 PAGE OF

PROSPECT NO. K-Mine #6 LOCATION Black Canyon City DATE 10-18-73

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL DEPTH	TRUE VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	SOUTH	EAST	WEST	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
*	1740				1736 76			N 72 E						30 22	86 57	
	1800	60	12 1/2	58 58	1795 34		12 99	N 76 E	3 14		12 60			27 08	99 17	
	1900	100	14 3/4	96 70	1892 04			N 78 E	5 29		24 90			21 79	124 07	
	2000	100	17 1/2	95 37	1987 41			N 78 E	6 25		29 14			15 54	153 21	
	2100	100	19 1/2	94 26	2081 67			N 81 E	5 22		32 97			10 32	186 18	
	2200	100	22 3/4	92 22	2173 89			N 82 E	5 38		38 29			4 94	224 47	
	2300	100	23 1/2	91 71	2265 60			N 84 E	4 17		39 66			77	264 13	
	2400	100	24 3/4	90 81	2356 41			N 87 E	2 19		41 81		1 42		305 94	
	2455	55	25 1/2	49 64	2406 05		23 68	N 87 E	1 24		23 05		2 66		328 99	

May Be error In Hole No. But Believed to Be Lower Part of Same Hole

Hor disp 328.99 ft E N 85 1/2 E

The Parsons Surveying Company Arizona

COMPANY Exxon Company JOB NO. 62121 & 62125 PAGE 1 OF 2

PROSPECT NO. Kay mine #10 LOCATION Black Canyon City DATE 10-18-73

ELEVATION 2084

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE		VERTICAL DEPTH		TRUE VERTICAL DEPTH		SECTION	COURSE DEVIATION		DRIFT DIRECTION			COS COORDINATE DIFFERENCES NORTH		SOUTH		EAST		SIN WEST		RECTANGULAR COORDINATES NORTH		SOUTH		EAST		WEST	
	100	100	1		99	98	99	98		1	75	N	8	W	1	73						24	1	73						24
	199	99	1	1/2	98	97	198	95		2	59	N	46	E	1	82	?		1	88	?		3	55			1	64		
	299	100	2		99	94	298	89		3	49	N	87	E		18			3	49			3	73			5	13		
	398	99	2	1/4	98	92	3 09 397	81		3	89	S	67	E			1	53 2	3	61			2	20			8	74		
	419.21 498	21.21 100	2 3	1/4	21 99	19 84	419 497	65		5	93 67	S	56	E			3	17	4	70					1.24 N	97	9.6 13	44		
	597	91 99	52 3	1/2	91 98	35 82	589 596	47		5 6	59 04	S	67	E			2 2	18 39	5 5	15 62					3 3	15 36	18 19	59 06		
	697	100	3	1/2	99	81	696	28		6	10	S	54	E			3	54	4	94					6	95	24	00		
	796	99	3	3/4	98	79	795	07		6	47	S	55	E			3	75	5	36					10	70	29	36		
	896	84.11 100	3	3/4	83 99	93 79	879 894	86		5 6	50 54	S	51	E			4	12	5	08					14 14	16 82	63 34	44		
	995	99	3	1/4	98	84	993	70		5	61	S	43	E			4	15	3	87					18	97	38	31		
	1095	100	2	3/4	99	88	1093	58		4	60	S	45	E			3	39	3	39					22	36	41	70		
	1194	16 99	44 3		16 98	42 96	11 10 1192	54		5	.85 18	S	48	E			3	50	3	89					27 25	94 86	45	59		
	1294	100	3		99	86	1292	40		5	23	S	51	E			3	29	4	07					29	15	49	46		
	1393	23.63 99	3		23 98	60 96	1316 1391	36		1 5	24 18	S	47	E			3	57	3	83					30 32	00 72	50 53	57 49		
	1493	58.72 100	3		58 99	64 86	1450 1491	22		3 5	07 23	S	42	E			3	89	3	50					35 36	00 61	55 56	55 99		
	1543	50	3	1/2	49	91	1541	13		3	05	S	59	E			1	58	2	61					38	19	59	60		
	1568	25	4	1/4	24	93	1566	06		1	31	S	84	E				19	1	84					38	38	61	44		
	1592	24	3	3/4	23	95	1590	01		1	64	N	68	E		58			1	46					37	80	62	90		
	1617	6.02 25	5	3/4	5 24	99 87	15 96 1614	88		2	.60 50	N	87	E		03 10			2	50					37 37	77 70	63 65	55 40		
	1642	25	7	3/4	24	77	1639	65		3	37	N	37	E	1	21			3	15					36	49	68	55		

The Parsons Surveying Company Arizona

COMPANY Exxon Company U.S.A JOB NO. 62144 PAGE 1 OF 2

PROSPECT NO. Kay Mine #10 LOCATION Black Canyon City DATE 10-18-73

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL DEPTH	TRUE VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	SOUTH	EAST	WEST	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
	1667	25	8 3/4	24 71	1664 36		3 80	N 69 E	1 37		3 55			35 12	72 10	
	1692	25	11 3/4	24 48	1688 84		5 09	N 71 E	1 69		4 82			33 43	76 92	
	1716	25	12	24 45	1713 28		5 20	N 71 E	1 70		4 92			31 73	81 84	
	1731	15	12	14 67	1727 96		2 49	N 71 E	93		2 95			30 80	84 79	
	1740	9	12	8 80	1736 76		1 87	N 72 E	58		1 78			30 22	86 57	
	1800	60	12 1/2	58 58	1795 34		12 47	N 76 E	3 14		12 60			27 08	99 17	
	1900	100	14 3/4	96 20	1892 04		25 46	N 78 E	5 29		24 90			21 79	124 07	
	2000		17 1/2	95 37	1987 41		30 07	N 78 E	6 25		29 14			15 54	153 21	
	2100		19 1/2	94 26	2081 67		33 38	N 81 E	5 22		32 97			10 32	186 18	
	2200		22 3/4	92 22	2173 89 (45)		38 67	N 82 E	5 38		38 29			4 94	224 47	
	2300		23 1/2	91 71	2265 60 (96)		39 87	N 84 E	4 17		39 66			77	264 13	
	2400	100	24 3/4	90 81	2356 41		41 87	N 87 E	2 19		41 81		1 42		305 94	
	2455	55	25 1/2	49 64	2406 05		23 68	N 87 E	1 24		23 05		2 66		328 99	
	T.D. 2469				2419 (ESTIMATE)											

Horizontal Displacement @ 2455 ft = 328.99 ft @ N 89° 28' E

THE PARSONS SURVEYING CO., ARIZONA
GYRO SURVEY FIELD DATA SHEET

COMPANY Exxon Company USA JOB NO. _____

ADDRESS _____ DATE 10-18-73

FIELD Black Canyon City LEASE _____ WELL NO. _____

COUNTY YAVAPAI STATE ARIZ CASING _____ OPEN HOLE _____ DEPTH _____

REFERENCE BEARING S 5 W OBJECT STAKE HOW OBTAINED BRUNTON

GYRO AZ. START N 78½ W TIME 00-25 GYRO AZ. END N85W TIME 62-30 DRIFT 6½ E

REMARKS: I

TD 2469 LF 65-25

IN RUN	MEASURED DEPTH	OUT RUN	IN RUN	MEASURED DEPTH	OUT RUN	IN RUN	MEASURED DEPTH	OUT RUN
03-20	0	61-30				04-20	0	N66W
07-20		58-30				07-20		N66W
					14	62	N6W	
13-35	1650							
18-35								
19-00								
19-45	1700				185	15-00	1650	S17W
20-10		46-45			12	19-20		S17W
20-55	1750	46-00			50			
21-30					2E			
22-15	1800				1	33-20	2455	N86½E
22-55					15.00	38-20		N85½E
23-40	1900							
24-25		43-45						
25-10	2000	43-00						
25-45								
26-30	2100							
27-10				2150-19¾	20	59-00	0	S89W
27-55	2200					62-00		S86W
28-25		40-15						
29-30	2300	39-30						
30-20								
31-05	2400							
	~~[illegible]~~							
~~[illegible]~~	~~[illegible]~~							
32-10	2455							
33-10								

PARSON'S SURVEYING

GYRO SURVEY FIELD DATA SHEET

2

COMPANY Exxon Company, USA JOB NO.

ADDRESS DATE 6-29-73

FIELD Black Canyon City LEASE WELL NO. RS-1

COUNTY STATE CASING OPEN HOLE DEPTH

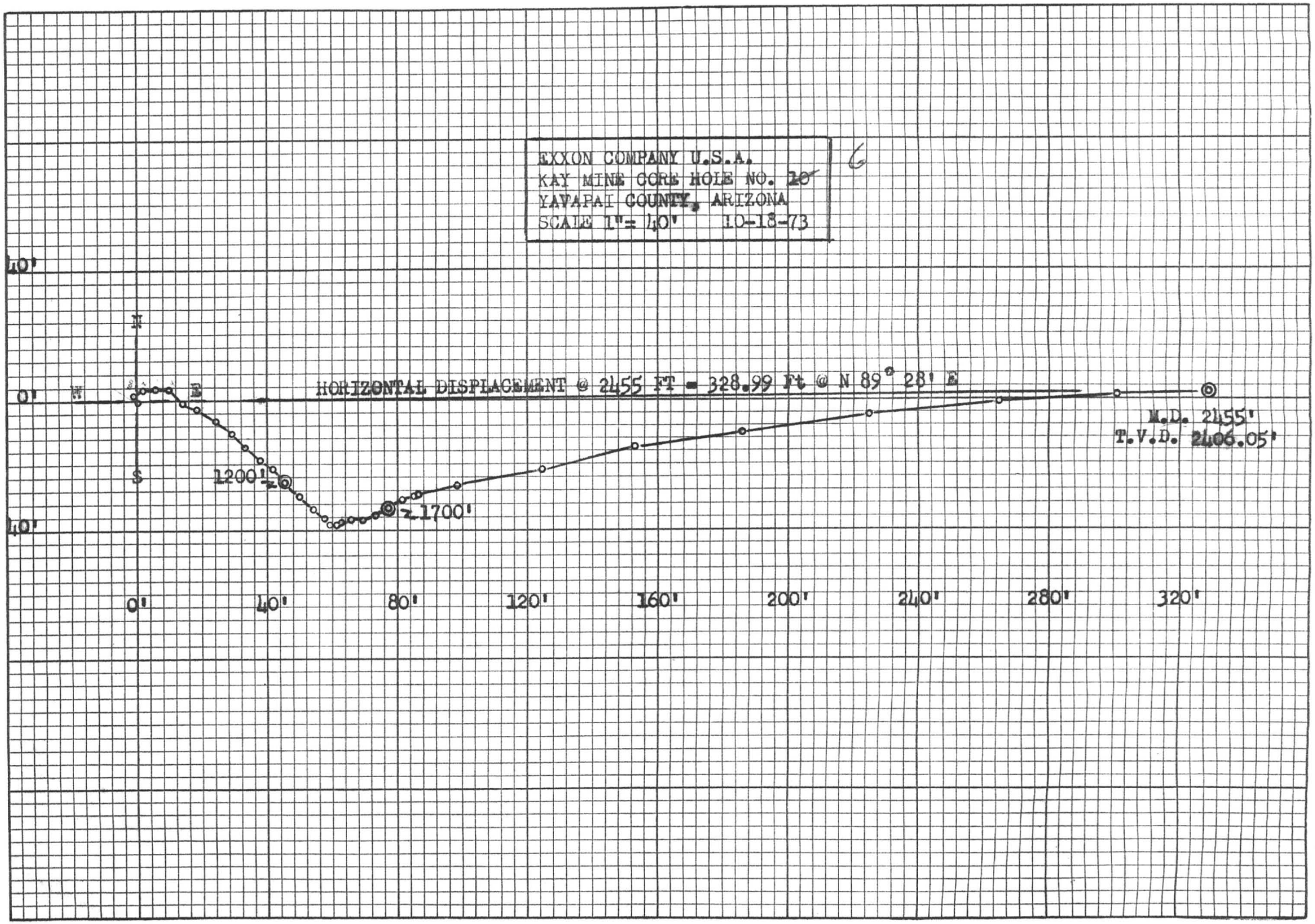
REFERENCE BEARING OBJECT HOW OBTAINED

GYRO AZ. START 0040 TIME ~~N 1 W~~ N 5½ W GYRO AZ. END N 1 W TIME 44 AM DRIFT 6½ E

REMARKS: Last Flash - 44'45"

IN RUN	MEASURED DEPTH	OUT RUN (3)	IN RUN	MEASURED DEPTH	OUT RUN	IN RUN	MEASURED DEPTH	OUT RUN
(1) 03-45		41-20		1200	29-15			
07-15	0	37-20			28-30			
12-30		27-45						
13-30	1300	27-00						
14-00								
14-45	1350							
15-00								
15-45	1400							
16-15								
17-00	1450							
17-30								
18-15	1500							
(2) 18-45								
25-00	1523							

K+E 10 X 10 TO THE INCH 46 0703
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

P.O. BOX 7517
TUCSON, ARIZONA 85725

710 E. EVANS BLVD.
PHONE 602-294-5811

RECEIVED
OCT 1976
TUCSON
MINERALS

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

KAY MINE
Proj. 3293

JOB # 019932
RECEIVED 10-19-76
REPORTED 10-22-76

SAMPLE NUMBER	GOLD ~~XXX~~PPM	SILVER OZ.*	LEAD %	COPPER %	ZINC %		MOLYBDENUM %
hole# -6-							
1800-1810	.04						
1830-1840	.10						
1910-1920	.10						
1940-1950	.12						
1970-1980	.18						
2000-2010	.18						
2080-2085	.20						
2095-2100	.04						
2110-2115	.06						
2125-2130	.12						
2140-2145	1.54						
2155-2160	.06						
2174-2180	.08						
2190-2195	.48						
2208.6-2210	.04						
2269-2275	.04						
2285-2290	.08						

MINERALS DEPARTMENT — FIELD

REC'D	CHG:	MIN	ST	PROJECT
MHA		Cu	Az	Kay Mine #3293

TO BE USED FOR: Drill Assays

APPV'D: DIST / APPV'D: HDQRS

DPT	LC	F	B	ST	DST-MIN	UNIT	TYPE	MEMO LC
6								
6								

REGISTERED ASSAYER
CERTIFICATE NO.
8888
Dnyanendra
Amrutlal Shah
DATE SIGNED 10-22-76
Arizona U.S.A.

CHARGE $ 34.00

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

INVOICE

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

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

File
Az- Kay Mine #3293
Drilling - Hole K-6

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION		Au ppm
	Project 3293		
1	K-6	2010-2013	0.13
2		2013-2015	0.13
3		2085-2090	0.31
4		2090-2095	<0.02
5		2100-2105	<0.02
6		2105-2110	<0.02
7		2135-2138	0.18
8		2150-2155	<0.02
9		2169-2170.6	0.19
10		2170.6-2174	0.12
11			
11		2200-2206.6	<0.02
12		2275-2280	<0.02
13		2280-2285	<0.02
14		2290-2297.6	0.05
15		2329.6-2335.0	0.29
16		2335.0-2340.0	0.11
17		2340.0-2350.0	0.19
18		2350.0-2357.1	<0.02
19		2357.1-2363.0	0.09
20		2363.0-2371.6	0.04
21		2381.6-2385.0	0.12
22		2240.5-2244	<0.02
23		2244-2246.6	0.03
24		2246.6-2249	<0.02
25		2249-2254	0.05
26		2254-2259	0.05
27		2259-2264	0.02
28		2264-2269	<0.02
29		2300-2305.6	0.52
30		2305.6-2308.5	0.33
31		2308-2310	0.06
32		2310-2316.2	0.05
33		2316.2-2317.7	<0.02
34		2317.7-2319.9	0.08
35	K-6	2319.9-2326.8	<0.02

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

Attention: Martin Hibbetts

REMARKS:
Trace analysis
Project: 3293
Kay Mine

Page 1 of 2

CERTIFIED BY:

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/11/76	11/26/76	762315

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

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION		Au ppm
36	K-6	2326.6-2329.6	0.08
37	K-7	2229.2-2231.2	0.25
38		2070-2071	0.25
39		2268.5-2270.2	<0.02
40		2271.2-2277	0.24
41		2289.5-2290	<0.02
42		2290-2295	<0.02
43		2295-2301.1	<0.02
44		2302.9-2308	<0.02
45		2308-2312.2	<0.02
46		2314-2320	<0.02
47		2320-2325	<0.02
48		2325-2330	<0.02
49	K-7	2330-2335.6	<0.02
50	K-8	2285-2290	<0.02
51		2290-2295	<0.02
52		2445-2450	<0.02
53		2450-2455	<0.02
54		2460-2465	<0.02
55		2465-2470	0.08
56		2475-2480	<0.02
57		2480-2485	0.07
58		2485-2490	0.17
59		2495-2500	0.79
60		2500-2505	0.23
61		2510-2515	<0.02
62		2515-2520	<0.02
63		2525-2530	<0.02
64		2530-2535	0.13
65		2180-2190	<0.02
66		2190-2194	<0.02
67		2197-2200	<0.02
68		2200-2205	<0.02
69		2205-2210	<0.02
70		2210-2215	<0.02
71	K-8	2215-2218.2	<0.02

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

Attention: Martin Hibbetts

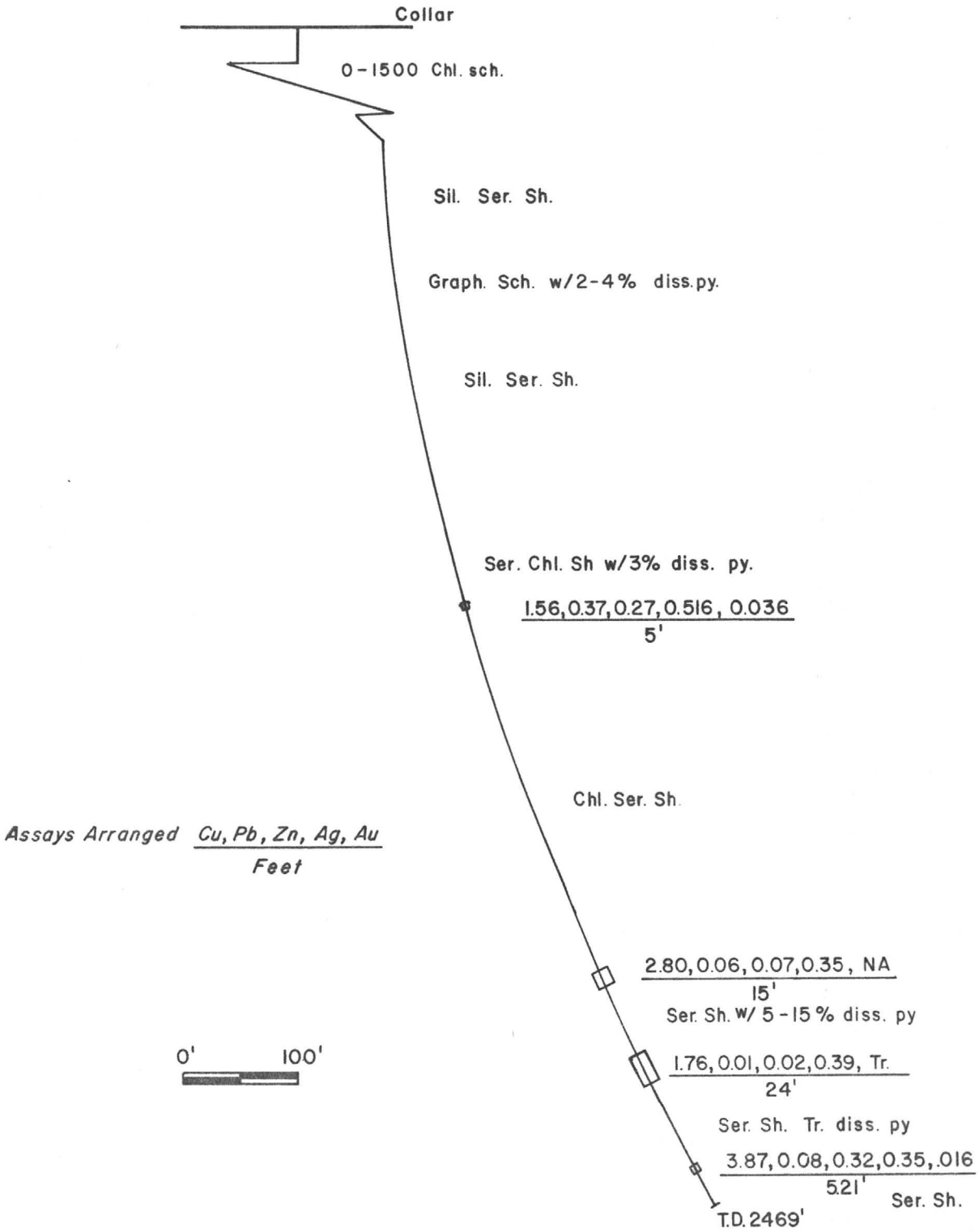
REMARKS:
Trace analysis
Project: 3293
Kay Mine

Page 2 of 2

CERTIFIED BY:

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/11/76	11/26/76	762315

KAY MINE DDH-6



PROJECT KAY MINE #3293 HOLE No. K-6

Co-ord. 1,113,164 N 425,758 E

Collar elev. 2084' By R. Rowe Scale 1" = 200' Date 6-76 P. 1

K-6 1" = 200' Summary Log

Depth	Recovery	Base Metal Mineralization	Pyrite Limonite	Ore Intervals	Color	Foliation	Rock Type	Description	Copper Equivalent	Analyses Element % Cu	ppm Au	% Pb	% Zn	ppm Ag
0														
20														
								0 – 1518' Hammer drilled						
40														
1500								begin CORE @ 1518'						
						60		¢ schist } chloritic tuffaceous metasedS						
						61		cφschist } chloritic tuffaceous metasedS						
						60		φ¢ schist } chloritic tuffaceous metasedS						
1600			-			60		m.g. gtz eye tuff						
								+ felsic tuffaceous metasedS						
						63		f-m.g. felsic Lapelli tuff						
1700						50-60		+ felsic tuffaceous metasedS						
			.5% py [10%]											
		-				50-60		graphitic metasedS / tuffaceous metasedS						
1800														
						51		f.g. felsic tuff						
1900			Tr py			52		m.g. felsic Lapelli tuff						
			[2%]			48-54		f.g. felsic tuff						
2000		- Cu							1.40	1.14	.29	.03	.22	16
						46		φ, z, blk¢ m.g. tuffaceous greywacke						
2100														
		[Cu] -	Tr py [2%]			45-55		φ, blk¢, z Lapelli tuff						
2200						38-55		f.g. felsic tuff						
									1.01	.79	.07	.03	.32	5
		2% Cu	5% py						3.14	2.06	-	.05	.06	12
		Cu -				40-45		φ, blk¢ f-m.g. tuff						
2300		2% Cu	15% py						1.90	1.82	.04	.01	.03	8
		Cu -	1% py											
			15% py			40-50		φ, blk¢ Lapelli tuff						
		3% Cu				40		m.g. felsic tuff	2.38	2.11	.34	.06	.25	9
2400						45		tuffaceous greywacke						
		-	py -			40-55		f.g. felsic tuff						
2500								T.D. 2469'						
60														
80														
90														

% Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	PROJECT KAY MINE #3293 Co-ord. 1,113,164 N 425,758 E HOLE No. K-6 Collar elev. 2084' By R. Rowe Scale 1"=20' Date 6-76 P. 1	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn

0-1500 HAMMER DRILLED

SPUD 6-27-73

Depth	% Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description
1520	98+					63°		calcite/¢ schist
	30				med-dk grn			Chlorite schist (Limy tuffaceous metasediments)
	30	–	–				C	stg foliated. Laminated: f.gr ¢ tuff / ¢ limy m.g. sediments 1/16"-1/4"
1540						60°		
	98+							sparce ¢ bands
	98+					60°		
1551								

HOLE STOPPED AT 1551'

CEMENTED BACK TO 1539' AND WEDGE OFF

Depth	% Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description
1540	98+				dk grn	56°	C	Chlorite schist Limy tuffaceous metasediments stg fol lam 1/16-1/4" f.g. ¢ tuff / ¢ Limy m.g. seds
	98+							
	98+	–	–		dk grn gr		g	
1560	0	–	–	–	–	–	–	WEDGE: NO CORE — Calcite chlorite schist (limy tuffaceous metaseds)
	98+				dk grn to dk grn gr	61°	g	Laminated 1/32-1/4" bands of Lime/Limy tuffaceous metaseds/tuff stg fol.
	95	–	–					
	98+							
	98+				med grn	60°		Quartz chlorite schist (¢ tuffaceous metased) stg fol Laminated 1/8-1/4" bands tuff / ¢ f-mg metaseds
1580	98+							
	98+							
	98+	–	trpy		med gr grn	61°		Quartz chlorite sericite schist (qtz eye m.gr tuff)
	98+							description next page
1600								

PROJECT KAY MINE #3293 HOLE No. K-6

Co-ord. 1,113,164 N 425,758 E

Collar elev. 2084' By R. Rowe Scale 1" = 20' Date 6-76 Pg 2

Depth	Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	Interval	Cu	Mo	Pb	Zn
1600	98+							- mod foliated - uniform texture - med to cse grained - 50% 1-2 mm felsic to intermed fragments 30% 2-5 mm quartz eyes 20% ribbony, feathery, wispy uniformly distributed med.grn f.g. tuff.					
	98+												
					med grn grey								
	40	-	-			60°							
1620	98+												
	98+							3 f.g. gouge: tuff/φ metasedS					
	98+		Intr-zf	C-ul	dk olive grn	-		Meta andesite dike non-foliate					
1640	98+				med grn	63°		Quartz chlorite schist (φ tuffaceous metasedS) - stg fol - fine to med grn - 30% white φ lens, bands, wisps + streaks					
	0	-	-		-	-	-	WEDGE NO CORE					
	75+	-	-		med grn			mixed cse to f.g. tuff					
1660	98+							Quartz sericite schist (rhyolite lapelli tuff?)					
	98+												
	95				Lt grey mottled white		a?	- wk to mod fol. - uniform texture 60% ghosty quartz lapelli frags 5-15 mm 25% f.g. sericitic tuff wisps + streaks 15% m.g. sericitic tuff patches (matrix)					
1680		-	tr Py-d			63°							
1700			.5% py-d					Quartz sericite schist (felsic tuffaceous metasediment)					
	98+% recovery				med grey	50-60°							
			10% py					- stg fol - stg laminated laminae 1/32"-1/4" 60-70% φ m.gr greywacke type sandstone 40-30% f.g. tuffaceous interbeds occuring as bands, lens, wisps + streaks. Grey to buff color - locally v. fi divided pyrite occurs as, or in bands					
			.5% py-d										
1720		-	[2%]			52-58°							
			10% py-d										
			.5% py-d										
1740		tr cp	3% py			50-60°		graphite graphite					
								Quartz graphite / Quartz sericite schist (interbedded: tuffaceous metasediment + carbonaceous metasediment)					
			.5% py-d		milky gray			graphitic					
1760	95+% recovery		[2%]		to med gray to black	50-60°		tuffaceous metased: - stg fol - stg lam 1/32"-1/4" 40-60% φ m.gr. greywacke type sandstone 60-40% f.g. tuff interbeds occuring as bands, lens + wisps. very minor pyrite					
								graphitic					
1780								Carbonaceous metasediments: - stg fol - 20 to 60% black graphite 80 to 40% m.gr. φ metasedS - the milky white φ meta sedS have been shrd + stretched into lenzoidal + elongate patches. Boudinage type structure.					
								graphitic					
	0%					50-60°		graphitic					
1800	90%												

PROJECT KAY MINE #3293
Co-ord. 1,113,164 N 425,758 E HOLE No. K-6
Collar elev. 2084' By R. Rowe Scale 1"=20' Date 6-76 p. 3

Depth	Recovery	Base Metal Mineralizatn	Pyrite Limonite	Color	Foliation	Rock Type	Description	Interval	Cu	Au (ppm)	Pb	Zn	Ag (ppm)
1800							CONT. from prev. page - pyrite occurs in graphite schist as 2-4mm cubes (recrystallized?)						
			<1 py				Sericite quartz schist (felsic tuff)		140	.04	38	170	-1
		(Tr cpy)											
		—	2 py	med gr.	53°		- stg fol - stg lam. 20-50% felsic lithic m.gr. tuff 80-50% sericite f.g. tuff. very longitudinal + wispy. Grey to buff		104		112	218	-1
1820		—	9 py										
		—	1 py				- Fair amount of white soft clay on bedding(?) fol. planes		90		40	130	-1
							Quartz sericite schist (felsic xtal lithic tuff)		60	.10	24	108	-1
1840					50°								
				pale grey buff			- stg fol - weakly laminated above 1860'; massive below 1860		44		25	140	-1
		—	Tr py		52°		- f.g. tuff in wispy + discontinuous bands < 1/8" thick. Matrix a lithic m.g. tuff		430		25	125	-1
1860		(Tr cpy)											
	98% RECOVERY						- below 1860 massive. relatively homogeneous		30		18	90	-1
					50°		- fine to fine-med ϕ tuff. Appears to consist of abun xtals barely visible to naked eye + occasional 1mm lithic fragments.		31		24	175	-1
1880							- very sericitic rich		45		41	105	-1
					52°		Quartz sericite schist (felsic lapelli xtal lithic tuff)		82		70	188	-1
1900				buff to tan grey			- mod fol - locally agglomeratic ϕ frags.		87		50	162	-1
		(Tr cpy)	Tr py		53°		- dominantly 60% xtal lithic tuff 25% f.g. tuff in irregular wisps + streaks 10% felsic lithic lapelli frags. 5% felsic lithic agglomeratic frags		68	.10	40	124	-1
1920							varies from coarser to finer or vice versa every few feet.		205		53	210	-1
		9 cpy (2C)	20 py				← 4" qtz-py-cpy						
							Sericite schist (felsic tuff)		114		55	206	-1
1940				v. lt grey white gr. to pale buff tan			- fine to v.f.g. tuff		135	.12	60	273	4
		—	Tr py				- weakly lam w/ qtz bands locally abundant						
		—	2 py				- sparce lapelli ϕ fragments + v. sparce sporatic agglomeratic frags.		36		30	120	-1
1960							- dominantly relatively massive texture		72		20	108	-1
				med tan grey	48°		Quartz sericite schist (felsic lapelli xtal lithic tuff)		67	.18	60	255	-1
		—	tr py				similar to 1892-1932' interval						
1980					52°		Sericite quartz schist (felsic xtal tuff)		110		64	226	-1
				buff			- stg fol - relatively massive						
					54°		- f.g. tuff w/ 30-75% diffuse ~1mm fsp xtals - quartz + lapilli frags locally abundant		97		37	154	-1
2000													

PROJECT KAY MINE #3293
Co-ord. 1,113,164 N 425,758 E HOLE No. K-6
Collar elev. 2084' By R. Rowe Scale 1" = 20' Date 6-76 P. 1

Depth	Recovery	Base Metal Mineralizat'n	Pyrite Limonite	Color	Foliation	Rock Type	Description
2000	98+	–	tr				
	98+						
	98+	1 cpy tr tn	2 py				abun bk chlorite, stg mottled
2020	80%	(5% cpy 2% tn)	tr py				stg milky white qtz; Quartz sericite ± bk chlorite schist (tuffaceous greywacke(?))
		–	Tr py	med or grey			- wk foliated; - massive
2040		2 cpy	2 py		45°		abun bk chlorite; - locally abun bk chlorite, occurring in matrix
							- med gr. ϕ metasediment w/ dk grey matrix 5-75% f.g. tuff matrix (sericite to bk chlorite)
			Tr py [1%]				- faint banding visible
2060		–			48°		massive f.g. sericite tuff w/ locally abun. 1-2mm lithic frags, beg coarser w/ depth
	98% recovery				45°		quartz bk chlorite sericite schist (intermediate tuff intermed. lapelli lithic tuff)
2080		Tr cpy	2 py tr py	med gray gr to bk gr			
		[cpy]	[1%] tr py				- med grained; - mod foliated
		2 cpy	2 py				stg bk ¢
		2 cpy	tr py				stg bk ¢; - locally laminated
2100		[cpy] .2 av. for entire interval?	[py] .5 av. for entire interval? [aa]		45-55°		- cpy occurs in ½" bands throughout interval. Interval always abun. qtz & bk chlorite; stg bk ¢; - above 2085 very ghosty ϕ fragments (?) generally 1 cm range. May be metamorphic textural phenom.
							Lapelli tuff
							- bet. 2085-2131 lithic frags beg. common. Locally up to 75% lithic frags up to 2 cm commonly stretched in plane of fol. Very patchy texture, banding locally common
2120				med gr	42-60°		stg bk ¢
		2 cpy	10 aa 5 py	med or grey			
2140		[cpy] [tn?]	tr py				- stg ghostly mottled texture
				med gr	45°		beg. more clastic: 40-60% ½-1 cm ϕ pods clasts? frags? w/ m.g. bk ¢, sericite tuff matrix
		–	1 py	med tan	50°		sandy siltst w/ scattered lapelli
2160		–	[py]	med-dk gr	51°		
		3 cpy 3 gn	tr py				
2180		[cpy] tr bands	[py] tr bands	lt gr	38-45°		Quartz sericite schist (felsic crystal tuff) - fine to med gr crystal to crystal lithic tuff. locally 1-3 scattered lithic frags common - locally laminated by ⅛" fine tuff bands + wisps - locally faint compositional banding on ½" scale
2200							

INTERVAL	Cu	Au	Pb	Zn	Ag
	70	.18	22	168	-1
	705	.13	133	580	4
	870	.13	340	0.30	4
	0.63	.29	390	0.16	5
	5.27	.85	0.13	0.23	66
	240		60	175	-1
	97		30	145	-1
	0.12		60	155	-1
	305		27	220	-1
	0.95	.61	160	0.12	4
	925		33	305	-1
	710		37	305	1
	105		25	210	-1
	87		23	100	-1
	85		30	175	-1
	700		88	505	-1
	90		92	275	-1
	175		160	0.11	-1
	383		115	545	-1
	845	.20	530	500	-1
	0.33	.31	0.15	600	6
	0.47	-.02	83	230	1
	420	.04	36	167	-1
	0.34	-.02	54	363	4
	330	-.02	24	92	-1
	0.10	.06	40	118	-1
	60		50	122	-1
	0.15		250	305	5
	650	.12	184	290	2
	720		192	340	-1
	0.63	.18	0.14	510	13
	55		67	300	-1
	0.39	1.54	0.41	615	9
	150		205	353	-1
	0.13	-.02	200	425	-1
	102	.06	79	335	-1
	26		180	320	-1
	360		340	615	-1
	0.42	.19	950	0.83	5
	1.20	.12	0.18	0.49	7
	980	.08	145	613	1
	350		780	590	1
	450		620	620	2
	0.44	.48	0.18	618	4
	25		20	146	-1

PROJECT KAY MINE #3293 HOLE No. K-6

Co-ord. 1,113,164 N 425,758 E

Collar elev. 2084' By R. Rowe Scale 1"=20' Date 6-76 P. 5

Recovery	Base Metal Mineralizatn	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	Cu	Au (ppm)	Pb	Zn	Ag (ppm)
2200	[cp] bands & blebs			Lt-mod gr	90° 55		beg. more barn.		0.72	-.02	180	217	-1
									0.33	-.02	60	0.14	2
									32	.04	40	174	-1
									28		15	185	-1
2220									438		25	400	-1
	2.5 cpy	10 py					Quartz bk chlorite sulfide schist (intermediate xtal lithic tuff)		0.79	.07	260	0.32	5
									650	-.02	135	425	2
	2.5 cpy	30 py					- stg fol		0.20	-.02	810	935	4
2240							- poorly banded		0.51	-.02	140	390	2
	Tr cpy	5 py					- m.gr xtal, xtal lithic, or lithic fragments in the .5-2 mm range, set in a f.gr. dk chloritic matrix. Locally bk-gry ¢ makes up a [illegible] of rock.		890	-.02	38	525	1
	.2 cpy	3 py			40-50				1.94	-.02	230	630	5
									280	-.02	58	560	1
	6 cpy	5 py		mod. gry					3.84	-.02	540	670	15
2260									4.32	-.02	750	645	16
98% Recovery	.3 cpy	Tr					- pyrite commonly v. abundant, occurring as 1-2 mm xtals uniformly disseminated.		900	-.02	85	300	3
									0.19	-.02	80	500	11
							- relatively siliceous, primarily due to the felsic nature of xtals + lithic frags.		0.16	.04	75	350	-1
2280	[cpy]	1 py							118	-.02	74	248	-1
					40-45°		below 2273 beg barn. Bk ¢ content decreasing. m.g. xtal + Lapelli lithic tuff is bedded w/ 1/8" irreg bands of f.g. tuff comprising up to 30% of the rock. Shrg commonly produces a boudin texture		0.23	-.02	55	285	1
									0.28	.08	96	346	3
70									0.80	.05	355	290	3
	+ cpy	5 py							0.16	1.50	92	290	3
2300	.3 cpy	20 py											
	3 cpy	20 py					below 2297.6 bk ¢ beg. more abund again like 2220-2273'		0.63	.48	380	375	6
	5 cpy	5 py					m.g. xtal tuff ± Lapelli lithic frags, interbedded w/ v.f.g. bk ¢ and pyrite, chalcopyrite		3.84	.26	82	390	10
	2 cpy	2 py							1.10	-.02	48	285	4
	6 cpy	10 py							3.02	-.02	145	305	10
	—	—		dark gray	-		} Andesite dike		0.11	-.02	78	120	2
2320	3 cpy	5 py							1.01	-.02	50	260	5
	[cpy]	Tr py					} massive bx ¢ } Mixed Qtz-¢-sulfide schist & Qtz sericite schist		0.18	-.02	58	220	3
	5 cpy	3 py							2.86	.07	300	290	18
							Quartz sericite schist		900	.29	67	0.13	5
		1 py		pale gray	40-45° range		- fine grained		180	.11	98	900	1
2340							- relatively massive						
							- locally vague banding w/ Qtz rich + sericite schist rich horizons		0.12	.19	100	800	3
							- locally scattered xtals +/or lithic frags up to 3 mm						
							← Lapelli tuff - mod foliated						
							Quartz bk chlorite sericite schist (intermed lapelli xtal lithic tuff)		700	-.02	54	190	2
2360	.5 cpy	15 py		mod gry gray					0.37	.09	130	275	5
98% recovery							- 10 to 50% felsic lithic subangular frags 5-20 mm set in a matrix of m.gr. xtal tuff and/or v.f.g. bk chlorite tuff		800	.04	28	800	2
	Tr cpy	1 py			40-50°		- mod foliated, locally wk barn						
	.2 cpy	10 py					- pyrite occurs as .5-1 mm xtals in zns elongate w/ fol.		0.20	.11	260	0.18	5
2380	10 cpy	15 py					← bk ¢ stg sulfide zns prim assoc w/ felsic ash gr tuffs & v. little bx ¢		3.87	.55	860	0.32	12
									455	.12	135	0.30	2
	—	py		mod gry gray			felsic Lapelli lithic tuff → Qtz sericite schist (felsic xtal tuff)		75		200	600	2
							- m.gr.						
							- vague banding - ribbony texture		95		210	900	2
							- 25% 1 mm lt tan xtals in m.gray matrix. Scattered lithic frags throughout in 1-3 mm range.						
2400													

PROJECT KAY MINE #3293 HOLE No. K-6

Co-ord. 1,113,164 N 425,758 E

Collar elev. 2084' By R. Rowe Scale 1" = 20' Date 6-76 P. 6

Recovery	Base Metal Mineralization	Pyrite Limonite		Color	Foliation	Rock Type	Description	INTERVAL	ANALYSES ELEMENT Cu	Mo	Pb	Zn
2400		.5 % py			40°		beg. more sedimentary in character lam more apparent v.v gradational over 15' interval					
2420		.5 py-d		med gry grn	45°		tuffaceous greywacke - m grained - mod fol. (sparce sprutric py in laminae) - v massive - sparce stretched lithic lapelli frags - faint banding indicative of varying degrees of f.g. tuff in matrix					
2440				dk tan + blk	55°		sharp contact sericite chlorite schist (felsic to intm tuff) - stg fol. - f.gr to v.f.gr. very massive + uniform texture - color varies from blk to dk tan, prob indicating amount of bk ¢ in tuff					
2460					40-55°		beg slightly coarser. xtals barely becoming visible to eye					
							T.D. 2469' TERM 10/18/73					
80												
00												
20												
40												
60												
80												
00												

PROJECT NAME - No. KAY MINE - 3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 1

Coordinates 1,113,164 N., 425,758 E. Collar Elevation 2084' Bedrock Elevation 2084'

66' one

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
30	40	10.0						310									
40	50							315									
50	60							290									
60	70							330									
70	80							220									
80	90							225									
90	100							210									
100	110							230									
110	120							210									
120	130							385									
130	140							225									
140	150							240									
150	160							195									
160	170							190									
170	180							210									
180	190							190									
190	200							195									
200	205	5.0						165									
205	210							175									
210	215							160									
215	220							155									
220	225							190									
225	230							180									
230	235							160									
235	240							160									
240	245							165									
245	250							150									
250	255							165									
255	260							150									
260	265							165									
265	270							170									
270	275							155									
275	280							150									
280	290	10.0						160									
290	295	5.0						145									
295	300							135									
300	305							145									
305	310							165									
310	315							150									
315	320							155									
320	325							165									
325	330							165									
330	335							160									
335	340							150									
340	345							165									
345	350							170									

PROJECT NAME - No. KAY MINE - 3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 2

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
350	355	5.0						160									
355	360							160									
360	365							145									
365	370							160									
370	375							165									
375	380							165									
380	385							155									
385	390							160									
390	395							165									
395	400							165									
400	405							200									
405	410							165									
410	415							155									
415	420							160									
420	425							165									
425	430							165									
430	435							160									
435	440							150									
440	445							150									
445	450							175									
450	455							150									
455	460 A							150									
455	460 B							195									
460	465							165									
465	470							155									
470	475							165									
475	480		SAMPLE MISSING														
480	485							185									
485	490							200									
490	495		SAMPLE MISSING														
495	500							185									
500	505							190									
505	510							215									
510	515							180									
515	520							190									
520	525							155									
525	530							155									
530	535							165									
535	540							185									
540	545							180									
545	550							210									
550	555							175									
555	560							160									
560	565							150									
565	570							150									
570	575	↓						140									

PROJECT NAME - No. KAY MINE-3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 3

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
575	580	5.0						140											
580	585							140											
585	590							140											
590	595							170											
595	600							160											
600	605							145											
605	610							175											
610	615							160											
615	620							145											
620	625							170											
625	630							160											
630	635							175											
635	640							160											
640	645							160											
645	650							145											
650	655							160											
655	660							170											
660	665							140											
665	670							140											
670	675							125											
675	680							155											
680	685							155											
685	690							155											
690	695							175											
695	700							175											
700	705							145											
705	710							175											
710	715							165											
715	720							180											
720	725							180											
725	730							170											
730	735							175											
735	740							190											
740	745							230											
745	750							200											
750	755							200											
755	760							205											
760	765							170											
765	770							175											
770	775							175											
775	780							140											
780	785							155											
785	790							175											
790	795							195											
795	800							185											
800	805	↓						185											

PROJECT NAME - No. KAY MINE-3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 9

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
805	810	5.0						200									
810	815							225									
815	820							155									
820	825							150									
825	830							150									
830	835							140									
835	840							155									
840	845							175									
845	850							140									
850	855		SAMPLE MISSING														
855	860							150									
860	865							160									
865	870							160									
870	875							175									
875	880							175									
880	885							145									
885	890							155									
890	895							165									
895	900							160									
900	905							185									
905	910							175									
910	915							175									
915	920							165									
920	925							140									
925	930							150									
930	935							115									
935	940							115									
940	945							130									
945	950							130									
950	955							120									
955	960							140									
960	965							155									
965	970							150									
970	975							135									
975	980							150									
980	985							150									
985	990							155									
990	995							170									
995	1000							180									
1000	1005		SAMPLE MISSING														
1005	1010							180									
1010	1015							180									
1015	1020							160									
1020	1025							165									
1025	1030							160									
1030	1035	↓						170									

PROJECT NAME - No. KAY MINE-3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 5

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
1035	1040	5.0						175									
1040	1045							170									
1045	1050							180									
1050	1055							190									
1055	1060							185									
1060	1065							180									
1065	1070							180									
1070	1075							160									
1075	1080		SAMPLE MISSING														
1080	1085							170									
1085	1090							175									
1090	1095							210									
1095	1100							165									
1100	1105							180									
1105	1110							165									
1110	1115							165									
1115	1120							155									
1120	1125							155									
1125	1130							160									
1130	1135							175									
1135	1140							170									
1140	1145							145									
1145	1150							165									
1150	1155							165									
1155	1160							145									
1160	1165							150									
1165	1170							165									
1170	1175							155									
1175	1180							175									
1180	1185							180									
1185	1190							175									
1190	1195							165									
1195	1200							175									
1200	1205							180									
1205	1210							175									
1210	1215							175									
1215	1220							170									
1220	1225							180									
1225	1230							155									
1230	1235							155									
1235	1240							165									
1240	1245							180									
1245	1250							135									
1250	1255							140									
1255	1260							135									
1260	1265	↓						135									

PROJECT NAME - No. KAY MINE - 3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 6

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
1265	1270	5.0						125									
1270	1275							125									
1275	1280							140									
1280	1285							150									
1285	1290							160									
1290	1295							160									
1295	1300							160									
1300	1305							165									
1305	1310							165									
1310	1315							165									
1315	1320							180									
1320	1325							165									
1325	1330							175									
1330	1335							190									
1335	1340							180									
1340	1345							185									
1345	1350							155									
1350	1355							155									
1355	1360							160									
1360	1365							180									
1365	1370							180									
1370	1375							150									
1375	1380							160									
1380	1385							165									
1385	1390							185									
1390	1395							150									
1395	1400							165									
1400	1405							180									
1405	1410							160									
1410	1415							170									
1415	1420							160									
1420	1425							155									
1425	1430							190									
1430	1435							165									
1435	1440							180									
1440	1445							170									
1445	1450							165									
1450	1455							170									
1455	1460							185									
1460	1465							165									
1465	1470							180									
1470	1475							175									
1475	1480							180									
1480	1485							150									
1485	1490							140									
1490	1495							140									
1495	1500	↓						150									

PROJECT NAME - No. KAY MINE - 3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 7

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
1800	1810	10						140		38		170		-1		.04	
1810	1820	10						104		112		218		-1			
1820	1830	10						90		40		130		-1			
1830	1840	10						60		24		108		-1		.10	
1840	1850	10						44		25		140		-1			
1850	1860	10						430		25		125		-1			
1860	1870	10						30		18		90		-1			
1870	1880	10						31		24		175		-1			
1880	1890	10						45		41		105		-1			
1890	1900	10						82		70		188		-1			
1900	1910	10						87		50		162		-1			
1910	1920	10						68		40		124		-1		.10	
1920	1930	10						205		53		210		-1			
1930	1940	10						114		55		206		-1			
1940	1950	10						135		60		273		4		.12	
1950	1960	10						36		30		120		-1			
1960	1970	10						72		20		108		-1			
1970	1980	10						67		60		255		1		.18	
1980	1990	10						110		64		226		1			
1990	2000	10						97		37		154		-1			
2000	2010	10						70		22		168		-1		.18	
2010	2013	3.0	7.0	1.14	.05	.22	12 .29	705		133		580		4		.13	
2013	2015	2.0		1.40	[illegible]		17.00	870		340	-		.30	4		.13	
2015	2019	4.0	5.0	1.56	.06	.19	17 .40		.63	390			.155	5		.29	
2019	2020	1.0							5.27		.133		.33	66		.85	
2020	2025	5.0						240		60		175		-1			
2025	2030	5.0						97		30		145		-1			
2030	2035	5.0							.122	60		155		-1			
2035	2039	4.0						305		27		220		-1			
2039	2041	2.0							.95	160			.115	4		.61	
2041	2045	4.0						425		33		305		-1			
2045	2050	5.0						710		37		305		1			
2050	2055	5.0						105		25		210		-1			
2055	2060	6.0						87		23		100		-1			
2060	2065	5.0						185		30		175		-1			
2065	2070	5.0						700		88		505		-1			
2070	2075	5.0						40		42		275		-1			
2075	2076.6	1.6						175		160			.108	-1			
2076.6	2080	3.4						383		115		545		-1			
2080	2085	5.0						845		530		500		-1		.20	
2085	2090	5.0							.33		.15	600		6		.31	
2090	2095	5.0							.47	83		230		1		-.02	
2095	2100	5.0						420		36		167		-1		.04	
2100	2105	5.0							.34	54		363		4		-.02	
2105	2110	5.0						330		24		92		-1		-.02	
2110	2115	5.0							.10	40		118		-1		.06	

PROJECT NAME - No. KAY MINE-3293 Location Black Canyon County Yavapai State Arizona

Date Started _____ HOLE No. K-6

Date Completed _____ DIAMOND DRILL ASSAY LOG Sheet No. 8

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.		COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton
2115	2120	5.0							60		50		122		-1			
2120	2125	5.0								.15	250		305		5			
2125	2130	5.0							650		184		290		2		.12	
2130	2135	5.0							720		192		340		-1			
2135	2138	3.0								.625		.14	510		13		.18	
2138	2140	2.0							55		67		300		-1			
2140	2145	5.0								.38		.41	615		9		1.54	
2145	2150	5.0							150		205		353		-1			
2150	2155	5.0								.13	200		425		-1		-.02	
2155	2160	5.0							102		79		335		-1		.06	
2160	2165	5.0							26		180		320		-1			
2165	2169	4.0							360		340		615		-1			
2169	2170.6	1.6	5.0	.95	.15	.60	6	.14		.424	950			.825	5		.19	
2170.6	2174	3.4								1.20		.18		.495	7		.12	
2174	2180	6.0							980		145		613		1		.08	
2180	2185	5.0							350		780		590		1			
2185	2190	5.0							450		620		620		2			
2190	2195	5.0								.44		.18	618		4		.48	
2195	2200	5.0							25		20		146		-1			
2200	2206.6	6.6	6.6'	.72	.02	.02	-	-		.72	180		217		-1		-.02	
2206.6	2208.6	2.0								.333	60			.135	2		-.02	
2208.6	2210	1.4							32		40		174		-1		.04	
2210	2215	5.0							28		15		185		-1			
2215	2220	5.0							438		25		400		-1			
2220	2230	10.0	10'	.79	.03	.32	5	.07		.79	260			.32	5		.07	
2230	2234	4.0		1.01 Cu equiv			$1.230		650		135		425		2		-.02	
2234	2238	4.0								.20	810		935		4		-.02	
2238	2240.5	2.5								.51	140		390		2		-.02	
2240.5	2244	3.5							840		38		525		1		-.02	
2244	2246.6	2.6								1.94	230		630		5		-.02	
2246.6	2249	2.4	15'	3.06	.05	.06	12	-	280		58		560		1		-.02	
2249	2254	5.0		3.19 Cu equiv			$38.66			3.84	540		670		15		-.02	
2254	2259	5.0								4.32	750		645		16		-.02	
2259	2264	5.0							900		85		300		3		-.02	
2264	2269	5.0								.19	80		500		11		-.02	
2269	2275	6.0								.16	75		350		-1		.04	
2275	2280	5.0							118		74		248		-1		-.02	
2280	2285	5.0								.23	55		285		1		-.02	
2285	2290	5.0								.28	96		346		3		.08	
2290	2297.6	7.6	7.6'	.80	.04	.03	3	.05		.80	355		290		3		.05	
2297.6	2300	2.4								.16	92		290		3		1.50	
2300	2305.6	5.6								.625	380		375		6		.48	
2305.6	2308.5	2.9	24'	1.82	.01	.03	8	.04		3.84	82		390		10		.26	
2308.5	2310	1.5		1.90 Cu equiv			$23.06			1.10	48		285		4		-.02	
2310	2316.2	6.2								3.02	145		305		10		-.02	

PROJECT NAME - No. KAY MINE-3293 Location Black Canyon County Yavapai State Arizona

Date Started _____

Date Completed _____

DIAMOND DRILL ASSAY LOG

HOLE No. K-6

Sheet No. 9

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.		COPPER ppm	COPPER %	LEAD ppm	LEAD %	ZINC ppm	ZINC %	SILVER ppm	SILVER oz/ton	GOLD ppm	GOLD oz/ton		
2316.2	2317.7	1.5								.108	78		120		2		-.02			
2317.7	2319.9	2.2								1.01	50		260		5		-.02			
2319.9	2326.6	6.7								.184	58		220		3		-.02			
2326.6	2329.6	3.0								2.86	300		290		18		.07			
2329.6	2335	5.4							900		67			.13	5		.29			
2335	2340	5.0							180		98		900		1		.11			
2340	2350	10.0								.12	100		800		3		.19			
2350	2357.1	7.1							700		54		190		2		-.02			
2357.1	2363	5.9								.365	130		275		5		.09			
2363	2371.6	8.6							800		28		800		2		.09			
2371.6	2376.4	4.8	10	2.11	.06	.25	9	.34		.20	260			.182	5		.11			
2376.4	2381.6	5.2		2.38	Cu equiv		28.88			3.87	860			.32	12		.55			
2381.6	2385	3.4							455		135			.30	2		.12			
2385	2390	5.0							75		200		600		2					
2390	2400	10.0							95		210		900		2					

PROJECT NAME - No. _____ Location _____ County _____ State _____

Date Started _____

Date Completed _____

DIAMOND DRILL ASSAY LOG

HOLE No. K-6

Sheet No. 7

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	Cu ppm	Cu %	Pb ppm	Pb %	Zn ppm	Zn %	Ag ppm	Ag oz/t	Au ppm	Au oz/t	Mo ppm
1840	1850	10						44		25		140						
1850	1860	10						430		25		125						
1860	1870	10						30		18		90						
1870	1880	10						31		24		175						
1880	1890	10						45		41		105						
2013	2015	2.0						870		340		3000						
2015	2019	4.0					5' 1.56% Cu		.68	390		1550		5	.15	.29	.008	9
2019	2020	1.0					1.83% Cu (2% Ag)		5.27	1330		3300		66	1.98	.85	.026	6
2020	2025	5.0						240		60		200						
2025	2030	5.0						97		30		145						
2030	2035	5.0						1220		60		155						
2035	2039	4.0						305		27		220						
2039	2041	2.0						9500	.96	160		1150		4	.12	.61	.018	10
2041	2045	4.0						425		33		305						
2045	2050	5.0						710		37		905						
2050	2055	5.0						105		25		210						
2055	2060	5.0						87		23		100						
2060	2065	5.0						185		30		175						
2065	2070	5.0						700		88		505						
2070	2075	5.0						410		42		275						
2075	2076.6	1.6						175		160		1080						
2135	2138	3.0						6250	.63	1400		510		13	.39			
2169	2170.6	1.6						4240	.42	950		8250		5	.15			
2170.6	2174.0	3.4					?		1.20	1800		4950		7	.21			
2206.6	2208.6	2.0							.33			1350		2		<.02		
2220	2230	10.0						7900	.79	260		3200		5	.15	.07		
2230	2234	4.0						650		185		425		2		<.02		
2234	2238	4.0						2000	.20	810		935		4	.12	<.02		
2238	2239.5	1.5						5100	.51	140		390		2		<.02		
2240.5	2244	3.5						840				525		1		<.02		
2244	2246.6	2.6					15' 0.1% Cu		1.94			680		5	.15	<.02		
2246.6	2249.0	2.4					3.06	2800				560		1		<.02		
2249.0	2254.	5.0					3.5% Cu (Ag)		3.84			670		15	.45	<.02		
2254.0	2259.0	5.0							4.32			645		16	.48	<.02		

PROJECT NAME - No. [illegible] Location _____ County _____

Date Started _____

Date Completed _____

DIAMOND DRILL ASSAY LOG

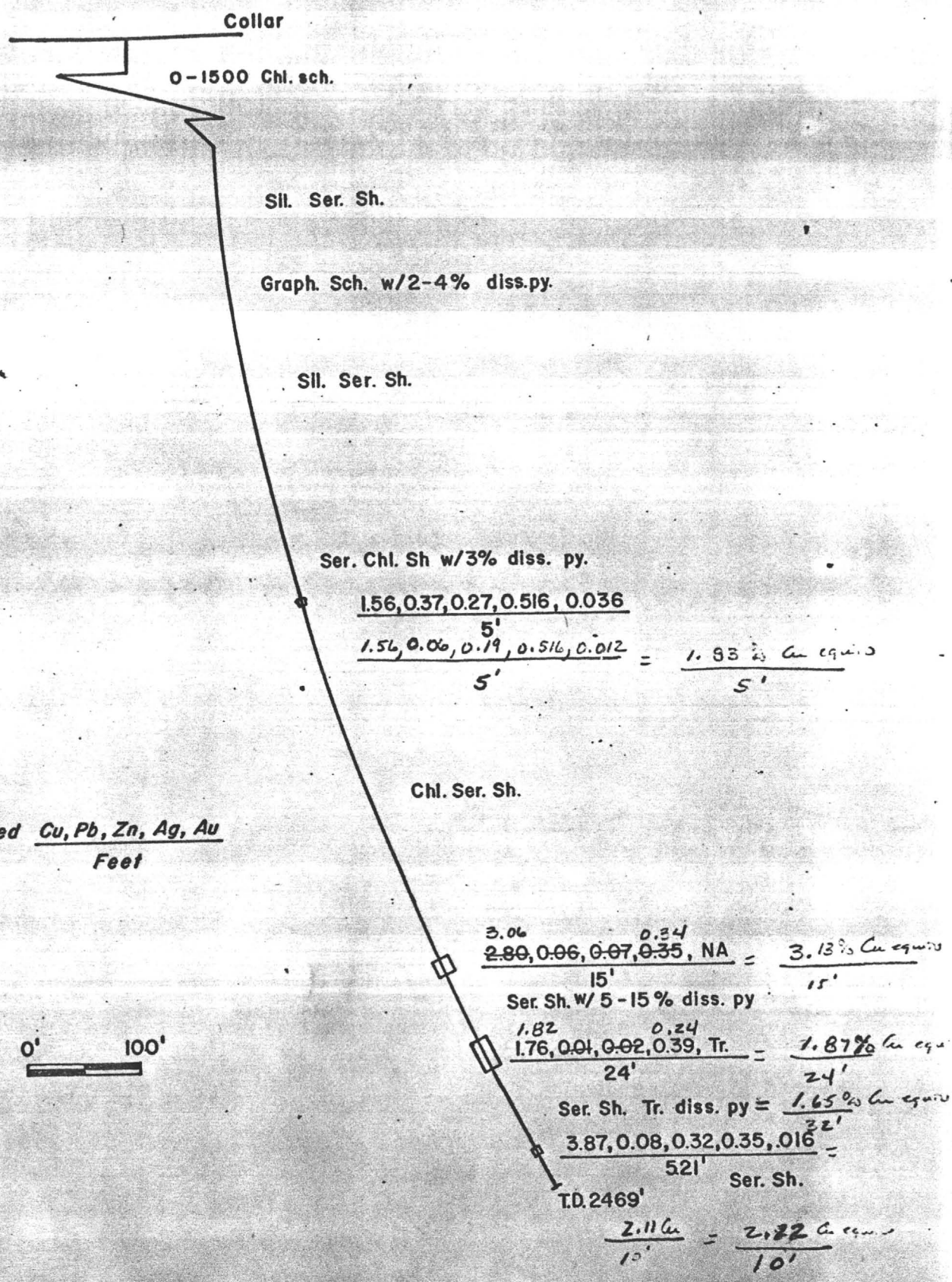
HOLE No. K-6

Sheet No. 8

Coordinates _____, _____ Collar Elevation _____ Bedrock Elevation _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	SG %	SAMPLE No.	Cu ppm	Cu %	Pb ppm	Pb %	Zn ppm	Zn %	Ag ppm	Ag oz/t	Au ppm	Au oz/t	Mo ppm
2259	2264	5.0						900		85		300		8		<.02		
2264	2269	5.0							.19	80		500		11	.33	<.02		
2297.6	2300	2.4							.16	92		290		8		1.5	.045	
2300	2305.6	5.6							.63	380		375		6	.18	.48	.014	
2305.6	2308.5	2.9		29.6' 1.60 % Cu					3.84	82		390		10	.30	.26	.007	
2308.5	2310	1.5							1.10	48		285		4	.12	<.02		
2310	2316.2	6.2					24' 1.82 % Cu or 1.87 % Cu 24' (+Ag)		3.02	145		305		10	.30	<.02		
2316.2	2317.7	1.5		1.65 % Cu 24" (Ag)				1080		78		120		2	.06	<.02		
2317.7	2319.9	2.2							1.01	50		260		5	.15	<.02		
2319.9	2326.6	6.7						1840		58		220		3	.09	<.02		
2326.6	2329.6	3.0							2.86	300		290		18	.54	.07		
2329.6	2335.0	5.4						900		67		1300		5	.15	.11	.003	
2335.0	2340.0	5.0						180		98		900		1		.55	.016	
2340.0	2350.0	10.0						1200		100		800		3				
2350.0	2357.1	7.1						700		54		190		2				
2357.1	2363.0	5.9						3650	.37	130		275		5	.15			
2363.0	2371.6	8.6						800		28		800		2				
2371.6	2376.4	4.8					10' 2.11 % Cu	2000	.20	300		1800		5	.15			
2376.4	2381.6	5.2							3.87	860		3200		12	.36			
2381.6	2385.0	3.4					2.22 % Cu	455		135		3000		2				
2385.0	2390.0	5.0					(+Ag)	75		200		600		2				
2390.0	2400.0	10.0						95		210		900		2				

KAY MINE DDH-6



Assays Arranged $\frac{\text{Cu, Pb, Zn, Ag, Au}}{\text{Feet}}$

DATE STARTED _____ DIAMOND DRILL ASSAYING SHEET NO. 1

DATE COMPLETED _____ KAY MINE HOLE NO. DD #6

COORDINATES _____ COLLAR ELEVATION _____ BEDROCK ELEVATION _____

Footage From	Footage To	Intervl	Recovery	% Cu	% Pb	% Zn	oz Ag	oz Au
2013.0	2015.0	2.0		0.08	0.03	0.30		
15.0	19.0	4.0		0.63	0.04	0.16	0.15	0.008
19.0	20.0	1.0		5.27	0.13	0.33	1.98	0.025
20.0	25.0	5.0		0.02	0.01	0.02		
25.0	30.0	5.0		0.01	<0.01	0.01		
30.0	35.0	5.0		0.12	<0.01	0.02		
35.0	39.0	4.0		0.03	<0.01	0.02		
39.0	41.0	2.0		0.95	0.02	0.12	0.12	0.018
41.0	45.0	4.0		0.04	<0.01	0.03		
45.0	50.0	5.0		0.07	<0.01	0.03		
2050.0	55.0	5.0		0.01	<0.01	0.02		
55.0	60.0	5.0		0.01	<0.01	0.01		
60.0	65.0	5.0		0.02	<0.01	0.02		
65.0	65.0	5.0		0.07	<0.01	0.05		
70.0	75.0	5.0		<0.01	<0.01	0.03		
2075.0	2076.6	1.6		0.02	0.02	0.11		
2135.0	2138.0	3.0		0.62	0.14	0.05	0.380	
2169.0	2170.6	1.6		0.42	0.10	0.83	0.146	
2170.6	2174.0	3.4		1.20	0.18	0.50	0.204	
2206.6	2208.6	2.0		0.33	<0.01	0.13	0.058	
2220.0	2230.0	10.0		0.79	0.03	0.32	0.146	
30.0	34.0	4.0		0.06	0.01	0.04	0.058	
34.0	38.0	4.0		0.20	0.08	0.09		
38.0	39.5	1.5		0.61	0.01	0.04		
2240.5	2244.0	3.5		0.08	<0.01	0.05	0.029	
44.0	46.6	2.6		1.94	0.02	0.06	0.146	
46.6	49.0	2.4		0.03	<0.01	0.06	0.029	
49.0	54.0	5.0		3.84	0.05	0.07	0.438	
54.0	59.0	5.0		4.32	0.08	0.06	0.467	
59.0	64.0	5.0		0.09	<0.01	0.03	0.088	
2264.0	2269.0	5.0		0.19	<0.01	0.05	0.321	
2297.6	2300.0	2.4		0.16	<0.01	0.03	0.089	
300.0	05.6	5.6		0.62	0.04	0.04	0.179	
05.6	08.5	2.9		3.84	<0.01	0.04	0.292	
08.5	10.0	1.5		1.10	<0.01	0.03	0.147	
10.0	16.2	6.2		3.02	0.01	0.03	0.292	
16.2	17.2	1.0		0.11	<0.01	0.01	0.118	
17.9	19.9	2.2		1.01	<0.01	0.03	0.058	
19.9	26.6	6.7		0.18	<0.01	0.02	0.089	
2321.6	2329.6	3.0		2.86	0.03	0.03	0.526	

6

DATE STARTED _____

DATE COMPLETED _____

DIAMOND DRILL ASSAY LOG
KAY MINE

SHEET NO. 2

HOLE NO. DD #6

COORDINATES _____ COLLAR ELEVATION _____ BEDROCK ELEVATION _____

Footage From	Footage To	Int	Rec.	% Cu		% Pb		% Zn		oz Ag		oz Au			
2329.6	2335.0	5.4													
35.0	40.0	5.0													
40.0	50.0	10.0													
50	57.1	7.1													
2357.1	2363.0			0.36		0.01		0.03		0.147					
2363.0	2368.0														
2368.0	2376.4														
2376.4	2381.6			3.87		0.09		0.32		0.350					
2381.6	2385.0														
2385.0	2390.0														
2390.0	2395.0														

6

DATE STARTED _____ DIAMOND DRILL ASSAY LOG SHEET NO. _____

DATE COMPLETED _____ Kay Mine #6 HOLE NO. _____

COORDINATES _____ COLLAR ELEVATION _____ BEDROCK ELEVATION _____

Footage From	Footage To	Interval	Measured Core Recovery	% Cu	% Pb	% Zn	oz Ag	oz Au
2015.0	2019.0	4.0		0.63	0.04	0.16	0.15	
2019.0	2020.0	1.0		5.27	0.13	0.33	1.98	
2020.0	2025.0	5.0		0.02	0.01	0.02		
2234.0	2238.0	4.0		0.20	0.08	0.09	0.12	
2238.0	2239.5	1.5		0.51	0.01	0.04	0.06	
2240.5	2244.0	3.5		0.08	>0.01	0.05	0.03	
2244.0	2244.6	2.6		1.94	0.02	0.06	0.15	
2246.6	2249.0	2.4		0.03	>0.01	0.06	0.03	
2249.0	2254.0	5.0		3.84	0.05	0.07	0.45	
2254.0	2259.0	5.0		4.32	0.08	0.06	0.48	
2259.0	2264.0	5.0		0.09	>0.01	0.03	0.09	
2264.0	2269.0	5.0		0.19	>0.01	0.05	0.32	
2297.6	2300.0	2.4		0.16	>0.01	>0.01	0.09	
2300.0	2305.6	5.6		0.62	>0.01	>0.01	0.17	
2305.6	2308.5	2.9		3.84	>0.01	0.09	0.29	
2308.5	2310.0	1.5		1.10	>0.01	>0.01	0.12	
2310.0	2316.2	6.2		3.02	>0.01	0.03	0.29	
2316.2	2317.2	1.5		0.11	>0.01	>0.01	0.06	
2317.7	2319.9	2.2		1.01	>0.01	>0.01	0.15	
2319.9	2326.6	6.7		0.18	>0.01	0.02	0.09	
2326.6	2329.6	3.0		2.86	0.03	0.0	0.52	
2371.6	2376.4			0.20	0.03	0.18	0.15	
2376.4	2381.6			3.87	0.08	0.35	0.35	

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

CERTIFICATE OF ANALYSIS

SAMPLE IDENTIFICATION	GOLD	SILVER	LEAD	ZINC	COPPER	MO			
[illegible]	[illegible]								

TO: [illegible]

REMARKS: [illegible]

CERTIFIED BY:

CHARGES:

PREPARATION $

ANALYSIS $ 12.0[illegible]

ACCT.:

DATE REC'D:

DATE COMPL.:

$

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

CERTIFICATE OF ANALYSIS

SAMPLE IDENTIFICATION	GOLD	SILVER	LEAD	ZINC	COPPER	MO			
[illegible]	[illegible]								

TO: [illegible]

REMARKS: [illegible]

CERTIFIED BY:

CHARGES:

PREPARATION $

ANALYSIS $

ACCT.:

DATE REC'D:

DATE COMPL.:

$

SHEET NO. ____

DATE STARTED ____ DIAMOND DRILL ASSAY LOG

DATE COMPLETED ____ HOLE NO. 6

COORDINATES ____ ____ COLLAR ELEVATION ____ BEDROCK ELEVATION ____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	S.G.	Sample No.	Cu %	Pb %	Zn %	Ag oz	Au oz			
2015	2019	4.0						.63	.04	.16	.15	.009			
2019	2020	1.0						5.27	.13	.33	1.98	.026			
2020	2025	5.0						.024	.006	.02	[illegible]	[illegible]			
2234	2238	4.0						0.20	.08	.09	.12				
2238	2239.5	1.5						0.51	.01	.04	.06				
2240.5	2244	3.5						0.08	>.01	.05	.15		2.50, .06, .07, .35 Tr		
2244	2246.6	2.6						1.94	.02	.06	.15		15		
2246.6	2249	2.4						0.03	>.01	.06	.03				
2249	2254	5.0						3.84	.05	.07	.45				
2254	2259	5.0						4.32	.08	.06	.48				
2259	2264	5.0						0.09	>.01	.03	.09				
2264	2269	5.0						0.19	>.01	.05	.32				
												rem			
2297.6	2300	2.4						0.16	>.01	.03	.09	0.48			
2300	2305.6	6.6						0.62	.04	.04	.17	0.48			
2305.6	2308.5	2.9						3.84	>.01	.04	.29	0.26			
2308.5	2310	1.5			14.3 @ 2.37			1.10	>.01	.03	.12	<0.02			
2310	2316.2	6.2						3.02	0.01	.03	.29	"			
2316.2	2317.7	1.5	24' @ 1.76					0.11	.01	.01	.06	"	1.76, 0.01 0.02, 39 Tr		
2317.7	2319.9	2.2						1.01	.03	.02	.15	"		24	
2319.9	2326.6	6.7						0.18	>.01	.02	.09				
2326.6	2329.6	3.0						2.86	.03	.03	.52	0.07			
+2 boxes															
2371.6	2376.4							0.20	.03	.18	.15	.13			
2376.4	2381.6	5.2						3.87	.08	.32	.35	.55			

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Au ppm
	Project No.: 3293-6	
1	2259-2264	<0.02
2	2264-2269	<0.02
3	2297.6-2300	1.5
4	2300-2305.6	0.48
5	2305.6-2308.5	0.26
6	2308-2310	<0.02
7	2310-2316.2	<0.02
8	2316.2-2317.7	<0.02
9	2317.7-2319.9	<0.02
10	2319.9-2326.6	<0.02
11	2326.6-2329.6	0.07
12	2371.6-2376.4	0.11
13	2376.4-2381.6	0.55

TO:
Exxon Company, U.S.A.
1758 West Grant Road
Tucson, Arizona 85705

Attention: Mr. R. E. Graves

REMARKS:
Trace analysis

CERTIFIED BY:

DATE REC'D: 11/1/73
DATE COMPL.: 11/6/73
JOB NUMBER: 348207

76

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

file K. Mine Assays

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Au ppm
	Project No.: 3293-6	
1	2259-2264	<0.02
2	2264-2269	<0.02
3	2297.6-2300	1.5
4	2300-2305.6	0.48
5	2305.6-2308.5	0.26
6	2308-2310	<0.02
7	2310-2316.2	<0.02
8	2316.2-2317.7	<0.02
9	2317.7-2319.9	<0.02
10	2319.9-2326.6	<0.02
11	2326.6-2329.6	0.07
12	2371.6-2376.4	0.11
13	2376.4-2381.6	0.55

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

KDDH #6

CERTIFICATE OF ANALYSIS

file K Mn As

SAMPLE IDENTIFICATION	GOLD ppm	SILVER	LEAD	ZINC	COPPER	MO
2220-2230	0.07					
2230-2234	< 0.02					
2234-2238	< 0.02					
2238-2239.5	< 0.02					

REGISTERED ASSAYER CERTIFICATE No. 6784 Arizona U.S.A. Date Signed

TO: Exxon Company, U. S. A.
Minerals Department
1758 West Grant Road
Tucson, Arizona 85705
Attn: Mr. R. E. Graves

REMARKS:
Trace analysis
Project # 3293-6
4 Gold @ $2.00

CERTIFIED BY: R. E. Richard

CHARGE
PREPARATION
ANALYSIS

6

ACCT.:	DATE REC'D:	DATE COMPL.:	
EXXON COMPANY, U.S.A.	9/27/73	10/3/73	347995

TO: Exxon Company, U.S.A.
1758 West Grant Road
Tucson, Arizona 85705

Trace analysis

Attention: Mr. R. E. Graves

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/1/73	11/6/73	348207

6

SKYLINE LABS, INC.
Hawley & Hawley, Assayers and Chemists Division
P.O. Box 50106, 1700 W. Grant Rd., Tucson, Arizona 85703

CERTIFICATE OF ANALYSIS

KAY DDH 6

ITEM NO.	SAMPLE IDENTIFICATION	Au ppm
	Project No.: 3293-6	
1	2259-2264	<0.02
2	2264-2269	<0.02
3	2297.6-2300	1.5
4	2300-2305.6	0.48
5	2305.6-2308.5	0.26
6	2308-2310	<0.02
7	2310-2316.2	<0.02
8	2316.2-2317.7	<0.02
9	2317.7-2319.9	<0.02
10	2319.9-2326.6	<0.02
11	2326.6-2329.6	0.07
12	2371.6-2376.4	0.11
13	2376.4-2381.6	0.55

TO:
Exxon Company, U.S.A.
1758 West Grant Road
Tucson, Arizona 85705

Attention: Mr. R. E. Graves

REMARKS:
Trace analysis

CERTIFIED BY:

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/1/73	11/6/73	348207

6

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

WIL WRIGHT
ARIZONA REG. NO. 5875

DNYANENDRA A. SHAH
ARIZONA REG. NO. 8888

P.O. BOX 7517
TUCSON, ARIZONA 85725

OCT 1976
RECEIVED
710 E. EVANS BLVD.
PHONE 602-294-5811
TUCSON
MINERALS

Exxon Company
Mr. Martin H. Hibbetts
2425 N. Huachuca Drive
Tucson, Arizona 85705 Proj. 3293

JOB # 019932
RECEIVED 10-19-76
REPORTED 10-22-76

SAMPLE NUMBER	GOLD XXXPPM	SILVER OZ.*	LEAD %	COPPER %	ZINC %		MOLYBDENUM %
-6-							
1800-1810	.04						
1830-1840	.10						
1910-1920	.10						
1940-1950	.12						
1970-1980	.18						
2000-2010	.18						
2080-2085	.20						
2095-2100	.04						
2110-2115	.06						
2125-2130	.12						
2140-2145	1.54						
2155-2160	.06						
2174-2180	.08						
2190-2195	.48						
2208.6-2210	.04						
2269-2275	.04						
2285-2290	.08						

MINERALS DEPARTMENT — FIELD

REQ'D	CHG:	MIN	ST	PROJECT
MA		Cu	Az	Kay Mine #3293

TO BE USED FOR: Drill Assays

APPV'D: DIST / APPV'D: HDQRS

DPT	LC	F	B	ST	DST-MIN	UNIT	TYPE	WEIGHT
6								
6								

REGISTERED ASSAYER
CERTIFICATE NO.
8888
Dnyanendra
Amrutlal Shah
DATE SIGNED 10-22-76
Arizona U.S.A.

CHARGE $ 34.00

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

INVOICE

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

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 94[illegible]

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION		Au ppm
	Project 3293		
1	K-6	2010-2013	0.13
2		2013-2015	0.13
3		2085-2090	0.31
4		2090-2095	<0.02
5		2100-2105	<0.02
6		2105-2110	<0.02
7		2135-2138	0.18
8		2150-2155	<0.02
9		2169-2170.6	0.19
10		2170.6-2174	0.12
11			
11		2200-2206.6	<0.02
12		2275-2280	<0.02
13		2280-2285	<0.02
14		2290-2297.6	0.05
15		2329.6-2335.0	0.29
16		2335.0-2340.0	0.11
17		2340.0-2350.0	0.19
18		2350.0-2357.1	<0.02
19		2357.1-2363.0	0.09
20		2363.0-2371.6	0.04
21		2381.6-2385.0	0.12
22		2240.5-2244	<0.02
23		2244-2246.6	0.03
24		2246.6-2249	<0.02
25		2249-2254	0.05
26		2254-2259	0.05
27		2259-2264	0.02
28		2264-2269	<0.02
29		2300-2305.6	0.52
30		2305.6-2308.5	0.33
31		2308-2310	0.06
32		2310-2316.2	0.05
33		2316.2-2317.7	<0.02
34		2317.7-2319.9	0.08
35	K-6	2319.9-2326.6	<0.02

NOV 1976
RECEIVED
TUCSON
MINERALS

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

Attention: Martin Hibbetts

REMARKS:
Trace analysis
Project: 3293
Kay Mine

Page 1 of 2

CERTIFIED BY:

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/11/76	11/26/76	762315

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

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 94[illegible]

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION		Au ppm
36	K-6	2326.6-2329.6	0.08
37	K-7	2229.2-2231.2	0.25
38		2070-2071	0.25
39		2268.5-2270.2	<0.02
40		2271.2-2277	0.24
41		2289.5-2290	<0.02
42		2290-2295	<0.02
43		2295-2301.1	<0.02
44		2302.9-2308	<0.02
45		2308-2312.2	<0.02
46		2314-2320	<0.02
47		2320-2325	<0.02
48		2325-2330	<0.02
49	K-7	2330-2335.6	<0.02
50	K-8	2285-2290	<0.02
51		2290-2295	<0.02
52		2445-2450	<0.02
53		2450-2455	<0.02
54		2460-2465	<0.02
55		2465-2470	0.08
56		2475-2480	<0.02
57		2480-2485	0.07
58		2485-2490	0.17
59		2495-2500	0.79
60		2500-2505	0.23
61		2510-2515	<0.02
62		2515-2520	<0.02
63		2525-2530	<0.02
64		2530-2535	0.13
65		2180-2190	<0.02
66		2190-2194	<0.02
67		2197-2200	<0.02
68		2200-2205	<0.02
69		2205-2210	<0.02
70		2210-2215	<0.02
71	K-8	2215-2218.2	<0.02

— recheck

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

Attention: Martin Hibbetts

REMARKS:
Trace analysis
Project: 3293
Kay Mine

Page 2 of 2

CERTIFIED BY:

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

DATE REC'D:	DATE COMPL.:	JOB NUMBER:
11/11/76	11/26/76	762315

PROJECT KAY MINE RDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

REMARKS * Indicates break in sample continuity

PROJECT NO. 3293

STORAGE BOX NO.

PAGE 1 OF 7 PAGES

SAMPLE CONCENTRATION 2/100

Sample No	Tube No			ppm Cu
30-40				310
40-50				315
50-60				290
60-70				330
70-80				220
80-90				225
90-100				210
100-110				230
110-120				210
120-130				385
130-140				225
140-150				240
150-160				195
160-170				190
170-180				210
180-190				190
190-200				195
200-205				165
205-210				175
210-215				160
215-220				155
220-225				190
225-230				180
230-235				160
235-240				160
240-245				165
245-250				150
250-255				165
255-260				150
260-265				165
265-270				170
270-275				155
275-280				150
*280-290				160
290-295				145
295-300				135
300-305				145
305-310				165
310-315				150
315-320				155
320-325				165
325-330				165
330-335				160
335-340				150

6

PROJECT KAY MINE RDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

REMARKS See Page 1

PROJECT NO. 3293

STORAGE BOX NO.

PAGE 2 OF 7 PAGES

SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
340-345				165
345-350				170
350-355				160
355-360				160
360-365				145
365-370				160
370-375				165
375-380				165
380-385				155
385-390				160
390-395				165
395-400				165
400-405				200
405-410				165
410-415				155
415-420				160
420-425				165
425-430				165
430-435				160
435-440				150
440-445				150
445-450				175
450-455				150
*455-460 A				150
*455-460 B				195
460-465				165
465-470				155
470-475				165
*475-480	SAMPLE MISSING			
480-485				185
485-490				200
*490-495	SAMPLE MISSING			
495-500				185
500-505				190
505-510				215
510-515				180
515-520				190
520-525				155
525-530				155
530-535				165
535-540				185
540-545				180
545-550				210
550-555				175

6

PROJECT KAY MINE RDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

REMARKS See Page 1

PROJECT NO. 3293

STORAGE BOX NO.

PAGE 3 OF 7 PAGES

SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
555-560	87			160
560-565	88			150
565-570	89			150
570-575	90			140
575-580	91			140
580-585	92			140
585-590	93			140
590-595	94			170
595-600	95			160
600-605	[illegible]			145
605-610	[illegible]			175
610-615	[illegible]			160
615-620	99			145
620-625	100			170
625-630	101			160
630-635	102			175
635-640	103			160
640-645	104			160
645-650	105			145
650-655	106			160
655-660	107			170
660-665	108			140
665-670	109			140
670-675	110			125
675-680	111			155
680-685	112			155
685-690	113			155
690-695	114			175
695-700	115			175
700-705	[illegible]			145
705-710	[illegible]			175
	—			—
	—			—
710-715	118			165
715-720	119			180
720-725	[illegible]			180
725-730	[illegible]			170
730-735	[illegible]			175
735-740	[illegible]			190
740-745	[illegible]			230
745-750	[illegible]			200
750-755	[illegible]			200
755-760	[illegible]			205
760-765	[illegible]			170
765-770	[illegible]			175
770-775	[illegible]			175

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PROJECT KAY MINE RDH-6

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

REMARKS See Page 1

STORAGE BOX NO.

SUBMITTAL NO. 73-24-8

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

PROJECT NO. 3293

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SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
775-780				140
780-785				155
785-790				175
790-795				195
795-800				185
800-805				185
805-810				200
810-815				225
815-820				155
820-825				150
825-830				150
830-835				140
835-840				155
840-845				175
845-850				140
*850-855	SAMPLE MISSING			
855-860				150
860-865				160
865-870				160
870-875				175
875-880				175
880-885				145
885-890				155
890-895				165
895-900				160
900-905				185
905-910				175
910-915				175
915-920				165
920-925				140
925-930				150
930-935				115
935-940				115
940-945				130
945-950				130
950-955				120
955-960				140
960-965				155
965-970				150
970-975				135
975-980				150
980-985				150
985-990				155
990-995				170

PROJECT KAY MINE RDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

REMARKS See Page 1

PROJECT NO. 3293

STORAGE BOX NO.

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SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
995-1000				180
*1000-1005		SAMPLE		MISSING
1005-1010				180
1010-1015				180
1015-1020				160
1020-1025				165
1025-1030				160
1030-1035				170
1035-1040				175
1040-1045				170
1045-1050				180
1050-1055				190
1055-1060				185
1060-1065				180
1065-1070				180
1070-1075				160
*1075-1080		SAMPLE		MISSING
1080-1085				170
1085-1090				175
1090-1095				210
1095-1100				165
1100-1105				180
1105-1110				165
1110-1115				165
1115-1120				155
1120-1125				155
1125-1130				160
1130-1135				175
1135-1140				170
1140-1145				145
1145-1150				165
1150-1155				165
1155-1160				145
1160-1165				150
1165-1170				165
1170-1175				155
1175-1180				175
1180-1185				180
1185-1190				175
1190-1195				165
1195-1200				175
1200-1205				180
1205-1210				175
1210-1215				175

PROJECT KAY MINE RDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Parsons

REMARKS

PROJECT NO. 3293

STORAGE BOX NO.

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SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
1215-1220				170
1220-1225				180
1225-1230				155
1230-1235				155
1235-1240				165
1240-1245				180
1245-1250				135
1250-1255				140
1255-1260				135
1260-1265				135
1265-1270				125
1270-1275				125
1275-1280				140
1280-1285				150
1285-1290				160
1290-1295				160
1295-1300				160
1300-1305				165
1305-1310				165
1310-1315				165
1315-1320				180
1320-1325				165
1325-1330				175
1330-1335				190
1335-1340				180
1340-1345				185
1345-1350				155
1350-1355				155
1355-1360				160
1360-1365				180
1365-1370				180
1370-1375				150
1375-1380				160
1380-1385				165
1385-1390				185
1390-1395				150
1395-1400				165
1400-1405				180
1405-1410				160
1410-1415				170
1415-1420				160
1420-1425				155
1425-1430				190
1430-1435				165

PROJECT KAY MINE DDH-6

SUBMITTAL NO. 73-24-8

SAMPLE TYPE Rotary Drill Cuttings NO. OF SAMPLES 272

DATE SUBMITTED 5/18/73

SUBMITTED BY G. Fernone

REMARKS

PROJECT NO. 3293

STORAGE BOX NO.

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SAMPLE CONCENTRATION

Sample No	Tube No			ppm Cu
1435-1440				180
1440-1445				170
1445-1450				165
1450-1455				170
1455-1460				185
1460-1465				165
1465-1470				180
1470-1475				175
1475-1480				180
1480-1485				150
1485-1490				140
1490-1495				140
1495-1500				150
TD-Rotary				

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PROJECT Kay Mine (K-6) (Ariz.)

SAMPLE TYPE Drill Core NO. OF SAMPLES 50

REMARKS

STORAGE BOX NO.

SUBMITTAL NO. 76-42-2

DATE SUBMITTED 10-12-76

SUBMITTED BY R. G. Rowe

PROJECT NO. 3293-6

PAGE 1 OF 2 PAGES

SAMPLE CONCENTRATION

Sample No.	PPM Cu		PPM Pb		PPM Zn		PPM Ag
1800-1810	140		38		170		<1
1810-1820	104		112		218		<1
1820-1830	90		40		130		<1
1830-1840	60		24		108		<1
	—		—		—		—
1890-1900	82		70		188		<1
1900-1910	87		50		162		<1
1910-1920	68		40		124		<1
1920-1930	205		53		210		<1
1930-1940	114		55		206		<1
1940-1950	135		60		273		4
1950-1960	36		30		120		<1
1960-1970	72		20		108		<1
1970-1980	67		60		255		1
1980-1990	110		64		226		1
1990-2000	97		37		154		<1
2000-2010	70		22		168		<1
2010-2013	705		133		580		4
	—		—		—		—
2076.6-2080	383		115		545		<1
2080-2085	845		530		500		<1
2085-2090		0.33		0.15	600		6
2090-2095		0.47	83		230		1
2095-2100	420		36		167		<1
2100-2105		0.34	54		363		4
2105-2110	330		24		92		<1
2110-2115		0.10	40		118		<1
2115-2120	60		50		122		<1
2120-2125		0.15	250		305		5
2125-2130	650		184		290		2
2130-2135	720		192		340		<1
	—		—		—		—
2138-2140	55		67		300		<1
2140-2145		0.38		0.41	615		9
2145-2150	150		205		353		<1
2150-2155		0.13	200		425		<1
2155-2160	102		79		335		<1
2160-2165	26		180		320		<1
2165-2169	360		340		615		<1
	—		—		—		—
2174-2180	980		145		613		1
2180-2185	350		780		590		1
2185-2190	450		620		620		2
2190-2195		0.44		0.18	618		4
2195-2200	25		20		146		<1
2200-2206.6		0.72	180		217		<1
	—		—		—		—
2208.6-2210	32		40		174		<1
2210-2215	28		15		185		<1
2215-2220	438		25		400		<1

Marlin H. Hubbell
10-14-76

PROJECT Kay Mine (K-6) (Ariz.)

SAMPLE TYPE Drill Core

NO. OF SAMPLES 50

REMARKS

STORAGE BOX NO.

SUBMITTAL NO. 76-42-2

DATE SUBMITTED 10-12-76

SUBMITTED BY R.G. Rowe

PROJECT NO. 3293-6

PAGE 2 OF 2 PAGES

SAMPLE CONCENTRATION

Sample No.	PPM Cu		PPM Pb		PPM Zn		PPM Ag
2269-2275		0.16	75		350		<1
2275-2280	118		74		248		<1
2280-2285		0.23	55		285		1
2285-2290		0.28	96		346		3
2290-2297.6		0.80	355		290		3

Marlin H. Hibbitts
10-14-76