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

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ABBREVIATIONS

Used on El Tiro-Imperial
and Mission Drill Logs

Rock Types

Al	Alluvium
Ccg	Caliche Conglomerate
Sed	Sedimentary
Arg	Argillite
S-Arg	Sandy Argillite
C-Arg	Calcareous Argillite
Ark	Arkose
Qtzt, Qt	Quartzite
Cgl	Conglomerate
Ls	Limestone
Ss	Sandstone
Sh	Shale
Sltst	Siltstone
Met	Metamorphic
Mb	Marble
Tac, Tt	Tactite
DHF	Diopside Hornfels
AHF	Actinolite Hornfels
Hf	Hornfels
Volc	Volcanic
Ig	Igneous
Dior	Diorite
Gb	Gabbro
Ap	Andesite porphyry
An	Andesite (post-mineral)
Mz	Monzonite porphyry
Ak	Alaskite
Da	Dacite
Dp	Dacite porphyry
Mp	Metaporphyry
Fp	Felsite porphyry
Fr	Feldspathized rock
Qf	Quartz feldspar rock

Formations

Pif	Pima formation
Pgf	Papago formation
Kf	Kino formation

Structures

BR	Bedrock
frac	fracture
vlt	veinlet
vn	vein
gg	gouge
bx	breccia
flt	fault
peb	pebble
diss	disseminated
ct, cnt	contact
mtx	matrix
br	broken
sh	shear (ing) (ed)
jt	joint
por	porphyritic
fr,frag	fragment
bd,bed	bedding, bedded

Minerals

Cup	Cuprite
CuSi	Chrysocolla
CuOx	Copper Oxide
CuCo3	Malachite Azurite
Nat Cu	Native Copper
Suls	Sulphides
Cpy	Chalcopyrite
Cc	Chalcocite
Bn	Bornite
Cov	Covellite
Lim	Limonite
LLm	Live Limonite
Py	Pyrite
Hem	Hematite
Mag	Magnetite
Spec	Specularite
Sph	Sphalerite
Gal	Galena
Moly	Molybdenite

ABBREVIATIONS - Continued

Minerals - continued

Fl	Fluorite
Gar	Garnet
Feld	Feldspar
Qtz	Quartz
Biot	Biotite
Chl	Chlorite
Serp	Serpentine
Ep	Epidote
Act	Actinolite-tremolite
Diop	Diopside
Asb	Asbestos (asbestiform)
Wol	Wollastonite
Cal	Calcite
CO3	Carbonate
WO3	Tungstate
CaSiO3	Lime Silicates
Bar	Barite
Gyp	Gypsum
Smiths	Smithsonite
Calc	Calcareous
Si	Silica

Others

hor	horizontal
vert	vertical
sp	sparse
sc	scarce
r	rare
tr	trace
abun	abundant
num	numerous
sct	scattered
st	strong
mod	moderate
wk	weak
v	very
silf	silicified
sil	siliceous
cs	coarse
fg	fine-grained
mg	medium-grained
cg	coarse-grained
sd	sandy
slty	silty
PM	post mineral
min	mineral
xtl	crystal
rext	recrystallized
RB	Rock Bit
RoBit	Rotary Bit
trans	transitional
poss	possible
pat	patches
alt	altered, alteration
dk	dark
lt	light
blk, bl	black
wht, wh	white
gr	gray
brn	brown
pk	pink
grn	green
yel	yellow

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 7-9-65 | D D HOLE NO. M-135
PROPERTY Mission | DRILL GRID COORD N62+87.43 W27+38.32 | TOTAL DEPTH 764.4
COLLAR ELEV 3,187.1 | SURVEY COORD N364,910.39:E764,948.99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif	REMARKS
190.0	190.0	-	-	-				Alluv	Unconsolidated gravels
205.4	15.4	-	-	-				Cal Cgl	Caliche cemented cgl
214.1	8.7	2.45	87	.18	2970		.06	Arg	Top of bedrock @205.4
224.0	9.9	2.37	25	.28	217.1				@214 10 ft. of flt GG 40±°
236.1	12.1	2.62	64	.24					
246.9	10.8	2.44	88	.20					
257.0	10.1	2.54	69	.16	2930		.22		@258 10 ft of mod GG zones
267.6	10.6	2.57	60	.23	257.1				70±° Lt gry to dk gry-tan
277.5	9.9	2.60	42	.25					arg.
287.7	10.2	2.66	83	.09					
298.2	10.5	2.68	90	.11	2890		.17		
307.8	9.6	2.66	83	.11	297.1				
317.5	9.7	2.65	89	.14					@320 12ft of mod GG zones
325.6	8.1	2.58	90	.18					70±° below which an arkosic
333.2	7.6	2.53	95	.18	2850		.15	Ark Arg	facies of the arg is found
344.3	11.1	2.67	88	.13	337.1				
355.6	11.3	2.64	88	.10					
365.5	9.9	2.67	89	.19					
374.6	9.1	2.63	98	.11	2810		.13		
386.7	12.1	2.63	93	.06	377.1				Gry-tan arkosic arg with
395.3	8.6	2.61	93	.09					sp cgl zones entire run
407.9	12.6	2.61	93	.07					cont numerous GG flt zones
419.1	11.2	2.52	89	.22	2770		.11		@70°±
428.7	9.6	2.56	92	.20	417.1				
437.8	9.1	2.58	89	.22					
448.5	10.7	2.60	87	.15					
454.9	6.4	2.57	88	.21	2730		.18	And	Cnt @451.6 int
464.1	9.2	2.53	71	.03	457.1				Blk-porph post min And.
472.6	8.5	2.57	93	.06					Cnt-int @471.0
480.0	7.4	2.58	100	.09				Arg	Pale gry arg
485.6	5.6	2.74	73	1.17		0.90		Tt-Arg	Cnt @480 GG zone
495.8	10.2	2.65	95	.68	2690		.42	bx	Shattered bx often GG
503.4	7.6	2.78	93	1.45	497.1				Hem stained flt zone;mainly
513.6	10.2	2.73	100	1.14		1.17			Tt with arg first 20'
519.6	6.0	2.82	85	.91					Cnt @519.6-40° int
529.5	9.9	2.64	87	.12				And	
537.0	7.5	2.56	89	.02	2650		.69		25' int dk gry-grn post min
544.6	7.6	2.49	65	.16	537.1				And dike
550.1	5.5	2.73	90	.06				Serp	
558.7	8.6	2.75	93	.04				Mb	
564.9	6.2	2.79	94	.02					Wh Mb with mod flted serp
574.6	9.7	2.58	99	.02	2610		.06		zones @30°-40°
584.8	10.2	2.81	91	.02	577.1				
594.9	10.1	2.73	96	.02					
607.0	12.1	2.59	97	.04					Cnt@606 60° 1ft GG flt
617.2	10.2	2.68	88	.05	2570		.03	Ht-Tt	Grn-tan Tt & Hf stly flted
627.5	10.3	3.21	90	.03	617.1				cnt flt @55° @625.5
633.3	5.8	2.60	96	.04				Serp Mb	Wh to grn serp rich Mb
643.6	10.3	2.49	83	.02				C-Arg	
650.7	7.1	2.61	100	.03					Tan-pale grn. Feldspathic
660.5	9.8	2.59	95	.02	2530		.03		C-arg
670.0	9.5	2.90	89	.02	657.1				Alt incr with gar zones
680.6	10.6	3.08	91	.02				Tt-Arg	
688.2	7.6	3.34	88	.02					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 7-9-65 | D.D. HOLE NO M-135

PROPERTY Mission | DRILL GRID COORD N62+87.43 W27+38.32 | TOTAL DEPTH

COLLAR ELEV 3,187.1 | SURVEY COORD N364,910.39;E764,948.99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
698.3	10.1	3.16	98	.03	2490		.02		Zones of pale grn-wh Tt
705.6	7.3	2.70	96	.02	697.1				and C-Arg and sp pods of
714.0	8.4	2.99	99	.02					woll. vr wk suls
722.6	8.6	2.92	98	.02					
733.7	11.1	3.26	85	.02	2450		.02		
745.0	11.3	2.51	94	.01	737.1			Arg	Cnt 740.0-60° bkn and GG
755.5	10.5	2.72	89	.01					dk gry f.g. siliceous
764.4	8.9	2.72	50	.01					arg.
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3 | DATE COMPLETED 6-2-65 | D.D. HOLE NO. M-134
PROPERTY Mission | DRILL GRID COORD N26+96.43 W9+68.75 | TOTAL DEPTH 1286.8
COLLAR ELEV 3,064.7 | SURVEY COORD N361,346.93;E766,772.68 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
80.0	80.0	-	-	-				Alluv	Gravels & Caliche cgl
85.0	85.0	-	-	-				Arg	Top of bedrock approx 80.0'
96.0	11.0	2.45	69	.06	2970		.02		
101.9	5.9	2.56	65	.07	94.7				Base of oxide zone @102.0
108.3	6.4	2.71	62	.18					
117.7	9.4	2.64	81	.11					Gry siliceous f.g. arg
126.2	8.5	2.73	90	.11					
138.4	12.2	2.62	94	.17	2930		.13		
149.5	11.1	2.61	95	.10	134.7				
170.6	12.3	2.68	95	.06	2890		.09		
182.8	12.2	2.73	92	.08	174.7				
194.1	11.3	2.64	93	.08					Grade facies change
205.9	11.8	2.60	99	.11				Ark-Arg	
214.1	8.2	2.59	98	.08	2850		.09		
222.3	8.2	2.66	98	.09	214.7				
234.3	12.0	2.65	91	.08					
244.4	10.1	2.63	95	.08					
256.0	11.6	2.74	90	.10	2810		.09		
267.1	11.1	2.67	97	.12	254.7				
278.7	11.6	2.65	94	.17					
285.2	6.5	2.64	97	.13					
296.2	11.0	2.67	99	.21	2770		.16		
304.0	7.8	2.64	100	.09	294.7				
315.0	11.0	2.65	99	.04					f.g. to m.g. brnish gry
323.8	8.8	2.85	92	.24					arkosic arg wk cpy-py
333.5	9.7	2.63	97	.13	2730		.13		as vnlts diss.
345.8	12.3	2.61	98	.15	334.7				
354.1	8.3	2.66	94	.07					
361.5	7.4	2.60	97	.23					
368.9	7.4	2.70	97	.15					
377.1	8.2	2.69	98	.06	2690		.14		
389.3	12.2	2.61	94	.14	374.7				
400.7	11.4	2.67	99	.24					
405.9	5.2	2.67	94	.16					
416.0	10.1	2.62	97	.14	2650		.17		
426.3	10.3	2.61	98	.20	414.7				
436.5	10.2	2.67	98	.11					Cnt @441.7
446.7	10.2	2.84	91	1.31		1.39		Arg-Tt	
456.9	10.2	2.67	100	1.50	2610		.72		Arg with alt zones of
467.1	10.2	3.08	88	.65	454.7				stly chloritic Tt
477.2	10.1	2.73	100	.75		0.78			
487.3	10.1	3.04	88	.60					
492.3	5.0	3.35	94	1.22	2570		.78		Cnt @486.0-35°± 5ft st sul
502.5	10.2	3.17	96	.71	494.7			Hf	filled pre-sul flt bx
512.7	10.2	3.10	96	.44		0.59			
522.9	10.2	3.10	96	.66					
529.8	6.9	3.00	96	.56					
539.1	9.3	3.13	93	.38	2530		.56		
548.3	9.2	3.13	90	.28	534.7				
558.4	10.1	3.14	96	.28					
568.5	10.1	3.10	98	.12					Pale grn to wh f.g. Hf
578.7	10.2	3.11	97	.13	2490		.23		sp cpy-py
588.9	10.2	2.86	100	1.91	574.7				
599.0	10.1	3.10	97	.57		1.24			

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3
PROPERTY Mission
COLLAR ELEV 3,064.7

DATE COMPLETED 6-2-65
DRILL GRID COORD N26+96,43 W9+68.75
SURVEY COORD N361,346.93;E766,772.68

D D HOLE NO. M-134
TOTAL DEPTH 1286.8
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
609.1	10.1	3.26	93	.26	2450		.77		
619.3	10.2	3.09	97	.40	614.7	0.40			
629.4	10.1	3.50	91	.31					Slt change in alt min.
639.6	10.2	3.10	100	.51		0.51		Hf-Tt	
649.8	10.2	3.14	99	.23	2410		.36		
660.0	10.2	3.11	98	.39	654.7				
670.3	10.3	3.11	100	.77					
680.5	10.2	2.99	100	.41		0.55			
690.7	10.2	3.13	96	.52	2370		.55		Slt chg inalt min
700.8	10.1	3.15	94	.63	694.7	0.63			
708.6	7.8	3.13	96	.13					
718.8	10.2	3.20	95	.09					
727.4	8.6	3.10	95	.10					
737.7	10.3	3.05	96	.12	2330		.19		
747.9	10.2	3.08	97	.26	734.7				
758.0	10.1	3.11	99	.17					Pale grn to tannish grn
768.1	10.1	3.09	100	.94		0.88			f.g. Hf
778.2	10.1	3.10	100	.78	2290 774.7	0.78	.48		
788.4	10.2	3.10	99	.29					
798.6	10.2	3.07	97	.20					
808.7	10.1	3.12	97	.65		1.41			
818.9	10.2	3.12	95	2.68	2250 814.7		.76		
829.0	10.1	3.06	100	.86					
839.1	10.1	3.16	97	.75		1.15			
849.2	10.1	3.11	98	1.14					Slt chg in alt min
859.5	10.3	3.23	91	1.25	2210		1.15	Hf-Tt	
865.0	5.5	3.07	100	1.12					
875.3	10.3	3.01	92	.62		0.92			Pale grn to pink Hf with
883.8	8.5	3.10	90	.97					pods of gar alt mod cpy-py
894.0	10.2	3.05	93	.21	2170		.73		slt chg in alt min
904.0	10.0	3.03	100	.47	894.7	0.47			
913.8	9.8	3.02	100	.32				Tt	
923.9	10.1	3.09	97	.40		0.40			
934.0	10.1	3.17	96	.33	2130		.38		c.g. grn tan Tt
943.8	9.8	3.34	93	.37	934.7				
953.9	10.1	3.14	100	1.16					Cnt flt beginning @947.0
963.8	9.9	2.92	99	3.59		1.72			20°± sul-chlor-silica filled
968.5	4.7	3.32	88	.54				Hf	f.g lt tan Hf
978.6	10.1	3.32	88	.54	2090 974.7		1.41	Tt	Cnt 971.2-20° wk flt
988.0	9.4	3.32	94	.34					
998.2	10.2	3.12	96	.57		0.66			
1008.3	10.1	3.08	96	.97	2050		.66		C.g. grn tan Tt with st
1018.5	10.2	3.25	86	.88	1014.7				silica poss as fillings in
1028.7	10.2	3.47	85	1.08					wk Tt & Arg bx
1038.8	10.1	3.15	94	.65		1.79			
1048.5	9.7	3.11	100	4.95					
1058.8	10.3	2.93	94	.41	2010		1.79	Hf	
1066.1	7.3	2.78	96	.10	1054.7				Poss pre alt bx filled
1073.5	7.4	2.88	76	.51		0.51			with massive woll.
1083.6	10.1	3.03	100	.16					
1093.8	10.2	3.02	97	.04	1970		.24		Pale grn f.g. Hf
1104.1	10.3	3.03	95	.54	1094.7				
1114.3	10.2	3.16	94	1.25		1.05			Cnt entering zone of st
1124.6	10.3	3.13	88	.82				Hf-Tt bx	post-sul flting; over-lapping pre-sul flt zone.

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 6-2-65 | D D HOLE NO. M-134

PROPERTY Mission | DRILL GRID COORD N26+96.43 W9+68.75 | TOTAL DEPTH 1286.8

COLLAR ELEV 3,064.7 | SURVEY COORD N361,346.93;E766,772.68 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1133.7	9.1	2.96	92	1.66	1930		1.05		Wedges of f.g. soft wh Hf
1139.8	6.1	3.08	96	.50	1134.7	0.97			& lt brn grn Tt in st low
1149.9	10.1	3.35	84	1.20					+ post sul & pre sul flt
1159.7	9.8	2.60	96	.07				Arg-Tt	zone.
1169.8	10.1	2.51	100	.03	1890		.40	bx	Wedges of f.g. lt gry
1180.1	10.3	2.69	100	.09	1174.7				siliceous arg & grnish
1189.9	9.8	2.63	100	.09					brn m.g. Tt in cont of
1199.9	10.0	2.66	96	.03				Arg bx	above flt zone
1209.9	10.0	2.63	96	.02	1850		.05		
1222.2	12.3	2.67	95	.05	1214.7				
1226.2	4.0	2.63	100	.03					f.g. gry siliceous arg bx
1238.6	12.4	2.55	91	.04					no pre-sul movement seen
1248.7	10.1	2.68	85	.02	1810		.04		below 1189.9; bx matrix
1258.6	9.9	2.63	99	.05	1254.7				stly chloritic.
1267.3	8.7	2.61	95	.03					St G.G zones where bx
1276.7	9.4	2.62	96	.03					becomes gran rep. main
1286.8	10.1	2.60	97	.03				Gran bx	part basement flt.

Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3 | DATE COMPLETED 5-24-65 | D.D. HOLE NO. M-132
PROPERTY Mission | DRILL GRID COORD. N27+35.03 W7+33.59 | TOTAL DEPTH 1305.6
COLLAR ELEV 3,081.6 | SURVEY COORD N3(1,389.08;E767,007.23 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
107.5	107.5							Alluv	Unconsolidated Gravels
110.0	2.5	-	-	-	2970		.07	Arg	Top of bed rock @107.5
121.7	11.7	2.56	78	.17	111.6				
132.2	10.5	2.63	45	.09					Base of oxide zone @
143.1	10.9	2.66	73	.12					124.0.
150.9	7.8	2.67	89	.10	2930		.12		
158.8	7.9	2.63	98	.09	151.6				
168.4	9.6	2.70	92	.15					
177.8	9.4	2.73	98	.08					
188.0	10.2	2.72	93	.18	2890		.13		
197.2	9.2	2.54	85	.18	191.6				
207.1	9.9	2.61	100	.17					
217.6	10.5	2.63	94	.17					
226.6	9.0	2.69	93	.43		0.43			
236.3	9.7	2.57	95	.24	2850		.24		
245.7	9.4	2.54	94	.23	231.6				
254.6	8.9	2.55	98	.14					
264.4	9.8	2.57	96	.22					
274.3	9.9	2.64	100	.46	2810	0.46	.25		Lt. gry f.g. to m.g.
283.1	8.8	2.67	84	.28	271.6				siliceous arg. wk cpy-py
291.9	8.8	2.66	90	.31					as diss & vnlts.
300.0	8.1	2.68	97	.35					
310.3	10.3	2.58	97	.33	2770		.32		
323.0	12.7	2.67	95	.12	311.6				
333.2	10.2	2.62	96	.22					
343.8	10.6	2.64	96	.24					
352.7	8.9	2.71	96	.15	2730		.18		
363.0	10.3	2.64	97	.18	351.6				
368.0	5.0	2.64	99	.37					
377.7	9.7	2.62	99	.17					
387.8	10.1	2.64	96	.25					
397.7	9.9	2.66	97	.11	2690		.21		
408.1	10.4	2.63	96	.15	391.6				
418.0	9.9	2.57	99	.13					
426.7	8.7	2.56	96	.12					
435.7	9.0	2.65	90	.55	2650	0.55	.18		Grad. Facies change
447.8	12.1	2.67	93	.18	431.6			Ark-	
456.0	8.2	2.62	94	.07				Arg	Lt. brnish to tannish gry
469.2	13.2	2.63	99	.14	2610		.18		arkosic arg.
476.3	7.1	2.69	97	.19	471.6				Cnt @480.9-45° wk slip
486.3	10.0	2.67	94	.12				Fp	
496.3	10.5	2.62	98	.07					Lt gry felsite porphyry,
506.0	9.2	2.60	98	.08				Ark-	wk min. Cnt 498.6 hazy grad
511.5	5.5	2.59	100	.08	2570		.10	Arg	cnt Arg & Fp
519.3	7.8	2.59	98	.04	511.6				
528.6	9.3	2.60	97	.09					Lt. to dk gryish brn arkosic
533.1	4.5	2.62	100	.03					arg occas. Sp pebble frags
542.0	8.9	2.58	97	.09					
548.1	6.1	2.56	99	.05	2530		.05		
558.1	10.0	2.63	100	.05	551.6				
568.3	10.2	2.68	96	.03					
579.9	11.6	2.66	97	.04					Grad facies change
592.0	12.1	2.69	96	.03	2490		.04	Arg-	
600.9	8.9	2.66	99	.08	591.6			cgl	

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3 | DATE COMPLETED 5-24-65 | D.D HOLE NO. M-132
PROPERTY Mission | DRILL GRID COORD N27+35.03 W7+33.59 | TOTAL DEPTH 1305.6
COLLAR ELEV 3,081.6 | SURVEY COORD N361,389.08;E767,007.23 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
612.6	11.7	2.59	98	.07					
625.5	12.9	2.65	97	.27	2450		.13		Lt. to dk gryish brn
638.3	12.8	2.63	94	.03	631.6				pebble cgl with occas.
648.0	9.7	2.59	94	.04					arkosic inters.
658.5	10.5	2.63	100	.01					
666.0	7.5	2.62	100	.03					
672.0	6.0	2.61	99	.05	2410		.03		
682.1	10.1	2.64	99	.08	671.6				
692.0	9.9	2.59	99	.05					
702.0	10.0	2.63	98	.07					
712.2	10.2	2.62	98	.07	2370		.07		Incr. alt.
724.7	12.5	2.69	97	.28	711.6			Ark-	
734.7	10.0	2.63	100	1.00				Arg.	Above rock with orig text
744.7	10.0	2.80	95	.90		1.40			part obscured.
752.0	7.3	2.70	99	2.08	2330		.92		
762.2	10.2	3.25	96	1.15	751.6			Tt	Cnt @753.8-65° st gyp
772.5	10.3	3.09	98	2.03		1.43			filled slip
782.4	9.9	3.11	100	1.23					
792.4	10.0	3.33	95	1.24	2290		1.43		
799.8	7.4	3.28	94	.57	791.6				Chlor & epid rich tactite,
805.6	5.8	2.97	100	.85		0.72			brn c.g. to grnish f.g.
815.8	10.2	3.45	92	.45					
826.0	10.2	3.43	100	.91					
836.2	10.2	3.39	98	.87	2250 831.6		.72		
846.4	10.2	3.13	89	1.17		1.56			Cnt Grad
856.6	10.2	2.76	100	2.27				CArg.	f.g. siliceous feld rich Arg
866.8	10.2	2.63	99	.26				And	Cnt @855.6-80°+-intrusive
869.3	2.5	2.63	100	.04	2210		1.07		blk mag rich Andisite dike
877.0	7.7	2.73	99	.47	871.6	0.73		C.Arg.	f.g. siliceous feld rich
882.7	5.7	2.70	100	.97					arg cnt @869.2-65° intrus.
891.8	9.1	2.65	86	.02				And	blk mag rich post mineral
901.2	9.4	2.64	100	.01					andisite dike
909.3	8.1	2.67	99	.01	2170		.26		cnt @909.3-75° intrusive
916.8	7.5	3.15	92	.87	911.6	0.99		Tt	pale grn to grn tan Tt
925.2	8.4	2.92	100	1.07					cnt @925.2-50° intrusive
930.5	5.3	2.65	98	.04				And	
941.3	10.8	2.65	98	.04					
950.3	9.0	2.65	95	.04	2130		.36		Blk mag rich post min
962.8	12.5	2.68	95	.04	951.6				andisite dike.
972.3	9.5	2.64	99	.03					
982.2	9.9	2.67	96	.03					
988.4	6.2	2.62	100	.08	2090		.05		Cnt @951.0
998.4	10.0	2.73	99	.11	991.6			Qtzt	
1007.6	9.2	2.65	95	.23				or	
1011.9	4.3	2.62	100	.04				CArg	
1022.0	10.1	2.69	95	.06					Lt gry to lt grnish & tan
1032.0	10.0	2.75	100	.26	2050		.15		mottled, f.g. higly silic.
1038.4	6.4	2.78	100	.48	1031.6	0.53			impure qtzt or arg
1048.5	10.1	2.78	98	.56					referred to as C.Arg.
1058.5	10.0	2.82	95	.08					
1068.5	10.0	2.66	95	.10	2010		.27		
1078.5	10.0	2.62	100	.08	1071.6				
1086.6	8.1	2.64	96	.04					
1098.0	11.4	2.65	100	.26					Cnt @1098.0-45° 5" pre min
								Tt	flt bx.

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 5-24-65 | D D HOLE NO. M-132
PROPERTY Mission | DRILL GRID COORD N27+35.03 W7+33.59 | TOTAL DEPTH 1305.6
COLLAR ELEV 3,081.6 | SURVEY COORD N361,389.08;E767,007.23 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1107.0	9.0	3.29	100	.23	1970		.18	Tt	
1117.3	10.3	2.91	87	.27	1111.6				
1126.6	93.	3.22	97	.07					
1136.9	10.3	3.30	96	.07					
1147.2	10.3	3.00	100	1.15		1.28			
1157.4	10.2	3.31	91	1.60	1930		.55		Lt grn-tan Tt with
1162.5	5.1	3.34	100	.36	1151.6	1.14			sp zones of massive qtz
1172.7	10.2	3.07	98	1.26					& fled. Mod to st cpy &
1184.9	12.2	3.08	99	.11	1890		.83		py as diss vnlts & blebs.
1195.3	10.4	3.16	100	1.15	1191.6				
1205.3	10.0	2.97	100	1.81		1.40			
1215.3	10.0	3.07	100	1.15					
1226.0	10.7	3.45	85	1.35					Cnt @1208.5-30° 18 flt of
1233.1	7.1	2.64	95	.07	1850		1.22	Arg	st pre sul flt bx
1240.8	7.7	2.67	94	.04	1231.6				
1250.8	10.0	2.62	97	.03					Dk gry f.g. to m.g. vr
1258.3	7.5	2.63	97	.10					sltly reddish arg.
1265.0	6.7	2.69	91	.02					
1273.3	8.3	2.66	94	.03	1810		.05		
1284.8	11.5	2.57	92	.01	1271.6			ArgBx	
1293.4	8.6	2.61	97	.02					m.g. stly chlor & ser rich
1305.6	12.2	2.64	94	.02					arg with st bx @40-70°
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 1 | DATE COMPLETED 5-12-65 | D.D HOLE NO. M-133
PROPERTY Mission | DRILL GRID COORD. N56+87.36 W21+28.13 | TOTAL DEPTH 705.6
COLLAR ELEV 3,189.4 | SURVEY COORD. N364,319.98;E765,568.19 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0							Alluv	Uncemented gravels
215.6	15.6	-	-	-				CaDgl	caliche cemented cgl
223.7	8.1	2.46	94	.07	2970		.01	Cgl	
232.5	8.8	2.50	47	.07	219.4				Lt gry siliceous pebble
243.2	10.7	2.47	52	.08					cgl, stly alt
254.9	11.7	2.58	92	.06	2930		.07	TtC gl	
263.0	8.1	2.62	92	.07	259.4				
272.4	9.4	2.63	96	.04					Above pebble cgl with
279.6	7.2	2.65	95	.16					pods of gar & epid alt.
289.5	9.9	2.59	83	.25					
299.1	9.6	3.36	92	.78	2890	0.78	.30	Tt	Cnt grad
310.9	11.8	3.34	99	.15	299.4				
322.3	11.4	3.43	96	.08					
333.8	11.5	3.21	100	.37					Lt brn vr sltly grnish
340.2	6.4	3.60	74	.28	2850		.21		f.g. to c.g. gran Tt
350.3	10.1	3.52	89	1.55	339.4	1.55			
362.0	11.7	3.44	93	.10					
370.8	8.8	3.12	97	.28					
382.9	12.1	2.52	100	.96	2810	0.96	.69	Cgl	Cnt @373.5-50± stly alt
391.0	8.1	2.70	94	.31	379.4				& min.
403.6	12.6	2.62	98	.33					
414.5	10.9	2.63	93	.66		0.66			
423.7	9.2	2.57	90	.05	2770		.44		
435.2	11.5	2.60	98	.32	419.4				
445.7	10.5	2.58	97	.03					
454.1	8.4	2.59	100	.02					
461.4	7.3	2.57	95	.03	2730		.11		
468.6	7.2	2.62	93	.05	459.4				Lt gry stly alt pebble
479.5	10.9	2.62	95	.07					cgl st min near Tt cnt
489.7	10.2	2.58	99	.08					below sp py, tr cpy as vnlt
500.4	10.7	2.60	96	.02	2690		.06		& diss. St plting seen
510.6	10.2	2.58	97	.02	499.4				at 30±
524.4	13.8	2.61	93	.03					
535.4	11.0	2.55	100	.03					
542.6	7.2	2.54	97	.03	2650		.03		
555.1	12.5	2.66	96	.03	539.4				
564.0	8.9	2.58	92	.03					
573.2	9.2	2.49	94	.03					
583.4	10.2	2.56	100	.04	2610		.03		
595.0	11.6	2.57	95	.04	579.4			Sltst	Cnt @586.0-20°-6' of st
607.8	12.8	2.68	87	.04					flting
619.3	11.5	2.69	61	.04	2570		.04		Gry vr wkly alt siltstone
630.9	11.6	2.66	71	.01	619.4				
640.9	10.0	2.63	89	Nil					Cnt grad
652.9	12.0	2.64	71	Nil				Ark	
663.8	10.9	2.70	60	Nil	2530		Nil		c.g. gry vr wkly alt arkose
673.5	9.7	2.60	89	.01	629.4				cnt grad
682.2	8.7	2.74	92	.02				Cgl	
693.9	11.7	2.66	95	.03					Tan stly alt (epid chlor
705.6	11.7	2.66	90	.03	2490		.02		feld) pebble cgl
					699.4				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 4-29-65 | D.D HOLE NO. M-131
PROPERTY Mission | DRILL GRID COORD N61/55.56 W26/14.76 | TOTAL DEPTH 801.3
COLLAR ELEV 3,183.6 | SURVEY COORD N364,780.77;E765,074.58 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
185.0	185.0							Alluv	Unconsolidated Gravels
199.3	9.3	-	-	-				CalCgl	Caliche cemented cgl
211.5	12.2	2.47	70	.05	2970		.08	Arg	Bedrock @199.3
219.8	8.3	2.57	87	.09	213.6				Base of oxide zone @213.5
230.2	10.4	2.59	90	.05					
241.3	11.1	2.58	93	.29					Lt gry m.g. siliceous
250.3	9.0	2.54	85	.23	2930		.29		arg sp cyp-py as diss &
258.8	8.5	2.62	74	.23	253.6				vnlts.
268.0	9.2	2.58	80	.30					
276.5	8.5	2.60	73	.32					Cnt @286.5-bkn poss flt
286.5	10.0	2.58	43	.35					pale grn
290.1	3.6	2.66	100	.59		0.59		Hf	Intru And£site dike 35°±
295.2	5.1	2.57	100	.03	2890		.31	And	Dense hem rich Tt
304.9	9.7	2.70	92	.34	293.6			Tt	
314.5	9.6	2.84	100	1.56		1.56			
324.7	10.2	2.71	69	.36				Hf	Cnt @316.5 grad.
334.3	9.6	2.93	62	.22	2850		.60		Lt pale grn Hf
345.9	11.6	3.08	84	.22	333.6				@327.0 50°± 2 ft. st flt
357.0	11.1	3.01	97	.78		0.78			Cnt @358.0 3.5 ft st hem
365.7	8.7	3.47	80	.22				Tt	filled flt zone
376.0	10.3	3.40	94	.05	2810		.34		
386.1	10.1	3.51	94	2.35	373.6				Grnish brn m.g. to f.g.,
396.3	10.2	3.37	93	7.76		4.49			stly min Tt. Zn incr to
406.5	10.2	3.38	92	4.18					massive near end of Tt.
416.0	9.5	3.20	96	3.29	2770		4.22		Cnt 413.0 20° flt
427.2	11.2	3.02	56	1.40	413.6	1.33		Hf Bx	St flt GG & bx in lt tan
433.3	6.1	2.42	91	.42					Hf.
439.8	6.5	2.63	88	.03				Mb	Cnt-flt bx becomes Mb
448.8	9.0	2.81	95	.01					@433.0
456.9	8.1	2.83	93	.02	2730		.66		
467.3	10.4	2.78	92	.02	453.6				
476.7	9.4	2.63	88	.02					
488.6	11.9	2.75	93	.01					Flt beginning @413.0 cont.
498.0	9.4	2.73	92	.01	2690		.02		to bottom of wh f.g. Mb.
507.0	9.0	2.71	83	.01	493.6				Mod flt GG zones through-
519.0	12.0	2.52	94	.01					out Mb contain massive
532.6	13.6	2.89	88	.64		0.64			serp.
539.7	7.1	2.78	90	.01	2650		.22		
550.5	10.8	2.74	92	.03	533.6				
555.0	4.5	2.73	64	.05					
563.8	8.8	2.81	86	.02					
574.1	10.3	2.62	96	.02	2610		.03	CArg	
584.4	10.3	2.63	93	.03	573.6				
592.1	7.7	2.64	100	.03					
596.5	4.4	2.64	86	.02					Pale grn to tan siliceous
606.3	9.8	2.63	99	.02					occasionally wkly
616.5	10.2	2.67	98	.02	2570		.03		calcareous Arg. with pods
626.9	10.4	2.70	95	.03	613.6				of Hf woll-Mb
630.8	3.9	2.67	94	.03					
640.3	9.5	3.11	93	.03					
649.4	9.1	2.73	100	.20	2530		.04		
659.7	10.3	2.70	99	.12	653.6				
662.8	3.1	2.64	100	.03					
670.7	7.9	2.92	99	.76		0.76			Cnt 670.7 40° pre-sul
681.6	10.9	2.71	56	.12				Arg	(filled with cpy stringers)

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 4-29-65 | D D HOLE NO. M-131
PROPERTY Mission | DRILL GRID COORD N61/55.56 W26/14.76 | TOTAL DEPTH 801.3
COLLAR ELEV 3,183.6 | SURVEY COORD N364,780.77;E765,074.58 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif	REMARKS
690.0	8.4	2.69	82	.01	2490		.21		Dk gry Ark to cgl arg
700.1	10.1	2.71	71	.02	693.6			Arg	cnt @698.0-30° stly alt
712.8	12.7	2.67	95	.03				(ed bed	
723.3	10.5	2.61	100	.03					
733.8	10.5	2.59	93	.05	2450		.03		Reddish tan f.g. silt.
743.7	9.9	2.60	84	.04	733.6				with sp. cglitic ints
753.4	9.7	2.65	100	.03					st. feld epid alt sp py
764.4	11.0	2.67	86	.04					
775.2	10.8	2.63	92	.06	2410		.04		
787.6	12.4	2.64	78	.03	773.6				
801.3	13.7	2.79	90	.03					

Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2
PROPERTY Mission
COLLAR ELEV 3,203.5

DATE COMPLETED 4-22-65
DRILL GRID COORD. N53+93.29 W27+29.58
SURVEY COORD. N364,016.85;E764,971.26

D.D. HOLE NO. M-130
TOTAL DEPTH 804.6
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0							Alluv	Unconsolidated gravels
209.5	9.5	-	-	-				CaCgl	caliche cemented gravels
220.2	10.7	2.50	77	.17				Arg	Top of bedrock @209.5
229.8	9.6	2.61	36	.18	2970		.11		Base of oxide @229.5
238.4	8.6	2.65	96	.19	233.5				
250.8	12.4	2.62	90	.22					
260.6	9.8	2.61	87	.22					
266.9	6.3	2.67	90	.14					
277.0	10.1	2.63	56	.11	2930		.19		f.g. arg stly bleached
285.9	8.9	2.62	90	.12	273.5				to lt gry with sp dk gry
295.9	10.0	2.67	93	1.43		1.43			rems. Wk to sp cpy-py
303.7	7.8	2.63	96	.17					as diss & vnlts.
311.7	8.0	2.67	96	.32	2890		.50		
323.5	11.8	2.69	96	.16	313.5				
334.9	11.4	2.58	95	.22					
346.4	11.5	2.58	74	.27					
354.0	7.6	2.60	90	.12	2850		.20		Grad incr in gran size.
362.2	8.2	2.63	98	.12	353.5			ArgArk	
368.4	6.2	2.71	94	.12					
377.5	9.1	2.62	97	.11					
387.8	10.3	2.65	95	.15					
396.7	8.9	2.64	95	.14	2810		.11		
405.6	8.9	2.59	99	.12	393.5				
417.3	11.7	2.73	96	.14					
425.3	8.0	2.70	92	.16					A coarser grained facies
434.7	9.4	2.59	95	.16	2770		.14		of the above arg.
444.0	9.3	2.61	99	.26	433.5				
454.8	10.8	2.58	79	.20					
464.4	9.6	2.55	88	.24					
475.8	11.4	2.49	90	.47	2730	0.47	.28		
484.2	8.4	2.61	94	.11	473.5				
489.5	5.3	2.60	96	.27					Cnt @489.5 st 3" flt-70°
495.7	6.2	2.74	84	.09				Tt Bx	hem & chlor healed Tt bx
505.7	10.0	3.20	89	.81		0.81			cnt grad.
509.3	3.6	2.77	94	.04				MbWoll	
518.5	9.2	2.70	100	.39	2690		.35		Wh Mb with pods of woll
528.6	10.1	2.81	92	.22	513.5				& Trem
538.6	10.0	2.85	90	.10					Cnt @538.6, bkn&gg-8°
548.6	10.0	3.54	100	2.81	2650	4.13	1.67	Tt	Dense grnish brn f.g. to
560.5	11.9	3.42	100	6.81	553.5	5.44			c.g. granular hem & chlor
571.3	10.8	3.29	97	4.55					rich stly min. Tt
573.5	2.2	2.69	100	.02				Mb	
582.3	8.8	3.34	93	.53				Tt	
588.6	6.3	2.79	100	.04				Mb	
598.6	10.0	2.69	95	.02	2610		2.58		Stly flted at 30°+
608.6	10.0	2.61	99	.02	593.5				with wedges of Hf
618.6	10.0	2.79	94	.05					Mb & Tt flt zone cont
626.3	7.7	2.67	91	.07					arg below to 649
638.5	12.2	2.87	98	.03	2570		.04	Hf& Tt	
648.9	10.4	2.65	95	.03	633.5				
660.4	11.5	2.64	98	.02				Arg	Lt gry vr stly alt arg
668.6	8.2	2.58	89	.02					
678.6	10.0	2.60	100	.03	2530		.03	And	Black int post min Andsite
687.0	8.4	2.70	100	.02	673.5				dike - 60°+
								Cgl	

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 4-22-65 | D.D. HOLE NO. M-130
PROPERTY Mission | DRILL GRID COORD. N53+93.29 W27+29.58 | TOTAL DEPTH 804.6
COLLAR ELEV 3,203.5 | SURVEY COORD. N364,016.85;E764,971.26 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
697.7	10.7	2.78	86	.01				Silt	
707.4	9.7	2.73	76	.01	2490		.02		
717.6	10.2	2.61	96	.02	713.5			Ark	
724.6	7.0	2.64	93	.02					
732.6	8.0	2.66	96	.02					
742.8	10.2	2.67	98	.01					Interbedded silit to
752.2	9.4	2.67	96	.01	2450		.01		Arkosic to cglitic facies
765.2	13.0	2.75	89	Nil	753.5			Silt	of a lt gry vr wkly alt
774.0	8.8	2.68	98	.01				Ark	arg. Alt min are ser-chlor
781.0	7.0	2.68	95	.01					& Tr py.
788.7	7.7	2.68	100	.02	2410		.01	Silt	Facies changes @30°
800.4	11.7	2.69	92	.01	793.5			& Cgl	
804.6	4.2	2.69	94	.01					
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 4-12-65 | D.D. HOLE NO. M-129
PROPERTY Mission | DRILL GRID COORD N53/76.55 W24/78.07 | TOTAL DEPTH 925.7
COLLAR ELEV 3,200.5 | SURVEY COORD N364,003.91;E765,222.99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0	-	-	-				Gra.	Gravel O.B. top Cal-Cgl 200'
223.8	13.8	-	-	-				C-Cgl	Lime cemented Cgl, top B.R. 223.8
231.5	7.7	2.81	94	.53	2970	0.53	.09	Hf	Base of ox 231.5'
240.3	8.8	2.75	75	.51	230.5	0.52			Wk leached, lt gr Hf
250.2	9.9	2.95	96	.53		0.07 N.S.			8"-60° flt @232.0'
262.9	12.7	2.92	86	.14				Hf &	
273.2	10.3	3.06	91	.05	2930		.31	Tt	Lt tan Hf with pods Tt
283.3	10.1	3.36	94	.07	270.5				wk diss cpy-py, sp feld
292.8	9.5	3.10	100	.03					wk hem-chlor
302.1	9.3	3.15	92	.05					
309.6	7.5	3.21	90	.10	2890		.06	Hf	
319.7	10.1	3.18	94	.18	310.5				
323.9	4.2	3.09	99	.14					Pale grn Hf wk suls
333.7	9.8	3.14	93	.09					Tr chlor-hem, wk silica
344.2	10.5	3.28	90	.03					Tr feld.
355.0	10.8	3.08	89	.03	2850		.09		
364.8	9.8	3.37	90	.06	350.5				Grad cont @368'
374.9	10.1	3.48	94	.08				Tt	
384.8	9.9	3.55	94	.04					
394.9	10.1	3.43	96	.27	2810		.09		St 6"-50° flt bx @394'
405.0	10.1	3.24	100	.10	390.5				6"-50° flt @405'
415.2	10.2	2.95	88	.09					Tan-lt grn, granular
421.0	5.8	2.89	86	.10					Soft Tt
428.4	7.4	2.57	99	.51	2770	0.51	.19		St-40° flt zone begin @424'
437.3	8.9	2.73	96	.06	430.5			Mb	5'-35° of pre min shear@437'
447.7	10.4	2.64	96	.14					White-gry relized L.S.
453.8	6.1	2.71	93	.02					1 ft-50° premin flt cont@354'
457.3	3.5	2.91	100	1.27				Tt	
467.5	10.2	2.81	100	2.05		1.96			Granular grn Tt
470.4	2.9	3.52	87	2.47	2730		.87		St 6.5ft, 30° premin, flt
477.5	7.1	2.67	99	Nil	470.5			Mb	bx @464'
487.8	10.3	2.69	92	Nil					
496.2	8.4	2.70	100	Nil					White-blue gry
506.2	10.0	2.66	98	Nil	2690		N.L		Re-xlized L.S.
516.3	10.1	2.72	95	Nil	510.5				
526.4	10.1	2.69	99	Nil					
536.6	10.2	2.75	93	.02					Sharp 30° flt cont of wh Mb
546.3	9.7	2.66	100	.03					& blue-gry Mb @531'
552.3	6.0	2.71	91	.01	2650		.01		
562.6	10.3	2.77	78	.01	550.5			Mb Serp	Serp-Mb-tr qtzt
567.9	5.3	2.80	100	.02				Mb	1.7'-15° flt zone @568'
571.5	3.6	3.14	81	.02				Tt	
581.3	9.8	3.14	95	.02					Dense brn gar, wk suls
591.3	10.0	3.30	91	.02	2610		.02		
600.7	9.4	2.62	100	.03	590.5				St serp filled flt bx @592'
610.9	10.2	3.12	96	.02				Tt	Cont bx with frags C-Arg
616.7	5.8	2.73	92	.03				C-Arg	F.G. feldspathic C-Arg & Tt
626.7	10.0	2.73	97	.03					5ft well filled bx zone 30°
631.9	5.2	2.69	92	.13	2570		.04		2ft-30° healed flt cont@630'
639.8	7.9	2.66	99	.08	630.5				Lt gry-tan feldspathic-Arg
649.3	9.5	2.76	99	.11					
656.9	7.6	2.65	77	.10				Ark	
667.1	10.2	2.69	55	.10	2530		.09	Arg	5ft-20° st bx zone @682'
677.7	10.6	2.69	77	.03	670.5				M.G.-C.grained-Ark-Arg
687.3	9.6	2.61	57	.04					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2
PROPERTY Mission
COLLAR ELEV 3,200.5

DATE COMPLETED 4-12-65
DRILL GRID COORD N53/76.55 W24/78.07
SURVEY COORD N364,003.91;E765,222.99

D D HOLE NO. M-129
TOTAL DEPTH 925.7
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
697.2	9.9	2.69	51	.03				Arg	
708.2	11.0	2.69	85	.05	2490		.04	Red	F.G.-lt tan-red sltst with
719.3	11.1	2.65	88	.04	710.5			Beds	wk interbedded Cgl.
731.2	11.9	2.50	69	.03				Arg	1 ft-50° flt bx @725
741.8	10.6	2.65	87	.02					
751.6	9.8	2.71	92	.01	2450		.03		8"-20° flt bx @746'
762.2	10.6	2.68	89	.01	750.5				6"-50° flt @752.8
772.8	10.6	2.71	95	.01					Gry-M.G.-slty, chloritic
782.0	9.2	2.73	48	.02					& feld spathic arg
792.2	10.2	2.69	95	.02	2410		.01		
803.6	11.4	2.70	92	.01	790.5				6" Bx zone @799'
812.7	9.1	2.70	96	.02				Ark	
821.6	8.9	2.67	91	.02				Arg	Dk gry, M.G. Ark-Arg
831.6	10.0	2.61	91	.01	2370		.02		Wk F.G. Blk sltst
844.6	13.0	2.67	97	.01	830.5				Facies & cgl zones
854.6	10.1	2.69	99	.02					
865.2	10.5	2.67	98	.02	2330		.02	Cgl	Course grned pebble cgl
876.4	11.2	2.76	92	.03	870.5			Arg	8"-50° flt GG @876'
886.4	10.0	2.65	99	.03					Dk gry F.G. Arg
896.7	10.3	2.66	90	.01					
906.4	9.7	2.67	97	.03	2290		.03		4"-70° flt @900'
916.8	10.4	2.62	98	.05	910.5			Arg	
925.7	8.9	2.64	99	.04				Red	Tan-red feldspathic sltst
								Bed	

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 4-6-65 | D D HOLE NO. M-128
PROPERTY Mission | DRILL GRID COORD N57/04.41 W27/27.36 | TOTAL DEPTH 795.6
COLLAR ELEV 3,194.7 | SURVEY COORD N364,328.96; E764,968.75 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
191.0	191.0							Alluv	Unconsolidated gravels
208.1	18.1	-	-	-				CalCgl	Caliche cem cgl
219.8	11.7	2.54	93	.87	2970	0.74	.31	Arg	Top of bedrock @208.1
230.9	11.1	2.85	88	.44	224.7	0.42			Lt gry m.g. arg, alt
239.1	8.2	2.63	97	.40					incr with depth.
251.2	12.1	2.67	94	.25					Base poxide zone @219.0
262.4	11.2	2.98	83	.60	2930	0.58	.42	Hf &	cnt low py filled shear
271.2	8.8	3.00	100	.46	264.7	0.43		Arg(?)	zone
279.4	8.2	2.87	97	.40					Lt tan wh Hf with sp pods
287.1	7.7	2.96	93	.32					of gar & wk rems of Arg(?)
296.9	9.8	3.00	93	.44		0.44			
306.4	9.5	2.80	100	.33	2890		.39	Hf	Grad end of Arg(?) rems.
315.4	9.0	3.08	96	.17	304.7				Lt tan-wh Hf with sp gar.
325.6	10.2	3.00	100	.38				Tt	Grad incr of gar.
332.4	6.8	3.30	91	.20					Lt brn c.g. gran Tt
342.6	10.2	2.80	100	.22	2850		.26		Cnt @642.4-25° 6" st presul
350.9	9.3	2.56	94	.40	344.7	0.40		Arg	flt. Lt gry f.g. siliceous
358.6	7.7	2.58	97	.28					arg.
371.3	12.7	2.54	95	.20				Arg Tt	
378.6	7.3	2.96	95	.31					Wedges & pods of epid Tt
388.9	10.3	2.66	90	.18	2810		.26		in lt gry f.g. stly alt
396.2	7.3	3.29	82	.26	384.7				arg.
404.9	8.7	3.10	96	.07				Tt	Cnt @392.5-10° pre alt slip
415.0	10.1	3.04	100	.02					zone.
425.3	10.3	3.28	93	.40	2770	0.40	.18		
437.0	11.7	3.20	97	.09	424.7				
444.6	7.6	3.39	93	.21					
457.2	12.6	3.43	89	.18					Lt brn-tan gran soft Tt
467.3	10.1	3.36	92	.26	2730		.18		last 35' has st trem &
472.4	5.1	3.33	81	.21	464.7				zones of Hf
482.5	10.1	2.79	100	.17					
491.7	9.2	3.25	94	.04					
502.7	11.0	3.06	100	.44	2690	0.44	.23	Tt	Cnt @495.6-45° 5 ft flt
512.9	10.2	3.36	100	.20	504.7				zone with GG & bx zones
524.2	11.3	3.60	96	.24					
534.0	9.8	3.35	100	.57		0.77			Grn-brn f.g. to hem red
545.4	11.4	2.94	100	.95	2650		.50		f.g. Tt
554.9	9.5	3.39	95	.49	544.7				
564.6	9.7	3.17	93	4.45		2.67			
574.4	9.8	3.50	86	3.15					Cnt @555.0 70° ∠ 19.9 ft of
578.6	4.2	2.74	94	.04				Mb	vr stly banded suls filling
588.1	9.5	2.73	96	.19	2610		2.02		poss pre sul flt GG
598.4	10.3	2.75	92	.03	584.7				
611.7	13.3	2.71	99	.05					
621.9	10.2	2.67	90	.03	2570		.05		Wh f.g. Mb showing serp
632.0	10.1	2.73	100	.03	624.7				filled lineation with
642.0	10.0	2.64	100	.01					occasional angular frags
652.4	10.4	2.74	100	.02					of serp also lineated.
665.0	12.6	2.73	89	.02	2530		.02		Cnt @663.7-30°, 1 ft GG
676.4	11.4	2.72	87	.03	664.7			Arg	flt bx
688.3	11.9	2.65	100	.05				red-bal	
698.6	10.3	2.66	96	.04	2490		.04		f.g. siltstone, dk gry to
710.3	11.7	2.75	93	.04	704.7				pale reddish with mod
720.8	10.5	2.69	78	.03					second-feld & sp blebs
730.8	10.0	2.64	59	.04					of epid

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 4-6-65 | D.D. HOLE NO. M-128
PROPERTY Mission | DRILL GRID COORD N57/04.41 W27/27.36 | TOTAL DEPTH 795.6
COLLAR ELEV 3,194.7 | SURVEY COORD N364,328.96;E764,968.75 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
740.8	10.0	2.68	92	.08	2450		.05		Grad cnt
751.0	10.2	2.59	91	.08	744.7			Cgl	Vr c.g. pebble cgl
756.7	5.7	2.66	100	.07					Grad cnt.
766.0	9.3	2.63	80	.04				Arg	
775.6	9.6	2.66	92	.06				Siltstone	Dk gry f.g. siltstone
787.9	12.3	2.69	97	.05	2410		.06		wkly alt short 3 ft cgl
795.6	7.7	2.84	95	.03	784.7				facies @778.0, bedded@20°
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 3-22-65 | D.D. HOLE NO. M-127
PROPERTY Mission | DRILL GRID COORD N60+03.03 W27+47.42 | TOTAL DEPTH 743.0
COLLAR ELEV 3,190.4 | SURVEY COORD N364,626.25;E764,944.19 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0							Alluv	Gravels & cal cgl.
210.8	10.8	2.33	86	.31				Arg	Top of bedrock 200 ∠
220.2	9.4	2.56	35	.17	2970		.13		Base of oxide zone
231.1	10.9	2.65	78	.16	220.4				@220.2
241.5	10.4	2.67	89	.30					
251.1	9.6	2.63	94	.30					
260.3	9.2	2.60	51	.24	2930		.25		Lt gry m.g. arg with vr sp
270.4	10.1	2.72	94	.38	260.4				dk gry chloritic rems. to
280.9	10.5	2.57	98	.21					270'.
291.3	10.4	2.62	82	.44		0.87			Mod py, sp cpy min, incrs
300.7	9.4	2.66	90	1.37	2890		.58		to st below 290'.
311.2	10.5	2.62	92	.47	300.4	0.52			
319.1	7.9	2.61	93	.55					
329.9	10.8	2.58	92	.26					
341.0	11.1	2.59	73	1.08	2850	1.08	.60		
349.8	8.8	2.55	95	1.00	340.4	1.16			Cnt @351.0 grad.
358.1	8.3	3.20	86	1.33				Tt	Lt grn-tan cg. soft Tt
363.1	5.0	3.03	99	.34					Grad zone
373.2	10.1	3.16	81	.84		0.84		Tt&Hf	
379.8	6.6	3.44	80	.05	2810		.78		
388.4	8.6	3.14	93	.33	380.4				Lt tan to grn-wh f.g.
397.2	8.8	3.14	100	.09					soft Hf with sp pods of
407.4	10.2	3.06	95	.34					gar. Wk cpy-py as diss
417.6	10.2	3.03	98	.14					& vnlts.
428.5	10.9	3.51	87	.11	2770		.22		Grad zone
438.5	10.0	3.46	93	.13	420.4			Tt	
447.3	8.8	3.54	100	7.79		7.79			Grnnish-tan c.g. Tt
458.4	11.1	3.24	83	.27	2730		1.85		@446.7-65° 1 ft st hem
468.4	10.0	3.47	84	.18	460.4				smeared flt zone
472.5	4.1	3.32	43	.55		0.55			Cnt @472.5-30° 4" st
482.5	10.0	2.67	100	.08				Mb	serp filled flt zone
488.4	5.9	2.63	99	.02					
499.2	10.8	2.62	80	.01	2690		.12		
512.3	13.1	2.80	89	.03	500.4				Lt gry to wh f.g. Mb
521.5	9.2	2.77	97	.21					Entire unit shows flow
528.9	7.4	2.75	93	.06					lineation parallel to
538.4	9.5	2.72	98	.01	2650		.07		serp filled flts @30°
547.2	8.8	2.71	97	.02	540.4				
557.4	10.2	2.76	96	.01					
564.0	6.6	2.79	83	Nil					Cnt @564.0 bkn part lost
575.0	11.0	2.62	69	.01				Qtzt	poss flt
582.9	7.9	2.71	99	.01	2610		.01		
592.2	9.3	2.68	100	.02	580.4				Lt tan-gry vr impure qtzt
598.1	5.9	2.65	93	.02					with vague ser & chlor
610.3	12.2	2.66	100	.02					alt. banding @30°
618.2	7.9	2.74	100	.03	2570		.03		Cnt 621.0-2 ft. massive
628.2	10.0	3.20	93	.23	620.4			Tt	Trem. Lt brn grn f.g. tom.g
638.4	10.2	3.14	91	.17				ArkArg	Tt. Cnt @633.4-30°poss depo.
648.8	10.4	2.72	90	.05					
660.3	11.5	2.68	96	.01	2530		.10		Lt to dk gry f.g. to c.g.
670.8	10.5	2.72	91	.01	660.4				wkly alt ark, occas.
681.0	10.2	2.75	75	.02					sltly cgl.
692.2	11.2	2.72	96	.01					@692.3-50° ∠ 7.5 ft of
700.1	7.9	2.66	99	.02	2490		.02	And.	Int Andesite dike
712.5	12.4	2.67	61	.04	700.4				Cnt. grad to siltstone

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 3-22-65 | D.D. HOLE NO. M-127
PROPERTY Mission | DRILL GRID COORD N60+03.03 W27+47.42 | TOTAL DEPTH 743.0
COLLAR ELEV 3,190.4 | SURVEY COORD N364,626.25; E764,944.19 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
725.1	12.6	2.63	100	.04				Arg	Lt gry to lt reddish tan f.g. wkly alt siltstone.
735.3	10.2	2.75	99	.02					
743.0	7.7	2.64	100	.03	2450 / 740.4		.03		
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3
PROPERTY Mission
COLLAR ELEV 3,121.8

DATE COMPLETED 3-27-65
DRILL GRID COORD N24/89.30 W11/41.93
SURVEY COORD N361,137.20;E766,602.65

D D HOLE NO. M-126
TOTAL DEPTH 1465.8
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
130.0	130.0							O.B.	Gravel O.B. top B.R. 136.8
136.8	6.8	2.38	43	-				Arg	
146.4	9.6	2.41	45	.24					
151.8	5.4	2.50	66	.17	2970		.07		Base of ox. 151.8 ft.
161.2	9.4	2.53	23	.52	151.8	0.52			Mod C.C. in run
170.6	9.4	2.64	34	.09					brkn alt siliceious arg
180.9	10.3	2.63	55	.06					wk cpy-py mod ser.
191.8	10.9	2.64	86	.05	2930		.17		
202.1	10.3	2.64	82	.09	191.8				3" - 70° flt @198'
211.7	9.6	2.66	74	.03					
223.3	11.6	2.62	97	.06					
235.3	12.0	2.83	85	.11	2890		.07		
245.4	10.1	2.73	86	.12	231.8				
258.0	12.6	2.66	96	.09					2" - 40° flt @247'
268.0	10.0	2.64	97	.08	2850		.10	Ark-Arg	
279.1	11.1	2.64	87	.07	271.8				
292.8	13.7	2.65	98	.08					1 ft - 60° sear zone @283'
303.2	10.4	2.69	81	.09					St sear zone - 40°
311.1	7.9	2.64	97	.06	2810		.08		
320.2	9.1	2.63	97	.05	311.8				
324.3	4.1	2.61	97	.05					
334.5	10.2	2.66	95	.08					2 ft - 60° flt bx @326'
343.3	8.8	2.69	96	.22					
350.7	7.4	2.66	99	.05	2770		.10		
359.0	8.3	2.71	97	.06	351.8				
368.0	9.0	2.69	98	.07					
378.0	10.0	2.67	98	.15					
388.1	10.1	2.66	99	.08	2730		.11		
396.3	8.2	2.66	95	.29	391.8				1 ft - 50° pre min flt@395
404.0	7.7	2.65	99	.05					
413.7	9.7	2.70	98	.05					Alt arkosic arg, sp
423.4	9.7	2.68	97	.45		0.45			mod diss cpy-py, mod ser
431.8	8.4	2.70	96	.07	2690		.18		& silica, sp feld, tr gyp
438.4	6.6	2.69	98	.07	431.8				Tr chlor, tr hem & epid.
448.5	10.1	2.68	94	.04					
459.6	11.1	2.66	96	.07					
469.7	10.1	2.78	96	.13	2650		.08		
478.7	9.0	2.62	97	.13	471.8				
491.4	12.7	2.63	99	.07					
502.5	11.1	2.64	95	.07					Wk pre min flt-70° @508'
512.3	9.8	2.70	97	.05	2610		.08		
522.3	10.0	2.67	99	.06	511.8				
532.5	10.2	2.61	100	.10					4" pre min-40° flt @526'
539.8	7.3	2.59	99	.04					
547.6	7.8	2.59	98	.10					3" pre min 50° flt @546'
553.3	5.7	2.61	100	.12	2570		.08		
563.5	10.2	2.66	91	.12	551.8				St-70° flt zone @558'
572.7	9.2	2.64	100	.09				Arg	Grad cont @594.6' becomes
582.8	10.1	2.65	96	.09				Tt	Tt below.
592.8	10.0	2.61	99	.25	2530		.14		Dense Tt, Sp-mod suls
603.0	10.2	2.92	100	.35	591.8				sp hem-chlor-feld-silica
613.2	10.2	3.53	90	.30				Tt	
617.5	4.3	3.44	99	.87					Lt grn, dense Tt
627.8	10.3	2.96	99	.62	2490	0.69	.45		Grad cont @630.3'
638.6	10.8	3.15	84	.29	631.8				

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3 | DATE COMPLETED 3-27-65 | D.D. HOLE NO. M-126
PROPERTY Mission | DRILL GRID COORD N24+89.30 W11+41.93 | TOTAL DEPTH 1465.8
COLLAR ELEV 3,121.8 | SURVEY COORD N361,137.20; E766,602.65 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
642.9	4.3	2.61	88	.07				Arg	
651.9	9.0	2.58	99	.11				Tt	Tt grades into lt gry
657.1	5.2	2.67	93	.15					cgl arg.
667.4	10.3	2.63	98	.16	2450		.15		
675.1	7.7	2.63	98	.08	671.8			Arg	
685.4	10.3	2.62	95	.12					
694.9	9.5	2.65	93	.18					
706.4	11.5	2.62	92	.17	2410		.16		
716.3	10.4	2.64	81	.20	711.8				1 ft 60°-flt @714'
728.3	11.5	2.57	93	.11					Cont st shear zone
737.9	9.6	2.61	90	.13					to 730' 40°-60°
749.1	11.2	2.63	89	.17	2370		.15		
758.2	9.1	2.56	85	.15	751.8				St 60° flt zone from
768.5	10.3	2.59	84	.19					758' to 763'
776.6	8.1	2.53	85	.14					
788.8	12.2	2.62	71	.13	2330		.15		5" - 55° flt @780'
799.0	10.2	2.61	73	.14	791.8				
808.2	9.2	2.52	97	.12					
818.3	10.1	2.64	84	.08					1 ft - 60° flt @814.5'
829.8	11.5	2.55	99	.10	2290		.11		St 50° / flt zone
839.2	9.4	2.51	98	.15	831.8				From 820 to 840'
847.7	8.5	2.56	95	.24					
857.9	10.2	2.61	96	.15					6"-st pre min-50° flt @850'
868.0	10.1	2.61	98	.15					
872.8	4.8	2.70	98	.27	2250		.18		
883.1	10.3	2.63	95	.31	871.8				Vry st 65° flt GG @881
892.7	9.6	2.61	79	.14					then 6ft. of wk bx assoc
901.3	8.6	2.64	99	.15					with flt @881
909.6	8.3	2.55	100	.28	2210		.22		
920.8	11.2	2.60	81	.14	911.8				St. 3ft - 60° flt @913'
930.4	9.6	2.65	93	.16					
939.7	9.3	2.68	99	.23					
949.8	10.1	2.64	98	.24	2170		.20		Tan-gry alt siliceous
956.6	6.8	2.68	86	.12	951.8				Arg, mod ser. wk gyp &
966.8	10.2	2.63	98	.07					fled throughout, sp diss
971.7	4.9	2.63	89	.07					cpy-py, F.G. with patches
981.5	9.8	2.68	100	.16					of ark
988.9	7.4	2.67	96	.19	2130		.12		
999.2	10.3	2.61	98	.08	991.8				
1009.4	10.2	2.65	96	.17					
1019.4	10.0	2.68	99	.38					
1029.6	10.2	2.69	94	.15	2090		.20		
1039.0	9.4	2.64	98	.11	1031.8				St 40°-60° pre min
1049.2	10.2	2.67	96	.08					flt zone @1039'
1059.3	10.1	2.62	100	.04				Ark	6'-55° pre min flt @1051'
1069.6	10.3	2.63	99	.03	2050		.07	Arg	1.5ft-bx-zone pre min@1060'
1079.8	10.2	2.63	96	.13	1071.8				siliceous arkosic arg
1090.5	10.7	2.64	95	.02					
1098.8	8.3	2.62	92	.13					Healed flt cont @1099'
1109.7	10.9	2.93	100	.38	2010		.18	Hf	
1120.0	10.3	3.06	84	.40	1111.8				6 ft GGY flt zone @1109
1129.6	9.6	3.19	95	2.28		1.40			Tan Hf with pods Tt
1136.0	6.4	3.16	96	1.70					
1148.3	12.3	2.69	90	.14	1970		.98	Mb	Flt cont-65° @1136'
1158.2	9.9	3.22	83	.43	1151.8				White rexlized L.S.

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 3-27-65 | D.D. HOLE NO. M-126
PROPERTY Mission | DRILL GRID COORD N24+89.30 W11+41.93 | TOTAL DEPTH 1465.8
COLLAR ELEV 3,121.8 | SURVEY COORD N361,137.20;E766,602.65 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1158.2	9.9	3.22	83	.43		*0.43		Tt	3 ft-30° GGY. flt @1150'
1167.8	9.6	3.33	90	.38					
1178.0	10.2	3.24	97	.18					
1188.1	10.1	3.08	97	.05	1930		.22		3.5 ft-low angle flt @1182'
1198.2	10.1	3.30	96	.01	1191.8				
1208.5	10.3	3.28	93	.02					Brn-grn garnet
1218.7	10.2	3.10	97	.02					wk suls, st hem
1227.7	9.0	3.12	97	.02	1890		.03		
1237.0	9.3	2.65	89	.12	1231.8			Hf &	St-bx-50° @1237'
1248.4	11.4	2.90	96	.13				Mb	6 ft st flt-30° @1242'
1258.3	9.9	2.67	92	.12					Brkn-fltd Hf & Mb
1266.3	8.0	2.75	97	.04					Begin vry st 20-30°
1276.5	10.2	2.66	97	Nil	1850		.09	Tt-Arg	flt zone
1286.7	10.2	2.80	94	.08	1271.8			Bx	
1292.7	6.0	2.70	100	.06				Tt-Arg	
1303.0	10.3	2.67	95	.03				Gran	
1313.5	10.5	2.75	99	.04	1810		.05	Bx	
1323.9	10.4	2.72	100	.04	1311.8			Arg-	
1333.6	9.7	2.70	94	.03				Gran	Intense brecciation of
1342.8	9.2	2.56	74	.02				Bx	Tt-Arg-Gran along low
1354.4	11.6	2.59	100	.02	1770		.03		angle flt zone
1363.9	9.5	2.61	98	.01	1351.8				("Base ment flt")
1374.3	10.4	2.60	100	.01					
1384.6	10.3	2.61	100	.02					
1394.9	10.3	2.61	100	Nil	1730		.01		
1404.7	9.8	2.66	100	.01	1 391.8				
1410.6	5.9	2.60	96	.02				Gran	
1419.6	9.0	2.60	71	.02				Bx	Continued "Base ment" flt
1424.2	4.6	2.55	84	.03					
1434.6	10.4	2.60	100	.02	1690		.02		
1445.0	10.4	2.63	96	.02	1431.8			Gran	
1455.5	10.5	2.60	93	.02					Dense - Sierrita Granite
1465.8	10.3	2.59	99	.02					

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3 | DATE COMPLETED 2-25-65 | D.D HOLE NO. M-124
PROPERTY Mission | DRILL GRID COORD N24+73.18 W9+47.00 | TOTAL DEPTH 1405.0
COLLAR ELEV 3,165.8 | SURVEY COORD N361,124.03;E766,797.80 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0	175.0							Alluv	Unconsolidated gravels
189.1	14.1	2.14	86	-				CalCgl	Caliche cemented cgl
198.8	9.7	2.49	83	.20	2970		.02	Arg	Bedrock @189.1
206.0	7.2	2.57	68	.30	195.8				Base of wk oxide zone @ 206.0'
216.0	10.0	2.61	62	.16					
226.0	10.0	2.55	92	.22					
233.0	7.0	2.55	96	.15	2930		.20		Lt gry f.g. siliceous
243.0	10.8	2.63	87	.07	235.8				arg, becomes incr courser
254.0	10.2	2.64	81	.09					with depth. Vr wkly min as
263.2	9.2	2.64	89	.11					cpy-py.
272.6	9.4	2.64	87	.08	2890		.09		between 240 & 290 numerous
281.3	8.7	2.63	95	.06	275.8				2"-4" flts @60°-80°
292.4	11.1	2.61	81	.09					
302.8	10.4	2.60	88	.06					Grad zone
313.0	10.2	2.67	90	.20	2850		.11	ArkArg	
322.0	9.0	2.66	98	.12	315.8				
332.0	10.0	2.65	96	.06					
342.4	10.4	2.67	98	.06					
351.1	8.7	2.67	91	.07	2810		.08		
357.2	6.1	2.77	94	.09	355.8				
366.3	9.1	2.61	98	.05					
376.0	9.7	2.69	91	.06					
388.7	12.7	2.73	88	.09					
400.2	11.5	2.66	97	.06	2770		.07		Lt tan-gry alt & ½bleached
407.2	7.0	2.64	97	.09	395.8				f.g. arkose.
415.0	7.8	2.71	93	.05					Same vnlt as arg above
425.6	10.6	2.60	98	.05					grain size con't to incr.,
435.6	10.0	2.66	97	.08	2730		.07		has pebble frags near
444.5	8.9	2.62	100	.15	435.8				bottom.
454.9	10.4	2.66	91	.10					
464.9	10.0	2.76	95	.12					
474.3	9.4	2.92	92	.41	2690	0.41	.19		
484.6	10.3	2.65	98	.15	475.8				
494.7	10.1	2.64	100	.22					Grad ince in alt.
504.4	9.7	3.12	91	1.03		0.87		Tt &	
514.6	10.2	2.80	98	.55	2650		.55	ArgCgl	St feld & incrsing gar alt;
524.2	9.6	2.89	100	2.32	515.8				becomes all Tt below 524'
534.5	10.3	3.24	95	.86		1.28		Tt	
543.5	9.0	3.06	91	1.98					
553.8	10.3	2.84	100	.42	2610		1.28		
566.2	12.4	3.29	100	.25	555.8				
576.5	10.3	3.43	98	.49		0.64			
586.8	10.3	3.20	98	.39					
596.7	9.9	3.31	100	1.10	2570		.54		
607.0	10.3	3.38	97	.65	595.8				Lt brn to pale grn Tt with
617.3	10.3	3.01	96	.95		0.96			wk to st cpy-py as diss &
627.3	10.0	3.48	99	1.23					vnlts. Sp chlor throughout.
637.5	10.2	3.51	92	.99	2530		.96		occas Tr epid & occas. sp ½
647.5	10.0	3.54	97	.47	635.8	0.55			Zn valves. Near bottom vnlt
657.8	10.3	3.28	98	.20					has sp pods lt grn f.g. h.f
667.8	10.0	3.43	99	.54		0.54			
678.0	10.2	3.36	97	.33	2490		.41		
687.7	9.7	3.31	90	1.74	675.8	1.12			
697.9	10.2	2.89	100	.54					
707.8	9.9	2.99	100	.35					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3 | DATE COMPLETED 2-25-65 | D.D. HOLE NO. M-124
PROPERTY Mission | DRILL GRID COORD N24/73.18 W9/47.00 | TOTAL DEPTH 1405.0
COLLAR ELEV 3,165.8 | SURVEY COORD N361,124.03;E766,797.80 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
715.6	7.8	3.30	99	.31	2450		.73		
722.9	7.3	3.44	95	.22	715.8				
733.2	10.3	3.31	94	.76		0.63			
744.0	10.8	3.31	84	.50					
752.9	8.9	3.20	95	.26					
761.2	8.3	3.11	98	.28	2410		.45		
767.2	6.0	2.93	92	.22	755.8				Cnt @767.2-30° Wk slip.
777.2	10.0	2.93	92	.22				Tt&Arg	
782.6	5.4	3.11	100	.57		0.57			f.g. to c.g. arg with
792.8	10.2	2.66	100	.12	2370		.24		occasional pebble frags &
802.9	10.1	3.19	84	.10	795.8				with decr. gar alt.
806.9	4.0	2.68	100	.06					
817.1	10.2	2.63	100	.11					
827.2	10.1	2.60	99	.11				Arg	
837.3	10.1	2.61	99	.07	2330		.10		
849.6	12.3	2.61	100	.12	835.8				
859.5	9.9	2.73	93	.08					Lt to dk gry f.g. to m.g.
869.7	10.2	2.66	96	.28					siliceous arg
879.7	10.0	2.65	69	.17	2290		.16		
888.9	9.2	2.58	98	.15	875.8				
896.0	7.1	2.81	89	.13					Grad incr. in alt
905.0	9.0	3.29	79	1.37		1.37		Arg&Tt	
914.9	9.9	3.03	91	.34	2250		.47		
922.7	7.8	3.05	87	.28	915.8				
925.0	2.3	3.05	100	7.28					
935.3	10.3	3.73	81	4.39		3.63			
938.3	3.0	3.01	100	5.54					Lt gry to tan-gry arg with
945.5	7.2	3.05	88	.59					mod zones of gar alt. Wk
954.6	9.1	2.65	100	.21	2210		2.18		feld occas epid chlor
962.5	7.9	2.69	98	.37	955.8				calcite, Epy-py sp to
972.6	10.1	2.78	100	.36					massive.
982.8	10.2	3.35	95	.29					
993.2	10.4	3.13	94	1.01	2170	1.02	.56		
1005.3	12.1	3.26	91	1.04	995.8				
1015.6	10.3	3.08	93	.88		0.96			
1025.8	10.2	2.60	100	.31					
1032.2	6.4	3.33	91	.29	2130		.62		End of gar alt.
1041.9	9.7	2.61	97	.18	1035.8			Arg	
1054.4	12.5	2.62	98	.20					
1059.7	5.3	2.62	100	.25					
1069.4	9.7	2.58	99	.19					
1079.4	10.0	2.95	91	.42	2090	0.42	.24		Lt gry siliceous f.g. to m.g.
1089.5	10.1	2.65	95	.28	1075.8				arg. Wk to sp cpy-py.
1099.7	10.2	2.63	98	.28					
1105.2	5.5	2.60	97	.17					
1115.4	10.2	2.60	96	.17	2050		.25		
1125.2	9.8	2.63	92	.10	1115.8				
1135.4	10.2	2.65	100	.11					
1144.5	9.1	2.72	100	.34				Tt	Cnt @1138.5-50° st slip
1154.4	9.9	2.93	52	.31	2010		.23		
1166.1	11.7	3.15	93	.67	1155.8				Pale grn to lt brn granular
1176.2	10.1	3.36	97	.39		0.50			Tt. Occas pods feld silica
1185.6	9.4	3.37	100	.44					epid alt. Sp to mod cpy-
1196.6	11.0	3.28	91	.25	1970		.44		py as diss & vnlts
1206.1	9.5	3.46	100	.28	1195.8				

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 2-25-65 | D D HOLE NO. M-124
PROPERTY Mission | DRILL GRID COORD N24+73.18 W9+47.00 | TOTAL DEPTH 1405.0
COLLAR ELEV 3,165.8 | SURVEY COORD N361,124.03;E766,797.80 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif	REMARKS
1216.3	10.2	3.52	96	.32					
1226.5	10.2	3.42	96	1.07		.0.94			Cnt @1227.0 3ft. poss pre-
1236.7	10.2	3.17	95	.80	1930		.61	Tt&Hf	min bx 50 +.
1246.8	10.1	3.50	91	1.56	1235.8				
1256.8	10.0	3.07	99	1.86		.1.14			Lt tan-brn f.g. Hf with
1267.0	10.2	3.07	100	.24					pods & blebs of lt brn gar.
1277.1	10.1	3.49	94	.93	1890		1.14		Mod to st cpy-py as diss
1287.3	10.2	3.26	95	.38	1275.8				& Vnlts.
1297.5	10.2	3.20	100	1.23		.0.75			Cnt @1298.0 1ft pre sul,
1305.1	7.6	2.99	96	.98				Tt & Hf	post alt flt bx 50+.
1314.7	9.6	3.16	99	.33	1850		.75	Arg Bx	@1301.0 first of set of vr
1325.0	10.3	3.28	59	1.74	1315.8				st low angle GG zones
1336.8	11.8	3.27	91	1.35		.1.32			which cont to bottom of
1347.2	10.4	3.11	95	.90					hole.
1357.2	10.0	2.64	95	.22	1810		1.08	Mb Bx	Stly sheared wedge of Mb
1365.5	8.3	2.73	100	.06	1355.8				
1379.9	14.4	2.66	98	.03					Lt tan siliceous f.g arg
1389.5	9.6	2.67	100	.02					stly bxeated, cem by py &
1395.0	5.5	2.71	98	.02	1770		.04		chlor.
1405.0	10.0	2.69	97	.02	1395.8			Arg gran bx	Sp gran. frags last 2'.
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 2-27-65 | D.D. HOLE NO. M-125
PROPERTY Mission | DRILL GRID COORD. N59+97.93 W24+82.04 | TOTAL DEPTH 725.4
COLLAR ELEV 3,184.6 | SURVEY COORD. N364.625,16;E765,209.62 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0	195.0	-	-	-				Alluv	Gravel O.B.
205.0	10.0	-	-	-				CalCgl	Caliche cem. cgl
209.8	4.8	2.58	86	.05	2970			ArgCgl	Top of bedrock @205'
218.2	8.4	2.60	77	.04	214.6		.01		
223.1	4.9	2.53	59	.04					Base oxide zone 223.1
233.0	9.9	2.60	77	.05					
241.1	8.1	2.70	76	.09					Gry tan siliceous cgl arg.
247.1	6.0	2.62	75	.08	2930				
258.7	11.6	2.56	80	.09	254.6		.07		
269.0	10.3	2.54	88	.13					
278.2	9.2	2.54	86	.17					
282.7	4.5	2.69	96	.12					Cnt @282.4-20°, 1" stly
292.6	9.9	2.69	96	.12	2890		.13	Hf	smeared flt.
301.7	9.1	2.91	91	.09	294.6				Lt tan-wh vr f.g. Hf with
311.8	10.1	2.94	95	.14					vr sp pods of gar.
322.5	10.7	2.90	94	.26					
326.0	3.5	2.71	98	.29					Cnt @326.0-5° chlor filled
331.9	5.9	2.72	95	.02	2850			Mb	sharp cnt.
339.1	7.2	2.80	95	.03	334.6		.15		Wh xline Mb with serp.
348.6	9.5	3.23	86	.05				Hf	Pale grn Hf.
358.9	10.3	2.52	77	.44		0.44		Arg	Cnt Hf&Arg @338.2 flt 25°
363.5	4.6	2.66	64	.01					Lt tan f.g siliceous arg.
373.3	9.8	2.64	100	.09	2810		.15	Arg&Tt	Grad. inc in alt.
381.6	8.3	2.67	95	.08	374.6				Lt tan arg with zones of
392.8	11.2	2.82	97	.06					brn-chlor grn Tt.
402.8	10.0	2.60	99	.03				Arg	Grad end of Tt zones.
412.9	10.1	2.59	96	.01					Stly alt f.g. tan-gry
416.8	3.9	2.57	100	.09	2770		.04		wkly cal car arg.
427.4	10.6	2.57	90	.13	414.6				Cnt @427' lost.
437.1	9.7	3.00	99	.17				Tt	Grn-tan m̄.g. Tt.
443.9	6.8	3.21	91	.43		0.43			Cnt 443.9-25° 3"vr st. flt
455.1	11.2	2.61	99	.36	2730		.25	Arg	Lt tan gry f.g. feld &
460.4	5.3	2.65	96	.44	454.6	2.24			chor rich arg.
471.7	11.3	3.15	90	3.08				Tt	Cnt @460.0-60° irreg.
482.7	11.0	3.04	100	.07					sharp.
490.7	8.0	3.38	95	.03					
498.5	7.8	3.37	96	.02	2690		.96		
505.4	6.9	3.45	91	.03	494.6				Tan-grn m.g. to c.g.
514.1	8.7	3.47	94	.04					Tt, sp arg rems
524.2	10.1	3.45	93	.02					near top assoc with
531.4	7.2	3.43	90	.09	2650				st min.
541.4	10.0	3.00	100	.29	534.6		.06		
550.4	9.0	3.29	96	.11					
560.7	10.3	3.42	93	.06					
570.8	10.1	3.42	96	.06					Grad change
577.5	6.7	2.98	100	1.86	2610		.28	Tt&Arg	
582.6	5.1	2.99	100	1.70	574.6	2.32			
592.6	10.0	3.15	97	2.77					
603.1	10.5	2.93	100	.24					Above Tt with rems of a
609.9	6.8	3.34	88	7.58		5.24			stly siliceous poss. f.g.
617.7	7.8	3.27	98	1.86	2570		2.61		arg assoc st min.
627.0	9.3	2.79	96	.28	614.6	1.03			
630.9	3.9	2.65	100	2.17					
640.3	9.4	2.63	92	.06				Arg	Cnt @630.9 grad.
650.2	9.9	2.61	94	.02					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 2-27-65 | D D HOLE NO. M-125
PROPERTY Mission | DRILL GRID COORD N29+97.93 W24+82.04 | TOTAL DEPTH 725.4
COLLAR ELEV 3,184.6 | SURVEY COORD N364,625.16;E765,209.62 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif	REMARKS
658.7	8.5	2.67	99	.01	2530		.44		
668.5	9.8	2.62	98	.02	654.6				
678.5	10.0	2.65	95	.03					Lt gry to tan to reddish
687.5	9.0	2.67	100	.01					tan f.g. Wkly alt
693.3	5.8	2.63	100	.02	2490		.02		"siltstone". Alt min- wk
705.2	11.9	2.67	97	.02	694.6				epid sp ser wk chlor.
713.7	8.5	2.71	92	.01					
725.4	11.7	2.68	98	.01					
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 1 | DATE COMPLETED 2-15-65 | D.D. HOLE NO. M-123
PROPERTY Mission | DRILL GRID COORD. N59/98.07 W22/46.58 | TOTAL DEPTH 665.4
COLLAR ELEV 3,181.6 | SURVEY COORD N364,628.85;E765,445.05 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1[illegible].0	190.0							Alluv	Gravel O.B.,Top Cal Cgl 190.0
210.0	20.0				2970		.002	CalCgl	Cal-Cgl, Top B.R. 210.0'
218.6	8.6	2.54	92	.04	211.6			Arg Cgl	leached-alt congl.arg,Tr Cux
230.3	11.7	2.67	24	.04					sp lim, ser, kaolin
240.5	10.2	2.67	48	.01	2930		.030		base ox 240.5'
253.0	12.5	2.56	91	.03	251.6				45° Wk flt cont. 253.0'
260.1	7.1	3.18	92	.15				Hf & Tt	
268.4	8.3	3.01	98	.16					
280.2	11.8	2.59	100	.10					Flt wedge of qtzt @280.2'
285.0	4.8	2.56	74	.01	2890	0.68	.204		
296.5	11.5	3.06	89	.68	291.6				Pale grn-tan Hf with patches
308.3	11.8	2.90	94	1.01		0.78			of Tt, wk-st cpy-py,Tr hem,
314.3	6.0	2.79	94	.40					feld,chlor 40° wk cont.314.3
321.0	6.7	2.63	93	.03				Ark-Arg	3" flt 40°, @317.2'
326.7	5.7	2.61	96	.03					Gry-tan alt, arkosic arg
336.5	9.8	2.58	94	.03	2850		.454		
345.6	9.1	2.59	100	.01	331.6			Cgl	
357.3	11.7	2.58	80	.02					
363.4	6.1	2.67	88	.01	2810		.017		
374.3	10.9	2.62	85	.02	371.6				
382.9	8.6	2.61	89	.01					
391.8	8.9	2.62	95	.02					
400.3	8.5	2.65	95	.02					
410.3	10.0	2.60	93	.02	2770		.018		
416.3	6.0	2.56	91	.03	411.6				
427.4	11.1	2.62	95	.02					
435.7	8.3	2.57	94	.02					6"-60° GG filled flt @429.8'
444.0	8.3	2.57	98	.07					
449.2	5.2	2.59	91	.05	2730		.038		
459.2	10.7	2.54	97	.06	451.6				St-30°-flt @450.5'
468.4	8.5	2.55	99	.17					St 3" 60°
478.8	10.4	2.63	97	.03					
482.6	3.8	2.54	100	.03	2690		.233		Lt tan-gry,siliceous cgl-arg
492.8	10.2	2.61	98	.77	491.6	0.77			Sp-mod ser, feld,epid,silic
502.8	10.0	2.61	95	.06					2" cpy-py, sp chlor,Tr hem
512.0	9.2	2.63	70	.03					
520.8	8.8	2.63	96	.02					2",30°, GG filled flt bx
530.2	9.4	2.59	100	.02	2650		.055		@518.8'
540.9	10.7	2.65	88	.03	531.6				
548.5	7.6	2.45	98	.02					
554.8	6.3	2.57	95	.03					
564.8	10.0	2.62	97	.01	2610		.021		
575.4	10.6	2.59	92	.02	271.6				4'8",30°Ser filled flt bx
583.7	8.3	2.65	95	.02					@568.6'
595.2	11.5	2.65	95	.01					
604.8	9.6	2.63	96	.02					
615.3	10.5	2.69	93	.02	2570		.017		
627.2	11.9	2.68	97	.02	611.6				
637.9	10.7	2.65	97	.01					
648.4	10.5	2.64	97	.02	2530		.017		
657.1	8.7	2.64	87	.01	651.6				
665.4	8.3	2.67	90	.02					

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2
PROPERTY Mission
COLLAR ELEV 3,191.4

DATE COMPLETED 1-28-65
DRILL GRID COORD N55/48.72 W21/21.69
SURVEY COORD N364,181.45;E765,576.73

D D HOLE NO M-122
TOTAL DEPTH 1146.6
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0	202.0				2970		-	Alluv	Unconsolidated Gravels
224.9	22.9	2.51	92	-	221.4			CalCgl	Caliche congl.
236.0	11.1	2.49	73	.11				ArgCgl	Base of oxide zone @236.0
241.6	5.6	2.74	64	.09					
250.9	9.3	2.58	100	.12					Lt gry siliceous cgl
258.7	7.8	2.53	96	.04	2930		.08		arg. vr wk min.
268.5	9.8	2.56	99	.01	261.4				
273.8	5.3	2.58	99	.04					Grad incr. in alt
281.2	7.4	2.59	99	.21				ArgCgl	
288.6	7.4	3.22	79	.48		0.48		&	Lt tan-gry siliceous
297.3	8.7	2.60	100	.10	2890		.21	Tt	cgls arg alting to Tt
307.0	9.7	3.29	92	.07	301.4				
314.7	7.7	3.02	89	.78		0.78			312.8-3" 4 314.7-1" @25° fl
322.8	8.1	3.43	93	.11				Tt	only Tt below
331.2	8.4	3.52	90	.40		0.72			
340.0	8.8	3.56	85	1.03	2850		.57		
351.8	11.8	3.45	91	.35	341.4				
359.1	7.3	3.32	92	.50					Tan-grn c.g. soft Tt.
369.2	10.1	3.36	96	.72		0.71			resembles Tt in arg cgl
379.2	10.1	3.29	94	.50	2810		.62		above. Mod to st cpy py,
389.4	10.1	3.14	100	2.33	381.4				wk to mod sphal as vnlts
399.4	10.0	3.03	91	5.33		3.93			& diss
403.4	4.0	2.83	99	3.65					
409.4	6.0	2.56	99	.29				Cgl	Cnt @403.4-25°-1" post min
419.5	10.1	2.64	97	.04	2770		2.22		flt
432.2	12.7	2.57	99	.08	421.4				
442.4	10.2	2.58	99	.01					Lt gry. mod alt pebble cgl
453.3	10.9	2.59	96	.01					rems. of bedding @40°
465.2	11.9	2.59	95	.02	2730		.03		
472.4	7.2	2.59	96	.06	461.4				
485.5	13.1	2.67	87	.15					
491.7	6.2	2.68	94	.15					
496.9	5.2	3.31	91	6.99		6.99		Tt &	
502.9	6.0	2.63	92	.04	2690		1.00	Q.f.r	
511.6	8.7	2.99	95	1.89	501.4				
519.6	8.0	2.85	100	.11					
529.5	9.9	2.80	100	4.50		2.55			Lt brn Tt, locally stly
539.1	9.6	2.99	98	3.41					chloritic, has massive
543.7	4.6	3.30	85	1.63	2650		2.46		zones or pods of woll &
553.8	10.1	3.06	100	7.34	541.4				qtz feld. Vr st to massive
562.6	8.8	2.96	100	2.36		4.17			suls - @519.6 43.0' of
569.8	7.2	3.01	93	2.74					4.01% Zn.
577.1	7.3	2.58	96	.01	2610		3.05	Arg	@569.4 Grad cnt
589.7	12.6	2.61	100	.01	581.4				
602.3	12.6	2.59	79	.01					Lt tan-gry vr f.g. to sltl-
612.8	10.5	2.69	84	.01					cglitic arg
623.0	10.2	2.57	95	.01	2570		.01		@607.3,10° 1-5 ft flt zone
633.6	10.6	2.62	90	.01	621.4				
646.8	13.2	2.63	89	.01					@655.7
659.5	12.7	2.59	94	.03	2530		.02	Red	Cnt pre pb Zn SiO_2 flt-20°
665.2	5.7	2.67	95	.02	661.4			Silst	alt tan-red siltstone
676.8	11.6	2.81	94	.02				Arg	cnt @669.0 with 35' zone of
687.9	11.1	2.68	94	.01					bx cont. above silst below
699.3	11.4	2.69	65	.01	2490		.01		
711.4	12.1	2.70	99	.02	701.4				

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 1-28-65 | D D HOLE NO M-122
PROPERTY Mission | DRILL GRID COORD N55/48.72 W21/21.69 | TOTAL DEPTH 1146.6
COLLAR ELEV 3,191.4 | SURVEY COORD N364,181.45;E765,576.73 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (Weighted)	Composite Assays	Rock Classif	REMARKS
721.7	10.3	2.69	94	.01					
729.2	7.5	2.69	99	.01					
741.4	12.2	2.67	86	.01	2450		.01		
751.5	10.1	2.71	97	Tr	741.4				Tan-gry wkly alt m.g., arg
759.1	7.6	2.74	82	.01					alt mainly epid, chlor, se
770.5	11.4	2.72	100	.01					suls mainly py
781.4	10.9	2.61	100	.02	2410		.01		
789.9	8.5	2.84	85	.01	781.4				
801.0	11.1	2.67	99	.01					
811.5	10.5	2.66	86	.02				ArkArg	
821.5	10.4	2.64	87	.03	2370		.02		
832.1	10.2	2.64	92	.03	821.4				
842.5	10.4	2.66	96	.02					
850.6	8.1	2.65	90	.01					
860.1	9.5	2.97	95	Tr	2330		.02		
870.1	10.0	2.73	99	.01	861.4				
882.9	12.8	2.75	76	.02					
894.2	11.3	2.68	99	.01	2290		.01		
904.2	10.0	2.67	99	.01	901.4				@917.4,35° 3" Chlor filled
914.1	9.9	2.62	100	.08					flt bx.
919.4	5.3	2.64	97	.02					A courser grained locally
928.2	8.8	2.61	100	.02					cglitic facies of above arg
935.3	7.1	2.65	95	.02					
944.8	9.5	2.70	97	.04	2250		.04		
957.3	12.5	2.72	95	.03	941.4				
967.5	10.2	2.75	98	.04					
977.5	10.0	2.63	98	.02					
987.5	10.0	2.63	99	.02	2210		.03		
997.5	10.0	2.61	100	.02	981.4				
1004.7	7.2	2.70	100	.03					Grad.
1009.3	4.6	2.63	100	.01				Red	
1019.5	10.2	2.66	100	.01	2170		.02	Silst	@1018.0 5 ft chlor 15°/
1029.6	10.1	2.70	100	.01	1021.4				filled bx
1040.8	11.2	2.73	97	Nil					@1036.0,70/ 8" flt zone
1051.2	10.4	2.80	95	.02					Rk becomes f.g. to silty,
1059.0	7.8	2.66	100	.02	2130		.01		red to reddish to tan to
1069.0	10.0	2.84	99	.01	1061.4				dk reddish gry; alt epid
1079.6	10.6	2.71	90	.01					ser chlor feld, suls-py.
1085.7	6.1	2.71	97	.02					
1096.7	11.0	2.82	89	Tr	2090		.01		
1106.5	9.8	2.64	100	Tr	1101.4				
1116.5	10.0	3.31	83	.02					
1123.2	6.7	2.69	100	.03					
1134.0	10.8	2.73	100	.03	2050		.02		
1146.6	12.6	2.72	100	.01	1141.4				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3
PROPERTY Mission
COLLAR ELEV 3,189.2

DATE COMPLETED 2-1-65
DRILL GRID COORD N25/65.71 W5/05.33
SURVEY COORD N361,223.23;E767,238.02

D.D. HOLE NO. M-121
TOTAL DEPTH 1494.6
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0	200.6	-	-	-				Alluv	Gravel O.B. Top Cal Cg120
214.6	14.0	2.55	-	-				Calcg 1	Cal-Cgl-Top B.R. 214.6
224.4	9.8	2.40	76	.05	2970 / 219.2		.006	Arg	
233.7	9.3	2.45	87	.08					
243.7	10.0	2.63	79	.11					
254.3	10.6	2.64	60	.07					
264.3	10.0	2.70	81	.06	2930 / 259.2		.078		6" 40°-50° Flt zone @263'
275.6	11.3	2.71	87	.09					
285.1	9.5	2.63	99	.14					
296.3	11.2	2.63	96	.12	2890 / 299.2		.111		St. 3 ft. 72° pre. min flt @296.5'
307.3	11.0	2.69	91	.15					
319.4	12.1	2.68	94	.21					
327.7	8.3	2.66	94	.10					
338.6	10.9	2.59	98	.12	2850 / 339.2		.149		
349.4	10.8	2.66	94	.12					
358.1	8.7	2.85	87	.14					
365.3	7.2	2.61	93	.10					
377.4	12.1	2.66	95	.10	2810 / 379.2		.113		
386.8	9.4	2.69	95	.09					
396.6	9.8	2.65	91	.47		0.47			
404.6	8.0	2.66	97	.17					
415.8	11.2	2.66	97	.16					
424.4	8.6	2.67	96	.31	2770 / 419.2		.237		
433.7	9.3	2.66	96	.25					7", 70° Chlor filled flt @431.0'
442.5	8.8	2.62	100	.16					
449.5	7.0	2.72	97	.15					
457.1	7.6	2.66	94	.16	2730 / 459.2		.201		7ft. 75°, flts & bx @451.0'
468.5	11.4	2.72	96	.21					
477.5	9.0	2.64	100	.14					
482.3	4.8	2.63	94	.12					
490.3	8.0	2.66	99	.11					
496.2	5.9	2.66	100	.17	2690 / 499.2		.158		
506.4	10.2	2.66	97	.21					
518.2	11.8	2.67	98	.17					
527.1	8.9	2.67	92	.15					3 ft., 60°, GGy flt zone @528
538.8	11.7	2.68	99	.14	2650 / 539.2		.164		
549.1	10.3	2.63	93	.16					
561.7	12.6	2.67	96	.19					
571.4	9.7	2.70	92	.16	2610 / 579.2		.173		Gry-siliceous arg with sp cpy-py, sp-mod ser, sp chlor, tr feld, tr epid. occas. feld banding, st shearing throughout pods ark text arg. Sp gyp Wk-sp calcite.
580.0	8.6	2.73	100	.18					
589.1	9.1	2.68	98	.14					
600.6	11.5	2.67	94	.22					
609.6	9.0	2.64	96	.27					
619.8	10.2	2.62	100	.22					
631.0	11.2	2.62	95	.07					
641.8	10.8	2.62	98	.34					
648.8	7.0	2.69	95	.14					
659.5	10.7	2.67	100	.30	2530 / 659.2		.217		
668.5	9.0	2.70	98	.06					
678.4	9.9	2.65	88	.11					
687.2	8.8	2.61	98	.14					
696.8	9.6	2.66	99	.24					
706.9	10.1	2.65	99	.12	2490 / 699.2		.139		
716.9	10.0	2.69	93	.13					2 ft, 40° st flt zone @709.7'
722.4	5.5	2.70	100	.12					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3
PROPERTY Mission
COLLAR ELEV 3,189.2

DATE COMPLETED 2-1-65
DRILL GRID COORD N25/65.71 W5/05.33
SURVEY COORD N361,223.23;E767,238.02

D.D. HOLE NO. M-121
TOTAL DEPTH 1494.6
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
735.2	12.8	2.71	95	.12	2450		.134		
742.0	6.8	2.67	100	.23					
755.2	13.2	2.67	97	.34					
763.8	8.6	2.64	100	.23					
774.4	10.6	2.59	96	.19	2410		.262		
783.8	9.4	2.64	98	.28	779.2				
794.5	10.7	2.64	96	.11					
807.1	12.6	2.58	98	.19					1 ft 2 in, 70°, ggy flt
819.0	11.9	2.56	97	.11	2370		.153		@798.2'
825.8	6.8	2.66	99	.22	819.2				
837.2	11.4	2.64	95	.23					
843.2	6.0	2.63	97	.22					
852.3	9.1	2.71	94	.06					
859.4	7.1	2.76	90	.13	2330		.170		
867.0	7.6	2.60	97	.11	859.2				
877.9	10.9	2.61	79	.30					
884.3	6.4	2.66	100	.06					
894.2	9.9	2.64	100	.07					Grad cont.
908.5	14.3	2.61	97	.09	2290		.141	Ark	
914.3	5.8	2.61	95	.03	899.2				
924.5	10.2	2.63	98	.04					
929.1	4.6	2.59	97	.22					Str, 60° sul & gyp filled
938.4	9.3	2.60	98	.57	2250	0.57	.194		flt @927.5'
947.9	9.5	2.62	94	.07	929.2				Lt tan-gry siliceous arkosic
958.1	10.2	2.63	97	.01					Text. arg, wk-sp cpy-pay as
968.9	10.8	2.61	99	.12					diss & vnlts, sp ser-feld
978.6	9.7	2.63	97	.11	2210		.084		
989.7	11.1	2.66	98	.48	979.2	0.48		Arg-Tt	Garnetized pods of arg
1000.5	10.8	2.65	96	.06				Arg	
1007.7	7.2	2.66	95	.02					Gry-siliceous F.G. arg
1016.4	8.7	2.62	96	.07					
1025.4	9.0	2.63	100	.05	2170		.164	Arg	
1031.3	5.9	2.95	86	.24	1019.2			&	1", 50°, Chlor filled flt
1042.4	11.1	2.62	95	.06				Tt	@1025'
1052.4	10.0	2.77	96	.27					Tan-gry arkosic arg with
1061.9	9.5	2.67	99	.24	2130		.168		pods of garnetized arg
1067.2	5.3	2.81	90	.33	1059.2				
1078.0	10.8	2.64	97	.08					
1088.1	10.1	2.68	94	.03					
1098.5	10.4	2.62	100	.11	2090		.126		St 1ft 55° pre min flt @1095.5
1108.6	10.1	2.78	94	.52	1099.2			Cgl	St 1ft 50° premin flt@1105.0
1113.0	4.4	2.64	94	.47		0.50		Arg	
1125.1	12.1	2.62	97	.10					
1137.2	12.1	2.62	96	.14	2050		.254		1'3" st 40° premin flt@1131.8
1146.0	8.8	2.63	97	.14	1139.2				
1156.1	10.1	2.63	96	.05					
1167.7	11.6	2.63	97	.08					Lt tan-gry wkly
1178.5	10.8	2.62	98	.45	2010	0.45	.184		congl. ark wk-st cpy
1191.9	13.4	2.64	97	.16	1179.2				as diss & frac fillings
1199.0	7.1	2.63	97	1.98		0.99			sp feld spath
1212.7	13.7	2.61	100	.48					
1223.4	10.7	2.68	96	.11	1970		.585		
1231.7	8.3	2.60	95	.03	1219.2				
1237.9	6.2	2.63	98	.04					Grad cont.
1242.3	4.4	2.62	99	.94		0.94		Arg	

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 2-1-65 | D D HOLE NO. M-121
PROPERTY Mission | DRILL GRID COORD N25/65.71 W5/05.33 | TOTAL DEPTH 1494.6
COLLAR ELEV 3,189.2 | SURVEY COORD N361,223.23;E767,238.02 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1252.3	10.0	2.64	96	.05	1930 / 1259.2		.218	Arg Tt-Bx	Lt gry arg
1262.6	10.3	2.65	96	.45					Tt-Arg Bx 25°dip, partly
1273.2	10.6	2.94	82	1.52		.0.91			replaced frags.
1283.2	10.0	2.57	99	.43				Cgl-Arg	3ft sheared zone 45°@1273.2
1288.7	5.5	2.64	90	.03					Cgl-arg, pods Tt & woll
1298.4	9.7	2.56	99	.07	1890 / 1299.2		.570		
1308.7	10.3	2.58	96	.03				Ark-Arg	
1313.8	5.1	2.61	100	.02					
1323.8	10.0	2.63	100	.03					Lt tan-gry arkosic arg
1330.6	6.8	2.65	100	.18					wkly calcareous, sp suls
1338.0	7.4	2.62	94	.06	1850 / 1339.2		.077		& feld
1345.3	7.3	2.63	98	.62		.0.62			
1351.1	5.8	2.57	100	.11					4.5' strly sheared-brkn-ggy
1361.4	10.3	2.62	91	.01				Cgl Arg (Kino) ?	flt zone, 30°±@1351.5' poss
1366.0	4.6	2.56	99	.03					flt cont of Papago &Kino
1375.7	9.7	2.61	96	.06					
1380.7	5.0	2.60	98	.03	1810 / 1379.2		.136		
1392.1	11.4	2.61	94	.02					Dk gry-tan, zones of red-
1397.1	5.0	2.60	100	.02					gry arg, has vague look of
1407.3	10.2	2.66	92	.01					Kino?
1418.3	11.0	2.65	98	.04	1770 / 1419.2		.024		
1430.0	11.7	2.64	96	.03					
1438.7	8.7	2.63	97	.02				Bx Zone	Vry str. low angle 0°-10°
1447.6	8.9	2.59	93	Tr					poss min flt, "Basement flt
1458.9	11.3	2.60	99	.01	1730 / 1459.2		.015	Gran	
1468.3	9.4	2.57	96	.02					
1478.5	10.2	2.57	95	.01					Sierrita granite
1486.8	8.3	2.57	94	.02					
1494.6	7.8	2.60	100	.01					

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3 | DATE COMPLETED 12-20-64 | D.D. HOLE NO. M-117
PROPERTY Mission | DRILL GRID COORD. N 23+07 W 7+49 | TOTAL DEPTH 1368.0
COLLAR ELEV 3,205.7 | SURVEY COORD N360,961.03;E766,998.49 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
220.0	220.0							Alluv	Unconsolidated gravels
226.1	6.1	-	54	-				CaCgl	Caliche cenented cgl
236.0	9.9	2.21	74	.84	2970	0.86	.20	Arg	
249.4	13.4	2.47	.69	.88		0.20 NS			Base of oxide zone 249.4
261.0	11.6	2.68	77	.12					
273.1	12.1	2.68	96	.12	2930		.38		
284.6	11.5	2.72	96	.14	275.7				
296.3	11.7	2.68	91	.09					
306.2	9.9	2.63	96	.09					
318.4	12.2	2.64	99	.06	2890		.09		
328.6	10.2	2.70	97	.08	315.7				
339.5	10.9	2.69	82	.11					
347.5	8.0	2.69	95	.14					
358.0	10.5	2.70	88	.13	2850		.11		
365.6	7.6	2.67	98	.07	355.7				
375.6	10.0	2.63	100	.07					
387.3	11.7	2.67	96	.12					
399.0	11.7	2.61	96	.09	2810		.09		
409.3	10.3	2.64	99	.16	395.7				
419.8	10.5	2.68	83	.11					
428.4	8.6	2.66	97	.13					
438.9	10.5	2.65	90	.13	2770		.13		
448.3	9.4	2.64	96	.09	435.7				
456.1	7.8	2.62	91	.10					
463.1	7.0	2.65	77	.10					Siliceous argillite lt gry
470.0	6.9	2.64	98	.10					& f.g. neartop of hole,
478.4	8.4	2.71	95	.09	2730		.10		gradually becomes sltly
487.4	9.0	2.72	98	.09	475.7				arkosic in text & lt tan gr
497.4	10.0	2.65	100	.09					in color with incr depth.
505.0	7.6	2.64	94	.09					Wk cpy-py min present as
517.4	12.4	2.65	99	.06	2690		.08		unlts and diss
528.4	11.0	2.72	90	.10	515.7				
538.4	10.0	2.66	99	.12					
544.8	6.4	2.76	90	.22					
554.0	9.2	2.66	96	.14	2650		.14		
560.8	6.8	2.65	100	.20	555.7				
567.5	6.7	2.70	93	.14					
575.4	7.9	2.68	98	.22					
585.4	10.0	2.68	98	.09					
595.5	10.1	2.68	98	.29	2610		.19		
605.7	10.2	2.62	99	.16	595.7				
615.8	10.1	2.70	94	.14					
625.8	10.0	2.63	100	.09					
636.0	10.2	2.66	100	.38	2570		.19		
645.1	9.1	2.69	96	.36	635.7				
654.2	9.1	2.66	98	.54		0.50			
664.2	10.0	2.66	99	.47					
668.2	4.0	2.66	99	.26					
678.4	10.2	2.67	97	.27	2530		.40		Cnt @682.1 35° 3" sul
688.4	10.0	2.96	95	.47	675.7			Tt &	filled flt bx
698.4	10.0	2.82	97	.87		0.58		ArgCgl	
708.4	10.0	2.60	100	.38					
718.4	10.0	2.62	99	.61	2490		.56		
728.4	10.0	3.13	94	1.57	715.7				
738.4	10.0	2.87	95	1.34		1.27			

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3 | DATE COMPLETED 12-20-64 | D.D. HOLE NO. M-117
PROPERTY Mission | DRILL GRID COORD N 23+07 W 7+49 | TOTAL DEPTH 1368.0
COLLAR ELEV 3,205.7 | SURVEY COORD N360,961.03;E766,998.49 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
745.9	7.5	3.01	93	1.02					F.g. to cglitic arg with
758.1	12.2	2.82	93	.17	2450		1.01		pods of Gar alt, stly
768.3	10.2	2.71	100	.30	755.7				silicified & feldspathized.
778.4	10.1	2.60	100	.28					Sp to st cpy-py as unlts
784.9	6.5	3.28	84	.43		0.43			& diss.
795.5	10.6	2.97	93	.29	2410		.30		
806.8	11.3	2.58	100	.09	795.7				Grades into zone without
811.9	5.1	2.62	98	.01				ArgCgl	Gar alt.
818.8	6.9	2.58	100	.02					Lt gry dense siliceous
828.5	9.7	2.66	97	.06					Arkosic to sltly cglitic
838.5	10.0	2.64	96	.09	2370		.06		arg.
846.3	7.8	2.60	100	.01	835.7				Cnt grad
856.5	10.2	2.64	100	.14				Tt&Arg	
866.6	10.1	2.85	100	.20					Dense siliceous arg with
878.2	11.6	2.58	100	.44	2330	0.44	.19		pods of Gar alt.
888.4	10.2	3.10	100	.20	875.7			Hf&Tt	Cnt grad below 878.6
896.4	8.0	3.05	100	.12					
906.6	10.2	3.15	98	.11					m.g. lt grn Hf with
916.7	10.1	3.16	95	.27	2290		.19		pats of lt tan-brn Tt
926.8	10.1	3.22	96	.26	915.7				Wk cpy-py
937.0	10.2	3.04	98	.44		0.44			Grad cnt below 935.0
947.2	10.2	3.27	95	.20				Arg&Tt	
955.2	8.0	3.26	88	.11	2250		.26		Lt brn Tt with pats of
965.4	10.2	3.12	100	.47	955.7				hornfelsic & argillaceous
973.6	8.2	3.18	91	.60		0.53			material. Sp Cu min.
983.8	10.2	3.40	90	.24					
994.0	10.2	3.18	100	.31	2210		.41		Grad zone-arg mat. disappears
1004.2	10.2	3.22	97	.81	995.7			Tt	disappears
1013.7	9.5	3.15	98	2.93		1.29			
1023.0	9.3	3.15	99	.42					
1033.0	10.0	2.89	100	1.18	2170		1.29		Pale grn tactite with
1043.2	10.2	3.12	97	.40	1035.7				sp qtz unlts & feld.
1053.1	9.9	3.15	95	.95		0.62			Wk to st cpy-py
1063.3	10.2	3.22	95	.46					
1071.8	8.5	3.42	93	.26					
1078.4	6.6	3.12	100	.25	2130		.51		Cnt zone marked by st
1085.2	6.8	3.31	97	.47	1075.7			Tt&Hf	incr. in hornfelsic mat.
1095.4	10.2	3.15	97	.95		0.99			
1105.6	10.2	3.04	100	1.55					
1114.0	8.4	3.15	98	.86	2090		.93		
1123.6	9.6	3.21	93	.49	1115.7				
1133.8	10.2	3.06	98	.61					
1144.0	10.2	3.10	98	.82		0.61			
1154.2	10.2	3.30	95	.53	2050		.61		Pale grn Tt with mod to
1161.1	6.9	3.10	100	.46	1155.7				st lt tan to pale tan-grn
1171.3	10.2	3.16	95	.44		0.45			hornfelsic ints. Sp to st
1181.6	10.3	3.05	99	.21					cpy-py with thestronger
1191.8	10.2	3.07	99	.14	2010		.54		valves often associated
1202.2	10.4	3.07	96	2.81	1195.7				pods of feld & silica
1212.3	10.1	3.30	82	3.23		1.98			
1221.0	8.7	2.74	100	2.42					
1233.7	12.7	3.09	92	.54	1970		1.98		
1243.8	10.1	3.27	93	.21	1235.7				Cnt zone marked by
1253.5	9.7	3.10	92	.56				Hf	absence ofTt pods below
1263.7	10.2	2.68	100	1.02		0.77			

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 12-20-64 | D.D. HOLE NO. M-117
PROPERTY Mission | DRILL GRID COORD. N 23/07 W 7/49 | TOTAL DEPTH 1368.0
COLLAR ELEV 3,205.7 | SURVEY COORD. N360,961.03;E766,998.49 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1272.4	8.7	3.01	94	.70					Lt tan f.g. hornfels with
1276.3	3.9	3.12	88	.10	1930 / 1275.7		.60		mod to st pods of qtz &feld
1286.2	9.9	3.11	93	.77					
1297.5	11.3	2.98	93	.66		0.78			
1307.5	10.0	2.98	89	.70				Hf &	Vr st pre min thrust flt
1312.8	5.3	2.91	89	.89				Arg Bx	with st serp filled G.G.
1317.5	4.7	2.97	97	1.35	1800 / 1315.7		.77		
1328.3	10.8	2.58	89	.25				Arg	
1341.8	13.5	2.60	98	.19					Tan gry m.g. arg, chlor is
1348.0	6.2	2.58	98	.01					is dom alt min; only
1358.0	10.0	2.58	100	.02	1850 / 1355.7		.20		noticible sul valves near
1368.0	10.0	2.60	100	.02					thrust flt.
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 12-16-64 | D.D. HOLE NO. M-119
PROPERTY Mission | DRILL GRID COORD. N56+98 W24+98 | TOTAL DEPTH 822.3
COLLAR ELEV 3194.3 | SURVEY COORD. N364,325.42;E765,198.01 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0	190.0							Alluv	Unconsolidated gravels
200.0	10.0							CaDgl	Cemented cgl
212.4	12.4	2.92	93	.11				Hf	Top of bedrock 200'+
219.9	7.5	3.41	88	.21					Pale grn Hf. base oxide 212
228.3	8.4	3.36	92	.13	2970		.09		Grades into mixed Tt & Hf
235.8	7.5	3.29	84	.28	224.3			Tt&Hf	
246.4	10.6	3.37	100	.38					
251.3	4.9	2.63	62	.04					Lt grnish-tan c.g. Tt with
259.5	8.2	3.30	80	.03					wk"pods" silica, feld, and
269.5	10.0	2.64	100	.04	2930		.18		Hf. Wk Cu min.
282.2	12.7	2.82	100	.15	264.3				Cnt @285.4-45°, sharp
292.8	10.6	2.78	74	.53		0.53		Arg	
301.8	9.0	2.64	85	Tr	2890		.19		Lt. gry to tan-gry f.g. to
312.7	10.9	2.64	83	Tr	304.3				cglitic siliceous Arg.
321.6	8.9	2.66	92	.01					Rare Cu min.
333.1	11.5	2.68	95	.04					Grad. cnt above 332.8
342.2	9.1	2.97	96	.08	2850		.04	Hf	
349.6	7.4	3.12	85	.06	344.3				Lt grn to lt tan f.g. soft Hf
357.6	8.0	3.12	85	.08					Grad cnt
367.7	10.1	3.49	84	.14				Tt	
378.2	10.5	3.16	80	.08	2810		.09		
390.7	12.5	3.28	89	.05	384.3	1.70			
399.2	8.5	3.30	94	1.70					Lt tan-brn to lt grnish-tan
408.8	9.6	3.17	91	.09					soft c.g. Tt. Sp zones
418.5	9.7	3.35	85	.14	2770		.50		of st cpy-py assoc. feld.
428.2	9.7	3.20	73	.51	424.3	1.24			
436.0	7.8	3.05	97	1.60					
439.4	3.4	2.77	100	.24					Cnt @439.3-20°-2" st flt GG
447.8	8.4	2.75	97	.02				Mb	
457.8	10.0	2.65	100	Tr	2730		.39		
466.0	8.2	2.78	91	.02	464.3				
475.0	9.0	2.78	96	.01					Blue-gry bleaching to wh f.g
481.0	6.0	2.83	84	Nil					Mb. contains zones of
490.5	9.5	2.81	97	.02					massive serp last 35' @25°
500.5	10.0	2.76	97	.02	2690		.02		
509.8	9.3	3.07	88	.02	504.3				Cnt alt. & obscured
517.6	7.8	3.31	83	.01				C.Arg	
528.0	10.4	2.65	74	.01					
538.2	10.2	2.53	99	.02					Lt. grnish-tan wkly cal
548.4	10.2	2.72	95	.02	2650		.02		careous f.g. Arg. sltly
558.6	10.2	2.63	91	Tr	544.3				hornfelsic in apprearance
568.7	10.1	2.63	100	.02					
578.6	9.9	2.65	94	.01					
588.3	9.7	2.67	100	.01	2610		.01	Tt	Cnt @581.0 Grad
600.0	11.7	2.96	96	.03	584.3				
610.4	10.4	3.27	91	.06					Grn siliceous Tt with
623.5	13.1	3.50	89	.03	2570		.04		patches of Arg. Vr good.
633.8	10.3	3.07	100	.01	624.3				MoS_2 valves are present
642.2	8.4	3.55	77	.02					
654.3	12.1	3.02	93	.63					
664.0	9.7	2.96	70	.07	2530		.21	Serp-	Bkn & frac zone with 3' st
667.1	3.1	3.12	63	.05	664.3			Mb Bx	Flt GG @664.0-50+°
677.6	10.5	2.79	100	1.24				Tt	Grn siliceous Tt as above
685.6	8.0	3.54	89	.82		1.14			bx zone. St Cu min
691.0	5.4	2.91	100	1.41					Cnt @691.0-15° 2" flt bx

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2
PROPERTY Mission
COLLAR ELEV 3194.3

DATE COMPLETED 12-16-64
DRILL GRID COORD N56+98 W24+98
SURVEY COORD N364,325.42;E765,198.01

D.D. HOLE NO. M-119
TOTAL DEPTH 822.3
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
700.1	9.1	2.70	92	Tr	2490		.68	Arg	
711.4	11.3	2.73	93	Tr	704.3				
721.4	10.0	2.76	93	.01					
724.2	2.8	2.66	100	.01					
735.1	10.9	2.66	90	.01					
741.5	6.4	2.64	91	.01	2450		.01		
753.7	12.2	2.67	100	.03	744.3				Lt gry to tan-gry f.g.
765.4	11.7	2.61	97	.03					Locally arkosice & cglitic
776.8	11.4	2.63	95	.01					Arg. Mod clor. feld epid,
785.8	9.0	2.61	90	.01	2410		.02		alteration with wk py.
796.8	11.0	2.66	100	.01	784.3				
804.1	7.3	2.74	100	Tr					
814.4	10.3	2.69	99	Tr					
822.3	7.9	2.74	98	.01					
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2
PROPERTY Mission
COLLAR ELEV. 3,189.2

DATE COMPLETED 1-5-65
DRILL GRID COORD. N 56/96 W 22/50
SURVEY COORD. N364,326.92;E765,445.74

D.D. HOLE NO. M-120
TOTAL DEPTH 744.4
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
198.0	198.0	-	-	-				Alluv	Unconsolidated gravels
210.6	20.6	2.58	57	-				CalCgl	Caliche cemented cgl
222.0	11.4	2.56	68	.09	2970		.02	ArgCgl	Top of bedrock 210.6'
232.8	10.8	2.55	27	.06	219.2				
242.8	10.0	2.49	63	.06					Tan-gry stly cgl-arg
253.0	10.2	2.61	77	.02					Rare Cu min. as unlts & dis
265.2	12.2	2.62	75	.04	2930		.05		
275.8	10.6	2.52	77	.05	259.2				
281.1	5.3	2.57	95	.10					
290.0	8.9	2.63	96	.09					Cnt @290.0'-grad, 30°
299.9	9.9	3.22	89	.33	2890		.13	Hf	
306.8	6.9	2.97	92	.68	299.2				Lt tan to lt tan-wh f.g.
315.6	8.8	2.86	97	1.72		0.95			Soft hornfels
327.2	11.6	3.07	92	.52					Cnt grad below 327.2
336.9	9.7	3.28	77	.06				Tt	
347.9	11.0	3.23	94	.11	2850		.67		
355.5	7.6	3.16	88	.24	339.2				
366.6	11.1	2.82	100	1.30		1.17			
377.4	10.8	3.41	94	1.03	2810		.73		Lt tan-grn c.g.
387.2	9.8	3.54	93	.38	379.2				Soft tactite. Mod Cu min
393.5	6.3	3.44	96	1.20					as pods, diss & unlts.
401.4	7.9	3.53	98	.49		0.84			
409.2	7.8	2.84	100	.90					
420.1	10.9	3.41	95	.24	2770		.60		
422.3	2.2	3.32	95	1.21	419.2	1.21			Cnt @422.3 grad.
433.0	10.7	2.61	99	.13				Qtzt	
444.7	11.7	2.64	92	.15					Lt gry f.g. impure qtzt.
454.4	9.7	2.87	91	.07					Rare Cu min.
464.3	9.9	2.55	100	.03	2730		.17		
474.5	10.2	2.91	96	.54	459.2	0.54		Tt	Grad zone begins 468.0' with
486.2	11.7	2.69	100	.20					mixed Tt & Qtzt to 490'
494.2	8.0	2.91	100	.81		0.87			
502.7	8.5	3.13	94	.97	2690		.48		
511.5	8.8	2.95	84	.13	499.2				
519.4	7.9	3.36	90	.03					
523.4	4.0	2.58	100	.07					Lt grn siliceious m.g.
527.6	4.2	2.84	100	.28					Tt with dk grn stly chloriti
536.8	9.2	3.31	89	.07	2650		.22		zones. Cu mon wk except last
545.0	8.2	3.20	97	.83	539.2				15'
552.1	7.1	3.28	87	4.80		2.39			
556.5	4.4	3.26	96	.54					Cnt @556.5-30°,2" flt zone.
565.2	8.7	2.75	100	.36				Hf	Lt grn f.g. Hf.
570.3	5.1	2.59	97	.05					Cnt grad zone @570.0
577.2	6.9	2.87	90	.28	2610		1.21	Tt	Lt tannish-grn siliceous Tt.
588.9	11.7	3.08	100	.85	579.2	0.85			Cnt @588.8 grad.
599.7	10.8	2.65	100	.04				Ark	
611.4	11.7	2.71	90	.01					St 6" flt GG @590.2
619.5	8.1	2.69	78	.01	2570		.22		
630.5	11.0	2.72	89	Tr	619.2				Stly cglitic to f.g. arkose,
641.5	11.0	2.72	89	.02					locally distinct bedding
646.8	5.3	2.60	99	.01					@30°,alt vr. wk cnt zone,
657.7	10.9	2.66	94	.01	2530		.01		c.g. facies of Ark above
666.5	8.8	2.66	94	.01	659.2			Arg	argular frags of arg below
678.0	11.5	2.67	99	.02					in it.
687.8	9.8	2.69	76	.01					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2
PROPERTY Mission
COLLAR ELEV 3,189.2

DATE COMPLETED 1-5-65
DRILL GRID COORD. N 56+96 W 22+50
SURVEY COORD N364,326.92;E765,445.74

D.D. HOLE NO. M-120
TOTAL DEPTH 744.4
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
697.4	9.6	2.67	100	.01	2490		.01		
709.1	11.7	2.71	98	.02	699.2				Lt tan-gry to reddish tan
721.7	12.6	2.69	94	.02					Arg with arkosic & cglitic
731.8	10.1	2.73	98	.02	2450		.02		facies. Mod chlor & feld alt
744.4	12.6	2.74	94	.02	739.2				& sp epid alt.
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 1
PROPERTY Mission
COLLAR ELEV 3,190.8

DATE COMPLETED 11-30-64
DRILL GRID COORD N 53+97, W 19+99
SURVEY COORD N364,031.18;E765,702.01

D.D. HOLE NO. M-118
TOTAL DEPTH 627.0
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0							Alluv	Unconsolidated gravel
217.3	17.3	2.57	91	-				Cgl	Cemented conglomerate
224.3	7.0	2.50	86	.16	2970		.01	Arg	Bedrock @217.3
230.3	6.0	2.53	95	.17	220.8				
240.0	9.7	2.51	24	.09					Lt gry f.g. siliceous arg.
251.3	11.3	2.63	83	.10					Base of oxide zone 240.0'.
259.3	8.0	2.54	93	.07	2930		.12		Cnt @259.3 wk sul filled
268.1	8.8	3.28	98	.47	260.8			Tt	slip-30°
276.2	8.1	3.32	86	.40					Lt grn to brnish-grn c.g.
283.5	7.3	3.41	93	.78		0.84			tactite. Mod Cu min.
289.8	6.3	3.39	81	1.33					Cnt 8" cemented flt bx 45°
295.7	5.9	2.83	86	1.45				Arg	@289.8
303.1	7.4	2.56	100	.83	2890		.84		Tan-gry st alt m.g arg vr
314.7	11.6	2.56	93	1.05	300.8				st Cu min.
325.4	10.7	2.58	99	1.00		1.37			
333.7	8.3	2.68	98	2.23					Grad. change @333.7
345.6	11.9	2.57	96	.23	2850		1.12	ArgCgl	
357.0	11.4	2.60	99	.14	340.8				
368.6	11.6	2.65	96	.01					
380.2	11.6	2.52	91	.01	2810		.07		
389.0	8.8	2.56	98	Tr	380.8				@389.0 1.4 ft flt zone 65°
397.2	8.2	2.54	86	.02					
407.7	10.5	2.58	95	.02					Lt tan-gry siliceous
419.0	11.3	2.60	94	.02	2770		.02		cglitic arg (pebble cgl).
431.2	12.2	2.58	97	.02	420.8				Vr wk Cu min.
438.0	6.8	2.59	83	.02					
448.0	10.0	2.58	98	.01					
457.0	9.0	2.59	99	.01					
462.7	5.7	2.61	96	Tr	2730		.01		
474.9	12.2	2.60	95	.01	460.8				Grad facies change
485.7	10.8	2.66	93	.01				Arg	Dense lt tan to reddish tan
496.0	10.3	2.61	90	.01	2690		.01		f.g. siliceous arg (
506.6	10.6	2.64	91	.01	500.8				(siltstone)
515.4	8.8	2.69	93	.01				ArgCgl	Grad change
526.2	10.8	2.63	99	.01					
536.7	10.5	2.70	95	Tr	2650		.01		
547.2	10.5	2.59	73	Tr	540.8				Lt gry alt pebble cgl
556.0	8.8	2.65	91	.01					St epid feld alt
566.0	10.0	2.68	85	.01					
578.4	12.4	2.78	90	.01	2610		.01		
587.1	8.7	2.60	96	.02	580.8				
597.2	10.1	2.65	98	.01					Grad chang
607.3	10.1	2.76	94	.01				Arg	Tan f.g. arg with st epid
618.9	11.6	2.71	96	.01	2570		.01		& feld alt.
627.0	8.1	2.66	92	.01	620.8				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 11-17-64 | D.D. HOLE NO. M-116
PROPERTY Mission | DRILL GRID COORD N53/97 W22/50 | TOTAL DEPTH 745.4
COLLAR ELEV 3,197.3 | SURVEY COORD N364,027.43, E765,451.12 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0	190.0							Alluv	Unconsolidated gravel
225.8	35.8		98	-	2970		.01	CalCgl	cemented cgl
234.8	9.0	2.69	98	.21	227.3			HF	Top of bedrock @225.8'
243.0	8.2	3.03	98	.07					Base of oxide zone 235.5
253.2	10.2	3.34	95	.10					
260.6	7.4	3.30	91	.29	2930		.17		Lt grn to tan-grn f.g. Hf
272.4	11.8	2.84	100	.21	267.3				Cu min sp, Zn st.
282.1	9.7	2.89	88	.17		0.48			(Assay 253.2-317.7 .25 Zn)
290.1	8.0	3.00	100	.48					Grad. change
299.0	8.9	3.28	92	.29	2890		.26	Tt	
312.7	13.7	3.02	93	.17	307.3				Tan granular Tt
317.7	5.0	3.16	73	.23					Cnt @317.0 65° st 1ft serp
321.4	3.7	2.70	100	.34				Mb	& chlor filled flt
329.5	8.1	2.76	86	.02					
339.8	10.3	2.81	91	.02					Wh to pale grn (st serp)
350.0	10.2	2.78	86	.03	2850		.10		Marble rare Cu & Zn min.
354.8	4.8	2.79	95	.03	347.3				
366.0	11.2	2.97	93	.24					
375.0	9.0	2.95	81	.32					Grad cnt
384.6	9.6	2.92	75	.29	2810		.22	Hf&Ft	Lt gry-grn f.g. h.f. & grn-
393.8	9.2	3.23	79	.02	387.3				brn c.g. Tt
406.2	12.4	2.78	97	.02				Mb	Cnt @393.4-30°, 5' st flt
413.5	7.3	2.69	92	.01					GG
425.2	11.7	2.75	92	.01	2770		.02		
435.2	10.0	2.80	96	.01	427.3				Lt gry-wh Mb with wk pods
444.0	8.8	2.75	96	.02					Tt near bottom.
452.9	8.9	3.17	86	.14					
463.4	10.5	2.74	96	.01	2730		.04		
475.0	11.6	3.04	88	.01	467.3			Bx	Mb-Hf-woll-arg bx with st
484.8	9.8	3.05	100	Tr					flt GG @30°
494.0	9.2	2.67	86	.01				Tt &	
500.6	6.6	3.26	87	.61		0.61		Qtz	
507.4	6.8	2.60	96	.04	2690		.11		
517.5	10.1	3.01	92	.09	507.3				
523.0	5.5	3.13	96	.05					
534.5	11.5	3.33	91	.02					
545.5	11.0	3.40	89	.03	2650		.05		Stly siliceous tactite wit
553.3	7.8	3.06	99	.02	547.3				pods of Qtz-feld rock, wol
559.1	5.8	2.64	100	.06					arg, & qtz which sometimes
569.3	10.2	2.78	100	.11					resembles qtzt. Vr st Cu
579.5	10.2	3.40	83	1.19		1.83			min last 30' only.
589.3	9.8	3.38	93	2.66	2610		.86		
597.0	7.7	3.37	92	6.00	587.3	5.31			
606.1	9.1	2.64	99	.03					Cnt zone vr stly alt
613.7	7.6	2.71	95	.05				Ark	contains massive trem.
626.6	12.9	2.62	95	.02	2570		1.31		Lt tan gry ark. Vr wkly
638.6	12.0	2.58	99	.03	627.3				alted @616.8-25° a 2.8' GG
645.2	6.6	2.59	98	.02				Arg	clay filled flt;@630.2 60°
654.8	9.6	2.66	94	.02					1" st sulsmeared flt cht
666.2	11.4	2.71	95	.04	2530		.03		between ark & arg.
674.3	8.1	2.74	94	.02	667.3				
686.4	12.1	2.68	73	.02					Dk gry to blk-gry siliceou
693.3	6.9	2.63	94	.02					argillite with wk to st
700.0	6.7	2.66	96	.02					secoundary feldspar &
710.0	10.0	2.78	94	.02	2490		.02		rare Cu min.
					707.3				

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2
PROPERTY Mission
COLLAR ELEV 3,197.3

DATE COMPLETED 11-17-64
DRILL GRID COORD N53+97 W22+50
SURVEY COORD N364,027.43;E765,451.12

D D HOLE NO. M-116
TOTAL DEPTH 745.4
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
720.0	10.0	2.69	95	.01					
731.1	11.1	2.70	96	.02					
737.5	6.4	2.68	96	.01					
745.4	7.9	2.70	98	.01			.01		
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2
PROPERTY Mission
COLLAR ELEV 3010.0

DATE COMPLETED 11-2-64
DRILL GRID COORD N 28+01, W 19+74
SURVEY COORD N361,436.60, E765,765.88

D.D. HOLE NO. M-115
TOTAL DEPTH 866.0
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
11.0	11.0							Arg.	Rock Bit, brkn bench mtrl.
21.0	10.0	2.52	12	.18					Base of oxide @30.3'
30.3	9.3	2.54	29	.08					
40.9	10.6	2.65	8	.05	2970		.08		
51.0	10.1	2.68	17	.06	40.0				
60.5	9.5	2.66	19	.06					57.9', 6 ft. ggy flt zone
72.0	11.5	2.67	71	.10					
82.8	10.8	2.63	31	.11	2930		.08		
93.3	10.5	2.67	36	.04	80.0				
103.2	9.9	2.69	13	.07					
112.5	9.3	2.69	71	.21					104°, 3.4 ft. 45°obrkn ggy
123.4	10.9	2.67	62	.11	2890		.11		flt.
134.2	10.8	2.63	87	.08	120.0				Dense arg, st. ser & silica
142.5	8.3	2.66	91	.19					alt; wk-sp diss cpy-py, tr
151.2	8.7	2.67	93	.17					Moly sp feld.
162.4	11.2	2.70	95	.18	2850		.15		
172.9	10.5	2.75	91	.16	160.0				
180.8	7.9	2.66	88	.10					
191.3	10.5	2.64	96	.14					
201.2	9.9	2.67	72	.03	2810		.12		
210.8	9.6	2.63	86	.05	200.0				
222.8	12.0	2.69	92	.07					
232.3	9.5	2.64	93	.09					
240.3	8.0	2.67	78	.15	2770		.08		@235.5', st. 5 ft., 40° flt
250.0	9.7	2.65	94	.18	240.0				
261.2	11.2	2.64	92	.13					
271.6	10.4	2.62	97	.20					2" - 80° - Chlor filled flt
282.0	10.4	2.62	94	.11	2730		.16	Arg-Ark	cont.
287.6	5.6	2.64	96	.18	280.0				
294.4	6.8	2.63	96	.07					
300.4	6.0	2.63	89	.09					299' - st 1 ft ggy flt
311.9	11.5	2.73	92	.07					Lt gry-tan, st alt arkosic
320.4	8.5	2.64	99	.08	2690		.09		arg, sp cpy-py-moly
331.0	10.6	2.68	95	.06	320.0				
342.5	11.5	2.66	90	.07					@337'-St.-65°-3 ft. flt
354.4	11.9	2.66	90	.11					@350'-2 ft 90° Chlor filled
358.5	4.1	2.90	69	.45	2650	0.45	.12	Arg	St flt cont - 70°@354.4'
366.0	7.5	2.74	89	.07	360.0				
377.5	11.5	2.72	96	.11					
389.5	12.0	2.69	93	.08					
395.1	5.6	2.63	100	.04					
404.2	9.1	2.62	89	.03	2610		.08		
414.3	10.1	2.62	95	.05	400.0				85° 1.5F-flt @406'
423.0	8.7	2.61	93	.06					
433.0	10.0	2.67	99	.06					Tan-gry siliceous arg
443.0	10.0	2.68	99	.10	2570		.06		mod ser, sp feld, Tr-sp
454.3	11.3	2.62	86	.14	440.0				cpy-py as diss & vnlts,
466.0	11.7	2.68	81	.12					tr Zn-Pb, Tr moly
471.5	5.5	2.69	92	.11					Ggy brkn flt zone @455.5'
479.5	8.0	2.65	100	.13	2530		.13		
484.4	4.9	2.67	96	.11	480.0				
494.0	9.6	2.72	97	.11					
503.7	9.7	2.66	90	.16					
513.3	9.6	2.63	87	.07					
523.8	10.5	2.64	93	.05	2490		.10		
					520.0				

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 11-2-64 | D.D. HOLE NO. M-115
PROPERTY Mission | DRILL GRID COORD N 28+01, W 19+74 | TOTAL DEPTH 866.0
COLLAR ELEV 3010.0 | SURVEY COORD N361,436.60, E765,765.88 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
530.3	6.5	2.60	68	.07					
539.8	9.5	2.66	90	.06					60°-6" flt @539'
549.2	9.4	2.63	94	.05					
558.2	9.0	2.63	99	.05	2450		.06		6" - 60° flt @552.2'
568.2	10.0	2.70	93	.05	560.0				
578.2	10.0	2.67	100	.04					
583.3	5.6	2.68	91	.04					
591.1	7.3	2.67	82	.04					
601.4	10.3	2.67	98	.04	2410		.04		
611.2	9.8	2.68	97	.04	600.0				
619.6	8.4	2.66	100	.04					And dike 50-70°
624.2	4.6	2.64	93	.02					
632.0	7.8	2.62	95	.21					Cnt @632.0, gyp filled slip
643.0	11.0	2.97	100	.44	2370	0.44	.15	Tt	40°
653.0	10.0	2.66	100	.27	640.0				Lt grn-tan tr, st. gar wk
663.0	10.0	3.11	91	.47		0.47			mod cpy as diss & vnlts. Tr
667.8	4.8	2.99	96	.07					Zn-moly, st chlor 4"-40°
677.8	10.0	3.44	90	.38	2330		.37		pre min flt @658'
685.2	7.4	3.12	100	.94	680.0	0.79			Grad cont.
688.5	3.3	2.59	100	.45				Mb	
695.3	6.8	2.61	98	.25					Lt gry-white, Mb
703.5	8.2	2.66	100	.12					
713.5	10.0	3.17	90	.50		0.50			701'- 1 ft-30°flt
724.8	11.3	2.79	91	.50	2290		.43		Ftl wedge of Tt
733.8	9.0	2.66	100	.34	720.0				St 30° flt zone beg @715.5'
745.0	11.2	2.63	100	.22					721.3'
754.3	9.3	2.62	100	.16				Mb &	
764.3	10.0	2.70	98	.34	2250		.28	Qtz	
774.3	10.0	2.66	99	.13	760.0				Lt gry - silcified Mg
784.2	9.9	2.71	98	.07					
794.7	10.5	2.70	98	.18					
798.6	3.9	3.31	84	5.20		5.20		Mb &	20° Grad cont
802.2	3.6	2.66	92	.13	2210		.65	Hf	
808.7	6.5	2.76	100	.07	800.0				Mb with, pods Hf & Tl
812.2	3.5	2.87	64	.57					Tr woll, sp-mod suls
822.2	10.0	3.01	96	.52		0.50			
827.0	4.8	3.67	66	.42					70° - flt cont @827'
839.7	12.7	2.60	100	.11	2170		.28	Qtzt	Lt gry qtzt
849.3	9.6	2.70	98	.04	840.0			Arg	St. 65° bx flt cont of
854.2	4.9	2.68	98	.09				(Kino)	qtzt & Kino 6.8' begin
866.0	11.8	2.66	78	.05			.05		@838' congl arg-Kino Fm
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 10-7-64 | D.D. HOLE NO. M-114
PROPERTY Mission | DRILL GRID COORD. N 25+59, W 22+64 | TOTAL DEPTH 810.0
COLLAR ELEV 3137.5 | SURVEY COORD N361,190.09,E765,479.84 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
136.2	136.2							Gra.	Gravel & cal-cgl, br. 136.2
147.3	11.1	2.60	58	.02				Arg	Base of ox. 147.3'
157.8	10.5	2.66	67	.14					
165.4	7.6	2.85	92	.17	2970		.09		
176.1	10.7	2.70	97	.26	167.5				
187.4	11.3	2.74	86	.12					
197.5	10.1	2.63	100	.08					
204.5	7.0	2.64	89	.07	2930		.13		
214.5	10.0	2.66	97	.14	207.5				
225.5	11.0	2.75	98	.12					Gry siliceous, arg, st ser
235.7	10.2	2.70	95	.09					alt, zone of banded feld
243.3	7.6	2.69	95	.08	2890		.11		wk cpy, py, tr Zn.
250.6	7.3	2.74	97	.10	247.5				Tr Moly, tr epid
259.1	8.5	2.68	99	.11					
268.3	9.2	2.73	93	.09					
274.5	6.2	2.60	91	.05					
281.7	7.2	2.57	64	.25					St flt zone 274.5' to 288.0
290.3	8.6	2.54	92	.08	2850		.12		45°-50° dip, post min(?)
298.6	8.3	2.64	87	.11	287.5				
306.9	8.3	2.75	92	.14					
316.8	9.9	2.67	100	.12					Grad. cont.
325.5	8.7	2.82	88	.31	2810		.16	Ark-	
336.0	10.5	2.66	93	.19	326.5			Arg	
346.2	10.2	2.70	93	.32					
356.1	9.9	2.65	97	.20					
364.7	8.6	2.68	100	.21	2770		.24		
375.0	10.3	2.69	95	.30	367.5				Dense-tan to gry alt arg,
383.4	8.4	2.74	94	.18					mod- st ser & SiO_2
392.2	8.8	2.64	99	.17					
402.7	10.5	2.75	93	.20	2730		.20		Sp cpy-py as diss & vnlts
411.6	8.9	2.62	97	.14	407.5				tr Zn on vnlts, tr diss
421.8	10.2	2.64	98	.23					moly tr epid, mod feld
432.7	10.9	2.64	96	.18					
442.2	9.5	2.68	93	.13	2690		.17		
450.5	8.3	2.63	96	.14	447.5				
459.9	9.4	2.64	97	.20					
469.4	9.5	2.67	96	.14					464.7' flt cont. 2 ft flt
478.7	9.3	2.63	97	.10				Cgl	66 @70°
488.9	10.2	2.66	100	.14	2650		.15	Arg	
493.8	4.9	2.65	80	.20	487.5				
503.8	10.0	2.71	93	.20					
512.4	8.6	2.66	90	.28	2610		.26		
523.1	10.7	2.69	98	.34	527.5				
533.0	9.9	2.61	89	.23					
542.2	9.2	2.64	89	.23					Tan-gry, st alt conglomeri
550.7	8.5	2.81	87	.24					tic arg. Sp-mod diss cpy &
558.4	7.7	2.75	94	.13					py tr Pb-Zn-Moly
564.0	5.6	2.64	95	.39	2570		.24		50-70° fracts entire run
574.6	10.6	2.60	92	.27	567.5				mod-st ser & feld
584.6	10.0	2.65	94	.27					
591.8	7.2	2.63	95	.11					
599.1	7.3	2.65	92	.44		0.44			
602.5	3.4	2.64	98	.08	2530		.28		
612.3	9.8	2.72	97	.46	607.5	0.61			
622.1	9.8	2.75	98	.69					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 10-7-64 | D.D. HOLE NO. M-114
PROPERTY Mission | DRILL GRID COORD N 25+59, W 22+64 | TOTAL DEPTH 810.0
COLLAR ELEV 3137.5 | SURVEY COORD N361,190.09, E765,479.84 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
634.8	12.7	2.64	95	.16				Cgl	
639.8	5.0	2.63	100	.18				Arg	
647.1	7.3	2.63	98	.16	2490		.33		
654.4	7.3	2.61	97	.14	647.5				
658.7	4.3	2.58	100	.27					
668.7	10.0	2.66	99	.57					
679.0	10.3	2.63	99	.59		.0.57			← Cont. at 678.7' is wk
684.0	5.0	3.26	100	.47	2450		.46	Tt	healed flt. 15°
693.8	9.8	3.43	96	.64	687.5				
700.0	6.2	3.46	98	.29					Dense tan-brn gar with diss
703.9	3.9	3.39	92	8.91		.1.55			& massive cpy, tr Zn-Moly
707.7	3.8	2.69	96	.10					sp Hem-Chlor.
717.7	10.0	2.72	100	.57					Wk slip cont.
727.9	10.2	2.74	96	.12	2410		1.20	Mb	
740.2	12.3	2.72	97	.09	727.5				
750.0	9.8	2.66	99	.04					
760.0	10.0	2.69	96	.04					Dense white-gry Mb with
770.0	10.0	2.71	99	.05	2370		.06		tr Zn-Pb.
784.4	14.4	2.69	99	.04					
794.4	10.0	2.70	100	.07					
804.4	10.0	2.70	99	.04					
810.0	5.6	2.71	97	.03	2330		.05		
					810.0				

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 3
PROPERTY Mission
COLLAR ELEV 3,202.5

DATE COMPLETED 11-19-64
DRILL GRID COORD. N 23+10 W 4+99
SURVEY COORD. N360,967.58; E767,185.46

D.D. HOLE NO. M-113
TOTAL DEPTH 1,433.0
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
210.0	210.0							Alluv	Unconsolidated Gravels
237.3	27.3	2.50	34		2970		-	CaCgl	Cemented conglomerate
247.0	9.7	2.50	100	.27	232.5			Arg	Top of bedrock @237.3'
252.0	5.0	2.50	100	.22					
262.9	10.9	2.66	97	.33					Base of oxide zone @266.0
272.9	10.0	2.67	84	.09	2930		.20		
282.8	9.9	2.67	85	.05	272.5				
287.4	4.6	2.73	100	.06					
295.8	8.4	2.65	100	.13					
306.1	10.3	2.65	100	.07	2890		.09		
318.7	12.6	2.75	98	.12	312.5				
329.1	10.4	2.71	90	.10					
340.9	11.8	2.68	92	.07	2850		.09		
349.3	8.4	2.76	98	.07	352.5				
358.9	9.6	2.66	100	.06					
369.4	10.5	2.66	87	.06					
377.5	8.1	2.68	60	.07					
388.6	11.1	2.69	100	.09	2810		.07		
398.9	10.3	2.66	100	.06	392.5				
407.8	8.9	2.66	100	.08					
412.8	5.0	2.65	100	.05					
420.1	7.3	2.70	100	.07					
430.1	10.0	2.71	100	.07	2770		.07		
440.0	9.9	2.71	100	.05	432.5				
448.1	8.1	2.74	100	.17					
455.3	7.2	2.64	100	.06					Lt gry to lt tan-gry
460.3	5.0	2.68	100	.06					siliceous f.g. argillite
472.5	12.2	2.68	100	.07	2730		.08		Tr to wk Cu min. incrs.
481.5	9.0	2.85	100	.07	472.5				sltly with depth.
494.2	12.7	2.81	100	.09					
503.4	9.2	2.67	100	.07					
511.5	8.1	2.69	100	.07	2690		.08		
520.2	8.7	2.74	100	.04	512.5				
527.5	7.3	2.62	100	.06					
536.0	8.5	2.73	100	.09					
546.3	10.3	2.63	100	.07	2650		.07		
554.7	8.4	2.66	100	.06	552.5				
559.6	4.9	2.68	100	.04					
568.1	8.5	2.72	100	.07					
577.1	9.0	2.68	100	.13					
588.3	11.2	2.73	100	.11	2610		.09		
597.4	9.1	2.66	100	.08	592.2				
606.3	8.9	2.64	100	.09					
618.3	12.0	2.63	100	.14					
626.5	8.2	2.65	100	.19	2570		.13		
635.9	9.4	2.62	100	.12	632.5				
645.6	9.7	2.61	97	.15					
656.5	10.9	2.69	95	.17					
668.3	11.8	2.61	95	.13	2530		.15		
675.1	6.8	2.63	87	.21	672.5				
684.6	9.5	2.55	98	.21					
694.6	10.0	2.62	100	.47		0.47			
704.3	9.7	2.67	98	.24					
712.8	8.5	2.68	96	.24	2490		.29		
722.7	9.9	2.56	100	.24	712.5				

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 3
PROPERTY Mission
COLLAR ELEV 3,202.5

DATE COMPLETED 11-19-64
DRILL GRID COORD. N 23/10 W 4/99
SURVEY COORD N360,967.58; E767,185.46

D D HOLE NO. M-113
TOTAL DEPTH 1,433.0
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
733.6	10.9	2.62	100	.21					
742.8	9.2	2.61	95	.24					
752.8	10.0	2.63	98	.29	2450		.24		
762.8	10.0	2.64	97	.26	752.5				
772.1	9.3	2.62	100	.12					
780.2	8.1	2.55	96	.13					
788.1	7.9	2.64	99	.13	2410		.18		
801.0	12.9	2.60	98	.34	792.5				
810.4	9.4	2.64	98	.27					
823.5	13.1	2.74	93	.35					
833.7	10.2	2.78	94	.80	2370	0.80	.43		
844.0	10.3	2.62	95	.10	832.5				
855.6	11.6	2.56	99	.16					
865.8	10.2	2.64	95	.05					
872.6	6.8	2.63	99	.12	2330		.14		
886.1	13.5	2.63	95	.06	872.5				
893.0	6.9	2.66	100	.16					
903.2	10.2	2.66	97	.42		0.42			
913.3	10.1	2.63	97	.08	2290		.17		
926.5	13.2	2.51	100	.16	912.5				
932.6	6.1	2.62	85	.09					
944.4	11.8	2.64	99	.26					
948.5	4.1	2.64	95	.08					Cnt @953.9 50° grad.
958.2	9.7	3.33	86	.42	2250	0.42	.20	Tt	Lt brn siliceous tactite
968.2	10.0	2.65	100	.25	952.5			ArgCgl	cnt @959.3 50° grad.
978.2	10.0	2.62	98	.04				&	
988.1	9.9	2.69	96	.11	2210		.16	Arg	Gry to tan siliceous arg.
997.6	9.5	2.68	100	.02	992.5				with st cglitic ints.
1001.5	3.9	2.64	96	.02					Wk Cu min.
1011.7	10.2	2.65	96	.26					
1021.8	10.1	2.63	97	.52		0.83			Grad change
1029.5	7.7	2.87	98	.73	2170		.51	Tt&Arg	
1038.3	8.8	3.03	97	2.16	1032.5				
1048.3	10.0	3.30	85	1.14		1.41			
1058.0	9.7	2.62	98	1.29					Dense siliceous arg.
1064.1	6.1	2.60	97	1.31					with tactite replacing
1071.5	7.4	2.67	90	.23	2130		1.17		arg in "pods". Mod to St
1077.6	6.1	2.74	90	.49	1072.5	0.49			Cu Min.
1087.1	9.5	2.72	100	.27					
1097.3	10.2	2.67	94	.45		0.45			Cnt @1097.5 70° 6' flt.
1107.1	9.8	2.55	96	.09				Arg	
1114.0	6.9	2.61	91	.08	2090		.27		
1123.9	9.9	2.60	100	.02	1112.5				Dense tan-gry siliceous,
1134.1	10.2	2.59	98	.01					in part cglitic, arg.
1143.1	9.0	2.58	100	.02					Cu min wk.
1148.0	4.9	2.75	88	6.55	2050	3.95	.94	Tt &	Grad change
1158.1	10.1	2.92	94	1.12	1152.5	1.12		Arg	
1166.0	7.9	2.72	100	.17					Siliceous, often stly alt &
1176.0	10.0	2.60	100	.09					cglitic arg with pods of
1188.3	12.3	2.85	93	.31	2010		.33		tactite st to wk Cu min.
1197.8	9.5	2.65	96	.24	1192.5				Grad change
1207.6	9.8	3.06	93	.30					
1217.8	10.2	2.60	100	.31				Cgl	
1227.8	10.0	2.63	100	.06	1970		.21		
1234.5	6.7	2.62	100	.07	1232.5				

COMPOSITE DRILL LOG - ASARCO

PAGE 3 OF 3 | DATE COMPLETED 11-19-64 | D D HOLE NO. M-113
PROPERTY Mission | DRILL GRID COORD N 23+10 W 4+99 | TOTAL DEPTH 1,433.0
COLLAR ELEV 3,202.5 | SURVEY COORD N360,967.58;E767,185.46 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1245.4	10.9	2.61	96	.15					Lt gry to tan-gry
1251.2	5.8	2.59	100	.10					siliceous peable cgl.
1262.0	10.8	2.55	100	.12					Wk Cu min.
1267.0	5.0	2.59	99	.02	1930		.18		Grad. change.
1277.0	10.0	2.73	100	.59	1272.5			Tt&Arg	
1284.0	7.0	2.80	99	.91		1.09			1284.0 15' pre min bx
1291.3	7.3	3.02	93	.47					
1301.4	10.1	2.69	100	.51					
1309.5	8.1	3.09	88	2.86	1890		1.09		Tan-gry siliceous arg.
1321.5	12.0	2.77	100	.97	1312.5				with st. pods of grn-brn
1330.5	9.0	3.18	100	1.02		.75			Tt. Mod to st Cu min.
1336.7	6.2	3.11	99	.32					
1346.8	10.1	3.07	99	.57					
1352.3	5.5	2.66	100	.29	1850		.69		Cnt @1352.3, 30°/ 3.5'chlo
1363.7	11.4	3.19	97	2.09	1352.5	2.44		Tt	Hem filled flt.
1370.0	6.3	3.03	100	1.10					Dk grn to grn-brn calcarou
1375.2	5.2	3.21	100	4.81					tactite.
1387.4	12.2	2.64	100	.11	1810		1.43	Arg	Cnt @1373.4, 25°, wk slip.
1397.6	10.2	2.61	100	.06	1392.5				@1394.5 25/° 2' stchlor
1407.8	10.2	2.68	100	.04					filled flt. G.G.
1417.8	10.0	2.64	100	.02					Dk gry f.g. dense chloriti
1427.8	10.0	2.61	100	.02					arg ("Kino" below 1394.5)
1433.0	5.2	2.64	98	.02	1770		.03		
					1432.5				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 9-22-64 | D.D. HOLE NO. M-112
PROPERTY Mission | DRILL GRID COORD N 31+62, W 37+37 | TOTAL DEPTH 898.1
COLLAR ELEV 3139.2 | SURVEY COORD N361,770.74, E763,997.89 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
60.0	60.0							Alluv	Gravels
83.5	23.5							CalCgl	Cal cemented cgl
93.2	9.7	2.55	93	.45	3050 / 89.2	0.45	.06	Arg	Top of bedrock 835
101.3	8.1	2.54	97	.30					Base of oxide zone 107.0
107.0	5.7	2.53	68	.30					Dense gry siliceous
117.5	10.5	2.74	76	.29					Arg. wh Cu min.
129.0	11.5	2.64	97	.30	3010 / 129.2		.31		grad facies chg-approx 1290
139.3	10.3	2.59	93	.21				ArkCgl	
149.3	10.0	2.64	96	.15					
157.9	8.6	2.66	88	.20					
169.8	11.9	2.60	94	.18	2970 / 169.2		.18		
179.0	9.2	2.66	99	.17					@179.0 18.6' bkn zone with
188.8	9.8	2.65	95	.31					1 ft. gg @179.2 @70°-a pre-
197.6	8.8	2.66	92	.48		0.46			min. structure.
208.2	10.6	2.67	85	.45	2930 / 209.2		.35		Dense siliceious tan-gry
218.3	10.1	2.67	95	.35					conglomeritic alt.
225.5	7.2	2.68	94	.28					Arkose. Cu min sparse.
235.2	9.7	2.68	94	.37					
246.8	11.6	2.68	97	.67	2890 / 249.2	0.67	.46		
255.4	8.6	2.69	98	.68					
265.5	10.1	2.72	97	.62					
270.5	5.0	2.69	100	.47		@.53			Grad. facies chg-approx
280.7	10.2	2.69	96	.43				Cgl	270.5
293.6	12.9	2.68	100	.49	2850 / 289.2		.53		
303.0	9.4	2.69	97	.50		0.49			
311.2	8.2	2.68	96	.47					
317.7	6.5	2.67	100	.31					
327.9	10.2	2.65	100	.33	2810 / 329.2		.41		
337.8	9.9	2.66	99	.32					
344.1	6.3	2.69	99	.33					
352.8	8.7	2.65	99	.26					Dense gry to tan-gry
363.0	10.2	2.63	98	.20					siliceous peble cgl. min.
370.2	7.2	2.64	94	.23	2770 / 369.2		.26		sp to mod inc. sltly.
379.6	9.4	2.66	98	.36					with depth.
389.1	9.5	2.59	94	.42					
398.2	9.1	2.67	90	.66		0.64			
404.8	6.6	2.67	98	.82	2730 / 409.2		.56		
415.0	10.2	2.64	94	.80					
425.3	10.3	2.63	96	.95					
435.3	10.0	2.65	96	.60		0.84			
439.1	3.8	2.61	92	.96					Cnt 439.1 @50°, wk shear.
446.8	7.7	2.69	95	.78	2690 / 449.2		.84	Qtzt	
456.8	10.0	2.67	96	1.45		1.45			
467.7	10.9	2.62	76	.22					
473.4	5.7	2.59	100	.21					Dense wh to lt gry impure
484.9	11.5	2.66	84	1.10	2650 / 489.2	0.92	.73		qtzt. min. sp. to st. as
494.4	9.5	2.62	94	.44					vnlts, blebs & diss.
506.0	11.6	2.68	98	.48		0.52			
515.0	9.0	2.62	93	.61					
523.2	8.2	2.64	100	.38					
532.2	9.0	2.65	98	.32	2610 / 529.2		.46		
542.9	10.7	2.63	84	.30					
551.5	8.6	2.72	96	.80				Hf	Cnt 545.0 grad.
561.6	10.1	2.84	74	.58		0.74			Dense f.g. lt todk grn Hf.
571.8	10.2	3.10	92	.90	2570 / 560.2		.59		

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 9-22-64 | D D HOLE NO. M-112
PROPERTY Mission | DRILL GRID COORD. N 31+62, W 37+37 | TOTAL DEPTH 898.1
COLLAR ELEV 3139.2 | SURVEY COORD N361,770.74, E763,997.89 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
576.8	5.0	3.04	90	.61		0.87		Qtzt	Cnt @577.3, pre min frac,
585.3	8.5	2.76	95	1.01					62°, Dense qtzt. st min
591.3	6.0	2.66	98	.31					near above Hf cnt.
596.9	5.6	3.24	94	.14				Tt	Cnt @591.3 seared frac 20°
605.4	8.5	3.17	71	.03	2530		.43		Lt tan-grn granular Tt
615.4	10.0	3.44	49	.04	609.2				
620.6	5.2	3.51	81	.05					Cnt 620.8 Grad-10' of mass-
628.4	7.8	3.03	98	.03				Mb	ive woll in cnt zone.
638.2	9.8	2.89	97	.12					
648.2	10.0	2.69	100	.01	2490		.05		
656.5	8.3	2.70	99	.01	649.2				
666.7	10.2	2.69	97	.01					Wh to lt gry m.g. Mb. with
674.5	7.8	2.69	96	.04					sp silicated zones (woll,
684.1	9.6	2.70	100	.09	2450		.04		Trem). Rare suls assoc with
694.3	10.2	2.70	98	.01	689.2				silicates.
704.5	10.2	2.70	98	.02					
714.7	10.2	2.68	100	.02					
724.9	10.2	2.70	99	.02					
730.7	5.8	2.57	99	.04	2410		.02		Cnt 730.7 wk sul filled
733.8	3.1	3.00	90	.53	729.2			Hf	slip 70°
743.9	10.1	2.84	98	.54		0.64			Lt grn dense calcarious Hf.
754.1	10.2	3.03	95	.78					Cu min.-sp to mod.
764.2	10.1	3.05	89	.22					
772.4	8.2	3.09	96	.71	2370	0.71	.52		
782.9	10.5	3.08	66	.12	769.2			Tt&	Grad change-becomes
790.5	7.6	2.82	97	.10				Arg	Argillaceous
800.0	9.5	3.09	84	.08					
810.4	10.4	3.28	92	.25	2330		.18		Dense gry arg. with pods
814.1	3.7	2.98	94	.15	809.2				of Tt replacing the arg.
823.1	9.0	3.12	86	.04					
833.1	10.2	3.12	77	.02					
838.7	5.4	3.02	96	1.06		0.96			
843.0	4.3	3.01	94	.84					Cnt 843.0, grad.
848.0	5.0	2.72	100	.04	2290		.27	Mb	
857.9	9.9	2.69	100	.02	849.2				
867.9	10.0	2.69	100	.03					Wh to gry f.g. Mb.
877.9	10.0	2.70	100	.02					Rare suls.
888.1	10.2	2.73	100	.03	2250		.03		
898.1	10.0	2.69	100	.05	889.2		.05		
					898.1				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2
PROPERTY Mission
COLLAR ELEV 2975.1

DATE COMPLETED 8-31-64
DRILL GRID COORD. N 28+56, W 22+68
SURVEY COORD. N361,487.30, E765,471.12

D.D. HOLE NO. M-111
TOTAL DEPTH 720.0
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
45.0	45.0				2930		N.S.	Arg	Hole collored in bedrock
55.7	10.7	2.74	55	.10	45.1				below oxidation zone.
65.5	9.8	2.76	91	.10					
73.8	8.3	2.70	94	.07					
79.0	5.2	2.73	97	.05					
87.9	8.9	2.65	84	.07	2890 / 85.1		.08		
96.6	8.7	2.57	100	.10					
106.3	9.7	2.69	90	.07					
114.3	8.0	2.64	99	.07					
124.5	10.2	2.66	98	.08	2850 / 125.1		.08		
134.7	10.2	2.69	94	.07					
142.0	7.3	2.66	97	.09					
152.1	10.1	2.68	98	.07					Lt gry to tan-gry siliceous
162.5	10.4	2.73	96	.08	2810 / 165.1		.08		sometimes sltly arkosic alt
172.8	10.3	2.68	97	.09					arg. Cu mon. rare.
180.2	7.4	2.70	94	.06					
190.5	10.3	2.68	95	.06					
200.2	9.7	2.78	93	.04					
210.7	10.5	2.66	100	.10	2770 / 205.1		.07		
220.9	10.2	2.71	95	.07					
231.1	10.2	2.73	94	.06					
241.3	10.2	2.69	97	.12					
251.0	9.7	2.69	96	.06	2730 / 245.1		.08		
260.8	9.8	2.76	97	.14					
270.9	10.1	2.62	98	.09					
281.3	10.4	2.63	98	.04					
292.0	10.7	2.66	99	.05	2690 / 285.1		.08		Grad facies change approx
300.0	8.0	2.61	95	.07				Ark-Arg	292'
308.5	8.5	2.61	99	.10					Lt gry to gry-tan siliceous
318.5	10.0	2.66	99	.20					alt. arkosic arg. Cu min
327.2	8.7	2.61	99	.12	2650 / 325.1		.11		rare. Grad facies change
338.5	11.3	2.72	97	.12				Arg-Qz	approx 327'
348.5	10.0	2.73	98	.10					Dense siliceous cglitic
358.5	10.0	2.69	98	.07					arg. Cu min rare
367.0	8.5	2.64	99	.07	2610 / 365.1		.09		
377.1	10.1	2.66	96	.13					Grad facies change approx
386.8	9.7	2.57	98	.07				Arg	377'
398.3	11.5	2.64	94	.04					
408.3	10.0	2.70	96	.06	2570 / 405.1		.08		Dense gry siliceous arg
417.9	9.6	2.64	94	.08					becoming feldspathic at
426.5	8.6	2.52	100	.08					Tt cnt.
436.7	10.2	2.73	94	.10					
439.9	3.2	2.65	97	.21					Cnt @439.9 @20° sharp alt
448.2	8.3	3.36	95	.51	2530 / 445.1	0.51	.15	Tt	change.
459.2	10.8	3.34	90	.73		0.99			Soft brn-grn c.g. Tt mod.
471.4	12.4	3.52	85	1.34					diss cpy with py.
481.3	9.9	2.73	100	.16				Mb	Cnt @479.2-10°;sharp alt
491.5	10.2	2.72	100	.35	2490 / 485.1		.73		change.
501.8	10.3	2.72	99	.13					Lt gry to wh m.g. Mb Cu
511.8	10.0	2.71	98	.09					min rare, associated with
522.2	10.4	2.71	95	.09					minor incr. in alt.
532.4	10.2	2.70	100	.06	2450 / 525.1		.14		
537.0	4.6	3.13	91	3.84		3.84			Cnt @537.0-70° wk re-xlize
549.5	12.5	2.57	98	.06				Arg	flt Lt tan arg. resembles
556.5	7.0	2.56	93	.24					felsite porph in part.

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 8-31-64 | D D HOLE NO. M-111
PROPERTY Mission | DRILL GRID COORD N 28+56, W 22+68 | TOTAL DEPTH 720.0
COLLAR ELEV 2975.1 | SURVEY COORD N361,487.30,E765,471.12 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
565.0	8.5	2.78	98	.09	2410		.53	Mb	
575.4	10.4	2.68	95	.10	565.1				
583.0	7.6	2.97	98	.99					
590.2	7.2	2.59	100	.69		0.71			
600.5	10.3	2.86	93	.52					
610.8	10.3	2.84	93	.07	2370		.48		Gry-wh Mb 575.4-600.5 slty
621.0	10.2	2.90	97	.07	605.1				silicated-hornfelsic in
631.4	10.4	2.73	99	.07					part with mod suls
641.8	10.4	2.65	100	.05					
652.2	10.4	2.72	98	.05	2330		.06		
662.6	10.4	2.71	97	.03	645.1				
672.9	10.3	2.71	99	.02					
683.4	10.5	2.71	98	Tr	2290		.02		Cnt @668.3 alt.
694.0	10.6	2.71	96	Tr	685.1			Ls	
704.3	10.3	2.71	98	Tr					Lt blue-gry ls wkly
714.7	10.4	2.70	99	Tr					marblized; bleached wh on
720.0	5.3	2.70	95	Tr					fracs. Cu nil.

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 9-18-64 | D D HOLE NO. M-110
PROPERTY Mission | DRILL GRID COORD N25+41; W20+04 | TOTAL DEPTH 1219.6'
COLLAR ELEV 3179.2 | SURVEY COORD N361,176.04,E765,739.57 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
180.0	180.0							Alluv	Gravels
192.0	12.0							CalCgl	Cemented cgl
199.6	7.6	2.67	82	.11				Arg	Top of bedrock @192.0
207.4	7.8	2.71	100	.07	2970		.04		
219.8	12.4	2.72	97	.09	209.2				Base of oxidation @194.0
230.5	10.7	2.68	94	.10					
241.0	10.5	2.71	94	.12					
248.4	7.4	2.66	86	.09	2930		.10		
259.1	10.7	2.83	89	.27	249.2				
267.5	8.4	2.74	96	.10					
275.8	8.3	2.70	91	.10					
284.7	8.9	2.67	97	.06					
296.2	11.5	2.68	97	.09	2890		.13		
304.7	8.5	2.69	80	.08	289.2				
315.7	11.0	2.66	72	.07					
324.3	8.6	2.66	85	.07					
335.3	11.0	2.66	37	.16	2850		.09		
345.0	9.7	2.65	25	.25	329.2				
357.9	12.9	2.53	34	.08					
366.8	8.9	2.59	47	.09					@410.0 10.0 ft. G.G. flt
378.3	11.5	2.60	98	.12	2810		.14		zone.
390.1	11.8	2.66	95	.16	369.2				
400.8	10.7	2.77	70	.19					Tan-gry to gry dense
410.7	9.9	2.87	28	.07	2770		.14		siliceous f.g to m.g.
420.7	10.0	2.67	49	.12	409.2				argillite Cu min. rare to
432.0	11.3	2.63	69	.10					sparse as diss unlts of
443.4	11.4	2.58	58	.14					cpy with py.
452.9	9.5	2.57	79	.10	2730		.12		
463.6	10.7	2.64	55	.12	449.2				@453.5 6 ft. bkn GG flt 80°
474.5	10.9	2.65	74	.15					@466 63 ft. bkn GG flt 85°
485.0	10.5	2.63	91	.62		0.62			
495.2	10.2	2.68	85	.38	2690		.29		
505.1	9.9	2.61	39	.23	489.2				
516.6	11.5	2.65	63	.14					
526.7	10.1	2.59	40	.09	2650		.19		
536.1	9.4	2.66	70	.14	529.2				
542.6	6.5	2.61	83	.14					
553.6	10.7	2.66	51	.08					
563.4	10.1	2.71	72	.16					@560.0 3.4' bkn & GG flt 85°
573.3	9.9	2.64	92	.22	2610		.14		
582.6	9.3	2.69	94	.18	569.2				
592.7	10.1	2.65	95	.17					
602.7	10.0	2.65	98	.10					
613.0	10.3	2.63	97	.09	2570		.15		
622.6	9.6	2.63	98	.14	609.2				
630.8	8.2	2.65	94	.12					
637.2	6.2	2.63	99	.12					
646.0	8.8	2.58	97	.07					
654.3	8.3	2.60	100	.09	2530		.11		
664.4	10.1	2.59	100	.09	649.2				@663.8 4 ft. flt GG 45°
674.7	10.3	2.67	95	.10					
684.7	10.0	2.67	99	.06					
694.8	10.1	2.71	97	.07	2490		.08		
703.7	8.9	2.67	93	.05	689.2				
710.9	7.2	2.68	96	.09					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 9-18-64 | D D HOLE NO. M-110
PROPERTY Mission | DRILL GRID COORD N25/41; W20/04 | TOTAL DEPTH 1219.6'
COLLAR ELEV 3179.2 | SURVEY COORD N361,176.04,E765,739.57 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
723.7	12.8	2.69	100	.06				Ark-Arg	Grad. facies change approx
733.9	10.2	2.65	98	.07	2450		.07		724.0
744.1	10.2	2.69	98	.03	729.2				
753.8	9.7	2.64	98	.06					
763.6	9.8	2.67	93	.04					
775.0	11.4	2.67	98	.05	2410		.05		
782.0	7.0	2.64	96	.05	769.2				Tannish-gry, dense siliceous
793.7	11.7	2.62	92	.03					arkosic argillite. Cu min.
801.1	7.4	2.51	100	.02					rare.
810.1	9.0	2.68	97	.07	2370		.04		
819.9	9.8	2.64	98	.04	809.2				
830.0	10.1	2.58	100	.08					
839.7	9.7	2.62	97	.04					
851.7	12.0	2.63	98	.03	2330		.05	Arg	Cnt @846.5 2 ft bkn GG
857.5	5.8	2.60	97	.04	849.2				flt 85°
867.6	10.1	2.75	97	.13					
875.7	8.1	2.69	100	.07					
886.7	11.0	2.64	97	.07					
893.0	6.3	2.70	92	.08	2290		.08		Dense dk gry to tan gry
899.5	6.5	2.64	91	.10	889.2				siliceous arg. Cu min rare
905.5	6.0	2.67	96	.09					
915.6	10.1	2.69	100	.06					
925.8	10.2	2.63	100	.06					
936.0	10.2	2.65	96	.13	2250		.08		
947.8	11.8	2.62	82	.11	929.2				
953.7	5.9	2.67	100	.33					Cnt @950.5 sharp alt chg-20°
963.8	10.1	3.31	95	.37		0.49		Tt	Dk-grn to grn-brn m.g. Tt
973.4	9.6	3.38	91	.49	2210		.26		
980.5	7.1	2.90	100	.20	969.2	0.49		Tt&Mb	
989.5	9.0	2.96	98	.23					Brn-tan pods of Tt in a
998.0	8.5	2.96	95	.37					stly silicated Mb.
1008.1	10.1	2.71	100	.06					
1013.1	5.0	2.85	87	1.08	2170		.26		
1018.3	5.2	3.18	100	.66	1009.2	0.87			Cnt @1016.3-alt chg @40°
1028.3	10.0	2.68	100	.11				Hf&Arg	
1038.5	10.2	2.65	100	.08					Lt grn to dk grn chloritic
1048.6	10.1	2.68	100	.03	2130		.25		Hf with ints of lt brn
1054.7	6.1	2.68	100	.04	1049.2				siliceous arg. Cu min rare.
1064.6	9.9	2.59	100	.06					Last 10' grades to Tt.
1073.0	8.4	2.64	100	.09					Cnt @1073.0 50°-wk slip.
1084.2	11.2	2.62	99	.04				Arg &	
1094.3	10.1	2.61	100	.05	2090		.06	Srg Bx	Tan-pink to tan-gry feld-
1104.4	10.1	2.67	100	.03	1089.2				spathci arg. @1094.0 10 ft
1114.8	10.4	2.57	100	.03					of cem bx @1115.0 10 ft. of
1125.5	10.7	2.78	100	.10					cem bx cnt grd chg @1136.0
1135.8	10.3	2.62	97	.04	2050		.05		
1140.7	4.9	2.59	100	.01	1129.2			Tt	Lt brn-grn c.g. Tt
1149.6	8.9	3.00	81	.03				Mb	Cnt @1144.1 2.3 ft. GG flt
1157.6	8.0	2.71	99	.05					wh f.g. sp silicated Mb
1166.6	9.0	2.72	99	.03	2010		.03		
1179.3	12.7	2.72	98	.05	1169.2				Cnt @1179.3 2.7' low ang flt
1188.1	8.8	2.69	70	.01				Arg bx	Dense f.g. arg bx
1199.5	11.4	2.69	100	.01					
1209.5	10.0	2.63	99	.01	1970		.02		1206.5 1.5 GG granite bx
1219.6	10.1	2.63	96	.01	1209.2			Gran Bx	

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 8-14-64 | D.D. HOLE NO. M-109
PROPERTY Mission | DRILL GRID COORD. N 28+36 W 24+87 | TOTAL DEPTH 604.9
COLLAR ELEV 2,971.8 | SURVEY COORD N361,463.98, E765,252.10 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
25.0	25.0							Arg	Hole collered in arg.
35.1	10.1	2.71	76	.10	2930 / 41.8		.05		below base of oxidation.
44.2	9.1	2.70	87	.16					
52.5	8.3	2.69	87	.14					
62.2	9.7	2.65	100	.12					
74.9	12.7	2.72	87	.18	2890 / 81.8		.18		
84.7	9.8	2.77	96	.29					
95.2	10.5	2.70	93	.13					Dense siliceous tan-gry to
103.7	8.5	2.67	100	.09					dk gry arg becoming arkosic
114.4	10.7	2.72	82	.11	2850 / 121.8		.12		with depth. Cu mineraliza-
124.9	10.5	2.70	97	.10					tion wk.
134.0	9.1	2.72	100	.11					
144.5	10.5	2.68	96	.07					
154.6	10.1	2.73	98	.11	2810 / 161.8		.09		162.5 6" GG sul filled flt
164.5	9.9	2.76	91	.05					zone 45°
174.1	9.6	2.63	76	.15					
185.5	11.4	2.61	72	.12					Cnt @185.5 grad facies
196.7	11.2	2.65	95	.26	2770 / 201.8		.18	Arg-Cgl	change
207.9	11.2	2.67	98	.27					
218.3	10.4	2.58	100	.47					
223.6	5.3	2.78	96	.28		0.43			245.6 2.3' GG flt zone 85°
232.6	9.0	2.77	93	.46	2730 / 241.8		.37		
243.0	10.4	2.70	99	.30					Tan-gry siliceous
252.9	9.9	2.66	94	.24					conglomeritic arg with
261.0	8.1	2.63	98	.20					introduced feld. incr.
271.5	10.5	2.70	97	.27					near Tt cnt as does Cu min.
280.2	8.7	2.74	96	.20	2690 / 281.8		.24		
290.6	10.4	2.70	98	.34					
295.6	5.0	3.27	90	.54					
305.9	10.3	2.83	99	.67		0.66			Cnt @306.0 grad
316.5	10.6	3.16	96	.70	2650 / 321.8		.55	Tt	
326.8	10.3	2.99	100	.34					
336.2	9.4	2.93	90	.20					Grn-brn sometimes siliceous
346.8	10.6	3.24	94	.13					c.g. Tt with minor pats of
357.2	10.4	3.37	95	.06	2610 / 361.8		.16		Hf. Cu min wk to mod.
366.2	9.0	3.31	100	.16					
377.8	11.6	3.23	100	1.14		1.14			
385.7	7.9	2.95	100	.15					Cnt @385.7 grad
397.0	11.3	2.70	98	.03	2570 / 401.8		.39	Mb	
406.9	9.9	2.71	98	.02					
417.3	10.4	2.59	100	.02					Wh m.g. marble with stly
427.7	10.4	2.71	99	.04					silicated zonesCu-Zn-Moly
438.1	10.4	2.79	97	.04	2530 / 441.8		.03		min rare
448.5	10.4	2.71	99	.05					
459.0	10.5	2.70	98	.10					
465.9	6.9	2.71	100	.05					
476.2	10.3	2.71	100	.06	2490 / 481.8		.07		
486.4	10.2	2.71	95	.08					
496.6	10.2	2.70	99	.06					Cnt @489.5 grad
506.8	10.2	2.66	100	.01					
514.0	7.2	2.53	92	.02	2450 / 521.8		.04		
522.2	8.2	2.65	92	.03					
531.1	8.9	2.68	96	.01					
542.5	11.4	2.68	97	.01					

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 8-14-64 | D.D. HOLE NO. M-109

PROPERTY Mission | DRILL GRID COORD. N 28/36 W 24/87 | TOTAL DEPTH 604.9

COLLAR ELEV 2,971.8 | SURVEY COORD N361,463.98, E765,252.10 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
552.4	9.9	2.74	97	.19					Wkly marblized blue-gry Ls
561.2	8.8	2.68	99	.19	2410		.10		with bleaching on fracs. Min
571.2	10.0	2.71	96	.08	561.8				rare, except for silicated
585.0	13.8	2.98	92	.63					zone at 571.2
595.0	10.0	2.89	98	.04	2370		.25		
604.9	9.9	2.69	99	.02	601.8				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 10-14-64 | D D HOLE NO. M-108
PROPERTY Mission | DRILL GRID COORD N24/63, W25/11 | TOTAL DEPTH 894.7
COLLAR ELEV 3219.2 | SURVEY COORD N361,090.56,E765,234.38 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
175.0	175.0							Alluv	Gravel O.B.
193.2	18.2							CalCgl	Cal cemented cgl top of
203.0	9.8	1.97	67	.21				Arg	bedrock @193.2' Base
213.7	10.7	2.47	82	.78	3010	0.78	.17		oxidation @213.7 c.c to
223.8	10.1	2.34	52	1.15		1.04			approx 225.0'
234.5	10.7	2.63	36	.20					
245.5	11.0	2.61	33	.12					
253.3	7.8	2.69	62	.13	2970 / 249.2		.48		
264.8	11.5	2.73	91	.13					
275.6	10.8	2.77	69	.11					
284.5	8.9	2.68	88	.16					
294.2	9.7	2.74	93	.14	2930 / 289.2		.13		
303.1	8.9	2.68	96	.11					
313.2	10.1	2.70	98	.09					
322.2	9.0	2.67	100	.11					
328.9	6.7	2.70	85	.11	2890 / 329.2		.11		
338.9	10.0	2.66	85	.14					
348.9	10.0	2.57	50	.18					Dense gry to tan-gry
359.8	10.9	2.69	83	.15					siliceous sometimes arkosic
364.5	4.7	2.70	94	.12					argillite Cu min. wk.
373.7	9.2	2.68	100	.18	2850 / 369.2		.16		
384.6	10.9	2.67	97	.09					
394.2	9.6	2.60	97	.09					
405.2	11.0	2.70	97	.10					
415.5	10.3	2.56	94	.14	2810 / 409.2		.11		
426.3	10.8	2.66	97	.11					
437.8	11.5	2.63	96	.31					
446.9	9.1	2.63	98	.24	2770 / 449.2		.21		
458.1	11.2	2.57	99	.22					
466.6	8.5	2.65	99	.27					
473.3	6.7	2.66	98	.25					
478.2	4.9	2.67	97	.21					
488.4	10.2	2.66	100	.23	2730 / 489.2		.24		
496.6	8.2	2.64	100	.21					
506.8	10.2	2.68	99	.17					
519.2	12.4	2.68	100	.19					Cnt @519.2 Grad facies
528.5	9.3	2.69	95	.12	2690 / 529.2		.17	ArgCgl	change.
535.7	7.2	2.61	99	.12					
545.9	10.2	2.66	95	.25					
556.1	10.2	2.68	99	.45		0.45			
566.1	10.0	2.64	97	.31	2650 / 569.2		.31		
576.2	10.1	2.70	92	.46					
585.6	9.4	2.67	100	.52					Dense gry to tan-gry
595.5	9.9	2.76	98	.34		0.45			siliceous, feldspathic
607.1	11.6	2.68	98	.40	2610 / 609.2		.45		conglomeritic arg. sp to
617.2	10.1	2.70	97	.84					mod cpy & py as diss & unlts
626.9	9.7	2.70	100	.42					Tr Zn.
636.1	9.2	2.75	92	.31		0.47			
647.5	11.4	2.69	100	.35					
654.6	7.1	2.64	98	.71	2570 / 649.2		.47		
662.9	8.3	2.68	91	.61					
670.9	8.0	2.62	98	.88		1.21			Cnt @670.9 wk slip 40°
679.0	8.1	2.77	96	1.01				Tt	
688.4	9.4	2.97	100	2.48	2530 / 689.2		1.21		Tan-grn silicified Tt mod
698.5	10.1	2.93	96	1.28					to st cpy-py as diss

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 10-14-64 | D.D. HOLE NO. M-108
PROPERTY Mission | DRILL GRID COORD N 24/63, W 25/11 | TOTAL DEPTH 894.7
COLLAR ELEV 3219.2 | SURVEY COORD N361,090.56, E765,234.38 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
706.4	7.9	3.04	71	.76					Cnt @705.5 st slip 40°
716.8	10.4	2.63	60	.12		.0.87		Qtzt	impue lt-gry f.g. qtzt
723.6	6.8	2.71	98	1.93					cnt grad @723.0
730.0	6.4	3.15	88	.45	2490		.87	Tt	
734.0	4.0	2.65	86	1.53	729.2				
745.0	11.0	3.36	90	.18					Lt grn-brn m.g. Tt with arg
752.7	7.7	3.48	94	.95		.5.06			& Tt pats first 10'. Last
758.0	5.3	3.91	82	12.20					20' massive cpy &sphal-assay
768.0	10.0	4.00	93	12.02	2450		5.06		10.78% Zn & 9.33% Cu
773.4	5.4	3.51	90	1.53	769.2	.1.53			
784.2	10.8	2.68	100	.03				Mb	Cnt 773.4 sul filled frac
794.1	9.9	2.68	100	.05					60°
804.1	10.0	2.71	100	.02					
814.1	10.0	2.70	100	.04	2410		.19		
824.2	10.1	2.66	100	.02	809.2				Lt blue-gry to wh Mb with
834.2	10.0	2.71	100	.02					short stly silicated ints
844.4	10.2	2.68	100	.02					(Trem). Suls rare.
854.5	10.1	2.72	100	.06	2370		.03		
864.6	10.1	2.77	97	.08	849.2				
874.5	9.9	2.83	99	.02					
884.6	10.1	2.70	99	.02					
894.7	10.1	2.69	100	.03	2330		.04		
					889.2				
									Bottom

COMPOSITE DRILL LOG - ASARCO

PAGE 1 OF 2 | DATE COMPLETED 8-20-64 | D.D. HOLE NO. M-107
PROPERTY Mission | DRILL GRID COORD N-24/59 W-27/57 | TOTAL DEPTH 983.4
COLLAR ELEV 3,222.4 | SURVEY COORD N361,082.41, E764,987.92 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	Gravel & cal. cg.
201.0	201.0								Bedrock @201.0'
212.9	11.9	2.14	84	.66	3010		.16	And	
219.7	6.8	2.16	95	.71	212.4				Mod. kaolinized amygdl and
228.7	9.0	2.38	84	1.79		.1.02			post min. dike. Cu supergene
237.4	8.7	2.39	100	.48		0.42NS			base of oxide zone 234.0
244.0	6.6	2.37	89	.11					cnt @244.0-intrusive.
254.7	10.7	2.63	64	.45	2970		.49	Arg	
264.4	9.7	2.65	81	.28	252.4				
274.4	10.0	2.64	91	.24					
284.4	10.0	2.66	89	.19					
292.5	8.1	2.70	91	.30	2930		.26		
304.2	11.7	2.68	95	.18	292.4				
314.6	10.4	2.66	59	.18					
322.2	7.6	2.65	90	.17					
331.0	8.8	2.71	93	.16	2890		.17		
338.1	7.1	2.68	90	.16	332.4				
348.5	10.5	2.67	96	.18					
358.3	9.8	2.63	78	.17					
366.6	8.3	2.66	49	.26					
377.7	11.1	2.65	63	.18	2850		.19		
386.8	9.1	2.62	92	.21	372.4				Dense dk gry to gry
397.1	10.3	2.64	93	.18					argillite with minor arkosic
409.1	12.0	2.65	91	.25					horizons. Wk Cu min. - cpy
416.7	7.6	2.64	98	.17	2810		.21		assoc. py as unlts & diss.
425.1	8.4	2.67	93	.22	412.4				
436.5	11.4	2.62	93	.21					
448.3	11.8	2.63	90	.19					
459.9	11.6	2.73	84	.22	2770		.20		
469.0	9.0	2.71	75	.16	452.4				
478.8	9.8	2.67	95	.20					
485.8	7.0	2.70	94	.28					
495.0	9.2	2.63	83	.19	2730		.21		
505.5	10.5	2.70	92	.18	492.4				
515.8	10.3	2.70	84	.12					
525.4	9.6	2.67	72	.16					
537.0	11.6	2.59	71	.16	2690		.16		@529.6 3' bkn g.g flt zone
547.1	10.1	2.61	71	.14	532.4				
558.5	11.4	2.67	81	.35				Arg-Cgl	Grad change approx 547.1
569.0	10.5	2.67	92	.43	2650	.0.47	.32		
578.6	9.6	2.75	82	.59	572.4				
589.0	10.4	2.64	99	.65					Tan-gry stly conglomeritic
599.6	10.6	2.67	94	.40		.0.67			argillite becoming
604.9	5.3	2.68	95	1.38					increasingly feldspathized
615.1	10.2	2.64	99	.66	2610		.67		& silicified with depth.
624.5	9.4	2.67	92	.72	612.4	.0.83			Cu min incr. with alt.
633.5	9.0	2.69	96	1.20					
643.4	9.9	2.64	100	.68					
653.7	10.3	2.54	99	.77	2570		.83		
664.0	10.3	2.63	100	1.38	652.4			Qtzfeld & Tt	Grad zone with pats of Tt
670.4	6.4	2.91	92	1.47		.1.19			to only Tt below 667.5.
678.0	7.6	2.77	100	1.01				Tt	670.4 7.6' vr st. premin
680.4	2.4	2.77	91	.42					flt in pale grn Tt @60° ∠
688.0	7.6	2.64	89	.11				Qtzt	cnt @680.4-4"premin flt 55°
695.8	7.8	2.63	81	.09	2530 692.4		.86		

COMPOSITE DRILL LOG - ASARCO

PAGE 2 OF 2 | DATE COMPLETED 8-20-64 | D.D. HOLE NO. M-107
PROPERTY Mission | DRILL GRID COORD N-24/59 W-27/57 | TOTAL DEPTH 983.4
COLLAR ELEV 3,222.4 | SURVEY COORD N361,082.41, E764,987.92 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
704.9	9.1	2.61	85	.10					Dense wh. f.g. qtzt.
714.7	9.8	2.62	94	.08					
721.1	6.4	2.58	96	.04					
731.1	10.0	2.62	99	.08	2490		.10		Cnt @731.1 1" sul-chlor
741.1	10.0	2.61	100	.57	732.4	0.57		Arg	filled flt
751.4	10.3	2.64	98	.05					Lt tan-gry arg cnt @756.2-
760.2	8.8	2.64	98	.29				Hf	10" chlor-hem-gyp filled
770.2	10.0	2.98	97	.61		0.60			alt flt 40°
780.4	10.2	2.96	98	.55	2450		.38		Dense lt grn siliceous Hf
790.0	9.6	2.94	96	.25	772.4			Ls	cnt @785.3 wk sul smeared
800.0	10.0	2.71	100	Tr					slip 30°
809.9	9.9	2.75	98	.03					
820.1	10.2	2.77	95	.06	2410		.18		
830.3	10.2	2.71	98	.30	812.4				
840.5	10.2	2.68	99	Tr					
850.7	10.2	2.71	99	Tr	2370		.09		
860.9	10.2	2.71	99	Tr	852.4				
871.2	10.3	2.70	98	Tr					Blue-gry limestone weekly
881.2	10.0	2.70	100	Tr					mblizd and bleached to wh
891.7	10.5	2.71	98	Tr					on fracs occasional stly
902.0	10.3	2.70	99	.01	2330		Tr		bleached zones contain
912.1	10.1	2.70	100	Tr	892.4				some calc. silicates. Suls
922.4	10.3	2.70	98	Tr					nil.
932.5	10.1	2.71	100	Tr	2290		Tr		
942.6	10.1	2.71	99	.05	932.4				
952.8	10.2	2.70	100	.04					
963.1	10.3	2.74	97	.01	2250		.03		
973.3	10.2	2.92	93	.01	972.4				
983.4	10.1	2.72	100	Tr					
									Bottom

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 4 | COLLAR ELEV. 3164.6 | D.D. HOLE NO. M-105

SURVEY COORD. N 361,187.30

PROPERTY Mission | E. 767,001.22 | TOTAL DEPTH 1461.0

DATE COMPLETED 7/23/64 | DRILL GRID COORD. N 25+33 W 7+43 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								ALLV.	GRAVEL
175.3	175.3								TOP CALCGL 1753'
196.9	21.6				2970 / 194.6			Cal-Cgl	TOP B.R. 196.9
206.5	9.6	2.54	33	.14				ARG	
214.0	7.5	2.37	83	.40		1.13			
221.2	7.2	2.59	89	1.99		0.32 NS			- BASE OF OX 218.1'
230.6	9.4	2.65	93	.06					
239.5	8.9	2.68	88	.21	2930 / 234.6		.50		
250.2	10.7	2.61	83	.19					- 5 Ft OX zone @ 250.2
259.4	9.2	2.62	90	.07					
267.8	8.4	2.69	98	.14					
277.3	9.5	2.74	94	.25	2890 / 274.6		.16		
283.5	6.2	2.64	91	.13					
293.3	9.8	2.68	83	.23					
304.1	10.8	2.61	95	.10					
314.5	10.4	2.68	94	.16	2850 / 314.6		.16		
323.9	9.4	2.67	85	.09					
332.9	9.0	2.73	86	.12					- ST. 40° FLT @ 327.5'
341.4	8.5	2.69	100	.13					
347.1	5.7	2.69	92	.11					
357.9	10.8	2.70	91	.05	2810 / 354.6		.10		
366.3	8.4	2.66	94	.12					F.G. Lt GRY-TAN
374.6	8.3	2.71	97	.20					SILICEOUS ARG, MOD SER
382.9	8.3	2.66	96	.09					SP CHLOR, TR Pb-Zn-Moly
394.7	11.8	2.66	94	.17	2770 / 394.6		.14		WK. FELDSPATIC, ARKOSIC
399.2	4.5	2.61	95	.18					HORIZONS. MOD. FRAC
407.8	8.6	2.59	91	.10					THROUGHOUT.
416.6	8.8	2.58	95	.09					- 401.3, 1' - 50° CHLOR FILLED FLT
424.9	8.3	2.60	100	.09					
434.8	9.9	2.64	98	.12	2730 / 434.6		.11		
441.3	6.5	2.61	90	.10					
452.5	11.2	2.62	98	.11					
458.9	6.4	2.54	92	.16					
464.2	5.3	2.58	68	.17					
476.0	11.8	2.63	94	.15	2690 / 474.6		.14		
487.1	11.1	2.60	98	.07					- 485.4', 8" - 70° FLT
497.8	10.7	2.58	96	.08					
507.4	9.6	2.63	100	.13					- 498.9' - 22" - 60° FLT.
515.9	8.5	2.62	96	.17	2650 / 514.6		.11		
524.9	9.0	2.65	98	.11					
533.8	8.9	2.73	95	.23					
543.3	9.5	2.68	99	.10					
548.3	5.0	2.66	93	.10					
558.4	10.1	2.63	97	.09	2610 / 554.6		.13		- GRAD CONT.
566.3	7.9	2.67	80	.12				[illegible]	
577.8	11.5	2.66	93	.25					

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 4 | COLLAR ELEV. 3164.6 | D.D. HOLE NO. M-105

SURVEY COORD. N 361,187.30

PROPERTY Mission | E. 767,001.22 | TOTAL DEPTH 1461.0

DATE COMPLETED 7/23/64 | DRILL GRID COORD. N-25+33, W-7+43 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
577.8									
585.7	7.9	2.62	95	.17					TAN - GRY ARG WITH HOR-
596.4	10.7	2.62	95	.07	2570		.15		IZONS OF ANOXSIC TEXT
604.5	8.1	2.66	96	.17	594.6				WK - SP SUL MIN.
614.9	10.4	2.67	95	.18					
622.9	8.0	2.79	95	.34					
630.9	8.0	2.48	100	.22					- 6" - 55° - FLT @ 627.0'
640.4	9.5	2.56	100	.21	2530 634.6		.22		GRAD. CONT.
649.2	8.8	2.62	96	.10					
659.1	9.9	2.58	99	.16					F.G. SILICEOUS ARG
669.2	10.1	2.65	97	.16					
681.4	12.2	2.66	98	.12	2490 674.6		.15		
691.8	10.4	2.63	96	.16				ARG-Cgl	Siliceous Cgl - ARG
701.7	9.9	2.61	99	.07					- 701.6' - SHRP - 85° - FLT
713.2	11.5	2.58	99	.09	2450		.12		
722.1	8.9	2.67	96	.41	714.6	0.42		HF-Tt Bx	VRY. ST. FLT ZONE, @ 713.2'
732.0	9.9	2.71	95	.42					80° 1AST 2F ST BX
742.0	10.0	2.62	100	.22				HF	PALE GRN - WHITE HF WITH
751.8	9.8	2.91	93	.07					RODS ST SILICA
759.4	7.6	2.31	100	.08	2410 754.6		.26		- 757.0' - 2.5' GGY HF-ARG FIT CONT.
769.5	10.1	2.51	99	.08				ARG-Cgl	
779.5	10.0	2.61	100	.35					
789.5	10.0	2.59	99	.04					
799.5	10.0	2.60	98	.07	2370 794.6		.14		
809.3	9.8	2.60	100	.40		0.40			
819.0	9.7	2.61	98	.04					TAN - GRY FELDSPATH RICH
829.4	10.4	2.64	95	.02					& SILICIFIED Cgl - ARG
839.5	10.1	2.53	100	.04	2330 834.6		.13		WK - SP SULS AS DISS. &
849.1	9.6	2.61	96	.03					VNLTS
859.6	10.5	2.59	100	.06					
868.7	9.1	2.66	93	.02					
878.6	9.9	2.60	100	.02	2290 874.6		.04		
888.5	9.9	2.62	98	.30					- 881.0' - 60° - 6" - FLT ZONE
898.4	9.9	2.54	100	.50				Tt	- WK - 40° - FLT CNT. OF ARG - Tt
906.6	8.2	2.88	96	.82		0.86			
914.1	7.5	2.76	89	1.37	2250		.64		- ST 2 FT - 45° - BX FLT ZONE
924.3	10.2	2.65	100	1.27	914.6				TAN Tt WITH PATCHES
930.0	5.7	2.79	100	1.26					OF HF, MOD - ST SULS
939.8	9.8	3.03	95	1.29		1.36			
949.9	10.1	3.21	94	1.70					- GRAD. CNT.
960.0	10.1	3.11	96	1.11	2210 954.6		1.36	HF	
967.1	7.1	3.01	97	1.31					
976.5	9.4	3.09	93	1.80		1.66			- 985' - MOD 70° Pre MIN FLT
985.4	8.9	3.13	100	.91					
990.3	4.9	3.13	93	1.95					- 990.3' - ST 3FT - 65° FLT BX
997.0	6.7	2.91	95	3.84	2170 994.6		1.66		Pre - MIN

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF 4 | COLLAR ELEV. 3164.6 | D.D. HOLE NO. M-105

SURVEY COORD. N 361,187.30

PROPERTY Mission | E. 767,001.22 | TOTAL DEPTH 1461.0

DATE COMPLETED 7/23/64 | DRILL GRID COORD. N-25+33, W-7+43 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
977.0					2170		1.66	HF	
1007.2	10.2	3.13	94	1.12	994.6				
1017.5	10.3	3.08	100	.62		0.97			PALE GRN HF WITH PODS
1027.7	10.2	3.12	94	.54					OF T+, MOD - ST cpy AS
1037.9	10.2	3.16	96	.92	2130		.97		VNITS & DISS, TR Pb-ZN
1048.0	10.1	3.13	97	.86	1034.6	0.88			Moly.
1058.2	10.2	3.24	97	.17					
1068.2	10.0	2.97	100	.13					
1079.4	11.2	3.19	86	.28	2090		.41		
1089.3	9.9	2.90	100	.65	1074.6				- 1086.0' - 1.4 FT - 70° - PRE - MIN
1099.4	10.1	3.09	97	.40		0.49			FLT Bx.
1109.9	10.5	3.06	95	.45					
1119.9	10.0	3.18	96	.41	2050		.46		
1129.9	10.0	3.22	18	.66	1114.6				- 1139.4' - GG/ - 5" FLT
1139.9	10.0	3.08	95	.42		0.66			
1151.0	11.1	3.12	92	1.00					
1161.1	10.1	3.10	96	.62	2010		.66		- 1160.0' - 55° - 4" FLT
1171.7	10.6	3.00	97	.27	1154.6				
1180.2	8.5	3.02	99	1.10		0.76			- 1177.0' - 2FT - 45° PRE. MIN. FLT
1189.1	8.9	3.02	83	.39					- 1186.2' - 1FT - 65° " "
1200.0	10.9	3.25	93	1.92	1970		.76		
1210.6	10.6	3.09	98	1.98	1194.6	1.52		HF & ARG T+	ST - 45° - BRKN - GG/ FLT
1221.3	10.7	3.02	94	.87					ZONE - ST Bx
1234.2	12.9	2.98	92	.30	1930		1.14		
1245.7	11.5	2.66	100	.06	1234.6				THIS ENTIRE SEGMENT IS
1252.0	6.3	2.63	93	.02					ST. FLT. ZONE CONT. OF
1262.0	10.0	2.66	100	.13					PIMA & KINO FM, APPROX 45°
1269.3	7.3	2.56	100	.01					
1278.3	9.0	2.60	97	.02	1890		.06		
1288.0	9.7	2.63	96	.06	1274.6			CGL (KINO)	
1298.2	10.2	2.61	97	.09					- 1293.2' - 1FT - 15° FLT zone
1308.0	9.8	2.55	100	.04					
1314.0	6.0	2.61	97	.04	1850		.06		"KINO" - LARGE ANGULAR
1322.1	8.1	2.62	94	.04	1314.6				FRAGS OF ARGILLITIC MATER
1334.3	12.2	2.58	85	.04					IAL IN DENSE SILICEOUS
1344.6	10.3	2.57	100	tr					& FELDSPATHIC MATRIX
1354.5	9.9	2.63	93	.03	1810		.03		ST 2FT - 50° FIT AT 1318.4'
1360.9	6.4	2.62	100	.04	1354.6				FIT ZONE - FROM - 1322.0' -
1368.3	7.4	2.62	98	.04					1333.4'
1377.2	8.9	2.63	98	.01					- ST 30° FITING
1384.2	7.0	2.63	100	.02					- STR. LOW & FIT zone
1388.5	4.3	2.73	96	.02					
1398.8	10.3	2.69	99	.02	1770		.03	Bx SERP-MB CHLOR	- BASEMENT FLT.
1409.0	10.2	2.71	99	.02	1394.6				ENTIRE RUN REPRESENTS
1416.6	7.6	2.64	97	.02					THE STR. LOW & BASE-
1426.6	10.0	2.64	100	.01					MENT THRUST FLT CONT.

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 4 OF 4 COLLAR ELEV. 3164.6 D.D. HOLE NO. M-105

SURVEY COORD. N 361,187.30

PROPERTY Mission E. 767,001.22 TOTAL DEPTH 1461.0

DATE COMPLETED 7/23/64 DRILL GRID COORD. N 25+33 W 7+43 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1426.6								MB-GR BX	OF KING & SIERRITA GRANITE
1435.5	8.9	2.66	88	.01	1730		.02	GR.	
1445.2	9.7	2.64	93	.01	1434.6				PINK - GRY SIERRITA GRAN.
1456.6	11.4	2.62	79	.01					
1461.0	4.4	2.52	31	.01					

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 4 | COLLAR ELEV. 3211.9 | D.D. HOLE NO. M-106

SURVEY COORD. N 360,950.20

PROPERTY Mission | E 766,748.17 | TOTAL DEPTH 1550.0

DATE COMPLETED 7/30/64 | DRILL GRID COORD. N 23+00 W 9+99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								ALLUV.	GRAVEL OB
215.0	215.0								
229.0	14.0							CALCGL	CAL Cgl
239.2	10.2	2.43	69	.14	2970		.05	ARG	
249.5	10.3	2.51	86	.22	2419				BASE OF OX 249.5'
259.5	10.0	2.63	84	.11					
269.0	9.5	2.63	75	.21					1'8" FLT GG @ 263.8'
277.2	8.2	2.63	89	.11					
286.5	9.3	2.61	97	.17	2930		.16		
297.5	11.0	2.65	91	.14	281.9				
307.9	10.4	2.66	97	.16					
318.2	10.3	2.74	95	.10	2890		.14		
328.5	10.3	2.68	98	.10	321.9				
338.8	10.3	2.70	99	.09					LT GRY HYDR. THERM.
348.0	9.2	2.62	100	.10					ALT ARG; MOD SER &
357.3	9.3	2.69	95	.08	2850		.09		SILICA, SP CPY-PY
367.3	10.0	2.66	99	.07	361.9				TR FELD, MOLY, MOD
377.0	9.7	2.72	91	.06					50° SHEARING
388.2	11.2	2.72	95	.05					- 70° 3" FLT @ 286.5'
398.2	10.0	2.75	97	.12	2810		.09		
408.4	10.2	2.68	99	.18	401.9				
418.6	10.2	2.68	100	.09					
429.0	10.4	2.75	94	.11					
438.7	9.7	2.74	91	.09	2770		.11		- 7" GGY FLT zone
445.1	6.4	2.71	100	.09	441.9				
455.2	10.1	2.64	97	.12					
463.9	8.7	2.54	100	.09					
472.4	8.5	2.66	100	.13					
484.0	11.6	2.65	92	.06	2730		.10		
494.3	10.3	2.66	98	.08	481.9				
504.7	10.4	2.61	98	.09				ARG Cgl	
515.1	10.4	2.60	100	.09					
525.4	10.3	2.67	96	.10	2690		.09		
530.4	5.0	2.66	97	.15	521.9				
540.7	10.3	2.56	100	.08					- 332 2-ST LOW ∡ (16') 8" FLT
552.5	11.8	2.71	87	.06					
562.6	10.1	2.65	98	.07	2650		.08		- 5" - 35° - FLT zone @ 553.1'
572.5	9.9	2.65	87	.07	561.9				
582.1	9.6	2.54	99	.05					
592.4	10.3	2.61	97	.11					GRY - TAN, ALT Congl-
602.0	9.6	2.62	93	.07	2610		.08		omeritic ARG, MOD Ser
612.3	10.3	2.64	97	.09	601.9				Feld - Silica, Sp Sulf
621.7	9.4	2.58	100	.08					TR CHLOR & Moly, MOD
632.1	10.4	2.63	97	.04					30°-35° Shearing
642.4	10.3	2.62	98	.03	2570		.06		
652.9	10.5	2.62	97	.04	641.9				

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 4 | COLLAR ELEV. 3211.9 | D.D. HOLE NO. M-106

SURVEY COORD. N 360,950.20

PROPERTY Mission | E. 766,748.17 | TOTAL DEPTH 1550.0

DATE COMPLETED 7/30/64 | DRILL GRID COORD. N 23+00 W 9+99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
652.9									
663.2	10.3	2.64	100	.07					
673.6	10.4	2.66	97	.04					
678.5	4.9	2.67	98	.06	2530		.07		
688.9	10.4	2.68	99	.23	681.9				
699.3	10.4	2.66	96	.22					
710.8	11.5	2.88	92	.61		0.61		ARG	ARG with PATCHES of
721.2	10.4	2.51	99	.23	2490		.34	& Tt	Tt, 8"-20° FLT @ 7036'
729.3	8.1	3.13	94	.21	721.9				MOD SULS IN Tt
738.5	9.2	2.62	100	.19				ARG	
748.6	10.1	2.63	91	.15				Cgl	- 6"-30° FLT @ 7460'
761.4	12.8	2.61	100	.20	2450		.19		
772.6	11.2	2.61	100	.09	761.9				Lt Gry - Cgl ARG, sp Suls
780.8	8.2	2.67	98	.18					MOD SET of Silica
788.6	7.8	2.59	97	.26					
796.8	8.2	2.67	99	.31	2410		.20		
805.0	8.2	2.54	100	.22	801.9				- ST, 1'5" - 70° Grp Filled FLT
812.6	7.6	2.68	96	.18					- GRAD CONT.
821.7	9.1	2.65	97	.14				ARG	
831.7	10.0	2.62	100	.17					
841.7	10.0	2.65	99	.10	2370		.15		
846.2	4.5	2.73	96	.07	841.9				
856.5	10.3	2.61	97	.06					
865.7	9.2	2.65	99	.08					
877.0	11.3	2.61	100	.15	2330		.11		
888.5	11.5	2.68	96	.19	881.9				
897.2	8.7	2.65	96	.17					
907.0	9.8	2.59	94	.12					Lt GRY - TAN, Silcified
916.7	9.7	2.79	96	.20					& Sericitized ARG with
921.5	4.8	2.73	95	.17	2290		.17		WK - Sp Suls, TR Moly
930.0	8.5	2.66	99	.10	921.9				TR CHLOR, Sp FELD
938.6	8.6	2.67	97	.15					WK 40-60° Ser &
948.5	9.9	2.60	98	.16					CHLOR Smeared Fracs
958.3	9.8	2.65	99	.14	2250		.14		& Shears
967.1	8.8	2.63	98	.12	961.9				
973.5	6.4	2.60	96	.08					
983.6	10.1	2.63	99	.12					
993.4	9.8	2.65	99	.19					
1003.6	10.2	2.63	100	.17	2210		.14		
1012.5	8.9	2.67	96	.22	1001.9				
1024.0	11.5	2.59	92	.28					- WK 60° SLIP CONT
1035.6	11.6	3.04	91	.75		0.75		Tt	SMALL wedge Tt
1044.4	8.8	2.75	98	.17	2170		.38	ARG	
1054.5	10.1	2.63	99	.23	1041.9				
1061.6	7.1	2.64	95	.19					Lt-Gry TAN Silic & Ser
1069.9	8.3	2.62	99	.31					ALT. F.G. ARG

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF 4 | COLLAR ELEV. 3211.9 | D.D. HOLE NO. M-106

SURVEY COORD. N 360,950.20

PROPERTY Mission | E. 766,748.17 | TOTAL DEPTH 1550.0

DATE COMPLETED 7/30/64 | DRILL GRID COORD. N 23+00 W 9+99 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1069.9									
1077.2	7.3	2.62	98	.14					
1086.7	9.5	2.63	99	.29	2130		.23		
1096.8	10.0	2.67	100	.60	1081.9				- GRAD CONT
1106.1	9.3	2.63	100	.66		0.63		ARG & Tt	Poss Tt. IN ARG, APPAR. GRAD CONTACT OF Tt & ARG
1113.6	7.5	2.63	96	.19				ARG	
1122.8	9.2	2.65	97	.20	2090		.42		
1132.1	9.3	2.65	99	.13	1121.9				
1143.2	11.1	2.66	97	.26					
1153.2	10.0	2.64	100	.39					- 1153.2' - 5" - 35° FLT
1163.5	10.3	2.69	98	.79	2050	0.59	.38		- 1161.8' - 35° - 7" Prc. MIN. FLT.
1175.6	12.1	2.66	96	.19	1161.9				
1185.8	10.2	2.64	97	.32					
1195.9	10.1	2.58	100	.20					ST FLT ZONE
1207.8	11.9	2.63	100	.37	2010		.28		- ST 1'4" 40° - FLT @ 1198.2'
1217.6	9.8	2.69	95	.31	1201.9				- ST 1'3" 30° - FLT @ 1212.0'
1228.6	11.0	2.66	98	.12					
1238.6	10.0	2.71	95	.25	1970		.24		F.G. Sericitic & Siliceous
1248.3	9.7	2.67	96	.21	1241.9				ARG, - 50-100 Sulf
1258.0	9.7	2.59	100	.18					
1268.1	10.1	2.75	95	.11					- 3" - 50° - FLT @ 1261.5'
1278.3	10.2	2.74	96	.13	1930		.28		
1288.4	10.1	2.65	96	.13	1281.9				
1297.4	9.0	2.61	92	.19					
1307.1	9.7	2.62	100	.13					
1320.1	13.0	2.64	100	.09	1890		.15		
1329.6	9.5	2.74	96	.47	1321.9	0.47			- 3" - 40° - FLT @ 1326.9'
1343.0	13.4	2.84	92	.12					
1350.8	7.8	2.65	94	.24					- 5" 25° FLT CONT @ 1354.6'
1354.6	3.8	2.88	100	.35				Tt-BX	Tt BX, silicified, TR Cu, PB, ZN
1363.3	8.7	2.66	99	.11	1850		.23		
1373.0	9.7	2.71	94	.45	1361.9			ARG	- GRY ARG - ARG, Mod Fold in Patches
1382.7	9.7	2.69	61	1.29				Hf-Tt ARG	Tt & HF with pod ARG
1392.3	9.6	2.72	42	.50		0.93			POOR REC.
1398.1	5.8	2.87	100	1.83	1810		.84		- GRAD. CONT.
1406.3	8.2	2.75	100	.12	1401.9			MB	Lt GRY - white MB
1415.1	8.8	2.67	96	.04					
1424.9	9.8	2.76	84	.05				Bx	- 30° - FLT @ 1419.5'
1435.0	10.1	2.69	96	.02				MB-Tt ARG	
1442.5	7.5	2.71	100	.01	1770		.04		ST ARG-MB BX IN ST.
1450.4	7.9	2.68	99	.01	1441.9				CHLOR MATRIX, LARGE
1461.3	10.9	2.79	97	.01					ANG. FRAG = (Poss KINO?)
1471.5	10.2	2.65	99	.01					
1481.9	10.4	2.61	98	.01	1730		.01	GR Bx	
1490.1	8.2	2.63	100	.01	1481.9				
1503.0	12.9	2.62	100	.01					

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COMPOSITE DRILL LOG — MISSION UNIT

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COLLAR ELEV. 3211.9

D.D. HOLE NO. M-106

SURVEY COORD. N 360,950.20

PROPERTY Mission

E. 766,748.17

TOTAL DEPTH 1550.0

DATE COMPLETED 7/30/64

DRILL GRID COORD. N 23+00 W 9+99

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1503.0								GR BX	TAN-PINK FELD & SILICA
1513.4	10.4	2.53	100	.01					FRAGS IN A STRONG
1522.6	9.2	2.61	93	.01	1690		.01		CHLOR MATRIX
1531.8	9.2	2.57	89	.01	1521.9				
1542.0	10.2	2.63	100	.01					
1550.0	8.0	2.59	100	nil				GR	COURSE GRAINED PINK-GRY
									GRANITE

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3057.2 | D.D. HOLE NO. M-101

SURVEY COORD. N 361,457.22

PROPERTY Mission | E. 764,962.35 | TOTAL DEPTH 619.3

DATE COMPLETED 6/23/64 | DRILL GRID COORD. N- 28+34 W- 27+77 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0					3056 / 2.2			Alluv.	Gravel & Cgl O.B.
28.0	28.0								
37.3	9.3	2.12	78	.33				Arg	
46.0	8.7	2.61	65	.23	3010 / 47.2		.13		Base of ox zone ±46'
55.6	9.6	2.69	97	.32					
65.5	9.9	2.70	90	.12					
74.9	9.4	2.65	95	.15					Gry-Dk Gry Arkosic-Arg
85.8	10.9	2.68	98	.07	2970 / 87.2		.16		with Tr Cpy-py
96.1	10.3	2.73	95	.12					
103.7	7.6	2.71	94	.09					
114.0	10.3	2.64	95	.20					
122.8	8.8	2.64	91	.13					
131.2	8.4	2.52	100	.02	2930 / 127.2		.13	And	Intrus Dk Gry And. dike
142.2	11.0	2.65	86	.15				Arg	
149.7	7.5	2.62	92	.12					
154.9	5.2	2.63	95	.09					
166.1	11.2	2.67	94	.19	2890 / 167.2		.13		
176.2	10.1	2.65	97	.14					
185.2	9.0	2.66	92	.14					
194.1	8.9	2.57	75	.18					
201.2	7.1	2.73	17	.32					Tan-Gry to Dk Gry Arkosic-Arg
206.3	5.1	2.65	82	.14	2850 / 207.2		.18		with Tr Cpy-py
217.7	11.4	2.65	90	.14					
227.0	9.3	2.68	86	.17					
237.4	10.4	2.75	92	.21					
245.9	8.5	2.73	91	.16	2810 / 247.2		.17		
253.4	7.5	2.88	81	.14					
259.3	6.9	2.69	33	.15					
264.9	5.3	2.60	53	.13					Cont Bkn
268.7	3.8	2.81	93	1.54				Qtz-Feld Pk	
275.4	6.7	2.82	100	.93		1.01			Wh-Pink F.R. (Replaced Arg, by
285.8	10.4	2.66	100	.94	2770 / 287.2		.63		Feld & Epid
296.9	11.1	2.69	95	.58		0.58		Arg	Grad chang
305.7	8.8	2.67	96	.18					Arg with pods of F.R.
310.9	5.2	2.65	95	.17					
317.8	6.9	2.61	96	.13				Cgl	Cont-bx GG zone ±40°
328.1	10.3	2.66	100	.18	2730 / 327.2		.27		
338.3	10.2	2.80	94	.22					
348.6	10.3	2.63	98	.55					Silt & mod ser alt Cgl with
357.7	9.1	2.58	98	.59		0.59			pods Arg wk-Mod Cpy-py
365.1	7.4	2.63	97	.47	2690 / 367.2		.47		
373.1	8.0	2.63	99	.87					
376.7	3.6	2.65	99	.46				Hf	0.8' Flt bx-GG
388.5	11.8	2.70	93	.85					Pale grn-wh Hf Sp Cpy-py
394.8	6.3	2.59	100	.35		0.59			as ults & piss
405.1	10.3	2.72	100	.35				Tt	Cont Slip ±50°

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 COLLAR ELEV. 3057.2 D.D. HOLE NO. M-104

SURVEY COORD. N 361,457.22

PROPERTY Mission E. 764,962.35 TOTAL DEPTH 619.3

DATE COMPLETED 6/23/64 DRILL GRID COORD. N- 28+34 INCLINATION Vertical

W- 27+77

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
405.1									
410.4	5.3	3.18	92	.36	2650 407.2		.59		Tan-grn maroon Tr Sp-Mod Cpy-py as Vlt & Diss.
421.5	11.1	3.13	96	.56		.52			
431.1	9.6	2.62	91	.09				Qtzt	50° Cont Gyp & chlor Filled Flt Slip
441.1	10.0	2.62	84	.15					
448.8	7.7	2.59	41	.08	2610 447.2		.27		Dense wh-Tan Qtzt, Tr Cpy-py
456.8	8.0	2.59	68	.27					
466.6	9.8	2.98	98	.54		0.42		Hf	1.1' Flt bx 50°
476.7	10.1	3.05	93	.30					
487.7	11.0	3.15	93	.13	2570 487.2		.30		Pale grn Hf with pods Tr Tr sphal
494.7	7.0	3.19	95	.82		0.82			
503.3	8.6	2.71	99	.11				Ls	cont ury wk Flt slip 20°
513.8	10.5	2.70	97	.03					
524.1	10.3	2.71	99	.04					
529.4	5.3	2.71	96	.05	2530 527.2		.19		Blue grey ls ury minor tr Cpy-py
538.7	9.3	2.69	100	.06					
549.0	10.3	2.68	99	.03					
556.8	7.8	2.70	99	.03					
567.4	10.6	2.71	97	.02	2490 567.2		.04		Grad change
577.8	10.4	2.72	90	.07				Mb	
588.2	10.4	2.70	97	.04					wh xline Mb minor Tr sulf
598.6	10.4	2.67	97	.05					
609.0	10.4	2.68	98	.05	2450 607.2		.05		
619.3	10.3	2.70	100	.05					
									BOTTOM

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2

COLLAR ELEV. 3106.3

SURVEY COORD. N 361,196.09
E. 764,730.49

D.D. HOLE NO. M-103

PROPERTY Mission

TOTAL DEPTH 821.5

DATE COMPLETED 6/18/64

DRILL GRID COORD. N- 25+77
W- 30+13

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	Gravel & Cgl - O.B.
60.0	60.0				3252 56.3		—	Cal Cgl	Top Cal Cgl ±40.0'
68.1	8.1								Cal cemented Cgl - O.B.
79.2	11.1	2.42	42	.10				Arg	B.R. at 68.1'
89.2	10.0	2.46	50	.11					
99.1	9.9	2.53	91	1.10	3212 16.3		.10		Base oxidation ±104.7'
109.2	10.1	2.58	60	.30					
120.9	11.7	2.58	60	.24					Pale Tan-gry to brn Arg,
129.8	8.9	2.65	83	.23					Arkosic in last 30', Cu Oxs
139.9	10.1	2.65	88	.17	2970 136.3		.18		Mn Ox, Jaro Lim, Cc in Ox zone
151.2	11.3	2.65	94	.22					Tr-wk Cpy-Py
159.2	8.0	2.63	95	.15					cont Bkn
162.1	2.9	2.66	92	.11				Bx dike (?)	Varied colered Bx Frags, Py, Cpy Sph, gn
171.5	9.4	2.65	98	.21				Arg-Cgl	
180.8	9.3	2.66	95	.20	2930 176.3		.19		
188.3	7.5	2.66	93	.20					
197.8	9.5	2.67	95	.24					
207.8	10.0	2.67	98	.25					
219.4	11.6	2.70	94	.25	2890 216.3		.23		
229.6	10.2	2.67	96	.19					Tan-brn Arg, locally Arkosic
239.3	9.7	2.66	96	.28					& Cgl, tic wk Cpy-py
250.8	11.5	2.66	96	.22					
261.6	10.8	2.56	100	.16	2850 256.3		.22		
272.5	10.9	2.66	96	.23					
281.0	8.5	2.68	98	.23					
293.8	12.8	2.65	97	.27	2810 296.3		.24		
303.4	9.6	2.68	97	.30					
312.4	9.0	2.66	97	.19					
322.7	10.3	2.67	96	.23				Arg	Grad. chang
331.9	9.2	2.64	100	.20					
340.6	8.7	2.70	97	.27	2770 336.3		.23		
348.4	7.8	2.67	96	.21					
355.9	7.5	2.68	95	.14					
364.3	8.4	2.67	94	.12					Tan-Gry Arg, wk cgl, tic
374.4	10.1	2.71	97	.19	2730		.18		& Arkosic zones
382.6	8.2	2.67	99	.24	376.3				
392.0	9.4	2.71	97	.18					
402.0	10.0	2.69	100	.16					
411.3	9.3	2.66	99	.28					
416.3	5.0	2.63	100	.36	2610 416.3		.23		Grad. Chang
425.5	9.2	2.69	95	.63				Arg-Cgl	
435.4	9.9	2.63	100	.26		0.43			
442.8	7.4	2.64	100	.67					
453.2	10.4	2.66	99	.38	2652 456.3		.45		
463.6	10.4	2.65	100	.23					
469.1	5.5	2.68	100	.52					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3106.3 | D.D. HOLE NO. M-103

SURVEY COORD. N 361,196.09

PROPERTY Mission | E. 764,730.49 | TOTAL DEPTH 821.5

DATE COMPLETED 6/18/64 | DRILL GRID COORD. N- 25+77 W- 30+13 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
469.1									
478.7	9.6	2.65	96	.37		0.43			Dk Gry-Tan Cgl-Arg with
488.5	9.8	2.72	97	.30					mod cpy-py
497.5	9.0	2.68	100	.31	2610 496.3		.34		
509.5	12.0	2.76	92	.51					
519.5	10.0	2.66	99	.67		0.60			
529.7	10.2	2.64	98	.59					conts poss intrus
539.7	10.0	2.61	97	.73	2570 536.3		.60	Cgl-Mp	Mp. Pats in Cgl assoc. with
546.6	6.9	2.65	96	.93					Fracs
555.5	8.9	2.64	93	1.06				Qtzt	cont Bkn
566.7	11.2	2.54	98	.51		0.68			wk-mod ser alt lt-gry-wh
573.1	6.4	2.57	91	.20					Qtzt st Diss Cpy-py
577.8	4.7	2.58	75	.62	2530 576.3		.68		cont Chlor & serp smeared
585.1	7.3	2.76	100	1.34				Hf	"slip" 25° Poss Alt Delineation
596.3	11.2	2.80	94	1.20					Pale grn-gry-grn Hf with
606.6	10.3	2.82	100	.68		0.99			prasens & serp, Cpy-py as
611.7	5.1	3.08	99	.60					pods & Diss
614.1	2.4	2.89	100	1.27	2490 616.3		.94	Tt	Dk grn dense Tt
622.0	7.9	2.61	96	.09				Qtzt	cont wk chlor smeared
631.3	9.3	2.60	93	.07					flt
641.1	9.8	2.61	93	.04					
648.2	7.1	2.65	89	.10					Dense wh-Gry Qtzt Tr
654.2	6.0	2.70	87	.19	2450 656.3		.09		subs
661.9	7.7	2.67	96	.10					
669.2	7.3	2.64	84	.09					
675.9	6.7	2.64	71	.44					chlor filled frac ±50°
685.2	9.3	3.05	97	2.81		1.53		Hf-Tt	
695.1	9.9	2.73	97	1.06	2410 696.3		1.03		pale grn-grn Hf, last 12'
705.4	10.3	2.68	100	.16					has pats Tt
715.0	9.6	2.99	90	.27					
720.9	5.9	2.65	83	.45		0.45		Mb	cont-30° frac
731.8	10.9	2.69	87	.13					
739.3	7.5	2.68	85	.07	2370 736.3		.21		
748.0	8.7	2.64	72	.05					
758.6	10.6	2.52	91	.04					
768.8	10.2	2.64	91	.15					Wh Mb with very minor pat
776.0	7.2	2.65	93	.06	2330 776.3		.08		Tt with cpy-py
785.1	9.1	2.59	93	.03					
797.1	12.0	2.70	95	.03					
806.4	9.3	2.70	100	.03					
814.0	7.6	2.70	99	.01	2290 816.3		.03		
821.5	7.5	2.69	82	.03				Qtzt	Serp filled cont ±20°
									Gry ser alt Qtzt
									Bottom

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF TWO

COLLAR ELEV. 3064.1

SURVEY COORD. N 361,456.03
E. 764,746.08

D.D. HOLE NO. M-102

PROPERTY Mission

TOTAL DEPTH 658.6

DATE COMPLETED 6/6/64

DRILL GRID COORD. N - 28+36
W - 29+93

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0					3050 / 14.1				
30.0	30.0							Alluv.	Gravel & Cgl
39.6	9.6	2.51	94	.38				Arg	
49.0	9.4	2.67	82	.24					Base of oxidation 49.0'
58.6	9.6	2.65	90	.16	3010 / 54.1		.17		Tan-Gry Arkosic Arg
63.7	5.1	2.66	92	.20					
73.8	10.1	2.66	97	.22				Arg-Cgl	Grad. change
84.0	10.2	2.65	100	.37					
94.3	10.3	2.65	99	.18	2970 / 94.1		.24		
103.0	8.7	2.73	96	.31		0.42			
112.7	9.7	2.67	96	.52					
123.8	11.1	2.68	97	.17					
134.3	10.5	2.69	99	.40	2930 / 134.1		.35		Locally Arkosic & Conglomeritic Tan-Gry Arg
143.1	8.8	2.68	91	.28					
153.4	10.3	2.67	99	.23					
163.9	10.5	2.81	93	.47		0.48			
174.4	10.5	2.68	98	.49	2890 / 174.1		.37		
186.0	11.6	2.69	98	.25					
196.3	10.3	2.66	98	.20					
203.1	6.8	2.70	96	.28					Grad. Change
211.9	8.8	2.64	99	.33	2850 / 214.1		.27	Arg	
222.1	10.2	2.70	99	.32					Dense slt. Arkosic-Arg
232.5	10.4	2.70	96	.20					
242.5	10.0	2.69	100	.36				Arg-Cgl	Grad Change
253.0	10.5	2.67	95	.22	2810 / 254.1		.27		
262.1	9.1	2.62	95	.17					
272.6	10.5	2.70	95	.18					
282.9	10.3	2.68	93	.24					
293.1	10.2	2.67	99	.31	2770 / 294.1		.23		
303.4	10.3	2.64	98	.33					
313.3	9.9	2.71	93	.37					Tan-Gry Arg with st conglomeritic zones, suls (cpy-py) stronger in cgl. zones
323.6	10.3	2.68	100	.28					
333.8	10.2	2.72	97	.54	2730 / 334.1	0.54	.38		
344.6	10.8	3.19	83	.79					
354.9	10.3	2.71	100	.85					
365.2	10.3	2.70	96	.64		0.73			
375.6	10.4	2.66	99	.63	2690 / 374.1		.73		
386.0	10.4	2.61	98	1.06					
391.3	5.3	2.66	91	1.49					
397.1	5.8	2.65	96	.59		0.95			±45° Intrus cont
409.5	12.4	2.56	93	.52				Mp	st sil, mod ser alt leuco-Mp
414.6	5.1	2.59	100	.96	2650 / 414.1		.854	Arg	cont-Frac 30°±; Tan-brn sil. Arg
420.8	6.2	3.07	95	.53				Hf	cont. Bkn zone
427.3	6.5	3.03	99	.43					
437.5	10.2	2.70	100	.59		0.54			
447.8	10.3	2.43	100	.61					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3064.1

SURVEY COORD. N 361,456.03
E. 764,746.08

D.D. HOLE NO. M-102

PROPERTY MISSION

TOTAL DEPTH 658.6

DATE COMPLETED 6/6/64

DRILL GRID COORD. N- 28+36
W- 29+93

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
447.8									
458.2	10.4	2.99	95	.45	2610 / 454.1		.54		Dk grn-pale grn often dense Hf with mod cpy-py as vnlts & diss
468.4	10.2	2.89	95	.36					
475.3	6.9	2.85	99	.64		0.64			
479.8	4.5	2.63	93	.28				Qtzt	Cont bkn-poss flt.
490.1	10.3	2.57	93	.02					
500.0	9.9	2.64	98	.11	2570 / 499.1		.30		Dense wht-Tan Qtzt with wk ser alt & Tr cpy-py
508.6	8.6	2.69	88	.29					
515.8	7.2	2.59	91	.05					
525.7	9.9	2.64	93	.07					Cont slip ±60°
537.4	11.7	2.94	100	1.32	2530 / 534.1	1.32	.38	Hf & Tc	
547.8	10.4	3.10	96	.27					
558.1	10.3	3.07	96	.39		0.40			Lt grn dense Hf with incr pats Tc; Sp-st cpy-py
568.6	10.5	3.05	98	.18					
577.8	9.2	2.73	99	.53	2490 / 574.1		.40		
588.9	11.1	2.69	92	.09				Mb & Hf	Cont GG Flt. ox ±45°
599.2	10.3	2.68	97	.05					
608.9	9.7	2.67	100	.14					Wht Mb with pats chl & serp Hf; Tr cpy-py
618.1	9.2	2.62	91	.06	2450 / 619.1		.13		
628.3	10.2	2.69	95	.04					
638.6	10.3	2.70	95	.03				Mb	3' An dike ±45°
648.7	10.1	2.67	97	.23					Gry-wh xline Mb
658.6	9.9	2.67	96	.05	2410 / 659.1		.09		
									BOTTOM

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV. 3287.8 D.D. HOLE NO. M-101

SURVEY COORD. N 362,613.48

PROPERTY Mission E. 760,971.41 TOTAL DEPTH 637.2

DATE COMPLETED 5/29/64 DRILL GRID COORD. N- 40+51 INCLINATION Vertical

W- 67+50

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								GRAVEL & Cal Cgl	GRAVEL 0.8 & Cal Cgl
185.0	185.0							Cal Cgl	
196.5	11.5	2.54	76	.13	3090		.04	MP	
206.2	9.7	2.52	94	.13	197.8				leached AIT MP
216.5	10.3	2.47	84	.15					
226.8	10.3	2.54	78	.14					BASE OF Ox @ 226.8'
237.1	10.3	2.54	84	.17	3050		.15		
247.1	10.0	2.56	88	.19	237.8				ST. 50° FIT @ 237.3'
257.0	9.9	2.60	72	.15					
267.6	10.6	2.55	82	.10					
277.0	9.4	2.55	91	.09	3010		.13		MOD-ST AIT MP
288.9	11.9	2.51	78	.13	277.8				WK FELDSPATH
298.6	9.7	2.52	58	.10					MOD SILICA & SER.
309.6	11.0	2.56	75	.10					
319.4	9.8	2.56	84	.06	2970		.10		
329.3	9.9	2.54	83	.09	317.8				
339.7	10.4	2.56	62	.09					
350.0	10.3	2.47	81	.18					- BX-GGY FLT ZONE @ 345.0'
361.0	11.0	2.53	88	.08	2930		.11		
368.5	7.5	2.58	78	.06	357.8				
375.3	6.8	2.53	35	.08					
386.1	10.8	2.48	46	.10					
395.6	9.5	2.54	98	.09	2890		.09		
405.7	10.1	2.66	62	.18	397.8				INTRUSIVE MP-T+ CONT.-45°-40°S'
412.7	7.0	3.37	86	1.77		1.77		T+	DK RED HEM STAINED T+
425.4	12.7	2.65	57	.09				QTZT	BRKN. GRY-WHITE QTZT
432.0	6.6	2.62	100	.06					
441.4	9.4	2.89	86	.51	2850	0.51	.49	T+ & HF	
450.0	8.6	2.75	95	.23	437.8	0.51			- TR ACT-TREM
461.4	11.4	2.74	81	.16					
470.6	9.2	3.37	70	.19					GRY-RED, DENSE HARD T+
480.4	9.8	2.99	67	1.80	2810	1.80	.69		LOCALLY VUGGY
493.2	12.8	2.93	87	.62	477.8				
501.9	8.7	2.54	86	1.67		1.13			
511.5	9.6	2.79	100	.12					- WK 60° FIT CONT.
515.5	4.0	2.37	100	.09	2770		.62	HF & Gyp	MIXED Gyp & HF, LOCALLY
524.9	9.4	2.42	89	.20	517.8				MASSIVE Gyp
534.9	10.0	3.22	87	.11					
543.1	8.2	2.82	82	.16				Mb & Gyp-HF	
553.2	10.1	2.74	86	.22					
558.6	5.4	2.32	92	.22	2730		.18		
569.5	10.9	2.51	93	.06	557.8				
578.8	9.3	2.44	100	.33					MIXED HF-GYP-Mb
586.7	7.9	2.34	94	.04					
596.1	9.4	2.96	87	.23	2690		.16		- ST 1 FT FLT BX 30° - 590.6'
606.1	10.0	2.44	100	.01	597.8				TR MAG ON FIT BX

MIS.8076-78

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2

COLLAR ELEV. 3287.8

SURVEY COORD. N 362,613.48

E 769,971.41

D.D. HOLE NO. M-101

PROPERTY Mission

TOTAL DEPTH 637.2

DATE COMPLETED 5/29/64

DRILL GRID COORD. N- 40+51 W- 67+50

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
606.1								MB-Gyp	
615.2	9.1	2.96	96	1.36		1.36		T+	MIXED T+-HF WITH LOCAL ST. GYP
626.3	11.1	2.64	94	.11				MB	MIXED SERP MB & HF
634.3	8.0	2.64	92	.18					
637.2	2.9	2.62	77	.01				Qtzt	HARD BRAN WHITE QTZT

MIS 6074—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 1 COLLAR ELEV. 2930.6 D.D. HOLE NO. M-100

SURVEY COORD. N 361,735.51

PROPERTY MISSION E. 766,102.93 TOTAL DEPTH 270.2

DATE COMPLETED 5-21-64 DRILL GRID COORD. N 31+45 INCLINATION Vertical

W 16+32

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Arg	
10.4	10.4				2930		—		
19.4	9.0	2.67	92	.14					
25.0	5.6	2.60	89	.17					
34.9	9.9	2.65	92	.07					
44.0	9.1	2.63	61	.08	2890 40.6		.08		-35.1' - 6" GGY FLT ZONE
52.0	8.0	2.83	91	.22					
61.0	9.0	2.72	95	.13					
69.5	8.5	2.64	100	.25					
76.9	7.4	2.68	100	.12					-72.1' - 88° 2" FLT
85.7	8.8	2.71	83	.11	2850 50.6		.17		
96.7	11.0	2.72	99	.10					- Feld. Replacement on FRACS
105.2	8.5	2.64	98	.06					
108.8	3.6	2.66	100	.25					LT. GRY - TAN SILICEOUS
118.0	9.2	2.62	100	.12	2810		.10		ARG. WITH PATCHES OF
130.5	11.5	2.66	100	.20	120.6				ARK TEXT & WK PATCHES
139.7	9.2	2.68	99	.08					OF Tt. LOCAL MOD-ST
149.4	9.7	2.62	100	.08					SER ALT, RK FRACTURED
159.4	10.0	2.63	99	.08	2770 160.6		.11		THROUGH OUT
170.2	10.8	2.67	98	.13					
173.3	3.1	2.66	100	.11					
182.0	8.7	2.67	93	.11					
190.5	8.5	2.64	100	.17					
197.2	6.7	2.61	100	.17	2730 200.6		.14		
205.6	8.4	2.68	99	.10					
216.3	10.7	2.63	100	.14					
223.8	7.5	2.65	100	.15					
234.0	10.2	2.70	99	.21					
242.0	8.0	2.66	85	.10	2690 240.6		.16		
253.7	11.7	2.66	100	.09					
262.2	8.5	2.80	98	.21					
270.2	8.0	2.65	100	.14				Arg	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV. 2853.2 D.D. HOLE NO. M-99

SURVEY COORD. N 362,000.74

PROPERTY MISSION E. 765,979.51 TOTAL DEPTH 426.5

DATE COMPLETED 5-9-64 DRILL GRID COORD. N 33+62 INCLINATION VERTICAL

W 17+52

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
11.0	11.0							Arg.	
20.6	9.6	2.61	66	0.07					
28.0	7.4	2.69	86	0.11					
37.1	9.1	2.70	96	0.10					
47.4	10.3	2.69	98	0.27	2810 43.2		.10		
55.5	8.1	2.66	100	0.04					DENSE SILICEOUS ARG TR CPY-
65.6	10.1	2.71	99	0.02					PY AS VNLTS & DISS TR ZN-Pb-MOL
73.9	8.3	2.67	98	0.03					
78.0	4.1	2.73	99	0.02					
90.1	12.1	2.73	100	0.03	2770 83.2		.05		
97.7	7.6	2.73	96	0.03					ARG-Tt CONT GRAD
102.7	5.0	3.14	90	0.25				Arg-Tt	
109.8	7.1	3.26	93	0.45		0.45		Tt	
119.2	9.4	2.64	100	0.26				Arg-Tt	ARG & Tt, ALL GRAD CONTS;
129.6	10.4	3.11	99	0.33	2730 123.2		.22	Tt	Tt IS LT BRN GAR WITH PATS OF
138.0	8.4	2.60	100	0.14				Arg-Tt	EPID; ARG SLT ARKOSIC AT END
142.2	4.2	3.00	93	0.19				Tt-Arg	ARG-ARK CONT-WK SLIP 30° @
151.6	9.4	2.60	93	0.11				Ark.	142.2
161.7	10.1	2.65	98	0.12	2690 163.2		.16		GRANULAR ST ALT ARK HAS MP
169.4	7.7	2.68	100	0.15					CHARACTERISTICS
181.6	12.2	2.61	100	0.08					ARK-ARG CONT - WK SLIP 10° @
190.2	8.6	2.69	97	0.06				Arg.	191.6
198.4	8.2	2.65	98	0.08					
206.5	8.1	2.64	100	0.13	2650 203.2		.09		ARG-Tt CONT 2" CHLOR-SUL FILLED
210.6	4.1	2.66	100	0.45		0.45		Tt	FLT 70° @ 206.0
218.9	8.9	2.61	99	0.09				Arg	GRAD CONT Tt-ARG @ 210.6
227.1	8.2	2.64	98	0.08					DARK GRY EG SILICEOUS ARG
235.3	8.2	2.61	100	0.15				Arg-Tt	
243.6	8.3	2.63	100	0.14	2610 243.2		.15		ARG AS ABOVE WITH PATS OF
251.9	8.3	2.59	100	0.10				Arg.	Tt IN GRAD CONT
260.0	8.1	2.58	100	0.09					DENSE GRY ARG
272.5	12.5	2.59	99	0.06				Arg-Tt	GRADS TO ROCK WITH Tt PATS
284.7	12.2	2.63	100	0.01	2570 283.2		.06		Wh-GRY ARG WITH PATS FELD
290.0	5.3	2.68	99	0.21					& Tt
299.6	9.6	3.02	100	0.06				Tt-Hf	5" BR GEL WITH CHLOR & HEMI-CONT
306.2	6.6	3.13	96	0.12					ARG & Tt 30°
314.5	8.3	2.61	100	0.39					PALE-GRN Tt W PATS OF Hf
322.7	8.2	3.33	96	0.21	2530 323.2		.20		
331.0	8.3	3.10	98	0.09					GRAD CONT Tt-Hf
335.2	4.2	2.72	100	0.29				Hf	PALE GRN BKN Hf
344.4	9.2	2.59	97	0.17				Hf Arg-Bx	FLT ZONE 50-65° ST BKN Hf
354.4	10.3	2.93	89	0.33					WITH FRAGS OF ARG
354.6	0.2	2.97	90	0.23					
364.1	9.5	2.60	65	0.14	2490 363.2		.20	Hf-Serp	PALE GRN Hf & SERP, SP DISS
374.4	10.3	2.67	97	0.07					CPY-PY
376.6	2.2	2.69	100	0.36					376.0 GG-BKN Hf-Tt CONT

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2

COLLAR ELEV. 2853.2

SURVEY COORD. N 362,000.74
E. 765,979.51

D.D. HOLE NO. M-99

PROPERTY Mission

TOTAL DEPTH 426.5

DATE COMPLETED 5-9-64

DRILL GRID COORD. N 33+62
W 17+52

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
382.2	5.6	3.06	81	0.86		.98		TT	
390.2	8.2	3.20	83	2.00					PALE BRN-TAN GRANULAR TT
399.4	9.2	2.94	97	0.30	2450		.63	TT-HF	WITH PATS OF HF
411.8	12.4	2.86	85	0.04	408.2			HF-QTZT	HF, LAST 1' GRADS TO QTZT
418.7	6.9	2.69	92	0.05				QTZT	DENSE WH QTZT
426.5	7.8	2.63	99	0.03					
									BOTTOM

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 1 | COLLAR ELEV. 2852.2 | D.D. HOLE NO. M-98

SURVEY COORD. N 361,929.63

PROPERTY MISSION | E. 766,082.13 | TOTAL DEPTH 400.0

DATE COMPLETED 5-4-64 | DRILL GRID COORD. N 32+90 W 16+50 | INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
15.0	15.0							Arg.	
25.5	10.5	2.49	24	0.12					
33.2	7.7	2.63	76	0.11					
42.3	9.1	2.59	74	0.15	2810		.09		
48.2	5.9	2.32	81	0.14	42.2				
59.3	11.1	2.63	91	0.18					
70.2	10.9	2.62	86	0.17					- 65.8' GGy 2" FLT ZONE
79.8	9.6	2.64	81	0.11					
88.3	8.5	2.60	44	0.13	2770 82.2		.15		- 85.0' - 46° 6" FLT
97.2	8.9	2.55	81	0.09					- 94.0' GGy 5" FLT
107.2	10.0	2.64	55	0.04					
116.4	9.2	2.68	90	0.05					MOD ALT SILICEOUS ARG
126.7	10.3	2.68	94	0.05	2730 122.2		.07		WITH PATCHES OF ARK
136.7	10.0	2.67	95	0.02					TEXT. MOD-ST SER
146.7	10.0	2.74	14	0.06					
156.7	10.0	2.67	97	0.04					
166.9	10.2	2.61	95	0.04	2690 162.2		.04		
176.9	10.0	2.63	96	0.02					
186.5	9.6	2.69	91	0.06					
196.8	10.3	2.69	88	0.05					- 194.0' - 1 FT GYPSUM VN - 68°
207.2	10.4	2.66	93	0.18	2650 202.2		.06		- BRKN GGy ARG - HF COAT 207.2'
216.8	9.6	3.13	88	0.33				HF	
225.7	8.9	3.09	88	0.49		0.49			- ST 2 FT BRKN FLT ZONE @ 225.7'
232.5	6.8	2.99	79	0.25					
242.5	10.0	3.05	94	0.07	2610 242.2		.27		TAN-WHITE HF
252.5	10.0	3.25	88	0.25					- ST. 80° CHLOR FILLED FLT @ 252.0'
257.6	5.1	2.95	84	0.12					
267.6	10.0	3.08	100	0.24					
278.0	10.4	3.14	97	0.55		0.55			
283.3	5.3	3.03	89	0.16	2570 282.2		.30		- GGy 60° 1 FT FLT ZONE @ 283.0'
291.5	8.2	2.64	100	0.26				HF-Mb	GRY-WHITE SERP HF & MB
301.6	10.1	3.18	91	0.25					
311.7	10.1	2.78	99	0.06				Mb-HF	- 303.0' - 60° FLT
321.7	10.0	2.77	99	0.11	2530		.17		WHITE MB WITH PATCHES
326.7	5.0	2.75	97	0.01	322.2				OF HF
336.2	9.5	2.66	100	0.07					
346.5	10.3	2.61	99	0.04				Mb Serp	PALE GRN SERP-MB
354.8	8.3	2.64	90	0.03					- 351.5' - 80° 3" FLT
365.3	10.5	2.55	81	0.04	2490 362.2		.28		
374.5	9.2	3.09	99	0.04				Mb-Serp-QTzT	SERP MB WITH PATCHES MB
384.0	9.5	2.66	100	TR				QTzT	
389.3	5.3	2.66	94	TR					DENSE WHITE QTzT
400.0	10.7	2.65	100	NIL					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF TWO

COLLAR ELEV. 3398.5

SURVEY COORD. N 362,00706

E. 760,982.80

D.D. HOLE NO. M-97

PROPERTY MISSION

TOTAL DEPTH 665.4

DATE COMPLETED 4/24/64

DRILL GRID COORD. N 34+44.06 W 67+47.98

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									GRAVEL OB
277.0	277.0							GRAVEL	Top Cal Cal 277.0'
279.8	2.8		28					Cal Cal	Cal Cal Top B.R 279.8
286.1	6.3	2.54	61	0.17				MP	
297.2	11.1	2.52	90	0.22					
305.4	8.2	2.50	93	0.12	3090		0.12		
319.2	13.8	2.51	90	0.10	308.5				- Base of Ox. 319.2'
323.0	3.8	2.49	74	0.47		0.47			
332.5	9.5	2.52	92	0.25					
343.8	11.3	2.46	94	0.16					
353.7	9.9	2.54	91	0.22	3050		0.20		
364.4	10.7	2.56	74	0.20	348.5				
376.0	11.6	2.51	68	0.15					
385.4	9.4	2.52	84	0.20	3010		0.19		
395.6	10.2	2.54	88	0.23	388.5				MOD-ST ALT MP
405.5	9.9	2.49	94	0.14					Considerable Ser-Silica
414.9	9.4	2.57	88	0.12					& Feld, 60° FIT @ 409.0'
423.3	8.4	2.48	97	0.10					
431.4	8.1	2.50	91	0.09	2970		0.14		
439.3	7.9	2.49	93	0.14	428.5				
448.1	8.8	2.48	82	0.13					
458.4	10.3	2.46	77	0.12					
468.4	10.0	2.53	78	0.12	2970		0.12		
474.1	5.7	2.51	82	0.10	468.5				
478.5	4.4	2.54	13	0.09					
489.2	10.7	2.54	83	0.08					
499.7	10.5	2.55	75	0.12					
507.5	7.8	2.53	94	0.09	2890		0.10		
513.2	5.7	2.52	95	0.11	508.5				
522.7	9.5	2.56	80	0.07					
534.7	12.0	2.54	82	0.08					
543.4	8.7	2.56	48	0.07					
552.5	9.1	2.57	81	0.06	2850		0.08		-546.5'-6" 45° CHLOR Filled FLT.
561.1	8.6	2.54	89	0.08	548.5				
570.7	9.6	2.60	74	0.10					
581.3	10.6	2.52	86	0.07					
587.7	6.4	2.55	70	0.08	2810		0.08		
591.0	3.3	2.51	21	0.06	588.5				
600.0	9.0	2.55	76	0.05					
605.2	5.2	2.54	83	0.08					- BRKN INTR. CONT 605.2
616.7	11.5	3.16	85	0.86				Tt	DENSE BRN GAR
621.0	4.3	3.31	87	1.88		1.01			- 621.3' 60° Tt-MP CONT.
624.2	3.2	2.57	82	0.40				MP	- 624.2' FIT CONT MP-Tt
633.0	8.8	3.23	80	0.37	2770		0.55	Tt	- DENSE BRN GAR
636.7	3.7	2.97	92	0.62	628.5	0.62		Tt-Hf	636.7' 25° FLT CONT Tt-QtzT
646.4	9.7	2.69	89	0.07				QtzT	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF TWO

COLLAR ELEV. 3398.5

D.D. HOLE NO. M-97

SURVEY COORD. N 362,007.06

PROPERTY MISSION

E. 760,982.80

TOTAL DEPTH 665.4

DATE COMPLETED 4/24/64

DRILL GRID COORD. N 34+44.06 W 67+47.98

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
646.4								QTzT	
657.7	11.3	2.61	93	0.05					> DENSE GRY QTzT, LOCALLY
660.8	3.1	2.63	30	0.19					ARGILLIC
665.4	4.6	2.65	100	0.11					
		2.58	84						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2

COLLAR ELEV. 3401.5

SURVEY COORD. N 361,414.04

E 760,989.28

D.D. HOLE NO. M-96

PROPERTY Mission

DATE COMPLETED 4-24-64

DRILL GRID COORD. N 28+51.01 W 67+50.47

TOTAL DEPTH 1085.5

INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									GRAVEL OB
270.0	270.0							ALL. J.	
280.0	10.0							C-Cg	CHL Cgl TOP B.R. 280.0'
289.4	9.4	2.47	64	.28				MP	
298.1	8.7	2.50	92	.22					
308.0	9.9	2.44	84	2.4	3090				LEACHED ALT MP
320.2	12.2	2.49	77	.15	311.5		.19		
327.3	7.1	2.45	88	.09					BASE OF OX. 327.3'
337.3	10.0	2.52	61	.42					
348.2	10.9	2.48	59	.38		0.40			— ST 65° FLT. @ 343.0'
358.2	10.0	2.52	83	.17	3050 351.5		.27		
369.0	10.8	2.47	44	.14					
371.3	2.3	2.44	58	.13					
376.0	4.7	2.52	14	.10					
381.5	5.5	2.47	48	.11					
383.8	2.3	0	0	0					
388.6	4.8	2.52	6	.09					
392.3	3.7	2.46	41	.12	3010 391.5		.12		
397.0	4.7	2.49	15	.10					
406.8	9.8	2.48	72	.11					
413.3	6.5	2.48	61	.08					
424.7	11.4	2.50	52	.09					
432.5	7.8	2.48	82	.13	2970 431.5		.10		
443.5	11.0	2.50	63	.12					— ST FLT GG @ 441.5'
453.0	9.5	2.56	77	.12					
465.0	12.0	2.51	71	.11					ST FELDSPATH ALT
474.0	9.0	2.51	85	.09	2930 471.5		.11		
484.7	10.7	2.46	88	.11					— ST SER ALT
493.6	8.9	2.51	85	.07					MOD SILICA
504.5	10.9	2.51	73	.09					MOD 30°-60° CHLOR,
514.6	10.1	2.50	76	.15	2890 511.5		.10		GYP & SER Filled
519.8	5.2	2.52	59	.09					FRACTURING
530.2	10.4	2.51	73	.11					
542.0	11.8	2.47	73	.09					
553.4	11.4	2.48	64	.14	2850 551.5		.11		
563.4	10.0	2.52	79	.11					
574.0	10.6	2.51	67	.09					
585.0	11.0	2.47	79	.06					
596.3	11.3	2.52	67	.12	2810 591.5		.09		
608.8	12.5	2.46	72	.09					
617.2	8.4	2.44	56	.07					
627.7	10.5	2.50	51	.06					
637.4	9.7	2.54	72	.09	2770 631.5		.08		
641.5	4.1	2.54	80	.09					
651.3	9.8	2.55	72	.05					
661.0	9.7	2.54	79	.07					

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3461.5 | D.D. HOLE NO. M-96

SURVEY COORD. N 361,414.04

PROPERTY Mission | E. 760,989.28 | TOTAL DEPTH 1085.5

DATE COMPLETED 4-24-64 | DRILL GRID COORD. N 28+51.01 W 67+50.47 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
661.0								MP	ALT MP
671.9	10.9	2.55	73	.08	2730 671.5		.08		
681.5	9.6	2.47	84	.08					
690.3	8.8	2.56	78	.10					
696.0	5.7	2.56	82	.10					
707.3	11.3	2.57	45	.09	2690		.09		
717.2	9.9	2.55	81	.12	711.5				
728.0	10.8	2.52	76	.09					
738.6	10.6	2.57	71	.12					
749.9	11.3	2.54	68	.11	2650		.11		
760.2	10.3	2.51	59	.12	751.5				
764.8	4.6	2.41	47	.12				MP-HF	
773.7	8.9	2.68	78	.34				HF	BRKN GGY 30° FLT ZONE-768.0'
782.5	8.8	2.66	90	.02				HF-QTzT	HF with FLTed wedges of
786.6	4.1	2.71	99	.06				HF-Serp MB	QTzT & Serp MB
797.4	10.8	2.60	90	.01	2610 791.5		.13	QTzT	
806.7	9.3	2.80	88	.01				QTzT-HF	
816.7	10.0	2.56	87	.01				QTzT	
827.2	10.5	2.59	92	.01					
837.1	9.9	2.59	98	Tr	2570 831.5		.01		DENSE WHITE QTzT with
847.9	10.8	2.58	84	Tr					SMALL PATCHES HF
858.5	10.6	2.60	91	Tr					ST 1' FLT ZONE @ 850.0'
869.0	10.5	2.60	93	Tr					
874.3	5.3	2.60	93	Tr	2530 871.5		Tr		
884.5	10.2	2.63	95	Tr					
895.6	11.1	2.60	99	Tr					— SERP FILLED QTzT-MB FLT CONT
906.5	10.9	2.72	94	Nil	2490		Tr	LS	60° @ 895.6'
917.2	10.7	2.69	90	Nil	911.5				
927.1	9.9	2.69	95	Nil					GRY-BLK LS
937.5	10.4	2.56	99	Nil					
942.8	5.3	2.60	92	Nil					
950.8	8.0	2.70	94	Nil	2450		Nil	LS-Mb	
961.3	10.5	2.70	93	Nil	951.5				
975.0	13.7	2.67	77	Nil					GRY MB WITH PATCHES
985.0	10.0	2.70	79	Nil				LS-Mb-HF	OF HF-LS & Serp MB
992.8	7.8	2.70	79	Nil	2410 991.5		Nil		
1006.5	13.7	2.48	99	Nil				Mb-HF	
1016.0	9.5	2.41	100	Nil					— LOW ∡ FLT CONT.
1026.5	10.5	2.60	96	Nil				Granite	2.5' FLT ZONE @ 1011.9'
1036.4	9.9	2.65	100	Nil	2370 1,031.5		Nil		THESE IS "BASEMENT FLT"
1046.5	10.1	2.65	100	Tr					
1056.6	10.1	2.63	100	Tr					COURSE GRAINED
1064.8	8.2	2.63	94	Tr					WK ALT NEAR FLT
1074.8	10.0	2.64	100	Tr	2330 1,071.5		Nil		
1085.5	10.7	2.64	95	Tr					
		2.56	78						

MIS 8074-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3263.0 | D.D. HOLE NO. M-95

SURVEY COORD. N 363,510.12

PROPERTY MISSION | E. 760,957.60 | TOTAL DEPTH 922.7

DATE COMPLETED 5-19-64 | DRILL GRID COORD. N 49+47 W 67+50 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Al LUV	GRAVEL O.B.
170.0	170.0								
175.0	5.0							Cc gl	CAL Cgl TOB B.R 175.0'
184.0	9.0	2.48	69	.23				MP	
193.6	9.6	2.46	69	.07					Leached ALT MP
201.0	7.4	2.47	85	.07					Base OX. 201.0'
209.7	8.7	2.50	95	.11	3050		.11		
220.0	10.3	2.56	92	.10	213.0				
230.9	10.9	2.58	92	.10					
239.0	8.1	2.50	96	.17					
251.0	12.0	2.51	95	.14	3010		.13		
261.1	10.1	2.52	92	.09	253.0				
271.3	10.2	2.48	100	.12					
280.5	9.2	2.52	94	.15					
291.5	11.0	2.48	89	.13	2970		.13		
298.4	6.9	2.53	75	.16	293.0				
307.2	8.8	2.48	89	.16					
319.5	12.3	2.52	86	.18					Mz - ST SER & Silica
330.2	10.7	2.54	81	.14	2930		.16		ALT.
341.7	11.5	2.47	78	.14	333.0				
353.9	12.2	2.50	84	.19					- ST FIT 349.6'
361.1	7.2	2.47	77	.19					- ST FIT 358.5'
368.1	7.0	2.55	83	.12	2890		.17		
379.0	10.9	2.51	88	.19	373.0				
388.3	9.3	2.44	83	.11					- ST QTz VNING
399.2	10.9	2.48	74	.18					
408.7	9.5	2.48	74	.14	2850		.14		
418.1	9.4	2.56	50	.07	413.0				
429.4	11.3	2.50	80	.09					- MOD FELDSPATH ALT
440.9	11.5	2.48	85	.07					
450.9	10.0	2.55	97	.10	2810		.08		
463.2	12.3	2.57	100	.08	453.0				- 70° FLT CONT MP - QTzT
471.5	8.3	2.59	96	.05				QTzT	Dense white QTzT
478.0	6.5	2.57	100	.10					- GRAD. CONT IN FRAC ZONE
487.9	9.9	2.43	95	.27				HF	
497.7	9.8	2.56	82	.06	2770		.20		- Pale - DK GRN HF with
507.4	9.7	2.63	100	.46	493.0				PODS MAG.
510.6	3.2	2.57	96	.36					- Gyp Filled 50° FLT CONT 510.6'
522.7	12.1	2.58	98	.04				QTzT	
533.1	10.4	2.56	99	.05	2730		.24		- Dense white QTzT
542.2	9.1	2.59	94	.05	533.0				
550.8	8.6	2.69	100	.80				Tr-HF	- Dense GRN with PYL EPID
554.1	3.3	2.57	100	.10				MP	- ST ALT Mz; MOD. Felt
559.7	5.6	2.53	99	.21				HF-MPQTz	HF with PODS MP
569.1	9.4	3.05	96	.50	2690		.39	Tr	
579.1	10.0	3.13	95	.49	573.0				

MIS 807A-78

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3263.0 | D.D. HOLE NO. M-95

SURVEY COORD. N 363,510.12

PROPERTY MISSION | E. 760,957.60 | TOTAL DEPTH 922.7

DATE COMPLETED 5-19-64 | DRILL GRID COORD. N 49+47 W 67+50 | INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
579.1								Tc	
589.3	10.2	3.35	95	.74					
599.6	10.3	3.41	92	2.44					— ST CPY CEMENTED BX AT 591.0'
604.6	5.0	3.29	93	.21					DK GRA-TAN GAR.
613.7	9.1	2.98	99	.82	2650 613.0		1.17		MED QTZ & GYP UNITS
622.2	8.5	3.25	93	.76					HEM STAINED IN PART
632.5	10.3	3.36	97	1.72					
642.5	10.0	3.12	100	3.16					
652.5	10.0	3.20	99	1.34	2610 653.0		1.76		
661.2	8.7	3.35	91	.92					— 663.8 GYP Filled FIT. CONT.
664.8	3.6	2.54	100	1.12				Tc-HF	
670.2	5.4	2.64	89	3.06				HF	
679.8	9.6	2.98	93	.17					- Pale GRN HF
690.0	10.2	3.00	99	.16	2570 693.0		.81		
700.0	10.0	3.18	99	.28				HF-Tc	
710.0	10.0	2.67	98	.12				MP	
720.0	10.0	2.66	100	.08					BRKN BX IN QTZT- VAGUE
726.8	6.8	2.63	93	.05					IGNEOUS TEXT
734.0	7.2	2.61	98	.06	2530 733.0		.12		
742.8	8.8	2.62	94	.08				MP-QTZT	ST QTZ IN MP
748.5	5.7	3.00	100	.09				Tc-HF-Mb	
758.5	10.0	2.99	93	.49					Tc - HF - MB BX
768.5	10.0	2.83	96	.23	2490 773.0		.21		- 30° FLT CONT 768.5'
779.4	10.9	2.55	79	.03				QTZT	
788.8	9.4	2.51	78	.05					- DENSE WHITE QTZT
797.1	8.3	2.51	65	.04					- ST. BX FLT ZONE AT 792.0'
809.2	12.1	2.53	87	.03					- QTZ-MB CONT WK FLT
816.4	7.2	2.69	99	.07	2450 813.0		.04	Mb	- ST 50° FLT @ 814.6'
829.1	7.7	2.70	99	.01					
834.3	10.2	2.58	100	.01					
844.6	10.3	2.69	96	.11				HF-Mb-QTZT	
854.8	10.2	2.36	100	.01	2410 853.0		.04	GYP	
864.8	10.0	2.63	98	.01				GYP-LS.	GRY - WHITE
873.2	8.4	2.45	94	.01				GYP-Arg	GYP SIFERALS MB
882.7	9.5	2.55	99	.01				Arg-Mb	
892.7	10.0	2.94	99	Tr	2370 893.0		.01	GYP	
902.7	10.0	2.69	99	.01				GYP-Arg	
912.7	10.0	2.70	100	Tr				GYP-LS.	- ST 50° CALCITE Filled FLT
922.7	10.0	2.77	100	.01				GYP-LS	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3409.3

SURVEY COORD. N 36,116.58

E. 76,247.03

D.D. HOLE NO. M-94

PROPERTY Mission

TOTAL DEPTH 832.2

DATE COMPLETED 3-28-64

DRILL GRID COORD. N 25+50 W 64+91

INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
280.0	28.0							Alluv	Top CCg ≐ 280'
290.2	10.2		50					CCg	BR cont @ 290.2'
300.3	10.1	2.46	71	.43		0.43		Arg Mp	Leached mixed ints Qzitic
310.0	9.7	2.47	95	.17					Arg (?) & st sec alt Mp; WK Cu Ox.
319.5	9.5	2.43	82	.18	3000 / 319.5		.19	MP	
325.6	6.1	2.50	84	.2					Base Oxidation @ 325.6'
334.7	9.1	2.44	85	.09					
344.4	9.7	2.57	85	.09					
355.7	11.3	2.52	86	.10	3050 / 350.3		.10		
365.7	10.0	2.55	74	.09					
375.0	9.3	2.53	75	.09					
384.7	9.7	2.50	73	.09					
396.4	11.7	2.54	71	.09	3010 / 399.3		.09		310.0 to 772.5.
405.6	9.2	2.57	79	.11					Typical Porphyry w/
416.1	10.5	2.49	64	.09					med-st sec alt; local
427.7	11.6	2.55	52	.08					feldspathization &
438.6	10.9	2.49	80	.07	2970 / 439.3		.09		silicification; Tr cpy-
447.0	8.4	2.52	80	.10					py-mal; etc.
458.0	11.0	2.53	75	.10					
461.0	3.0	2.54	36	.09					
471.8	10.8	2.57	80	.08					
481.0	9.2	2.49	83	.06	2930 / 479.3		.09		
488.9	7.9	2.52	87	.09					
496.1	7.2	2.42	78	.07					
504.6	8.5	2.55	65	.07					
514.8	10.2	2.55	90	.06	2890 / 519.3		.07		
524.0	9.2	2.52	83	.07					
533.6	9.6	2.56	82	.07					
545.0	11.4	2.53	74	.08					
553.8	8.8	2.49	80	.06	2850 / 559.3		.07		
561.5	7.7	2.49	92	.07					
571.3	9.8	2.55	95	.06					
583.0	11.7	2.55	77	.05					
593.8	10.8	2.54	83	.06	2810 / 599.3		.06		
608.1	14.3	2.52	77	.06					
617.2	9.1	2.54	75	.08					
629.4	12.2	2.53	65	.06					
638.4	10.0	[illegible]	84	.08	2770 / 639.3		.06		634' - 60° wk chl filled flt.
649.9	11.5	2.50	82	.07					644.5' Mod brkn ggy flt zone.
652.6	2.7	2.54	94	.10					652.2 - 1' - 60° brkn flt zone
661.5	8.9	2.41	[illegible]	.08					660.6' ± 60° flt bx-gg 0.1'
672.0	10.5	2.47	53	.08					
683.5	11.5	[illegible]	83	.08	2730 / 679.5		.05		
691.3	7.8	2.54	88	.09					
698.8	7.5	2.48	94	.08					

MISSOTA-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3409.3

D.D. HOLE NO. M-94

SURVEY COORD. N 361,116.58

PROPERTY Mission

E. 761,247.03

TOTAL DEPTH 832.2

DATE COMPLETED 3-28-64

DRILL GRID COORD. N 25+50 W64+97

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
698.8								MP	
709.7	10.9	2.54	84	.09					
719.2	9.5	2.55	97	.09	2690		.09		
729.3	10.1	2.51	92	.11	719.3				
738.7	9.4	2.50	85	.08					
750.4	11.7	2.52	91	.13					
760.6	10.2	2.52	77	.08	2650		.10		
766.6	6.0	2.54	98	.11	759.3				
772.5	5.9	2.56	100	.11					772.5 ± 40° Intrusive(?) Mg-Tt cont.
783.9	11.4	2.67	63	.28				Tt-HF	777.1' - 1.0' - 30° Qtzt intercept
791.6	7.7	2.72	78	.09				Mb	783.9 - 84.7'; Serp filled Hf-Mb
796.7	5.1	2.72	90	.16	2610		.16		flt contact @ ± 45°.
808.0	11.3	2.72	65	.17	799.3				783.9 to 832.2; Wht to
813.0	5.0	2.67	94	.09					Ltgr Xline Mb w/ sp sulf
822.6	9.6	2.66	100	.12					& local Tt graphite on fracs.
832.2	9.6	2.71	99	.10			.12		
		2.55	81						

MIS-807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two COLLAR ELEV. 3374.5 D.D. HOLE NO. M-92

SURVEY COORD. N 362,015.80 J. H. C.

PROPERTY Mission E. 761,475.29 TOTAL DEPTH 839.0

DATE COMPLETED 3/13/64 DRILL GRID COORD. N 34+45 W 62+55 MAY 1 1964 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
280.0	280.0				3090 284.5		NIL		Top CCg ±250'
290.7	10.7	2.50	60	.04				Mp	BR @ 280'
300.8	10.1	2.47	87	.03					
309.9	9.1	2.53	91	.07					Base of Oxidation @ 309.9
321.5	11.6	2.56	86	.08	3250 324.5		.06		
329.0	7.5	2.58	95	.07					
339.4	10.4	2.57	92	.11					
346.8	7.4	2.52	98	.08					
356.0	9.2	2.57	96	.06					
364.5	8.5	2.53	94	.07	3010 364.5		.08		
374.0	9.5	2.58	93	.08					
385.5	11.5	2.50	77	.07					
395.4	9.9	2.57	89	.09					
408.5	13.1	2.52	77	.06	2970 424.5		.08		280.0 to 680.9
418.6	10.1	2.57	89	.04					Typical mod to st ser
430.8	12.2	2.56	86	.08					all Mp w/ varying
441.0	10.2	2.54	55	.05	2930 444.5		.06		degrees feldspath &
451.0	10.0	2.53	81	.08					silf; Ti suls including
460.5	9.5	2.56	74	.08					moly; local biot, chl,
472.0	11.5	2.58	74	.08					serp as accessories
479.8	7.8	2.57	86	.09					
487.9	8.1	2.57	87	.12	2890 484.5		.09		
499.1	11.2	2.54	88	.10					
510.5	11.4	2.55	81	.11					
519.4	8.9	2.52	83	.08					
527.5	8.1	2.55	81	.10	2850 524.5		.10		
537.0	9.5	2.49	55	.08					
548.7	11.7	2.54	79	.12					
560.3	11.6	2.60	79	.11					
568.9	8.6	2.59	92	.09	2810 564.5		.10		
578.5	9.6	2.57	72	.09					
587.2	8.7	2.54	78	.10					
597.1	9.9	2.60	88	.08					
603.9	6.8	2.58	89	.09	2770 604.5		.09		
612.8	8.9	2.57	96	.09					
625.3	12.5	2.56	86	.08					
635.7	10.4	2.57	66	.06					
645.0	9.3	2.56	63	.08	2730 644.5		.08		
654.5	9.5	2.55	86	.07					
663.7	9.2	2.52	64	.08					
670.8	7.1	2.53	55	.10					
680.9	10.1	2.50	60	.07					
681.2	0.3	2.85	83	2.50		1.47		Tt	Cpy-py Ti mag
689.0	7.8	2.80	23	1.38	2690 684.5	1.38	.20	Tt-Hf	Pos Fld zone
698.5	9.5	2.38	97	.08				Hf-Gyp	

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two COLLAR ELEV. 3,374.5 D.D. HOLE NO. M-92

SURVEY COORD. N 362,015.80

PROPERTY Mission E. 761,475.29 TOTAL DEPTH 839.0

DATE COMPLETED 3/13/64 DRILL GRID COORD. N 34+45 INCLINATION Vertical

W 62+55

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
706.4	7.9	3.43	76	.79		0.79		Hf-Tt	cpy-py-Tr mag
713.0	6.6	2.56	99	.04				Mp	Intrusive(?) Tt-Mp ent
722.7	9.7	2.52	100	.03	2650		.35		
729.8	7.1	2.67	100	.13	724.5			Mb	
733.5	3.7	2.94	100	.87		0.87		Mb-Hf	Pots Hf-Tt in xline Mb; cpy
742.4	8.9	2.77	92	.34				Tt	py-bn-sph-
751.7	9.3	2.58	99	.02				Mp	Fine gr sil RK w/ feldspath, &
764.2	12.5	2.47	90	.02	2610		.19		faint porph Text.
773.0	8.8	3.06	78	.05	764.5			Hf	70° cnt @ frac w/ Mp.
783.2	10.2	2.46	100	.03				Hf-GypP	
793.0	9.8	2.78	100	.17				Hf-Tt	Mixed mts w/ Kmineralized
804.0	11.0	2.89	97	.28	2570		.14	Mb-GypP Hf	Hf-Tt-Gyp-Mb
814.0	10.0	2.76	100	.14	804.5			Hf-Mb	
822.7	8.7	2.59	89	.01				Mb	820.7' Bx-Gg zone.
829.2	6.5	2.60	92	.02					Lgr-wht Mb Locally
839.0	9.8	2.93	95	.02			.05		mottled w/ serp.
		2.60	83						

MISB07A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3330.8

SURVEY COORD. N 361,118.50
E. 761,494.88

D.D. HOLE NO. M-93

PROPERTY MISSION

TOTAL DEPTH 766.2

DATE COMPLETED 4-3-64

DRILL GRID COORD. N 25+48
W 62+49

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
204.2	204.2				3130 200.8		NIL	Alluv	Top Cal Cgl 204.2'
213.7	9.5							Cal-cgl MP	Top BR. 213.7
224.7	11.0	2.45	82	0.06					
236.3	11.6	2.49	92	0.17					
249.5	8.2	2.55	81	0.19	3090 240.8		0.09		Sp-Mod limi; Tr Jaro, Cu Ox,
255.1	10.6	2.45	93	0.06					Kaolin; Mod ser; st Leached
267.3	12.2	2.46	88	0.07					Base Oxidation @ 267.3'
277.3	10.0	2.47	86	0.07					
287.8	10.5	2.49	91	0.09	3050 280.8		0.08		
296.8	9.0	2.77	85	0.11					
305.4	8.6	2.55	91	0.09					
312.6	7.2	2.58	93	0.08					267.3' to 648.0':
322.8	10.2	2.45	96	0.09	3010 320.8		0.09		Mod-st ser alt Mp w/
333.7	10.9	2.54	95	0.11					wk-st feldspath & silf.
344.3	10.6	2.50	96	0.07					Tr Suls including moly,
353.2	8.9	2.59	93	0.09					Accessories are sp-Tr
363.4	10.2	2.47	97	0.07	2970 360.8		0.09		biot, chl, serp, Kaolin,
373.4	10.0	2.54	95	0.06					gyp.
378.4	5.0	2.53	98	0.09					
386.8	8.4	2.55	96	0.09					
396.8	10.0	2.58	93	0.11					
405.4	8.6	2.56	93	0.07					
409.6	4.2	2.53	95	0.07	2930 400.8		0.08		
419.9	10.3	2.60	92	0.08					
427.5	7.6	2.55	89	0.07					
434.3	6.8	2.62	95	0.11					
444.0	9.7	2.62	95	0.09	2890 440.8		0.08		
454.4	10.4	2.59	95	0.08					
464.2	9.8	2.57	94	0.08					
474.3	10.1	2.52	99	0.06					
485.7	11.4	2.56	94	0.06	2850 480.8		0.07		
491.1	5.4	2.55	100	0.09					
501.3	10.2	2.60	62	0.08					
510.2	8.9	2.53	78	0.07					
520.7	10.5	2.45	73	0.06	2810 520.8		0.07		
527.7	7.0	2.58	65	0.10					
537.1	9.4	2.45	69	0.08					
545.8	6.7	2.50	84	0.06					
553.6	9.8	2.54	59	0.27					
563.4	9.8	2.53	90	0.08	2770 560.8		.13		
574.0	10.6	2.57	71	0.08					
578.5	4.5	2.55	99	0.09					
587.8	9.3	2.56	56	0.10					
597.4	9.6	2.58	100	0.08	2730 600.8		.09		
608.8	11.4	2.57	98	0.09					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF TWO

COLLAR ELEV. 3330.8

SURVEY COORD. N 361,118.50
E. 761,494.88

D.D. HOLE NO. M-93

PROPERTY MISSION

TOTAL DEPTH 766.2

DATE COMPLETED 4-3-64

DRILL GRID COORD. N 25+98
W 62+49

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
609.8								Mp	
619.9	11.1	2.60	72	.09					
623.8	3.9	2.58	95	.11					
634.6	10.8	2.55	81	.09					
643.6	9.0	2.58	76	.12	2690 / 640.8		.10		
648.0	4.4	2.24	53	.08					649.6 - brkn - ggy Mp - Tt cnt.
658.0	10.0	2.76	96	.45				Tt	cpy - py vlts & diss.
664.7	6.7	2.69	91	.31					
672.4	7.7	2.18	100	.68				HF	cpy - py - chl - Mag.
675.2	2.8	3.46	97	1.66					Calcite filled 23° HF-Mb cnt.
683.5	8.3	2.72	102	.32	2650 / 680.8		.47	Mb	wht - xline
693.0	9.5	2.56	99	.54				Mp	Faint porph Text.
701.2	8.2	2.72	100	.49				Mb	Cpy - bn - graphite
713.7	12.5	2.64	100	.12					
722.4	8.7	3.06	95	.08	2610 / 720.8		.18	Mb-HF	
733.6	11.2	2.62	80	.14					
739.6	6.0	2.57	99	.04				QTzT	
746.5	6.9	2.66	87	.02				QTzT-Mb	739.9 & 747.6 ≠ 20° Qtzt-Mb cnts.
754.5	8.0	2.57	97	.02				QTzT	
764.8	10.3	2.60	100	.01	2570 / 760.8		.06		≠ 75° Qtzt. Serp Mb cnt @ slip.
766.2	1.4	2.[illegible]	88	.02				Mb	
		2.57	97						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3367.4 | D.D. HOLE NO. M-91

SURVEY COORD. N 361,722.62

PROPERTY MISSION | E. 761,742.76 | TOTAL DEPTH 779.9

DATE COMPLETED 3/11/64 | DRILL GRID COORD. N 31+48 W 59+92 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
300.0	300.0							Alluv	Top Clg ± 280 BR ± 290'
310.0	10.0	2.49	94	.18	3090		.05	MP	
318.4	8.4	2.44	98	.33	310.2				Mod-st ser alt, limonite
328.2	9.8	2.39	100	.19					stained MP.
337.7	9.5	2.49	89	.18					Base Oxidation ± 337'
348.3	10.6	2.48	87	.23	3050		.22		
360.0	11.7	2.60	90	.11	350.2				
372.4	12.4	2.58	95	.08					
383.9	11.5	2.51	96	.07					
392.5	8.6	2.55	89	.08	3010		.08		
404.2	11.7	2.57	67	.08	390.2				
414.3	10.1	2.49	86	.09					
424.5	10.2	2.53	89	.08					
434.4	9.9	2.53	92	.08	2970		.08		
445.7	11.3	2.57	90	.08	430.2				
455.5	9.8	2.53	90	.06					
465.0	9.5	2.58	92	.08					
474.7	9.7	2.59	98	.06	2930		.07		
479.5	4.8	2.54	98	.13	470.2				
489.9	10.4	2.56	100	.08					337' to 749.1':
501.1	11.2	2.59	98	.12					Weakly mineralized,
510.9	9.8	2.56	100	.07	2890		.09		Moderately sericitized &
518.0	7.1	2.60	97	.07	510.2				Feldspathized Menz. porph
527.7	9.7	2.65	98	.07					
538.9	11.2	2.61	94	.09					
548.5	9.6	2.61	99	.08	2850		.08		
559.5	11.0	2.59	99	.09	550.2				
567.5	8.0	2.61	98	.07					
572.6	5.1	2.63	91	.09					
584.0	11.4	2.58	100	.08					
593.5	9.5	2.59	100	.06	2810		.08		
603.3	9.9	2.60	100	.08	590.2				
610.1	6.8	2.59	96	.07					
618.3	8.2	2.59	92	.06					
628.7	10.4	2.55	87	.09	2770		.08		
638.1	9.4	2.55	96	.10	630.2				
651.3	13.2	2.59	91	.09					
661.8	10.5	2.56	89	.09					
672.0	10.2	2.57	83	.12	2730		.10		
682.7	10.7	2.52	92	.10	670.2				
692.0	9.3	2.57	82	.11					
701.2	9.2	2.54	74	.11					
708.1	6.9	2.55	50	.10	2690		.11		
718.1	10.0	2.54	83	.09	110.2				
729.5	11.4	2.54	88	.07					

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2

COLLAR ELEV. 3367.4

SURVEY COORD. N 361,722.62
E. 761,742.76

D.D. HOLE NO. M-91

PROPERTY Mission

TOTAL DEPTH 779.9

DATE COMPLETED 3/11/64

DRILL GRID COORD. N 31+48
W 59+92

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
729.5									
741.0	11.5	2.57	87	.09					
749.1	8.1	2.56	95	.10	2650		.09		
755.1	6.0	2.94	92	.24	750.2			Hf-Mb	30° Mp-Hf cnt @ slip w/ suls
767.3	12.2	2.68	100	.10				Mb	
771.7	4.4	2.67	100	.03					Pale grn to wht-gr banded
779.9	8.2	2.68	97	.03					Mb
		2.57	92						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3367.4 | D.D. HOLE NO. M-90

SURVEY COORD. N 361,722.62

PROPERTY Mission | E. 761,742.76 | TOTAL DEPTH 708.3

DATE COMPLETED 2/22/64 | DRILL GRID COORD. N 31+48 W 59+92 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
250.0	250.0							ALLUV.	Top CCg ± 23.5'
262.7	12.7		97					CCg	BR-CCg cnt @ 262.7'
271.1	8.4	2.53	90	.09				Mp	
282.8	11.7	2.46	100	.14	3090 / 277.4		.04		Sp-wk Cu Ox & sils in
293.7	10.9	2.50	92	.08					Mod-st ser alt & leached
306.5	12.8	2.52	86	.06					Mp
315.0	8.5	2.43	92	.08					
320.8	5.8	2.43	71	.87	3050 / 317.4		.08		Base Oxidation 320.8'
331.8	11.0	2.52	87	.10					
341.5	9.7	2.55	91	.09					
352.8	11.3	2.58	90	.10					
361.2	8.4	2.59	90	.09	3010 / 357.4		.09		
373.3	12.1	2.57	100	.08					
385.4	12.1	2.56	100	.07					
393.9	8.5	2.54	100	.08					
401.3	7.4	2.60	100	.08	2970 / 397.4		.08		320.0' to 628.3':
411.0	9.7	2.60	97	.09					wk-st Feldspathized
419.3	8.3	2.59	97	.08					& silicified Mp with
427.6	8.3	2.57	100	.07					wk-st ser alt, Tr-wk
435.9	8.3	2.59	99	.08	2930 / 437.4		.08		suls, Tr moly-chl-serp
447.4	11.5	2.58	100	.07					local biot.
459.9	12.5	2.57	100	.09					
468.1	8.2	2.60	97	.09					
480.0	11.9	2.59	96	.09	2890 / 477.4		.09		
491.9	11.9	2.59	100	.09					
503.4	11.5	2.58	100	.12					
514.9	11.5	2.56	99	.10	2850 / 517.4		.10		
528.3	13.4	2.51	98	.12					
540.0	11.7	2.56	94	.14					
548.3	8.3	2.59	97	.18					
558.7	10.4	2.60	94	.15	2810 / 557.4		.15		
567.7	9.0	2.57	90	.11					
576.3	8.6	2.56	93	.12					
582.2	5.9	2.58	98	.09					
594.3	12.1	2.54	78	.09					
603.1	8.8	2.55	85	.09	2770 / 597.4		.10		
607.1	4.0	2.50	87	.09					
617.1	10.0	2.48	71	.17					1.0' Tt int @ 614.6'
628.3	11.2	2.51	90	.13					
637.8	9.5	2.37	77	.30	2730 / 637.4		.17	Tt-Mp	
647.0	9.2	2.89	85	.41		.44		Tt	
658.4	11.4	3.10	73	.47					cpy-py Tr mag-hem
667.3	8.9	2.99	77	.30					667.7 & 671.8': 30-35° Hf-Tt-
674.6	7.3	2.58	70	.67	2690 / 677.4	.67	.42	Tt QTzT	Qtzt bx flt zones, 671.8' flt cnt.
683.4	8.8	2.68	49	.02				QTzT	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2

COLLAR ELEV. 3367.4

D.D. HOLE NO. M-90

SURVEY COORD. N 364,722.62

E. 761,742.76

PROPERTY MISSION

TOTAL DEPTH 708.3

DATE COMPLETED 2/22/64

DRILL GRID COORD. N 31+48 W 59+92

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
683.4								QTzT	Dense wht brKn Qtzt
691.6	8.2	2.62	30	.03					Qtzt-Ls Cont brKn
701.7	10.1	2.69	100	NiL				LS	DKgr-blK Ls.
708.3	6.6	2.68	83	NiL					
		2.59	90						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two

COLLAR ELEV. 3282.0

D.D. HOLE NO. M-89

SURVEY COORD. N 362,931.43

E 761,219.99

PROPERTY Mission

TOTAL DEPTH 680.3

DATE COMPLETED 2/18/64

DRILL GRID COORD. N 43+65 W 64+97

INCLINATION Vertical

J. H. C.

APR 20 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
183.4	183.4							Gravel cal-cal	
190.8	7.4		70		3090 192.0		.01	MP	
200.2	9.4	2.51	93	.19					
211.8	11.6	2.54	99	.26					
222.1	10.3	2.60	92	.11					Sp-Mod Alt & leached w/
232.2	10.1	2.55	90	.13	3050 232.0		.18		Tr-wk chrys, Cu ox.
240.6	8.4	2.47	93	.18					Base Oxidation ± 240.6'
245.0	4.4	2.57	50	.15					
255.7	10.7	2.52	99	.09					
266.6	10.9	2.53	98	.12					
275.0	8.4	2.56	92	.14	3010 272.0		.13		
283.9	8.9	2.58	80	.13					
293.4	9.5	2.57	97	.07					
303.4	10.0	2.56	96	.08					240.6' to 466.8':
315.1	11.7	2.55	99	.13	2970 312.0		.10		lt pk-Gr-wht Mp w/
325.7	10.6	2.55	94	.13					varying amounts Feld, ser
334.4	8.7	2.55	96	.15					Tr-wk sulf.
341.1	6.7	2.59	89	.14					
350.5	9.4	2.55	99	.13	2930 352.0		.14		
362.3	11.8	2.56	93	.10					
371.1	8.8	2.55	90	.10					
382.9	11.8	2.55	96	.08					
390.5	7.6	2.58	97	.09	2890 392.0		.09		
398.5	8.0	2.50	99	.09					
410.1	11.6	2.69	94	.08					
422.4	12.3	2.57	96	.09					
432.5	10.1	2.57	92	.09	2850 432.0		.08		
443.1	10.6	2.63	93	.09					
453.4	10.3	2.59	93	.09					
463.2	9.8	2.51	88	.08					
466.8	3.6	2.51	51	.26					Cont. brkn
473.7	6.9	2.83	73	.82	2810 472.0	0.82 0.82	.20	Tt	Dense sil Tt w/ cpy
484.4	10.7	2.59	95	.06				QTzT	
493.1	8.7	2.62	74	.04					Dense gr-Tan Qtzt
495.2	2.1	2.66	75	.11					
499.0	3.8	2.71	48	1.32				Hf-Tt	
510.4	11.4	3.20	60	1.02		1.27		Tt	cpy-py-mag-hem.
515.0	4.6	3.35	85	2.96	2770 512.0	2.96	.59		
524.7	9.7	2.71	71	.35				Mb	wht xline
535.0	10.3	2.73	93	.19				Serp-Mb	
547.0	12.0	2.78	93	.16					st serp.
557.8	10.8	2.56	96	.17	2730 552.0		.39		
567.5	9.7	2.62	100	.33					
571.7	4.2	3.13	99	.14				HF	D-Hf
581.9	10.2	2.97	100	.03				HF-GYP	V. st Gyp w/ Frags silty Hf

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two COLLAR ELEV. 3282.0 D.D. HOLE NO. M-89

SURVEY COORD. N 362,931.43

PROPERTY Mission E. 761,219.99 TOTAL DEPTH 680.3

DATE COMPLETED 2/18/64 DRILL GRID COORD. N 43+65 INCLINATION Vertical

W 64+97

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
581.9								Hf-Gyp	
592.1	10.2	2.71	95	.05	2690		.14		
602.3	10.2	2.57	100	.11	5920			Gyp-Arg	Frags brn Arg in mass
608.7	6.4	2.39	100	.13					gyp
618.2	9.5	3.02	95	2.00		2.00		HF	bn-cpy-py
628.9	10.7	2.61	99	.32				LS-HF	pale gr Ls w/ pats Hf.
634.8	5.9	2.57	98	.10	2650 6320		.62		
642.4	7.6	2.50	100	.02				QTzT	
652.3	9.9	2.60	97	.02					
662.5	10.2	2.52	92	.02					Dense wht barren Qtzt
673.2	10.7	2.60	97	.02	2610 6720		.03		
680.3	7.1	2.63	100	.02					
		2.63	92						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3339.2 | D.D. HOLE NO. M-88

SURVEY COORD. N 361,125.48

PROPERTY MISSION | E. 761,730.87 | TOTAL DEPTH 774.0

DATE COMPLETED 2/5/64 | DRILL GRID COORD. N 25+51 W 60+13 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
225.0	225.0							O.B.	Top of cgl 210.0'
230.4	5.4		97					Cgl-Cgl	BR 230.4'
239.4	9.0	2.18	96	.03				Mp	
249.7	10.3	2.39	81	.05	3090 249.2		.02		
258.1	8.4	2.46	96	.07					
269.4	11.3	2.64	89	.12					230.0' to 343.0'
280.4	11.0	2.54	92	.03					Leached & st ser alt
293.0	12.6	2.59	94	.14	3050 289.2		.08		Mp
302.8	9.8	2.49	94	.23					
311.2	8.4	2.58	69	.18					
323.9	12.7	2.74	86	.18					317' 8" bx zone; poss flt.
333.1	9.2	2.52	90	.14	3010 329.2		.18		
343.0	9.9	2.47	76	.08					
352.0	9.0	2.47	49	.21				Mp-Bx	Ggy bx zone w/ Hf Frags
355.5	3.5	2.59	85	.61		.61		Hf-Bx	wk-mod cpy-py
360.9	5.4	2.48	96	.28				Mp	Lower cont intrusive
370.1	9.2	2.66	90	1.41	2970 369.2	1.41	.46	Tt	Cpy-cc-py-Tr mag, $CuCO_3$.
381.5	11.4	2.39	91	.41		.48		Mp	Base Oxidation 382.0'
387.4	5.9	2.47	92	.10					
395.6	8.2	2.43	99	.11					
406.7	11.1	2.47	94	.14	2930 409.2		.23	Mp-Tt	Poss Xenoliths Tt in Mp.
415.7	9.0	2.54	95	.07				Mp	
424.1	8.4	2.53	97	.10					
435.9	11.8	2.50	100	.08					
448.0	12.1	2.50	96	.07	2890 449.2		.08		
459.9	11.9	2.48	86	.08					459.9-474.8' Poss flt bx-gg
470.1	10.2	2.52	68	.06					
481.9	11.8	2.56	88	.09					406.7 to 623.0'; wk-st
493.4	11.5	2.62	88	.10	2850 489.2		.08		ser & clay altered w/
503.0	9.6	2.58	92	.08					varying degrees of silf &
515.6	12.6	2.52	85	.07					feldspath. Sulf sparse;
525.7	10.1	2.58	79	.08	2810 529.2		.08		Tr moly
535.8	10.1	2.60	93	.11					
544.0	8.2	2.55	80	.09					
556.2	12.2	2.60	66	.09					
566.3	10.1	2.56	90	.18	2770 569.2		.12		
575.4	9.1	2.61	93	.09					
585.0	9.6	2.53	94	.07					
591.8	6.8	2.52	76	.06					
602.2	10.4	2.49	82	.08	2730 609.2		.08		
613.8	11.6	2.57	85	.09					
623.0	9.2	2.53	91	.09					619.0' st recent flt bx w/ Angular
633.1	10.1	2.88	94	.41		.79		Tt	frags Mp; Bx ± 1 ft wide. (Flt cont)
641.5	8.4	3.32	36	1.00					
649.9	8.4	3.06	93	1.07	2690 649.2		.55		

U.S.P.O. 1-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3339.2 | D.D. HOLE NO. M-88

SURVEY COORD. N 361,125.48

PROPERTY MISSION | E 761,730.87 | TOTAL DEPTH 774.0

DATE COMPLETED 2/5/64 | DRILL GRID COORD. N 25+51 W 60+13 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
649.9									
658.1	8.2	3.18	92	.65				Tt	
666.4	8.3	3.04	97	.43				HF	Cu mineral mainly cpy
674.8	8.4	3.48	91	1.12		1.11		Tt	occuring with py & mag.
683.0	8.2	3.51	98	2.42					wk. Tr born in last run.
687.1	4.1	3.50	93	.84	2650		1.11		Local wk sph.
695.2	8.1	3.29	100	1.02	689.2	1.03			
705.2	10.0	3.17	96	1.04				Tt-L.S.	705.2 Tt-Ls cnt @ 40°
713.6	8.4	2.73	100	.14				L.S.	
722.0	8.4	2.70	99	.13					Pale gr Ls (Mb?)
727.8	5.8	2.71	99	.18	2610		.50		Brkn Ls - Mp cnt
738.3	10.5	2.56	97	.08	729.2			Mp	Vague sud text & pats Tt.
742.7	4.4	2.68	100	.23				HF-Mb	
755.3	12.6	2.70	98	.04				Mb	
767.4	12.1	2.69	97	.02	2570		.06		Lt gr Xline Mb
774.0	6.6	2.69	98	Tr.	769.2				
		2.64	90						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3262.8 | D.D. HOLE NO. M-87

SURVEY COORD. N 363,528.78

PROPERTY MISSION | E. 761,206.71 | TOTAL DEPTH 893.6

DATE COMPLETED 2/1/64 | DRILL GRID COORD. N 49+62 W 65+01 | INCLINATION Vertical

J. H. C.

MAR 13 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
180.0	180.0							Alluv	Top CCg ± 165'
182.1	2.1							CCg	BR. cont @ 182.1'
191.1	9.0	2.44	92	.12				Mp	
201.9	10.8	2.49	88	.21					Base Oxidation 201.9'
213.2	11.3	2.53	96	.13	3050 212.8		.12		
223.3	10.1	2.54	91	.22					
233.2	9.9	2.49	92	.19					
243.7	10.5	2.49	87	.26					
253.7	10.0	2.55	87	.20	3010 252.8		.22		
263.4	9.7	2.56	95	.13					
270.8	7.4	2.49	89	.16					
280.0	9.2	2.52	94	.20					
290.1	10.1	2.55	99	.19	2970 292.8		.18		182.1' to 570.5':
298.6	8.5	2.59	100	.23					WK-st ser alt Mp
307.6	9.0	2.55	100	.18					w/ local silf & feldspath;
316.5	8.9	2.56	100	.12					Tr-wk moly; Sp-Tr
325.5	9.0	2.54	97	.13					cpy-py, 20° to 85° Fracs,
337.7	12.2	2.57	96	.19	2930 332.8		.16		slips, & gyp vlts.
348.5	10.8	2.54	98	.14					
363.0	14.5	2.56	98	.13					
371.4	8.4	2.55	100	.16	2890 372.8		.15		
380.1	8.7	2.53	98	.14					
389.6	9.5	2.55	98	.19					
397.9	8.3	2.55	100	.12					
411.7	13.8	2.53	97	.13	2850 412.8		.15		
419.0	7.3	2.52	99	.17					
431.5	12.5	2.54	100	.11					
442.2	10.7	2.55	98	.13					
449.1	6.9	2.51	100	.12	2810 452.8		.13		
457.2	8.1	2.54	96	.18					
468.0	10.8	2.47	100	.19					
478.4	10.4	2.53	94	.16					
488.3	9.9	2.56	100	.08	2770 492.8		.14		
497.3	9.0	2.54	96	.10					
508.2	10.9	2.58	98	.13					
517.0	8.8	2.53	98	.09					
525.2	8.2	2.53	100	.08					
534.7	9.5	2.53	100	.09	2730 532.8		.10		
545.5	10.8	2.57	100	.10					
553.0	7.5	2.55	100	.08					
562.0	9.0	2.53	98	.09					
570.5	8.5	2.55	97	.08	2690 572.8		.09		
577.2	6.7	2.56	100	.09				MpQTzT	576.4' Igneous cont @ 30° w/ Qtzt.
583.8	6.6	2.59	98	.08					Pats Mp Int into Qtzt.
593.9	10.1	2.60	100	.05				QTzT	Dense wht Qtzt

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3262.8 | D.D. HOLE NO. M-87

SURVEY COORD. N 363,528.78

PROPERTY MISSION | E. 761,206.71 | TOTAL DEPTH 893.6

DATE COMPLETED 2/1/64 | DRILL GRID COORD. N 49+62 W 65+01 | INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
593.9									cnt @ 593.9'
603.2	9.3	2.59	100	.26				Hf	
613.7	10.5	2.59	100	.23	2650		.15	Hf Tt	wk cpy-py
618.5	4.8	2.83	97	.61	612.8	.61		Tt	618.5' - Tt-Qtzt flt cnt
624.0	5.5	2.59	100	.08				QTzT	
632.0	8.0	2.62	100	.08					Dense wht Qtzt; Faint ArK Text.
642.0	10.0	2.64	97	.09					45° flt cnt w/ st Gyp
647.2	5.2	2.62	100	.49		.49		Hf Tt	wk cpy-py Tr Moly
655.2	8.0	2.48	100	.29	2610		.23		
665.2	10.0	3.22	96	.61	652.8			Tt	
675.2	10.0	3.09	100	.73		1.28			cpy-py-bn-Tr mag, moly
685.2	10.0	3.37	97	2.89					
695.3	10.1	2.91	100	.75	2570		1.22		
705.2	9.9	3.08	95	1.47	692.8	1.32		Tt Hf	
716.4	11.2	2.65	100	.22				Hf	
722.8	6.4	2.63	99	.05				QTzT	Gyp filled flt conts above & below.
728.8	6.0	2.63	100	.06				Hf	
738.9	10.1	2.76	98	.10	2530		.50		738.5 Sey 4" chloritic
745.7	6.8	2.64	100	.05	732.8				flt zone
748.9	3.2	2.58	100	.03				QTzT	
757.6	8.7	2.60	100	.04					Dense wht Qtzt
764.7	7.1	2.62	100	.03					
772.5	7.8	2.63	99	.03	2490		.05		
780.2	7.7	2.64	100	.03	712.8				Poss flt cnt in brkn zone
789.2	9.0	2.58	94	.03				Mp	Light pink feldspathized &
800.2	11.0	2.61	99	.02					silicified siltstone (?); Faint
812.9	12.7	2.60	88	.01	2450		.02		porphyry texture
817.9	5.0	2.64	92	.02	812.8			QTzT	
827.6	9.7	2.59	100	.02					
835.0	7.4	2.58	97	.03					812.9' to bottom:
847.2	12.2	2.57	99	.03					Dense white to tan
858.6	11.4	2.55	99	.03	2410		.03		Qtzt w/ wk ser alt &
863.2	4.6	2.62	99	.03	852.8				sp sulf. Local Tr Moly
873.3	10.1	2.57	100	.03					
883.5	10.2	2.59	99	.02					
893.6	10.1	2.62	100	.02	2370		.03		
					892.8				
		2.61	97						

MIS807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3383.7 | D.D. HOLE NO. M-86

SURVEY COORD. N 361,427.99

PROPERTY Mission | E. 761,986.88 | TOTAL DEPTH 904.0

DATE COMPLETED 1/2/64 | DRILL GRID COORD. N 28+50 W 57+53 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp Gr. Averages (weighted)	Composite Assays	Rock Classit.	REMARKS
0.0								Alluv	No Cgl recovered
285.0	285.0								BR ± 285'
295.0	10.0	2.53	46	.02	3090 293.7		—	Mp	Alt & leached Mp.
301.6	6.6	2.48	66	.13					All poss fault zone
311.1	9.5	2.52	76	.34				Hf Bx	
314.5	3.4	2.57	66	.60					
324.7	10.2	2.56	57	.57		0.55			wk cc, cuox; Tr mag
329.2	4.5	2.16	90	.48					
337.9	8.7	2.51	93	.20	3050 333.7		.38	Arg-Bx	301.6' to 366.2' is gougy and brecciated
348.0	10.1	2.55	49	.10					
358.6	10.6	2.49	41	.13					
366.2	7.6	2.26	63	.13					
374.0	7.8	2.20	63	.17	3010 373.7		.14	Arg Hf Bx	Base oxidation 374.0'
382.6	8.6	2.31	80	.35				Hf	DK grn, chloritic w/ occas
392.9	10.3	2.40	77	.37					pats Tc
403.6	10.7	2.56	100	.65					py-cpy-Tr cc
412.0	8.4	2.76	55	.48	2970 413.7	0.58	.45		BrKn Hf-Mp cnt.
421.7	9.7	2.52	81	.12				Mp	From 412.0' to 743.0;
426.3	4.6	2.53	71	.07					Typical Mp w/
436.8	10.5	2.50	26	.05					Tr-sp suls; wk moly;
446.7	9.9	2.45	25	.06					wk to med & sometimes
454.0	7.3	2.53	55	.06	2930 453.7		.07		st ser, feld, SiO_2, gyp;
465.2	11.2	2.51	71	.08					Local chl, serp, biot.
475.0	9.8	2.49	75	.08					
482.4	7.4	2.53	79	.08					
490.3	7.9	2.61	93	.07	2890 493.7		.08		
501.2	10.9	2.53	84	.09					
513.5	12.3	2.58	99	.08					
523.0	9.5	2.59	98	.06					
531.9	8.9	2.60	100	.12	2850 533.7		.09		
540.3	8.4	2.59	100	.10					
548.7	8.4	2.57	99	.12					
557.0	8.3	2.61	100	.11					
569.2	12.2	2.55	100	.19	2810 573.7		.14		
581.0	11.8	2.60	99	.14					
592.2	11.2	2.63	100	.16					
602.4	10.2	2.59	100	.15					
610.7	8.3	2.56	100	.18	2770 613.7		.16		
618.8	8.1	2.60	100	.15					
630.8	12.8	2.59	100	.16					
641.3	10.7	2.59	100	.15					
653.1	11.8	2.56	99	.15	2730 653.7		.15		
664.8	11.7	2.56	100	.14					
674.3	9.5	2.53	100	.13					
684.6	10.3	2.59	100	.12					
694.8	10.2	2.60	100	.11	2690 693.7		.13		

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3383.7 | D.D. HOLE NO. M-86

SURVEY COORD. N 361,427.99

PROPERTY Mission | E. 761,986.88 | TOTAL DEPTH 904.0

DATE COMPLETED 1/2/64 | DRILL GRID COORD. N 28+50 W 57+53 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
694.8								Mp	
703.2	8.4	2.59	99	.12					
711.3	8.1	2.59	100	.14					
719.5	8.2	2.56	99	.13					
729.8	10.3	2.57	98	.15	2650		.13		
737.2	7.4	2.58	97	.13	733.7				
743.0	5.8	2.55	99	.09					25° cont @ frac.
753.2	10.2	2.57	100	.02				QTzT	
763.1	9.9	2.58	97	.02					- Dense wht Qtzt
771.1	8.0	2.63	96	.02	2610		.04		
778.4	7.3	2.62	100	.03	773.7				
785.9	6.5	2.63	87	.01				Mp	
791.5	5.6	2.59	100	.01					- St feld & SiO_2
800.5	9.0	2.50	95	.02					
810.2	9.7	2.55	67	.02	2570		.02		
824.7	14.5	2.56	92	.01	813.7				
831.7	7.0	2.63	100	.03				Mp QTzT	Grad cnt @ 826.9'
839.6	7.9	2.63	100	.02				QTzT	836.6' ∓ 75° Bx-gg-clay
849.6	10.0	2.60	100	.09					- Lt gr - tan dense Qtzt
855.4	5.8	2.63	100	.02	2530		.04		
868.2	12.8	2.62	97	.03	853.7				
879.4	11.2	2.64	100	.03					
887.5	8.1	2.71	100	.02				Mb	
897.4	9.9	2.71	92	.03	2490				- DK & Lt gr faint banded
904.0	6.6	2.70	100	.03	893.7				xline Ls.
		2.56	87						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3386.2 | D.D. HOLE NO. M-85

SURVEY COORD. N 361,128.89

PROPERTY MISSION | E. 761,993.60 | TOTAL DEPTH 850.6

DATE COMPLETED 1/15/64 | DRILL GRID COORD. N 25+51 W 57+51 | INCLINATION vertical

J. H. C.

MAR 11 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
280.0	280.0							Alluv.	Top CCg ± 280'
312.9	32.9							CCg	BR @ 312.9'
322.5	9.6	2.51	82	.09				Mp	
330.1	7.6	2.54	54	.08					Mod alt Mp w/ patch
340.5	10.4	2.52	85	.09	3050 / 336.2		.05		Qtzt; sp-mod Qtz vning.
351.0	10.5	2.50	91	.10					
359.2	8.2	2.50	95	.08					
370.4	11.2	2.58	95	.17					Base of Oxidation @ 370.4'
381.1	10.7	2.55	96	.16	3010 / 376.2		.12		
391.1	10.0	2.45	78	.21					
400.9	9.8	2.51	78	.17					
408.6	7.7	2.47	93	.22					
413.0	4.4	2.58	86	.22				Mp-Arg	±412' brkn & clayey cont.
423.7	10.7	2.53	79	.37	2970 / 416.2		.21	Arg	
434.7	11.0	2.57	94	.19					
444.0	9.3	2.64	93	.22					
448.5	4.5	2.54	76	.27					
458.0	9.5	2.32	49	.60	2930 / 456.2	0.60	.32	Chl-GG-Bx	Flt zone
466.4	8.4	2.60	89	1.01				HF	lens stalt Mp.
471.7	5.3	2.57	91	.81		1.80		Mp	
480.5	8.8	3.03	89	2.62				HF Tt	cpy-py w/ lesser
491.5	11.0	2.94	100	2.34				Tt	moly-sph
503.5	12.0	3.49	90	2.02	2890 / 496.2		1.80		
511.6	8.1	3.24	96	2.39		2.01			
515.7	4.1	3.08	95	1.26				Tt HF	30° Flt cnt @ 515.6'
525.5	9.8	2.53	96	.13				Mp	
534.3	8.8	2.56	79	.11	2850 / 536.2		1.04		
543.2	8.9	2.47	84	.08					
550.6	7.4	2.56	88	.08					
561.0	10.4	2.52	95	.08					
571.4	10.4	2.54	84	.08					
579.0	7.6	2.52	70	.08	2810 / 576.2		.08		
588.4	9.4	2.54	66	.07					515.7 to 703.9':
595.9	7.5	2.53	73	.08					Typical Mp w/
606.4	10.5	2.55	76	.09					Feldspath, silf, ser
611.5	5.1	2.54	79	.09					alt. & Tt suls & moly
620.0	8.5	2.54	94	.11	2770 / 616.2		.08		
630.1	10.1	2.54	96	.13					
641.4	11.3	2.61	97	.13					
650.0	8.6	2.55	96	.12					
657.3	7.3	2.55	89	.13	2730 / 656.2		.13		
667.2	9.9	2.58	94	.18					
677.3	10.1	2.51	92	.15					
683.0	5.7	2.50	94	.15					
693.4	10.4	2.53	95	.15					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3386.2 | D.D. HOLE NO. M-85

SURVEY COORD. N 361,128.89

PROPERTY MISSION | E. 761,993.60 | TOTAL DEPTH 850.6

DATE COMPLETED 1/15/64 | DRILL GRID COORD. N 25+51 W 57+51 | INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
693.4					2690		.15	Mp	
703.9	10.5	2.56	88	.10	696.2				To 4.3 ± Ac" ·p-Qtzt flt cnt.
708.0	4.1	2.51	92	.13				Mp QTzT	707.8 Qtzt-HF ... (flt!)
716.2	8.2	2.99	84	.77				HF Tt	
724.6	8.4	2.44	100	2.91		2.92			
733.0	8.4	2.63	100	4.11				Tt	
737.0	4.0	2.74	90	5.37	2650 736.2		2.09		
747.6	10.6	2.77	79	4.37					Mod-st-vst cpy-py;
758.1	10.5	3.23	73	3.22		3.13			local born; Tr-wk mag,
771.2	13.1	3.47	49	1.66					sph
781.3	10.1	3.48	5	3.84	2610 776.2		3.13		
789.8	8.5	3.41	43	.43		1.71			
800.6	10.8	2.79	94	.25				Mb	
811.0	10.4	2.73	95	.11					
820.1	9.1	2.70	96	.40	2570 816.2	0.40 0.40	.73		Pat Tt in Mb w/ cpy-bn; Tr
831.4	11.3	2.75	84	.22					Pb & zn
841.1	9.7	3.02	87	.33					
850.6	9.5	2.67	92	.09					
		2.79	84						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3261.7 | D.D. HOLE NO. M-84

SURVEY COORD. N 363,529.18

PROPERTY MISSION | E. 761,458.53 | TOTAL DEPTH 878.5

DATE COMPLETED 12/27/63 | DRILL GRID COORD. N 49+59 W 62+49 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv.	
175.0	175.0								Top CCg ± 175.0'
195.0	20.0							Cal-Cgl	BR @ 195.0'
205.9	10.9	2.45	99	.41		.41		Mp	
212.8	6.9	2.49	85	.25	3050 211.7		.15		Base Oxidation @ 212.8'
224.1	11.3	2.55	98	.18					St Moly 214-215'
234.1	10.0	2.59	79	.35					
243.0	8.9	2.64	92	.18				Arg	Pass zeolitic Arg in Mp.
254.0	11.0	2.56	92	.24	3010 251.7		.24	Mp	St Alt cnt @ 243' & 254'
264.8	10.8	2.60	82	.30				Arg Cgl	Silf w/ vague cgl Text.
271.3	6.5	2.58	84	.22					
283.8	12.5	2.59	100	.21				Arg.	
287.9	4.1	2.58	97	.33					285.0 - 65° - 3" flt. GG-Bx
290.2	2.3	2.54	41	.24	2970 291.7		.25		Pass flt cnt.
302.0	11.8	2.56	83	.12				Mp	290.2 to 499: Typical
315.4	13.4	2.56	100	.15					Mp w/ mod-st ser alt
325.7	10.3	2.56	100	.13					locally silicified & Feld-
333.4	7.7	2.56	99	.11	2930 331.7		.13		spathized. Tr sulf & Moly
340.7	7.3	2.57	100	.13					local Qtz vlts
346.9	6.2	2.55	100	.15					
355.6	8.7	2.56	98	.09					
366.4	10.8	2.57	99	.11					
373.8	7.4	2.53	100	.18	2890 371.7		.13		
380.7	6.9	2.60	96	.17					
389.1	8.4	2.54	100	.14					
399.3	10.2	2.60	98	.09					
404.6	5.3	2.58	100	.13					
414.7	10.1	2.57	99	.16	2850 411.7		.14		
424.6	9.9	2.53	99	.13					
434.6	10.0	2.56	97	.13					
442.0	7.4	2.57	97	.12					
447.0	5.0	2.58	98	.13	2810 451.7		.13		
459.7	12.7	2.57	96	.11					
470.3	10.6	2.54	100	.08					
479.5	9.2	2.53	100	.12					
490.5	11.0	2.55	95	.11	2770 491.7		.10		
499.0	8.5	2.55	100	.11					499-500.5 - 40° Recem Flt cnt.
508.5	9.5	2.67	100	.84		.84		HF	
517.1	8.6	2.80	98	.36					
525.7	8.6	2.68	100	.30					
534.0	8.3	2.98	100	.11	2730 531.7		.38		539.7 - 543.2 ± 50° Flt Bx-gg
544.3	10.3	3.08	77	.59		.59			w/ st mag, chl, gyp, py-cpy-Act.
552.0	7.7	2.72	100	.28				HF QF	30° cnt @ slip
560.3	8.3	2.59	100	.28				Mp	70° pass intrusive cnt.
570.9	10.6	2.57	100	.38	2690 571.7		.37	HF QF	
580.0	9.1	2.60	88	.09				QTzT Arg	dense wht Qtzt w/ pots Arg

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3261.7 | D.D. HOLE NO. M-84

SURVEY COORD. N 363,529.18

PROPERTY Mission | E. 761,458.53 | TOTAL DEPTH 878.5

DATE COMPLETED 12/27/63 | DRILL GRID COORD. N 49+59 W 62+49 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
583.0	3.0	2.66	94	.07				Arg.	45° Flt plane cnt w/ faint Bx.
593.2	10.2	3.30	90	.38				HF Tr	Hf-Tt cnt @ 585.9 ∠ 80°
603.4	10.2	3.45	86	.64		.64		Tr	
613.4	10.0	3.06	100	.37	2650 611.7		.36		wk-mod cpy-py-mag; Tr Moly
623.9	10.5	3.23	100	1.24					
634.1	10.2	3.73	97	1.51		1.54		Tr Mag	Mass Mag vn 627.4' to 644.2'
644.2	10.1	3.99	100	2.67				Mag	w/ st cpy
654.2	10.0	3.34	99	.50	2610 651.7	.50	1.49	Tt	
664.3	10.1	3.49	95	.36					Tr-wk cpy-py-mag
674.4	10.1	3.25	94	.34					
684.2	9.8	3.45	95	.30					
694.3	10.1	3.30	96	.26	2570 691.7		.33		
704.2	9.9	3.01	100	.67		.67			
710.8	6.6	3.29	89	.22					Recem flt bx w/ st. SiO_2 ±30°
720.6	9.8	2.75	100	1.69				HF	Flt cnt w/ Tt above
730.6	10.0	2.47	100	.46	2530 731.7	1.05	.77	HF Gyp	
740.7	10.1	2.96	100	.63				HF Tr	- cpy-py local bn-mag.
750.9	10.2	3.14	96	2.31					Mix Tt-Hf 730.6' - 750.9'
761.1	10.2	3.44	95	2.30		1.49		Tr	
770.4	9.3	3.07	98	.52	2490 771.7		1.44	Tr HF	
773.5	3.1	2.74	100	.03				Gyp HF	Poss flt bx w/ mass gyp ∠ 40°
783.7	10.2	3.10	97	1.71		1.71		HF	776.0' - 45° - 8" Mag-Cpy Vn
793.9	10.2	2.80	100	.36				HF & Ser-Mb	
801.1	7.2	2.68	100	.53		.53		Mb	
814.3	13.2	2.53	100	.04	2450 811.7		.64	Arg QTzT	
824.5	10.2	2.55	100	.05					
834.7	10.2	2.58	99	.02					
844.8	10.1	2.55	100	.04					
855.0	10.2	2.54	100	.02	2410 851.7		.03		
861.9	6.9	2.56	100	Tr					Recem flt bx cnt ±25°
867.8	5.9	2.64	100	.22				HF	±55° Recem Hf-St zt cnt @ frac
878.5	10.7	2.61	100	.01			.01	Arg QTzT	
		2.83	97						

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3385.4 | D.D. HOLE NO. M-83

SURVEY COORD. N 36,126.00

PROPERTY Mission | E. 762,246.30 | TOTAL DEPTH 929.6

DATE COMPLETED 12/7/63 | DRILL GRID COORD. N 25+44 W 54+98 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
285.0									Top CCg ± 270'
288.9	3.9							CCg	BR @ 288.9'
297.1	8.2	2.39	93	.04	3090 295.4		—	Arg	
305.5	8.4	2.45	97	.04					
314.4	8.9	2.53	85	.06					
324.5	10.1	2.55	90	.04					Leached Arg
330.2	5.7	2.52	97	.04					
338.0	7.8	2.51	100	.03	3050 335.4		.04		
347.0	9.0	2.56	96	.13					
356.4	9.4	2.53	94	.24					
363.5	7.1	2.59	100	.18					
373.8	10.3	2.56	95	.14	3010 375.4		.16		
383.0	9.2	2.59	91	.21					Base Oxidation 383.0
387.2	4.2	2.54	100	.08					
396.4	9.2	2.55	100	.12				Mp	
405.4	9.0	2.56	66	.10					Mod Alt Mp
411.0	5.6	2.53	95	.08	2970 415.4		.12		
421.5	10.5	2.58	95	.07					± 70° cnt
432.0	10.5	2.60	100	.06				Arg	
442.6	10.6	2.55	82	.07					
453.4	10.8	2.56	81	.24	2930 455.4		.12	Mp	
464.5	11.1	2.65	87	.13				Mp Arg	Mp-Arg cnt @ 454.9' BrKn
475.4	10.9	2.62	92	.11				Arg	
489.3	13.9	2.58	81	.12					
498.9	9.6	2.61	89	.07	2890 495.4		.11		
509.3	10.4	2.67	87	.17					
516.0	6.7	2.64	87	.12					516.0' BrKn Arg-Hf cnt
527.5	11.5	2.48	88	.89		.93		Hf-Bx	first 3.0' Hf bx. Poss flt.
531.9	4.4	2.67	91	.97				Hf	
538.7	6.8	2.52	87	.99	2850 535.4		.52		
547.3	8.6	2.84	81	.85					Cpy, Py, Mag, Tr Moly
556.0	8.7	2.95	77	2.15		1.31		Hf Tt	
567.7	11.7	2.98	84	1.22				Tt	
576.5	8.8	2.91	46	1.14	2810 575.4		1.31		
586.8	10.3	2.64	4	.90		.90		Tt Hf Arg	Bx-Arg-Hf-Tt, Angular frags.
596.0	9.2	2.65	46	.29				Hf Arg	Arg w/ pats Hf.
606.0	10.0	2.66	56	.09				Arg	
612.7	6.7	2.59	61	.05	2770 615.4		.37		
620.6	7.9	2.54	23	.06					
631.0	10.4	2.50	20	.04					
641.0	10.0	2.59	35	.07					
650.5	9.5	2.55	49	.04					
660.3	9.8	2.57	58	.09	2730 655.4		.06	Arg Mp	Alt Arg w/ pats Mp.
665.2	4.9	2.59	60	.16				Mp	
675.5	10.3	2.56	40	.12					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3385.4 | D.D. HOLE NO. M-83

SURVEY COORD. N 361,126.09

PROPERTY MISSION | E. 762,246.30 | TOTAL DEPTH 929.6

DATE COMPLETED 12/7/63 | DRILL GRID COORD. N 25+44 W 54+98 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
675.5								Mp	
686.8	11.3	2.53	68	.09					
699.0	12.2	2.51	75	.15	2690 / 695.4		.12		40° cnt @ 699.1'
711.8	12.8	2.91	77	.57				HF Tt	709' - 45° Hf-Tt cnt @ gyp vlt.
719.2	7.4	2.82	62	5.90		3.51		Tt	
729.2	10.0	2.61	61	5.78					
737.9	8.7	2.65	54	3.07	2650 / 735.4		3.21		
749.5	11.6	3.17	40	4.45					
759.3	9.8	3.40	53	.46		2.01			- Yn, diss cpy-py; Ti Mag, Moly
770.5	11.2	3.31	65	.59					
772.8	2.3	3.59	98	.21	2610 / 775.4	.83	1.83		
783.2	10.4	3.31	90	.83					
793.2	10.0	3.41	67	1.65		1.33			
802.6	9.4	3.57	62	1.92					802.6' Grat. Tt-Mb cnt.
810.5	7.9	2.73	69	.71				Mb Serp	
823.6	13.1	2.70	76	.21	2570 / 815.4		1.19	Mb	
832.7	9.1	3.00	39	.02				Mb HF	
840.2	7.5	3.17	34	.03				HF Tt	Mixed Hf-Tt
847.9	7.7	2.56	100	.15				Serp Mb	cnt gradational @ bottom
858.1	10.2	2.82	81	.21	2530 / 855.4		.12	HF	
863.7	5.6	2.97	86	.01				HF Mb	863.9' Mb-Qtzt cnt ± 30°
868.6	4.9	2.82	82	.04				QtzT	
878.8	10.2	2.63	97	.03					Impure tan to wht Qtzt
883.8	5.0	2.58	74	.04					
893.4	9.6	2.60	91	.04	2490 / 895.4		.05		
905.8	12.4	2.62	66	.04					
916.0	10.2	2.70	90	.04				Mb	
926.0	10.0	2.75	96	.03					DK gr Ls w/ wht 30° banding
929.6	3.6	2.71	98	.03					
		2.71	74						

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2

COLLAR ELEV. 3335.7

SURVEY COORD. N 361,135.78
E 762,748.02

D.D. HOLE NO. M-82

PROPERTY MISSION

TOTAL DEPTH 864.2

DATE COMPLETED 12/20/63

DRILL GRID COORD. N 25+46
W 49+96

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
250.0									Top CCg ± 240'
260.9	10.9		89					CCg	BR @ 260.9'
270.1	9.2	2.51	94	.03				Arg	
280.5	10.4	2.55	88	.05					
290.8	10.3	2.54	88	.05	3050 285.7		.03		Leached Arg to 321'
300.9	10.1	2.54	93	.02					
310.3	9.4	2.54	93	.02					
321.0	10.7	2.50	92	.13					Base Oxidation 321'
331.0	10.0	2.61	93	.18	3010 325.7		.07		
343.0	12.0	2.60	92	.13					
352.8	9.8	2.59	79	.10					
358.3	5.5	2.62	100	.09					
366.8	8.5	2.61	100	.10	2970 365.7		.12		Brn-Tan Arg w/ local
375.3	8.5	2.59	96	.09					Arkosic and/or Cgl Text
383.5	8.2	2.58	82	.09					to 449.0
393.8	10.3	2.57	75	.08					
403.0	9.2	2.63	81	.11	2930 405.7		.09		
414.8	11.8	2.56	86	.14					
426.0	11.2	2.58	70	.10					
436.8	10.8	2.57	78	.13					
446.0	9.2	2.59	83	.15	2890 445.7		.12		
449.0	3.0	2.59	79	.10					± 30° cnt
458.3	10.3	2.59	92	.08				Mp	Ltgr-wht Mod ser alt Mp.
468.6	9.3	2.58	77	.08					BrKn Cnt
478.5	9.9	2.51	90	.15				Arg	
488.8	10.3	2.61	78	.11	2850 485.7		.11		
499.5	10.7	2.62	82	.12					
510.0	10.5	2.51	88	.09				Arg Ark	As Arg Above
518.1	8.1	2.59	82	.12					
526.5	8.4	2.60	92	.05	2810 525.7		.10		
532.4	5.9	2.57	93	.10					BrKn Flt cnt.
541.4	9.0	2.56	59	2.11				HF Tt	St-Mass cpy w/ mod Mag in
550.0	8.6	2.75	87	3.43					Mixed yel-grn Hf-Tt.
557.8	7.8	2.67	48	.78		2.71		QTzT Mp	Intercept Mp-Qtzt (Low ∡)
564.4	6.6	3.05	67	4.11				HF Tt	
567.0	2.6	2.85	58	6.51	2770 565.7	6.51	2.27		
576.8	9.8	2.46	40	.06				QTzT	Dense wht Qtzt
586.6	9.8	2.62	66	.06					
596.5	9.9	2.44	55	.04				QTzT-Mp	Mixed
599.1	2.6	—	—	—				MP?	No Recovery
605.7	6.6	2.52	44	.36	2730 605.7		.31	Mp HF	Mp-Hf cnt @ ± 604.7'
615.4	9.7	2.40	96	.61		.56		Hf	Diss & pat cpy-py; grn-wht Hf.
621.6	6.2	2.52	27	.49				HF QTzT	
631.2	9.6	2.20	39	.30					BrKn & ggy w/ wh cnts.

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 COLLAR ELEV. 3335.7 D.D. HOLE NO. M-82

SURVEY COORD. N 361,135.78

PROPERTY Mission E. 762,748.02 TOTAL DEPTH 864.2

DATE COMPLETED 12/20/63 DRILL GRID COORD. N 25+46 INCLINATION Vertical

W 49+96

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
631.2								Hf - Qtzt.	
640.2	9.0	2.64	12	.34					
650.5	10.3	2.54	29	28	2690 / 645.7		.41	QtzT HfMp	
656.9	6.4	2.57	27	.15				Arg HF Mp	Pass Flt zone; Strongly BrKn.
666.0	9.1	2.57	19	.05				Arg QtzT	
677.6	11.6	2.58	44	.07				QtzT	
680.9	3.3	2.62	80	.09					
689.3	8.4	2.61	86	.07	2650 / 685.7		.11		
699.5	10.2	2.58	87	.05					- Dense wht Qtzt w/ sp pats Mp.
705.1	5.6	2.58	69	.08					
715.4	10.3	2.59	64	.08					
720.0	4.6	2.64	45	.09					
723.8	3.8	2.59	27	.22					BrKn Qtzt - Hf cnt.
732.1	8.3	2.70	90	.60	2610 / 725.7	.60	.11	HF	
742.6	10.5	2.73	28	.57		.57			
751.3	8.7	3.11	90	.55					
757.9	6.6	3.26	89	.30					
764.9	7.0	2.79	100	.23	2570 / 765.7	1.68	.49		- Mineralization: py-cpy-bn-sph-gn-moly-mag.
775.5	10.6	3.42	79	1.68					
785.8	10.3	2.62	59	3.87		2.31			
796.6	10.8	3.02	83	1.87					
805.5	8.9	3.16	82	1.75	2530 / 805.7	1.49	2.31		
813.9	8.4	3.24	90	1.49				HF Tr	
824.9	11.0	2.70	96	.28				HF Tr Mb	
834.6	9.7	2.69	80	.09				Mb HF	Mixed Hf - Mb - Gyp w/ occas pats Gar & Tr.
841.9	7.3	3.10	78	.20				HF Gyp	
851.5	9.6	2.63	98	.22	2490 / 845.7		.46	Gyp Mb HF	60° cnt.
864.2	12.7	2.57	97	.03				QtzT	Impure top Qtzt.

MS 8078 — 79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3336.3 | D.D. HOLE NO. M-81

SURVEY COORD. N 362,029.48

PROPERTY Mission | E. 762,011.13 | TOTAL DEPTH 831.3

DATE COMPLETED 11/23/63 | DRILL GRID COORD. N 34+51 W 57+19 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv.	
220.0				–					Top CCg ± 203'
231.6	11.6	2.50	21	–				CCg	BR @ 231.6'
237.3	5.7	2.54	86	.03				Mp	
247.6	10.3	2.50	93	.03	3090 246.3		.01		Leached sericitized
257.3	9.7	2.56	93	.05					Mp to 332.0'
265.2	7.9	2.48	97	.05					
275.6	10.4	2.58	92	.04					
283.7	8.1	2.52	95	.03					
288.1	4.4	2.56	90	.04	3050 286.3		.04		
294.4	6.3	2.43	81	.00		0.59			St smeared suls; wk cc; Sul
304.8	10.4	2.43	64	.40					zone along pass flt.
314.3	9.5	2.51	81	.10					
322.8	8.5	2.41	85	.03					
332.0	9.2	2.52	89	.05	3010 326.3		.28		Base Oxidation @ 332.0'
343.4	11.4	2.52	89	.10					
353.5	10.1	2.53	89	.07					
363.5	10.0	2.54	93	.09					Typical Mp to 562.0'
372.2	8.7	2.52	96	.07	2970 366.3		.08		
379.6	7.4	2.59	94	.11					
387.9	8.3	2.60	94	.08					
396.0	8.1	2.57	100	.13					
404.3	8.3	2.57	99	.08	2930 406.3		.10		
416.8	12.5	2.57	98	.11					
424.9	8.1	2.61	100	.10					
433.0	8.1	2.60	100	.11					
441.3	8.3	2.58	98	.11	2890 446.3		.11		
452.0	10.7	2.61	96	.12					
460.3	8.3	2.61	99	.14					468.6 -60° flt bx-gg 0.2'
470.3	10.0	2.57	100	.15					
483.8	13.5	2.58	98	.11	2850 486.3		.13		
490.4	6.6	2.65	100	.11					
495.0	4.6	2.59	99	.09					
506.7	11.7	2.56	100	.09					
516.3	9.6	2.54	98	.11					
526.7	10.4	2.59	97	.14	2810 526.3		.11		
535.0	8.3	2.59	88	.13					
545.7	10.7	2.59	98	.13					
555.1	9.4	2.58	99	.12					
562.0	6.9	2.55	96	.10					562.0' Intrusive Mp-Qtzt cnt.
573.6	11.6	2.61	100	.08	2770 566.3		.12	QTzT	
583.2	9.6	2.62	99	.06					Aft dense wht & tan Qtzt.
593.0	9.8	2.59	92	.06					
596.0	3.0	2.56	100	.14					
603.3	7.3	2.62	99	.38	2730 606.3	0.88	.22	HF QTzT / QTzT	Hf w/ pals Qtzt; Mod cpy
613.3	10.0	2.62	76	.10					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3336.3 | D.D. HOLE NO. M-81

SURVEY COORD. N 362,029.48

PROPERTY MISSION | E. 762,011.13 | TOTAL DEPTH 831.3

DATE COMPLETED 11/23/63 | DRILL GRID COORD. N 34+51 W 57+19 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
613.3								QtzT	
622.2	8.9	2.59	69	.05					
632.0	9.8	2.62	100	.08					
642.0	10.0	2.61	100	.08	2690		.08		
654.6	12.6	2.58	100	.09	646.3				
661.7	7.1	2.57	100	.09				Mp	±40° lense Alt Mp
671.9	10.2	2.69	98	.11				QtzT	
684.3	12.4	2.63	100	.05	2650		.09		±35° brkn cnt
694.7	10.4	2.39	100	.27	686.3			HF	Pale grn Hf w gyp vlts. &
705.0	10.3	2.76	92	.19					scat pats Tt.
714.7	9.7	3.39	89	.51				Tt	cnt Gradational
724.6	9.9	3.32	97	.53	2610		.48		
734.7	10.1	3.23	97	2.81	726.3				cpy-py-Local Mag
744.8	10.1	3.32	96	1.24					
754.8	10.0	3.39	98	.97				Tt HF	
765.9	11.1	3.16	93	.30	2570		1.23	HF	25° Hf-Arg cnt
773.2	7.3	2.61	99	.05	766.3			Arg QtzT	25° slip cnt between Qtzt & Mb
783.4	10.2	2.66	100	Nil				Mb Ls	Gr Ls & wht xline Mb
791.8	8.4	2.67	100	Nil					
805.5	13.7	2.70	100	Nil	2530		Nil	Mb	Ltgr Mb from 791.8 to 818.1
815.0	9.5	2.70	100	Nil	806.3				
818.1	3.1	2.68	100	Nil					40° flt cnt
828.0	9.9	2.60	63	.03				QtzT	824' ±35° Flt zone - 2.0'
831.3	3.3	2.62	42	.02					
		2.66	92						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV. 3380.3 D.D. HOLE NO. M-80

SURVEY COORD. N 361,725.21

PROPERTY MISSION E. 761,952.28 TOTAL DEPTH 803.2

DATE COMPLETED 11/12/63 DRILL GRID COORD. N 31+48 W 57+83 INCLINATION vertical

J.H.C.

JAN 3 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv.	Top ccg ± ?
295.8									Top BR ± 295'
305.0	9.2	2.40	65	.04				Mp	
315.9	10.9	2.52	59	.03					
323.2	7.3	2.43	77	.06					Base Oxidation 318.2'
333.0	9.8	2.51	76	.09	3050 330.3		.04		
343.3	10.3	2.56	89	.09					
354.8	11.5	2.49	81	.09					
363.5	8.7	2.52	79	.11					
374.2	10.7	2.52	90	.09	3010 370.3		.09		
385.0	10.8	2.55	79	.11					
393.9	8.9	2.59	93	.13					
402.7	8.8	2.64	100	.11					
413.9	11.2	2.56	100	.13	2970 410.3		.12		
416.4	2.5	2.56	97	.08					
425.5	9.1	2.59	99	.09					318.2' to 724.5' ±
437.8	12.3	2.55	100	.09					Ser alt Mp w/ sp-Tr suls;
448.4	10.6	2.68	96	.08	2930		.09		local Tr Moly; wk-Mod
459.5	11.1	2.60	98	.09	450.3				gyp; local Qtz-Feld repl.
468.2	8.7	2.63	99	.11					
478.0	9.8	2.60	100	.10					
485.5	7.5	2.69	96	.13					
495.5	10.0	2.59	100	.14	2890 490.3		.11		
505.0	9.5	2.59	98	.16					
516.8	11.8	2.53	98	.13					
528.1	11.3	2.58	98	.11	2850 530.3		.13		
536.6	8.5	2.62	95	.13					
549.3	12.7	2.55	95	.10					
559.0	9.7	2.58	100	.14					
569.3	10.3	2.58	94	.16	2810 570.3		.13		
579.4	10.1	2.58	100	.12					
586.0	6.6	2.62	100	.07					
594.9	8.9	2.57	98	.15					
601.8	6.9	2.58	100	.17					
612.3	10.5	2.57	98	.10	2770 610.3		.12		
621.8	9.5	2.59	100	.12					
631.2	9.4	2.58	99	.12					
638.6	7.4	2.61	100	.13					
647.6	9.0	2.65	97	.13	2730 650.3		.12		
659.1	11.5	2.60	100	.12					
667.3	8.2	2.59	100	.17					
679.5	12.2	2.64	100	.13					
683.8	4.3	2.59	97	.11					
692.3	8.5	2.57	100	.08	2690 690.3		.11		685.3', ±50°; Pass flt bx-gg
700.8	8.5	2.58	100	.09					
709.4	8.6	2.58	100	.09					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3380.3 | D.D. HOLE NO. M-80

SURVEY COORD. N 361,725.21

PROPERTY MISSION | E: 761,952.28 | TOTAL DEPTH 803.2

DATE COMPLETED 11/12/63 | DRILL GRID COORD. N 31+48 W 57+83 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
709.4								MP	
721.5	12.1	2.60	99	.10					
725.5	4.0	2.55	99	.12					724.5' 1.0' 45° flt cnt between
733.3	7.8	2.60	41	.11	2650 730.3		.10	QTzT	Mp & Qtzt w/ st bx-gg.
742.2	8.9	2.63	59	.03					
751.7	9.5	2.52	95	.02					Dense wht Qtzt w/ sp Tr sulf.
760.8	9.1	2.59	96	.02					
764.7	3.9	2.55	94	.02	2610 770.3		.03		
778.6	13.9	2.64	97	.03					Cnt @ serp-chl filled slip
790.9	12.3	2.69	100	Tr				Mb	782.7: 0.3' 40° Recem flt.
803.2	12.3	2.69	100	Tr					785.0: 0.1' 20° Healed flt
									wht Mb between flts & Gr
		2.59	93						Rexlized Ls on either side.

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3277.3 | D.D. HOLE NO. M-79

SURVEY COORD. N 362,625.01

PROPERTY MISSION | E 761,457.58 | TOTAL DEPTH 765.2

DATE COMPLETED 11/6/63 | DRILL GRID COORD N 40+55 W 62+50 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								ALLUV	
180.0	180.0								Top CCg ± 160'
181.0	1.0		100					CCg	BR 181'
193.5	12.5	2.53	92	.07	3090 187.3		—	Mp	
203.8	10.3	2.50	94	.13					st Alt yel-brn Mp; well oxidized
214.4	10.6	2.56	95	.10					
223.4	9.0	2.54	90	.12	3050 227.3		.11		Base Oxidation 218.2'
233.4	9.7	2.57	93	.08					
243.3	10.2	2.52	96	.09					218.2' to 512.1': wk to local mod ser alt Mp w/ local feldspathization & wk suls & moly.
254.7	11.4	2.55	96	.09					
263.8	9.1	2.56	92	.11	3010 267.3		.10		
275.4	11.6	2.58	97	.11					
284.7	9.3	2.55	96	.14					
295.5	10.8	2.56	76	.09					
305.2	9.7	2.58	93	.08	2970 307.3		.10		
314.6	9.4	2.55	95	.09					
324.9	10.3	2.57	93	.08					st brkn & Gzy (Poss flt)
335.9	11.0	2.50	50	.08					
345.1	9.2	2.65	87	.10	2930 347.3		.09		
354.3	9.2	2.62	100	.10					
362.0	7.7	2.56	99	.09					
371.8	9.8	2.60	99	.09					
381.3	9.5	2.58	98	.08	2890 387.3		.08		
391.3	10.0	2.58	100	.08					
401.0	9.7	2.57	90	.10					
410.8	9.8	2.56	97	.09					
415.1	4.3	2.56	95	.09					
424.0	8.9	2.60	87	.07	2850 427.3		.09		
434.0	10.0	2.58	96	.07					
445.4	11.4	2.57	100	.09					
457.7	12.3	2.61	99	.10					
466.0	8.3	2.62	99	.09	2810 467.3		.09		
476.9	10.9	2.57	100	.09					
485.1	8.2	2.57	100	.07					
497.3	12.2	2.57	100	.10					
502.6	5.3	2.60	97	.09					
512.1	9.5	2.57	100	.11	2770 507.3		.09		
514.8	2.7	2.80	100	.39				Recem. FLT ZONE	30° flt; Recem w/ SiO_2
522.1	7.3	2.97	98	2.00				HF	
530.3	8.2	2.92	93	1.35		1.30			st cpy-py, Mag in Ltgr silf Hf.
538.7	8.4	2.78	97	.64					
540.0	1.3	2.68	82	.25					20° Gyp filled flt ent w/ Qtzt.
551.1	11.1	2.68	93	.05	2730 547.3		.83	Qtzt	
559.4	8.3	2.57	100	.05					Dense wht Qtzt, Tr suls, moly
564.5	5.1	2.56	100	.13					
574.3	9.8	2.32	100	.02				Gyp	Mass Gyp, (Replaces Qtzt ?)

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2

COLLAR ELEV. 3277.3

SURVEY COORD. N 362,625.01
E 761,457.58

D.D. HOLE NO. M-79

PROPERTY MISSION

TOTAL DEPTH 765.2

DATE COMPLETED 11/6/63

DRILL GRID COORD. N 40+55
W 62+50

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
574.3									
582.8	8.5	2.53	71	.12				Feld. Rk	Alt pK Feld RK. Vague granular Text.
592.0	9.2	2.56	77	.02	2690 587.3		.06	QTzT	
600.1	8.1	2.59	99	.02					
611.7	11.6	2.62	100	.02					
620.0	8.3	2.58	100	.02					
632.2	12.2	2.62	100	.02	2650 627.3		.02		
639.2	7.0	2.61	89	.03					
649.4	10.2	2.63	100	.03					Dense wht Qtzt w/ tr sulf,
660.1	10.7	2.63	97	.04					wh-med ser; 30-60° gyp filled
668.9	8.8	2.63	100	.04	2610 667.3		.03		fracs
675.1	6.2	2.63	100	.03					
684.6	9.5	2.57	99	.03					
693.5	8.9	2.60	97	.02					
704.1	10.6	2.58	72	.02	2570 707.3		.03		
714.6	10.5	2.62	100	.01					
722.0	7.4	2.67	96	.09				HF	Pale gr-grn Hf; last 1.0' Mb.
726.1	4.1	2.37	53	Tr.				Gyp Arg	Gypsiferous Arg
733.8	7.7	2.40	100	Tr.				Gyp	Mass wht-cloudy gr Gyp.
745.2	11.4	2.57	97	Tr.	2530 747.3		.02	Gyp Mb	Grades to Mb @ 745.2'
755.2	10.0	2.69	100	Tr.				Mb	wht Mb to 748.5' & dK gr Mb to end
765.2	10.0	2.70	100	Tr.					DK gr Mb
		2.59	94						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3267.3 | D.D. HOLE NO. M-78

SURVEY COORD. N 363,219.92

PROPERTY Mission | E. 761,457.40 | TOTAL DEPTH 821.5

DATE COMPLETED 10/21/63 | DRILL GRID COORD. N 46+50 W 62+55 | INCLINATION Vertical

J.H.C.

JAN 3 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	Top ccg ?
174.0	174.0				3090		—		
184.0	10.0		93		177.3			Calcgl	BR 184.0'
188.1	4.1	2.49	47	.04				Mp	
197.0	8.9	2.40	96	.10					Alt. leached Mp
206.6	9.6	2.49	89	.08					
216.0	9.4	2.49	79	.10	3050		.08		Base Oxidation 216.0'
227.0	11.0	2.54	76	.10	217.3				Typical Mp to 438.0'
235.4	8.4	2.49	71	.09					
246.3	10.9	2.55	94	.10					
256.4	10.1	2.49	69	.09	3010		.10		
265.1	8.7	2.52	91	.08	257.3				
271.0	5.9	2.53	79	.16					
281.0	10.0	2.50	58	.09					
291.1	10.1	2.52	61	.09					
300.3	9.2	2.53	85	.11	2970		.10		
305.6	5.3	2.89	76	.12	297.3				
314.0	8.4	2.54	73	.11					
324.8	10.8	2.54	70	.10					
327.5	2.7	2.55	99	.12					
335.7	8.2	2.53	83	.13	2930		.12		
346.2	10.5	2.53	78	.16	337.3				
357.6	11.4	2.53	46	.15					
367.6	10.0	2.56	61	.11					
370.9	3.3	2.49	29	.12					
381.3	10.4	2.53	79	.11	2890		.13		
390.6	9.3	2.57	89	.09	377.3				
400.6	10.0	2.55	73	.10					
408.0	7.4	2.58	68	.07					
419.3	11.3	2.57	87	.07	2850		.09		
431.3	12.0	2.52	86	.07	417.3				
438.0	6.7	2.55	88	.06					Brkn Mp-Hf cnt. (poss flt cnt)
447.7	9.7	2.77	93	.41		0.48		HF	St Moly first 1.7'; 1.2' Mp int @ 439.8'
455.4	7.7	3.14	87	.51	2810		.25		
467.8	12.4	3.11	100	.46	457.3			HFTt	Mixed Hf-Tt
476.0	8.2	3.18	100	.56				Tt	
484.1	8.1	3.35	97	.63		0.64			
496.4	12.3	3.25	100	.72	2770		.64		fine diss & vlt cpy-py w/
505.0	8.6	3.39	90	2.42	497.3				local st mag; Tr-wk Moly
514.5	9.5	3.39	97	2.37					
524.6	10.1	3.57	95	2.49		2.31			
534.6	10.0	3.64	98	1.70	2730		2.31		
544.7	10.1	3.30	98	3.32	537.3	2.03			
550.9	6.2	3.41	93	.50					30° cnt @ gyp vlt
562.0	11.1	2.60	99	.17				QTzT	Dense Ltgr-wht Qtzt 40° cnt
572.6	10.6	3.42	92	.46				Tt	Tr Mag

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3267.3 | D.D. HOLE NO. M-78

SURVEY COORD. N 363,219.92

PROPERTY Mission | E. 761,457.40 | TOTAL DEPTH 821.5

DATE COMPLETED 10/21/63 | DRILL GRID COORD. N46+50 W62+55 | INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
572.6						0.51			
582.8	10.2	2.98	100	.61	2690 / 577.3		.93		
590.0	7.2	3.08	97	.52				Tt HF	
600.1	10.1	3.26	98	.54		0.65			- wk-mod, local st cpy-py; Tr
610.1	10.0	2.88	100	.90				Tt	sph, moly
617.8	7.7	3.37	98	.59	2650 / 617.3		.65		
626.2	8.4	3.38	97	1.02		1.00			40° Tt-Hf cnt @ gyp v/f
635.0	8.8	3.09	91	.16				HF	Pats gar in D-Hf.
646.6	11.6	2.76	90	1.29		1.29		GYP-HF	635.0 - 639.2' pass gyp filled flt.
653.9	7.3	2.65	96	.05	2610 / 657.3		.64	QTzT	Dense wht Qtzt to 785.4'
663.1	9.2	2.62	96	.04					Hf-Qtzt cnt in st brkn zone @
673.1	10.0	2.59	100	.10					646.6'
677.1	4.0	2.56	100	.08					
687.1	10.0	2.55	96	.06					
698.8	11.7	2.67	98	.09	2570 / 697.3		.08		
708.8	10.0	2.64	100	.08					
719.0	10.2	2.63	99	.04					
729.1	10.1	2.63	100	.01					
735.4	6.3	2.59	98	.03	2530 / 737.3		.04		
745.0	9.6	2.59	99	.02					
755.0	10.0	2.59	100	.02					
765.0	10.0	2.62	98	.02					
774.8	9.8	2.62	100	.04	2490 / 777.3		.03		
785.4	10.6	2.60	100	.05					Grad(?) cnt @ 785.4'
794.0	8.6	2.73	100	.11				HF-Mb±S	- Pats Hf-Tt-Ls-Mb, serp Mb &
805.5	11.5	2.76	97	.08					Wollastonite. 802.3'-60°-6" flt.
815.0	9.5	2.58	95	.05	2450 / 817.3		.07	GYP-Mb	Gypsiferous Mb.
821.5	6.5	2.58	100	.02					
		2.77	88						

MIS 807A-78

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3389.9 | D.D. HOLE NO. M-77

SURVEY COORD. N 361,430.72

PROPERTY MISSION | E. 762,240.74 | TOTAL DEPTH 921.6

DATE COMPLETED 10/21/63 | DRILL GRID COORD. N 28+49 W 54+89 | INCLINATION vertical

J. H. C.
JAN 3 1964

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv.	
290.0									Top CCg ?
305.8	15.8		96		3090 299.9		—	CCg	BR 305.8
315.3	9.5	2.48	86	.05				Mp	Leached Mp to 371'
323.3	8.0	2.45	55	.09					
332.8	9.5	2.48	82	.05					
343.3	10.5	2.49	85	.03	3050 339.9		.05		
354.0	10.7	2.47	85	.02					
364.1	10.1	2.30	73	.02					
371.0	6.9	2.36	88	.01					
381.3	10.3	2.34	75	.02	3010 379.9		.02	MpArg	Mp w/ frags & pats Arg
390.3	9.0	2.41	80	.22				Arg	Leached Arg
405.6	15.3	2.17	95	.53					
412.7	7.1	2.55	93	1.01		.75			
419.3	6.6	2.26	84	1.00	2970 419.9		.61	HF QTzT BX	Tr-mod Chry & Cu Ox; Tr-wk Nat Cu
428.0	8.7	2.20	83	.71					
437.2	9.2	2.34	63	.93					Base Oxidation 430.0' w/ wk sulf.
445.6	8.4	2.34	90	1.13		.97		HF BX	412.7' – 467' Poss flt
455.6	10.0	2.17	73	1.17	2930 459.9		.97		zone; Mixed frags Hf-Qtzt-
467.0	11.4	2.79	83	.74				HF	w/ gg; intense chl, serp.
477.9	10.9	2.84	80	.50					
486.7	8.8	2.74	70	.84		.67		HF Tc	430' – 493.4' Cc, Nat Cu, Cpy,
493.4	6.7	2.73	54	.64				HF	Moly
499.0	5.6	2.36	42	.04	2890 499.9		.57	QTzT	Brk. Hf-Qtzt cnt.
509.3	10.3	2.47	62	.03				MP	Vuggy Mp
516.0	6.7	2.48	76	.04					515.5' Poss flt
525.8	9.8	2.53	76	.04				QTzT	Dense wht Qtzt w/ Sp Moly
536.2	10.4	2.56	69	.04				QTzTArg	Pats Arg in wht Qtzt
542.3	6.1	2.51	58	.07	2850 539.9		.04	Mp	Typical Mp to 810'
551.0	8.7	2.53	93	.14					
561.3	10.3	2.51	89	.09					
572.1	10.8	2.53	83	.08					
583.4	11.3	2.54	88	.08	2810 579.9		.10		
591.3	7.9	2.60	97	.13					
597.8	6.5	2.61	97	.12					
607.0	9.2	2.57	98	.08					
615.4	8.4	2.60	99	.12	2770 619.9		.11		610.5' 3" 10° flt w/ chl.
627.3	11.9	2.62	97	.13					
637.8	10.5	2.59	100	.09					
645.0	7.2	2.61	98	.12					
654.9	9.9	2.59	100	.11					
664.6	9.7	2.59	94	.12	2730 659.9		.11		
675.8	11.2	2.65	100	.15					
683.3	7.5	2.56	100	.16					
694.0	10.7	2.57	94	.15					
700.6	6.6	2.68	98	.12	2690 689.9		.14		

MIS 807A—78

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3389.9 | D.D. HOLE NO. M-77

SURVEY COORD. N 361,430.72

PROPERTY MISSION | E. 762,240.74 | TOTAL DEPTH 926.1

DATE COMPLETED 10/21/63 | DRILL GRID COORD. N 28+49 W 54+99 | INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
700.6								Mp	
710.0	9.4	2.59	98	.11					
721.5	11.7	2.57	100	.12					
731.4	9.7	2.61	96	.12					
740.3	8.9	2.60	100	.14	2650		.12		
749.3	9.0	2.59	96	.12	739.9				
757.4	8.1	2.59	97	.15					
763.3	5.9	2.59	99	.13					
771.7	8.4	2.62	100	.14					
778.4	6.7	2.59	65	.12	2610		.13		
787.0	8.6	2.58	100	.12	779.9				
798.0	11.0	2.54	54	.16					
809.9	11.9	2.56	65	.15					
815.4	5.5	2.55	98	.05	2570		.12	QTzT	
824.4	9.0	2.59	57	.05	819.9				
831.0	6.6	2.59	64	.19					wht Qtzt
840.2	9.2	2.58	23	.14					
851.0	10.8	2.65	54	.07					
861.7	10.7	2.64	97	.05	2530		.10		
871.0	9.3	2.60	71	.04	859.9				
879.6	8.6	2.65	73	.02				Cgl	Arkosic Cgl text. Siliceous
885.3	5.7	2.58	94	.03				Cgl Pebble Dk	* Poss bx dike ? Siliceous matrix.
890.9	5.6	2.59	70	.10				QTzT	
897.9	7.0	2.53	20	.04	2490		.04		wht Qtzt
907.8	9.9	2.60	34	.03	899.9				
918.3	10.5	2.72	94	.01				LS-Mb	Dk gr Ls-Mb
921.6	3.3	2.70	100	.01					
		2.54	81						* Note: This appears to be a small pebble dike or Bx dike. It may be a thin seam of feldspathized Cgl, but it is unusual to find angular frags of them in a feldspathized cgl.

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 | COLLAR ELEV. 3271.7 | SURVEY COORD. N 362,933.60 E. 761,471.04 | D.D. HOLE NO. M-76

PROPERTY MISSION | TOTAL DEPTH 731.0

DATE COMPLETED 10/3/63 | DRILL GRID COORD. N 43+63 W 62+46 | INCLINATION Vertical

J.H.C.

JAN 3 1964

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
180.0									Top CCg - ?
181.3	1.3	2.46	94	.04	3090		—	C-cg	BR ± 181.3
191.8	10.5	2.46	86	.04	181.7			Mp	
201.8	10.0	2.53	80	.11					
207.4	5.6	2.50	30	.14					
219.9	12.5	2.46	87	.12	3050		.10		
228.8	8.9	2.51	90	.12	221.7				
237.2	8.4	2.57	95	.09					
246.0	8.8	2.52	94	.08					Base of Oxidation 238.0'
255.0	9.0	2.46	87	.09	3010		.10		
267.0	12.0	2.52	89	.13	261.7				
277.3	10.3	2.53	36	.09					181.3' to 457.2': Usual Mp
283.5	6.2	2.49	94	.12					w/ wk-mod ser alt; local
292.8	9.3	2.55	91	.12					silf & Feldspath; Tr-wk
304.0	11.2	2.58	92	.14	2970		.12		cpy-py-moly; sp-Tr biot.
314.3	10.3	2.58	68	.11	301.7				
323.0	8.7	2.58	84	.10					
333.3	10.3	2.55	93	.13					
345.6	12.3	2.54	90	.14	2930		.12		
355.4	9.8	2.53	74	.13	341.7				
365.7	10.3	2.58	87	.18					361.2' 6" GGy Flt zone.
373.3	7.6	2.57	87	.13					
380.5	7.2	2.56	24	.07	2890		.13		
392.5	12.0	2.54	83	.09	381.7				
404.8	12.3	2.55	95	.08					
414.1	9.3	2.52	82	.07					
421.1	7.0	2.53	96	.07	2850		.08		
431.7	10.6	2.50	85	.09	421.7				
442.9	11.2	2.54	71	.09					
447.7	4.8	2.59	18	.09					
451.6	3.9	2.49	100	.07					
457.2	5.6	2.57	36	.37					
464.7	7.5	4.10	100	2.72	2810 461.7	2.72	.42	Mass Mag ETc	Frags Hf-Tc in Mass Mag.
474.7	10.0	3.99	84	3.05				Tc Hf	
484.7	10.0	3.36	100	1.00		1.59		Tc	
494.7	10.0	3.48	98	.79					
504.9	10.2	3.51	93	1.03	2770 501.7		1.59		
514.8	9.9	2.97	99	.61				Tc Hf	- St-Tr mag w/ St-wk cpy-py
522.5	7.7	3.06	80	.40		0.53		Tc Hf Gyp	Local tr bn in Mixed Hf-Tc.
527.3	4.8	2.79	85	.41					
537.3	10.0	2.67	100	.37				Hf Tc	
544.6	7.3	3.49	92	.67	2730 541.7	0.67	.53	Tc	30° Tc-Mb cnt.
553.0	8.4	2.79	100	.22				Mb	wht Mb
563.5	10.5	2.99	92	.17				Mb Tc	wht Mb w/ patc Tc
572.4	8.9	2.60	100	.02				Qtz Feld Rock	Pale grn Qtz to 546, PK trend

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 COLLAR ELEV. 3271.7 D.D. HOLE NO. M-76

SURVEY COORD. N 362,933.60

PROPERTY MISSION E. 761,471.04 TOTAL DEPTH 731.0

DATE COMPLETED 10/3/63 DRILL GRID COORD. N 43+63 INCLINATION Vertical

W 62+46

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
572.4									
578.8	6.4	2.58	98	.02	2690		.16	Qfr	PK Qfr 30° cut @ 578.8'
586.3	7.5	2.77	100	.18	581.7			Serp.Mb	Lt grn w/ Mf pats near 45° frac
594.5	8.2	2.63	84	.02				QTzT	30° Mb-Qtztant @ 586.3'
603.4	8.9	2.61	99	.01					
611.5	8.1	2.59	100	.02					
622.7	11.2	2.63	96	.01	2650		.03		
632.8	10.1	2.62	100	Tr.	621.7				- Tan, Lt gr, & Wht Qtzt
637.8	5.0	2.63	99	Tr.					
648.6	10.8	2.62	92	Tr.					
658.8	10.2	2.56	86	.03	2610		.01		
669.8	11.0	2.61	79	.02	661.7				
676.9	7.1	2.63	64	.02				Andesite	45° An dike
684.2	7.3	2.63	99	.01				QTzT	
694.2	10.0	2.61	97	.01					
704.0	9.8	2.62	100	.02	2570		.02		- Dense tan to wht Qtzt
714.2	10.2	2.58	100	.03	701.7				
727.5	13.3	2.62	100	.02					
731.0	3.5	2.63	100	.02					
		2.70	87						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV. 3341.9 D.D. HOLE NO. M-75

SURVEY COORD. N 361,060.25

PROPERTY MISSION E. 762,537.52 TOTAL DEPTH 919.0

DATE COMPLETED 9/25/63 DRILL GRID COORD. N24+74 W52+08 INCLINATION vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Allu.	
251.0					3090		—		Top CCg ± 230'
265.0	14.0		89		251.9			CCg	BR 265.6'
276.0	11.0	2.46	83	.02				Arg	
286.5	10.5	2.52	68	.03	3050		.02		
295.0	8.5	2.57	78	.03	291.9				st alt & leached Arg
306.3	11.3	2.60	92	.02					
316.6	10.3	2.51	90	.04					
327.2	10.6	2.56	92	.12	3010		.06		Base of ox @ 319.0'
338.3	11.1	2.63	93	.08	331.9				
349.0	10.7	2.65	93	.07					
360.0	11.0	2.63	100	.08					
369.0	9.0	2.65	94	.07	2970		.08	Arg.Qtzt	DK gr dense siliceous Arg.
379.6	10.6	2.57	77	.08	371.9			Arg	376.0' 2' chlgg flt zone
389.0	9.4	2.64	80	.08					
399.7	10.7	2.68	88	.10					
409.5	9.8	2.61	86	.07	2930		.08		
415.0	5.5	2.60	91	.09	411.9				
425.6	10.6	2.57	97	.11					
435.3	9.7	2.64	86	.10					
445.2	9.9	2.64	91	.09					
456.6	11.4	2.60	93	.07	2890		.09		453.0' ± 30" c. 2' bx-gg zone
466.2	9.6	2.59	91	.07	451.9				
473.5	7.3	2.58	100	.06					
480.8	7.3	2.59	96	.06					
491.4	10.6	2.51	90	.08	2850		.07		
501.4	10.0	2.56	84	.09	491.9				
511.7	10.3	2.55	87	.07					
520.0	8.3	2.56	55	.07					
525.0	5.0	2.30	35	.06					
528.1	3.1	2.50	88	.08	2810		.08		
533.6	5.5	2.54	10	.16	531.9				± 533.6' Arg-Hf flt ent
545.9	12.3	2.25	70	.26				Hf Arg	Poss flt w/ Arg-Hf-Qtz bx
556.7	10.8	2.41	66	.75					
567.1	10.4	3.05	79	1.44		1.03		Tc	
574.0	6.9	2.74	66	.78	2770		.76	Tc Hf	wk-st diss cpy in Tc & Hf
584.8	10.8	2.73	84	.72	571.9				Poss flt zone strongly brkn
595.5	10.7	2.73	65	.58		.66			& gay; Brkn Arg-Hf ent
605.3	9.8	2.53	49	.12				Arg	
610.0	4.7	2.31	43	.14	2730	.59	.46		Sgy, chlor'd. Arg-Hf ent.
617.9	7.9	2.56	67	.59	611.9			Hf	
623.2	5.3	2.50	60	.88					wk-st cpy in grn Hf & Tan Tc.
628.6	5.4	2.89	59	.68		1.27			
637.4	8.8	2.50	45	2.32				Hf Tc	Brkn Hf-Tc & Qtzt ent.
643.0	5.6	2.62	15	.28				Qtzt	
646.2	3.2	2.56	68	.30					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 COLLAR ELEV. 3341.9 D.D. HOLE NO. M-75

SURVEY COORD. N 361,060.25

PROPERTY MISSION E. 762,537.52 TOTAL DEPTH 919.0

DATE COMPLETED 9/25/63 DRILL GRID COORD. N 24+74 INCLINATION Vertical

W 52+08

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
646.2								QTzT	
649.7	3.5	2.48	25	.29	2690		.90		646.2' ± 60° 1.0' chl cem Hf-Qtzt
660.5	10.8	2.61	39	.11	651.9				bx.
669.0	8.5	2.57	40	.07					
679.2	10.2	2.54	63	.06					
686.6	7.4	2.49	54	.12					
694.4	7.8	2.55	55	.12	2650		.09		
709.9	15.5	2.55	67	.09	691.9			MP	PR- wht Mp w/ mod-st ser Alt.
721.7	11.8	2.62	40	.23				QTzT	
728.8	7.1	2.59	50	.45	2610	.43	.22	C-arg	728.3' brKn C-Arg-Hf cnt.
739.0	10.2	2.84	66	.40	731.9	.40		HF	
745.4	6.4	2.79	85	.26					
757.2	11.8	2.94	97	.40				TC	
764.5	7.3	3.12	75	.69		.69		HF	
772.6	8.1	3.51	58	1.16	2570	1.16	.57	TC	wk to v.st. dis & vlt cpy-bn w/
779.9	7.3	3.36	36	.12	771.9				Tr. wk sph, Tr moly, mag
790.1	10.2	3.48	95	1.80					
801.2	11.1	3.49	89	1.51		2.32			
811.9	10.7	3.71	81	3.67	2530		1.90		
820.6	8.7	3.47	62	3.40	811.9	3.40			st bn vn (7") @ 816.4
830.6	10.0	2.69	99	.13				Mb	
838.4	7.8	2.69	76	.09					wht Recrystallized LS.
847.8	9.4	2.71	100	.21					gradational Mb-TC cnt
855.7	7.9	3.20	42	.47	2490	.47	.88	TC	
859.0	3.3	3.15	40	.80	851.9				
868.8	9.8	2.78	89	.55		.58			sp-mod cpy-py
879.3	10.5	2.66	94	.06				TC Mb	Grad TC-Mb cnt
889.5	10.2	2.59	93	.04				Mb	
894.1	4.6	2.58	100	.30	2450		.29		
902.0	7.9	2.55	91	.03	891.9			Gyp Mb	Mixed Gyp & Mb.
913.2	11.2	2.64	50	.53		.53		Mb HF	wk cpy-bn-py; Tr sph. in
915.0	1.8	2.56	35	.03					pale grn Hf & Mb.
919.0	4.0	2.58	46	.03				QTzT	Dense wht Qtzt.
		2.70	77						

MIS 807A—7.9

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two

COLLAR ELEV. 3293.4

SURVEY COORD. N 361,654.62
E 763,339.42

D.D. HOLE NO. M-74

PROPERTY Mission

TOTAL DEPTH 914.8

DATE COMPLETED 9/17/63

DRILL GRID COORD. N30+56
W43+97

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0					3090		–	Alluv	
220.0					203.4				Top CCg ?
223.2	3.2							CCg	BR 222.3'
231.5	8.3	2.51	62	.27				Arg	
236.8	5.3	2.41	86	.17				Mp	
244.0	7.2	2.52	77	.34	3050		.16	Arg	Sp Cu Sils, Cu Ox; Tr Nat Cu
251.6	7.6	2.44	89	.25	243.4				
263.2	11.6	2.57	40	.36					
270.3	7.1	2.46	74	.76		.76			Sp-Mod cc
280.4	10.1	2.51	66	.38	3010	.44	.42	ArK-Arg	Base Oxides 272.7; flt
290.8	10.4	2.62	77	.44	283.4				gg @ 275'
299.5	8.7	2.59	70	.44					
309.0	9.5	2.61	71	.44		.44			
318.0	9.0	2.63	96	.43					Sp-Mod cpy, cc, py, Tr Moly
328.8	10.8	2.60	88	.31	2970		.420		in st alt. Arkosic Arg.
336.7	7.9	2.65	100	.50	323.4				
347.6	10.9	2.60	99	.44		.47			
355.9	8.3	2.66	97	.36					Mp 352.0 to 358.5
366.5	10.6	2.78	93	.22	2930		.38		wk 2" gg filled flt @ 360.5'-60°
374.1	7.6	2.77	96	.43	363.4	.43			
384.6	10.5	2.61	90	.37				ArK	
392.4	7.8	2.64	100	.37					
404.2	11.8	2.61	98	.38	2890		.37		
413.0	8.8	2.61	98	.34	403.4				Mp - 408.4 to 410.4'
423.1	10.1	2.61	98	.41				ArK-Cgl	Alt ArK w/ pats cgl text
433.6	10.5	2.67	99	.56		.49			
442.7	9.1	2.61	93	.25	2850		.39		
452.1	9.4	2.61	82	.19	443.4			ArK-Arg	
462.7	10.6	2.62	96	.12					
474.0	11.3	2.62	97	.13					
481.4	7.4	2.65	95	.14	2810		.14		442.7 to 537.2; Arkosic
490.7	9.3	2.59	97	.16	483.4				Arg
499.2	8.5	2.64	84	.33					
508.8	9.6	2.66	96	.13					
518.3	9.5	2.68	71	.14					
527.6	9.3	2.58	87	.09	2770		.18		
537.2	9.6	2.61	88	.06	523.4				
548.7	11.5	2.48	100	.67					Brkn Arg - Hf cnt.
555.3	6.6	2.62	84	.42		1.08		Hf	
563.5	8.2	2.71	89	2.21	2730	2.21	.73		Pale grn Hf w/ vH & diss cpy
572.1	8.6	2.48	86	.19	563.4				cnt in brkn zone
582.1	10.0	2.42	57	.31				Arg	
587.9	5.8	2.60	37	.89					wk-st v/t & diss cpy
600.1	12.2	2.57	72	1.46		1.28			586.0'-1.9' 60° Gouge bx zone
609.1	9.0	2.57	54	.10	2690		.71		Hf-Arg-Qtzt w/ st cpy
618.5	9.4	2.57	21	.10	603.4			Qtzt	
									Pats Arg

MIS.807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3293.4 D.D. HOLE NO. M-74

SURVEY COORD. N 361,654.62

PROPERTY Mission E. 763,339.42 TOTAL DEPTH 914.8

DATE COMPLETED 9/17/63 DRILL GRID COORD. N 30+56 W 43+97 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
618.5								QTZT	Pats Arg in Qtzt
629.5	11.0	2.51	25	.06					
639.6	10.1	2.63	61	.08					
644.0	4.4	2.64	99	.29	2650		.10		
					643.4				
651.2	7.2	2.59	82	.32					
661.8	10.6	2.58	66	.27					
673.0	11.2	2.62	83	.26					
686.0	13.0	2.64	70	.45	2610	.45	.32		wk diss cpy; 676.4-50° Recem flt.
					683.4	.45			
696.0	10.0	2.67	92	.15					
706.3	10.3	2.64	52	.39					
711.7	5.4	2.62	52	.42					wk-st diss & vlt cpy
713.8	2.1	2.66	43	1.93		.81			± 713.6' Qtzt-Hf cnt.
724.5	10.7	2.78	88	.81	2570		.51	HF	
					723.4	.81			
735.4	10.9	2.55	96	.32				Qtzt	
744.9	9.5	2.64	95	.06					
750.8	5.9	2.55	81	.05					
757.9	7.1	2.54	38	.04					
766.5	8.6	2.56	23	.05	2530		.15		45° Flt cnt w/ Tt.
					763.4				
775.7	9.2	2.78	53	1.14				Tt	st cpy; pats Hf & Mb
782.5	6.8	2.77	95	1.82		1.43		Tt-Hf	st cpy
787.0	4.5	3.04	22	.15					
790.3	3.3	2.78	60	.06					Mixed Hf-Tt w/ sp seat
795.8	5.5	2.95	27	.22					pats Mb.
803.6	7.8	3.16	71	.73	2490	.73	.72		Mod cpy; 802.6' ± 45°, 0.6'
					803.4	.73			
806.9	3.3	3.02	37	.25				Mb-Tt	Recem flt bx w/ Mb below.
816.5	9.6	3.41	59	.49				Hf-Gyp	
826.5	10.0	3.21	53	.92		1.04			sp-mod cpy-bn
830.3	3.8	2.59	100	.95					
838.0	7.7	2.70	89	1.61	2450		.97	Hf-Tt	st cpy-bn; Tr Moly
847.2	9.2	2.72	74	1.47	843.4	1.47			
855.9	8.7	2.66	96	.14				Hf-Mb	Mixed pale grn Hf & Ltgr Mb
861.6	5.7	2.69	100	.08				Mb	853.4' ± 20° Qtz bx in slip
874.8	13.2	2.69	100	.18					
885.9	11.1	2.67	96	.21	2410		.29		
					883.4				
894.0	8.1	2.69	97	.22					Ltgr to wht xline Mb
904.9	10.9	2.69	99	.16					
914.8	9.9	2.75	100	.07					
		2.65	79						

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two

COLLAR ELEV. 3297.0

SURVEY COORD. N 361,731.63

E. 762,235.25

D.D. HOLE NO. M-73

PROPERTY Mission

TOTAL DEPTH 885.6

DATE COMPLETED 8/19/63

DRILL GRID COORD. N 31+50 W 43+97

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
190.0									
220.5	30.5		90		3090		Nil		
					207.0			C Cg	Bed Rock 220.5'
231.5	11.0	2.49	94	.17				Mp	
241.0	9.5	2.50	64	.12					Leached Alt Mp
251.9	10.9	2.49	85	.03	3050		.08		sp Cu oxides
					247.0				
261.7	9.8	2.49	90	.05					
268.1	6.4	2.51	93	.08				Mp-Arg	Base of ox 268.1'
272.2	4.1	2.54	93	.26				Arg	
281.8	9.6	2.56	91	.24					Gra-brn. Arg Med ser Alt.
290.4	8.6	2.53	89	.21	3010		.14		WK chlor & serc.
					287.0				
300.5	10.1	2.54	84	.09					
307.7	7.2	2.55	97	.06					
318.1	10.4	2.44	36	.09				Mp	Arg-Mp cont at 307.7 is a
327.2	9.1	2.56	64	.07	2970		.09		gry Fit cmt.
					327.0				
338.8	11.6	2.55	76	.09					
349.3	10.5	2.55	86	.07					Lt Gry - Pink Mp. Sp ser Alt.
354.1	4.8	2.56	98	.14					
365.5	11.4	2.51	96	.08	2930		.09		
375.8	10.3	2.51	90	.07	367.0				
381.2	5.4	2.56	95	.07					
390.4	9.2	2.55	98	.05				Arg-Qtzt	Patch of tan Arg & Qtzt
399.9	9.5	2.59	95	.05				Qtzt	
408.2	8.3	2.59	95	.10	2890		.06	Mp	
					407.0				
419.1	10.9	2.52	92	.11					
430.6	11.5	2.50	95	.12					
440.1	9.5	2.59	81	.14					
451.3	11.2	2.54	86	.13	2850		.12		
					447.0				
458.3	7.0	2.57	97	.10					
465.3	7.0	2.57	100	.14					
477.4	12.1	2.59	100	.12					
484.3	6.9	2.59	100	.12					
491.4	7.1	2.58	100	.11	2810		.12		Str. Ser Alt; Patches of
					487.0				
501.0	9.6	2.56	100	.15					Str silicif., Fresh Biot. x/s.
509.4	8.4	2.59	95	.12					- 503.0' - 505.0' WK 45° Fit. zn.
518.2	8.8	2.53	88	.15					- 517.0 Med. 80° Fit
525.4	7.2	2.61	100	.18	2770		.14		
					527.0				
530.6	5.2	2.53	96	.13					
538.1	7.5	2.60	100	.16					
551.0	12.9	2.65	97	.14					
561.9	10.9	2.54	100	.15					- 557.6' - 2" - 20° Fit.
571.9	10.0	2.57	100	.16	2730		.15		
					567.0				
578.6	6.7	2.64	97	.20					
590.0	11.4	2.61	98	.15					
600.2	10.2	2.60	100	.14	2690		.16		
612.9	12.7	2.62	97	.17	607.0				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two COLLAR ELEV. 3,297.0 D.D. HOLE NO. M-73

SURVEY COORD. N 361,731.63

PROPERTY Mission E. 762,235.25 TOTAL DEPTH 885.6

DATE COMPLETED 8/19/63 DRILL GRID COORD. N 31+50 W 43+97 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
612.9								Mp	
620.6	7.7	2.61	100	.15					– 620.6' – 65° Flt. cont Mp-QTzt
628.8	8.2	2.60	98	.07				Qtzt	
638.6	9.8	2.62	99	.07				Qtzt-Arg	– Tan. Arg. Patches QTzt
645.4	6.8	2.53	97	.09	2650			Arg-Qtzt	
653.5	8.1	2.59	100	.08	647.0		.10	Qtzt	
663.7	10.2	2.63	99	.08					
673.8	10.1	2.64	98	.05					
685.4	11.6	2.62	95	.06	2610		.06		
695.4	10.0	2.63	96	.04	687.0				
705.5	10.1	2.61	87	.05					
711.2	5.7	2.60	31	.05					
722.8	11.6	2.62	63	.07					Dense White QTzT., Med.
730.4	7.6	2.61	73	.10	2570		.06		Fracs. locally Brkn & ggy
740.2	9.8	2.59	98	.06	727.0				Sp-Mod ser Alt.
750.8	10.6	2.61	73	.05					– 744.0–749.0' Poss 60° Flt zone
760.3	9.5	2.62	95	.03					
770.3	10.0	2.62	17	.17	2530		.07		
774.0	3.7	2.59	98	.18	767.0				– 774.0 – 10" – 45° Flt cut of QTzT & Hf
781.7	7.7	2.76	83	.48		.48		Hf	sp cpy-born.-py, Tr Mag-hem-chlor
791.9	10.2	2.68	98	.13				Mb	– Grad Hf-Mb cont.
803.9	12.0	2.70	96	Nil	2490		.16		
814.0	10.1	2.71	100	.01	807.0				
824.0	10.0	2.71	98	Nil					
833.1	9.1	2.71	93	Tr					
839.5	6.4	2.71	97	Nil					Gry-white Mb with patches
849.4	9.9	2.68	92	Nil	2450		Nil		of L.S.; Vuggy in Part.
860.1	10.7	2.67	100	Nil	847.0				
870.5	10.4	2.70	90	Nil					
877.7	7.2	2.63	78	Tr				Mb-Serp	
880.5	2.8	2.61	96	Tr				An	Post Min AND Dk
885.6	5.1	2.63	85	Tr				Mb	White Re-Xllzed L.S.
		2.59	90						

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two COLLAR ELEV. 3287.3 D.D. HOLE NO. M-72

SURVEY COORD. N 361,507.87

PROPERTY Mission E. 762,489.40 TOTAL DEPTH 910.0

DATE COMPLETED 8/23/63 DRILL GRID COORD. N 29+22 INCLINATION Vertical

W 52+49

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
180.0									Top CCg ± 173'
207.6	27.6				3090		Nil	CCg	BR. Cnt between 207' & 212'
213.1	5.5	1.65	7	.04	197.3			Ark	
223.8	10.7	2.32	51	.17					
230.5	6.7	2.38	60	.39					
233.6	3.1	2.43	20	.10					
241.5	7.9	2.51	81	.02	3050		.13		
248.2	6.7	2.52	81	.01	237.3				
256.4	8.2	2.44	70	.04				Ark-Arg	
261.0	4.6	2.40	60	.04					
271.7	10.7	2.50	57	.10					Base Oxidation @ 268'
282.5	10.8	2.51	52	.09	3010		.06		
292.2	9.7	2.59	73	.08	277.3				
302.4	10.2	2.60	80	.12				Arg	
313.6	11.2	2.59	71	.07	2970		.09		
323.0	9.4	2.62	93	.08	317.3				
332.0	9.0	2.56	83	.19				Arg-Ark	
342.6	10.6	2.59	51	.12				Ark	
352.5	9.9	2.55	42	.06	2930		.11		
362.1	9.6	2.59	43	.08	357.3			Arg-Ark	
372.5	10.4	2.51	42	.07					
378.8	6.3	2.58	61	.06					
387.5	8.7	2.62	56	1.22				Hf-Bx	387.5' - St Mineralized flt zone
393.4	5.9	2.44	78	.99		1.14		Hf	390.8' - Poss flt bx-gg
400.2	6.8	2.91	87	1.21	2890		.57	Tt	397.1 Poss 1.1' Low ∠ Flt.
410.6	10.4	2.73	64	1.12	397.3			Tt-Hf	378.8 to 437.5 ± Diss, vlt & scnt
419.8	9.2	2.54	91	.69		.93		Hf	pats cpy-py w/local st Mag.
431.4	11.6	2.57	80	1.05					20° Hf-Qtzt cnt @ slip
437.5	6.1	2.68	55	.62	2850	.62	.93	Qtzt	
445.7	8.2	2.61	48	.33	437.3				
457.4	11.7	2.58	46	.14					Poss 2' ggy flt cnt
466.0	8.6	2.59	89	.11				Arg	
476.3	10.3	2.61	93	.09	2810		.16		
480.3	4.0	2.61	88	.09	477.3				
487.5	7.2	2.56	99	.06					
497.1	9.6	2.55	97	.07					Grades to Qtzt
507.9	10.8	2.55	89	.07				Qtzt	Grades to Arg
517.4	9.5	2.58	77	.06	2770		.07	Arg	
527.2	9.8	2.57	83	.05	517.3				
534.0	6.8	2.58	70	.04					
540.1	6.1	2.59	84	.06					
548.2	8.1	2.57	86	.06					Arg-Mp cnt 30° @ slip.
557.8	9.6	2.57	93	.14	2730		.07	Mp	
568.7	10.9	2.56	96	.12	557.3				
577.2	8.5	2.54	80	.18					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3287.3 D.D. HOLE NO. M-72

SURVEY COORD. N 361,507.87

PROPERTY Mission E. 762,489.40 TOTAL DEPTH 910.0

DATE COMPLETED 8/23/63 DRILL GRID COORD. N 29+22 W 52+49 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
577.2								Mp	
587.0	9.8	2.58	93	.12					
599.0	12.0	2.62	67	.15	2690		.14		548.2 to 765.5' : Typical
610.7	11.7	2.58	66	.24	597.3				Mp w/ Tr-wk cpy-py,
622.2	11.5	2.61	95	.14					Tr Moly, wk-mod ser,
631.3	9.1	2.60	100	.14					Tr-wk Qtz-Feld repl.
640.6	9.3	2.61	99	.13	2650		.12		
649.4	8.8	2.57	97	.15	637.3				
655.5	6.1	2.57	100	.17					
662.0	6.5	2.66	95	.13					
670.0	8.0	2.71	96	.13					
678.6	8.6	2.62	100	.13	2610		.14		
686.0	7.4	2.62	100	.11	677.3				
695.8	9.8	2.62	99	.15					
705.5	9.7	2.53	74	.17					Brkn-ggy Mp-Qtzt cnt.
716.8	11.3	2.60	93	.10	2570		.13	Qtzt	
726.8	10.0	2.60	90	.09	717.3				
735.1	8.3	2.59	99	.07					wht Qtzt
743.3	8.2	2.62	51	.06					
751.7	8.4	2.59	100	.06					
752.9	1.2	2.59	80	.02				An	
759.0	6.1	2.59	76	.02	2530		.06		blk-dk gr post Min An
765.2	6.2	2.41	34	.02	757.3				dike
776.1	10.9	2.60	38	.10				Qtzt	
785.0	8.9	2.62	73	.10					wht Qtzt
792.2	7.2	2.60	64	.07					
801.7	9.5	2.64	96	.07	2490 797.3		.08		40° cnt; gypfilled slip
812.0	10.3	2.80	88	.59				Hf	ggy brkn Hf-Tt cnt.
819.8	7.8	3.32	59	1.10		1.19		Tt	801.7' to 840.1: Med-st
830.0	10.2	3.41	90	1.39					diss, vlt, & pat cpy-bn-py,
840.1	10.1	3.57	91	1.83	2450	1.83	1.06		& Tr Mag. Cnt gradational
851.2	11.1	2.64	100	.37	837.3			Mb	@ 840'
858.7	7.5	2.74	82	.04				Mb-Gyp	840.1 to 874.4': wht
867.4	8.7	2.44	97	.02					gypsiferous Mb.
874.4	7.0	2.39	83	.04	2410		.25		
881.8	7.4	2.55	99	Nil	877.3			Mb	
892.3	10.5	2.68	58	Nil					Dense dk gr Mb.
904.5	12.2	2.70	88	Nil					
910.0	5.5	2.68	88	Nil					
		2.61	77						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3222.4 D.D. HOLE NO. M-71

SURVEY COORD. N 361,465.84

PROPERTY Mission J. H. C. E. 764,487.94 TOTAL DEPTH 779.3

DATE COMPLETED 7/31/63 DRILL GRID COORD. N 2850 INCLINATION VERTICAL

NOV 18 1963 W 3251

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									Top CCg @ 145'
160.0								Alluv	
171.7	11.7	2.58	100		3050		Tr	CCg	GR @ 171.7
179.0	7.3	2.52	92	.20	172.4			Arg	
189.5	10.5	2.53	94	.25					Tr-wk Cu Ox in sandy Arg.
194.4	4.9	2.59	80	.44					Base Oxidation 194.4'
205.2	10.8	2.64	100	.35					
211.6	6.4	2.58	97	.18	3010		.28		
221.5	9.9	2.61	100	.20	212.4				194.4 to 293.4 ± Tan - brown
229.8	8.3	2.66	67	.15					silt Arg w/ wk ser
241.8	12.0	2.64	99	.20					
253.0	11.2	2.64	100	.11	2970		.17		
263.7	10.7	2.69	97	.24	252.4				260.0' 55° Bx - Ss zone (1.7')
274.3	10.6	2.67	95	.15					
283.5	9.2	2.66	100	.17					
293.4	9.9	2.72	93	.18	2930		.18		
303.8	10.4	2.66	100	.30	292.4			Arg-Cgl	
313.4	9.6	2.62	100	.24					
321.8	8.4	2.67	99	.15				Arg-Fp(?)	313.9 - 17.6 ; Fp (?) - faint purple text.
333.7	11.9	2.70	99	.22	2890		.23	Arg-Cgl	
344.7	11.0	2.75	96	.21	332.4				273.4 - 542.0 - Arg Cgl
358.5	13.8	2.72	100	.17					Lava rock w/ wk, locally
368.3	9.8	2.63	98	.18					mod, ser alt.
375.0	6.7	2.67	100	.15	2850		.18		
386.6	11.6	2.68	100	.23	372.4				
397.5	10.9	2.67	97	.26					
407.6	10.1	2.65	100	.22					
419.1	11.5	2.67	100	.17	2810		.22		413.1 - 1.4', 30° Recem bx zone
432.5	13.4	2.68	100	.30	412.4				
444.3	11.8	2.67	99	.22					
454.7	10.4	2.65	97	.27	2710		.25		
464.6	9.9	2.62	100	.24	452.4				
473.6	9.0	2.69	100	.22					
485.0	11.4	2.65	100	.40		.50			
495.3	10.3	2.68	100	.66	2730		.36		
507.9	12.6	2.67	100	.63	492.4				
515.2	7.3	2.70	100	.76		.77			
525.2	10.0	2.69	100	.89					- Diss & stk cpy-py w/ tr moly
534.8	9.6	2.62	100	.89	2690		.77		
542.0	7.2	2.67	99	1.07	532.4				
553.5	11.5	2.61	100	1.27		.93		Arg Cgl & Qtzt	
563.9	10.4	2.63	100	.46				Qtzt	
569.1	5.2	2.63	96	.27					
576.8	7.7	2.63	94	.33	2650		.79		
585.7	8.9	2.60	90	.25	572.4			Qtzt-Ar	50° Andesite dike @ 584.7-86.2
591.3	5.6	2.60	96	.12				Qtzt	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3222.4

D.D. HOLE NO. M-71

SURVEY COORD. N 361,465.84

PROPERTY Mission

E. 764,487.94

TOTAL DEPTH 779.3

DATE COMPLETED 7/31/63

DRILL GRID COORD. N 2850 W 3251

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
591.3								Qtzt	
594.8	3.5	2.60	96	.30					594.8' - 45° Qtzt - Hf cont @ frac.
602.0	7.2	2.54	97	.67		.82		Hf	
614.5	12.5	2.74	76	.92	2610		.49		
623.5	9.0	2.89	95	1.21	612.4	1.16			vlt & diss cpy-py w/ Tr. Mag, Moly
635.0	11.5	2.70	96	.32					
645.0	10.0	3.06	97	.84		.84			
649.4	4.4	2.58	100	.25	2570		.65		
659.4	10.0	2.16	93	.07	652.4			Qtzt	
666.0	6.6	2.64	100	.11					
672.0	6.0	2.45	91	.03				An	70° Intrusive dike @ 666.2 - 72.0
681.9	9.9	2.65	96	.12				Qtzt	
690.8	8.9	2.61	96	.13	2530	1.73	.16		
701.1	10.3	3.25	97	1.73	692.4	1.73		Hf	
705.6	4.5	3.88	82	.28					wk-st Mag w/ cpy-py.
709.5	3.9	3.07	96	.19					
719.2	9.7	3.00	100	.31					
723.0	3.8	2.99	18	.22					723.5 - 26° Hf - Qtzt cont & slip.
729.0	6.0	2.63	100	.02	2490		.53	Qtzt	
739.7	10.7	2.62	91	.05	732.4				
743.5	3.8	2.62	41	.04					
745.5	2.0	—	0	—					
747.1	1.6	2.57	100	.06					50° GGy Qtzt - Hf cont.
755.0	7.9	2.69	100	.07				Hf-Mb	Mixed Serp Hf & Mb.
757.6	2.6	2.67	28	.23				Mb	
765.8	8.2	2.75	90	.07	2450		.07		
779.3	13.5	2.69	69	.04	772.4				
		2.67	95						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF two

COLLAR ELEV. 3281.4

SURVEY COORD. N 362,334.33

E 761,916.47

D.D. HOLE NO. M-70

TOTAL DEPTH 759.3

INCLINATION Vertical

PROPERTY MISSION

DATE COMPLETED 1/10/63

DRILL GRID COORD. N 37+56 W 57+49

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
									Top Cgg ?
191.0									BR cnt @ ± 191'
200.0	9.0	2.48	57	.04				MP	
210.0	10.0	2.51	87	.06					
212.7	2.7	2.46	37	.06					
218.3	5.6	2.51	90	.04					
225.3	7.0	2.39	17	.04					
229.0	3.7	2.48	68	.03	3050		.05		
233.2	4.2	2.42	09	.03	231.4				
243.5	10.3	2.48	78	.14					Base Oxidation ± 241'
251.0	7.5	2.54	74	.13					
262.1	11.1	2.52	64	.12					
271.7	9.6	2.54	72	.12	3010		.12		
280.9	9.2	2.51	88	.15	271.4				
292.5	11.6	2.54	91	.28					
302.3	9.8	2.51	89	.11					
313.0	10.7	2.51	96	.11	2970		.17		
323.0	10.0	2.55	95	.09	311.4				191.0' To 516.2':
336.6	13.6	2.52	62	.11					Mod-st alt pk-gr-wht Mb
347.7	11.1	2.56	82	.11					
359.4	11.7	2.91	91	.17	2930		.11		
371.0	11.6	2.60	77	.14	351.4				
382.3	11.3	2.64	98	.14					
391.1	8.8	2.60	100	.13	2890		.14		
400.2	9.1	2.59	99	.17	391.4				
411.3	11.1	2.58	100	.17					
420.3	9.0	2.57	99	.13					
432.8	12.5	2.57	100	.13	2850		.15		
443.6	10.8	2.56	98	.10	431.4				
453.9	10.3	2.65	97	.11					
464.2	10.3	2.59	99	.12					
472.2	8.0	2.54	100	.10	2810		.11		
479.2	7.0	2.60	94	.16	471.4				
489.5	10.3	2.60	87	.11					
499.8	10.3	2.57	98	.14					
506.2	6.4	2.57	100	.16	2770		.14		
516.2	10.0	2.51	96	.15	511.4				50° cnt @ frac.
522.4	6.2	2.60	100	.11				Qtzt-Mp	Mp ints in wht Qtzt ?
531.6	9.2	2.60	100	.07				Arg	
539.9	8.3	3.04	80	.08					
550.2	10.3	2.58	99	.07	2730		.09		
561.8	11.6	2.61	99	.09	551.4				Grad. cnt w/ Qtzt
571.0	9.2	2.59	100	.12				Qtzt	
580.4	9.4	2.60	97	.10				Qtzt-Mp	572'-1.3 Mp int @ 45°
589.4	9.0	3.02	80	.08	2690		.10	Qtzt	
595.2	5.8	2.56	100	.10	591.4				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two

COLLAR ELEV. 3281.4

D.D. HOLE NO. M-70

SURVEY COORD. N 362,334.33

PROPERTY Mission

E. 761,976.41

TOTAL DEPTH 759.3

DATE COMPLETED 7/30/63

DRILL GRID COORD. N 37+56 W 51+49

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
595.2									
605.0	9.8	2.56	79	.10					580.4 to 651.0'
615.1	10.1	2.62	100	.07					wht Qtzt w/ wk ser alt.
625.5	10.4	2.62	97	.07					
634.0	8.5	2.64	100	.07	2650 / 631.4		.08		
643.0	9.0	2.61	93	.07					
651.0	8.0	2.63	100	.05					
656.8	5.8	2.56	99	.10				Mp	PK Mp w/ Qtz-feld alt.
661.8	5.0	2.61	92	.17				Qtzt	662' Qtzt-Hf cnt.
672.7	10.9	2.71	93	.31	2610 / 671.4		.14	Hf	
678.9	6.2	2.51	99	1.90					
689.2	10.3	2.72	90	.44		.93			diss & vlt. py-py.
699.3	10.1	3.19	87	1.32				Tt	699.3' - 50° Recem. flt bx.
709.5	10.2	2.86	99	.46				Tt-Hf	
712.7	3.2	2.58	100	.04	2570 / 711.4		.87	Qtzt	712.5' - 20° flt cnt w/ Mb.
723.7	11.2	2.63	89	.02				Mb	720-721 - ± 30° pass flt zone.
730.0	6.1	2.68	90	tr					
743.6	13.6	2.53	97	Tr				Mb-Gyp	
749.6	6.0	2.72	74	.03	2530 / 751.4		.01	Mb	
759.2	9.7	2.63	100	.01					
		2.62	88						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3288.2 D.D. HOLE NO. M-69

SURVEY COORD. N 761,136.40

PROPERTY Mission E. 762,481.76 TOTAL DEPTH 945.9

DATE COMPLETED [illegible] DRILL GRID COORD. N 31+51 INCLINATION Vertical

W 52+47

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
								Alluv	
191.0									Top CCg ?
208.6	17.6							Con Col	BR 208.6'
219.6	11.0	2.45	78	.05				Arg	208.6 - 385.5' ± brn - Tan - gr Arg w/ qtz vning, wk - mod ser; Tr cpy - py - moly; local gyp vlts.
229.8	10.2	2.39	72	.25					
232.2	2.4	2.55	71	.03	3050		.08		
242.1	9.9	2.50	81	.04	238.2				
254.0	11.9	2.58	86	.05					
266.7	12.7	2.54	94	.07					
276.7	10.0	2.57	88	.25	3010		.11		Base Oxidation @ 273'
287.9	11.2	2.62	94	.11	278.2				
296.6	8.7	2.66	91	.07					
307.9	11.3	2.61	85	.12					
315.3	7.4	2.59	97	.10	2970		.10		
323.6	8.3	2.58	93	.07	318.2				
332.8	9.2	2.58	93	.07					
340.1	7.3	2.59	94	.03					6" gry Slt zone @ 340.1'
347.3	7.2	2.58	89	.10					
356.8	9.5	2.58	91	.16	2930		.09		
365.7	8.9	2.57	86	.08	358.2				
375.1	9.4	2.55	88	.11					
385.5	10.4	2.57	58	.09					
395.3	9.8	2.59	30	.27				Mp	
397.4	2.1	2.67	84	.80	2890	.80	.18	Mp-Arg	Seat vlts py - cpy @ ± 45° in mixed Mp & Arg.
403.9	6.5	2.03	54	.38	398.2				
412.0	8.1	2.35	54	.08				Arg	
419.3	7.3	2.77	65	1.01		1.01		Tt	WK - st cpy - py w/ mag.
427.5	8.2	2.55	84	.06				Qtzt	419' Gry - brKn Tt - Qtzt cnt.
434.8	7.3	2.58	96	.05				Arg Qtzt	
439.3	4.5	2.57	58	.04	2850		.28	Arg	
447.4	8.1	2.55	96	.11	438.2				
457.0	9.6	2.51	55	.09					
468.3	11.3	2.58	16	.06					
476.8	8.5	2.54	75	.10	2810		.09		
482.7	5.9	2.60	72	.05	478.2				
487.0	4.3	2.57	81	.04					
497.7	10.7	2.56	89	.12				Mp	
508.2	10.5	2.54	94	.12					
512.2	9.0	2.56	100	.12	2770		.10		
528.6	11.4	2.58	65	.07	518.2				
540.0	11.4	2.60	78	.12					487.0' to 629.3' ± Mod alt wht - pk - Ltgr Mp w/ zones feld repl.
550.0	10.0	2.54	98	.15					
558.3	8.3	2.59	98	.20	2730		.13		
568.2	9.9	2.60	93	.13	558.2				
579.3	11.1	2.58	99	.13					
588.6	9.3	2.55	87	.13					

MISBOTA-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3285.2 D.D. HOLE NO. MI-69

SURVEY COORD. N 361,236.70

PROPERTY Mission E. 762,992.76 TOTAL DEPTH 945.4

DATE COMPLETED 7/12/63 DRILL GRID COORD. N 31+21 INCLINATION Vertical

W 22+47

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
588.8									
595.4	9.6	2.55	74	.14	2690		.13		
					598.2				
603.1	4.1	2.55	86	.18					
606.6	3.5	2.50	31	.16					
612.2	12.6	2.53	83	.14					
621.4	2.2	2.48	26	.11					
629.3	7.7	2.55	85	.15					Grad Arg-Mb cnt from 628.3
641.5	12.2	2.64	95	.09	2650		.14	Arg	to 629.3'
					638.2				
652.3	10.8	2.60	88	.07					
662.3	10.0	2.64	91	.06					
669.2	6.7	2.66	93	.07				Arg-Qtzt	Mixed; Grades to Qtzt
679.6	10.4	2.60	95	.09	2610		.07	Qtzt	
					618.2				
689.4	9.8	2.61	75	.10					
700.1	10.7	2.58	71	.08					
709.1	8.0	2.61	93	.07					
715.7	6.6	2.59	99	.11					
721.6	5.3	2.71	83	.18	2570		.09		wht dense Qtzt
					718.2				
731.1	10.1	2.63	100	.11					
737.4	6.3	2.63	96	.13					
743.4	6.0	2.60	100	.16					
750.9	7.5	2.61	94	.09					
761.7	10.8	2.81	91	.12	2530		.11		761.7'-10° wk flt cut w/ Hf.
					758.2				
766.8	5.1	2.68	100	.51				Hf	
775.2	8.4	2.88	92	.53					
781.4	6.2	2.83	97	.37		.69			
788.8	7.4	2.96	93	.46					-wk-st vlt & diss cpy-py w/
798.2	10.2	3.39	93	.76	2490		.69	Tt	local wk bn.
					798.2				
811.0	12.8	3.03	97	.63		.97			
819.4	8.4	3.37	93	1.47					819.4 - 60° Tt-Mb cnt.
829.6	10.2	2.66	100	.22				Mb	wht xline Mb w/ local
843.5	13.9	2.92	91	.12	2450		.59		serp.
					838.2			Hf	843.5' ± 50° Mb-Hf cnt
856.6	7.1	3.08	100	.16					+ Serp Hf.
866.7	10.1	3.12	97	.03					
877.7	10.6	3.34	96	.05				Hf-Tt	
886.1	8.4	3.02	100	.01	2410		.07		
					878.2				
892.4	12.3	2.52	100	.01				Hf	892.4' - 30° Hf-Mb cnt @ frac.
902.2	10.5	2.67	97	.01				Mb	
916.6	13.4	2.75	99	.16	2310		.06		
					918.2				
925.6	7.0	2.70	100	.01					DK-Lt gr Mb w/ local
933.1	7.5	3.04	92	.02					zones wht Mb
945.4	12.3	2.70	100	.04					
		2.66	86						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Three

COLLAR ELEV. 3278.6

SURVEY COORD. N 361,437.49
E 762,742.94

D.D. HOLE NO. M-68

PROPERTY Mission

TOTAL DEPTH 922.3

DATE COMPLETED 7/5/63

DRILL GRID COORD. N 28+48
W 49+97

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
								Alluv	
190.0									Top CCg ?
194.1	4.1							Cal. Cgl	BR ± 193.7'
198.7	4.6	2.47	47	.11				Arg	
207.0	8.3	2.50	76	.07					
218.4	11.4	2.51	38	.07					
225.0	6.6	2.51	76	.13					
230.5	5.5	2.45	77	.09	3050		.08	Mp-Arg	227' - 3' gg-Mp bx zone
241.0	10.5	2.45	9	.02	228.6			Mp	
247.0	6.0	2.44	45	.05				Mp-Arg	Alt ints Arg-Mp
251.5	4.5	2.36	45	.09				Mp	251.5 Base Oxides
255.5	4.0	2.58	51	.15				Arg	
257.9	2.4	2.55	63	.07					
265.3	7.4	2.55	75	.07					
276.5	11.2	2.60	81	.10	3010		.07		
286.2	9.7	2.57	79	.10	268.6				
297.4	11.2	2.61	90	.10					
309.3	11.9	2.56	94	.09	2970		.10		Lt gr-brn Arg w/ Tr
313.0	3.7	2.54	65	.23	308.6				cpy-py-moly, local mod ger
317.5	4.5	2.55	46	.15					& locally silf.
321.0	3.5	2.52	90	.14					
325.0	4.0	2.52	47	.09					
328.4	3.4	2.51	53	.28					
331.0	2.6	2.55	76	.12					
335.0	4.0	2.51	12	.21					
338.3	3.3	2.52	62	.11					
347.8	9.5	2.55	23	.15	2930		16		
353.9	6.1	2.58	64	.09	348.6				
362.3	8.4	2.54	77	.10					
373.0	10.7	2.63	75	.06				Arg-Ark	
384.3	11.3	2.57	59	.08	2890		08		Arkosic Text. Arg. (Cgl?)
393.3	9.0	2.55	90	.09	388.6				
401.6	8.3	2.52	51	.08					
410.1	9.1	2.59	92	.25				Arg	
421.4	10.7	2.32	85	.46		.46		Hf	
430.4	9.0	2.47	39	.20	2850		.24	Hf-Arg Bx	gy run
437.9	7.5	2.36	76	2.09	428.6			Hf	wk-st cpy-py-Tr
446.0	8.1	2.44	59	1.17		1.21		Hf-Bx	moly-mag-hem
450.0	4.0	2.34	22	2.95				Hf	
460.9	10.9	2.60	69	.56				Hf-Mp	
466.8	5.9	2.59	79	.18	2810		1.12	Mp	451-54.2' Poss 30° flt cnt w/ Mp
484.4	17.6	2.51	7	.07	468.6			Mp-Qtzt Arg	Poss flt bx?
486.5	2.1	2.56	49	.07				Qtzt-Arg	
497.2	10.7	2.59	69	.07				Arg	490.0' Brkn flt zone
505.0	7.8	2.56	99	.05	2770		.06	Qtzt	
515.7	10.7	2.58	84	.04	508.6				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF three

COLLAR ELEV. 3278.6

SURVEY COORD. N 361,437.49
E. 762,742.94

D.D. HOLE NO. M-68

PROPERTY Mission

TOTAL DEPTH 922.3

DATE COMPLETED 7/5/63

DRILL GRID COORD. N 28+48
W 49+97

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
515.7									
523.8	8.1	2.61	99	.03					497.2 to 548.3' &
531.9	8.1	2.61	95	.05					wht Qtzt
536.0	4.1	2.54	98	.06					
539.6	3.6	2.59	28	.07					
542.4	2.8	2.59	78	.04					
548.3	5.9	2.53	15	.04	2730		.05		
558.8	10.5	2.58	81	.03	548.6			Arg-Qtzt	
565.0	6.2	2.60	89	.06					562' - 40° - 0.3' bx-gg
575.0	10.0	2.60	86	.06				Qtzt	
584.6	9.6	2.62	89	.06	2690		.06		
593.0	8.4	2.53	90	.11	588.6				
597.1	4.1	2.67	86	.11					598' - 45° - 6" flt zone w/ sulgg
607.8	10.7	2.46	98	.47		.47		Hf-Qtzt	Mp-Hf cnt @ 607.8' Suls in Hf.
617.7	9.9	2.42	51	.13				Mp	
621.0	3.3	2.57	91	.15					45° flt cnt @ 621'
631.0	10.0	2.58	90	.08	2650		.21	Arg	
642.8	11.8	2.60	96	.08	628.6				Tan Alt Arg w/ pats Mp-Qtzt
654.6	11.8	2.62	100	.08					
663.2	8.6	2.63	100	.12				Arg-Qtzt	
667.3	4.1	2.57	89	.07	2610		.09		Mixed Arg & Qtzt.
670.0	2.7	2.59	14	.07	668.6				
677.4	7.4	2.57	98	.01				Qtzt	
687.5	10.1	2.61	94	.10					
697.1	9.6	2.63	100	.10					
705.0	7.9	2.57	100	.12	2570		.09		670.0' to 767.1' &
717.5	12.5	2.66	71	.12	708.6				wht Qtzt w/ occasional
721.3	3.8	2.59	38	.14					pats Arg.
733.5	12.2	2.63	34	.10					
744.5	11.0	2.65	64	.14	2530		.12		
755.2	10.7	2.58	62	.10	748.6				
767.1	11.9	2.64	51	.15					
777.5	10.4	2.80	88	.64		.64		Qtzt-Hf	±748' Qtzt-Hf cnt @ 40° slip.
787.0	9.5	3.05	80	.32	2490	.50	.32	Hf	
797.4	10.4	3.00	94	.50	788.6				
806.4	9.0	2.86	99	.62					
816.4	10.0	3.03	100	.90		.68			
822.6	6.2	2.86	96	.66				Hf-Tt	wk-st cpy-py; Tr-wk bn;
832.6	10.0	2.91	97	.71	2450		.68	Hf	Tr Moly; local hem & mag.
842.5	9.9	3.28	98	.19	828.6	.47			
853.0	10.5	2.95	100	.46					
857.3	4.3	2.95	100	.02				Hf-Tt	
865.8	8.5	3.00	94	.03	2410		.36	Hf	
875.5	9.7	3.07	100	.02	868.6				Cnt w/ Mb gradational
882.4	6.9	2.90	100	.03				Mb	
892.6	10.2	2.78	100	.04					

MIS807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF three

COLLAR ELEV. 3,279.6

D.D. HOLE NO. M-68

SURVEY COORD. N 361,437.49

E. 762,742.94

PROPERTY Mission

TOTAL DEPTH 922.3

DATE COMPLETED 7/5/63

DRILL GRID COORD. N28+48 W47+91

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
892.6								Mb	
902.8	10.2	2.74	100	.05					
913.0	10.2	2.69	100	.03	2372 / 905.6		.04		
922.3	9.3	2.69	100	.02					
		2.63	75						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF THREE COLLAR ELEV. 3252.8 D.D. HOLE NO. M-67

SURVEY COORD. N 363,548.89

PROPERTY MISSION E. 761,990.83 TOTAL DEPTH 1172.0

DATE COMPLETED 6/1/68 DRILL GRID COORD. N #91+20 INCLINATION VERTICAL

W 57+17

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
181.0								Alluv	Top ccg ?
195.7	14.7		100					C Cg	Top BR ± 195.7'
206.0	10.3	2.53	94	.25	3050		.04	Mp	
211.3	5.3	2.54	71	.16	202.8				Base Oxides ± 211.3
224.0	12.7	2.61	92	.17					
233.4	9.4	2.56	95	.18					
242.4	9.0	2.59	95	.18	3010		.18		
253.1	10.7	2.58	99	.19	242.8				
264.0	10.9	2.58	94	.22					256' – 30° 2' Bx-qg zone
275.0	11.0	2.53	99	.18					
285.3	10.3	2.53	99	.20	2970		.20		
295.3	10.0	2.57	100	.16	282.8				
302.7	7.4	2.55	98	.11					
310.6	7.9	2.56	99	.16					
318.3	7.7	2.59	99	.15	2930		.14		
327.4	9.1	2.61	98	.10	322.8				
339.2	11.8	2.57	98	.10					195.7 to 636.3' ±
345.0	5.8	2.56	99	.13					wht-pk, Up wk wk-mod
355.3	10.3	2.57	72	.17	2890		.14		ser alt; scat Qtz vlts;
369.6	14.3	2.56	100	.17	362.8				Tr-wk suls; local Feld
378.8	9.2	2.56	92	.14					& Qtz Repl
386.0	7.2	2.55	98	.13					
397.8	11.8	2.54	70	.15					
403.9	6.1	2.51	97	.13	2850		.15		
413.4	9.5	2.51	48	.20	402.8				
425.6	12.2	2.59	93	.18					
435.6	10.0	2.58	98	.22					
448.5	12.9	2.57	86	.16	2810		.19		
459.7	11.2	2.58	96	.14	442.8				
472.1	12.4	2.56	99	.11					
480.6	8.5	2.62	95	.10					
490.6	10.0	2.58	98	.13	2770		.12		
499.4	8.8	2.52	99	.10	482.8				
512.6	13.2	2.55	99	.11					
519.8	7.2	2.56	93	.13	2730		.12		
527.5	7.7	2.55	100	.13	522.8				
540.9	13.4	2.60	98	.15					? Pass 45° flt.
547.8	6.9	2.56	98	.11					
560.8	13.0	2.58	100	.13	2690		.13		
574.7	13.9	2.61	98	.12	562.8				
581.7	7.0	2.58	97	.14				Mp Qtzt	± 580.4 Mp-Qtzt cnt
591.6	9.9	2.58	100	.04				Qtzt	
601.8	10.2	2.59	99	.08	2650		.09		596.1' Recem 65° Bx zone
609.8	8.0	2.62	100	.10	602.8				
619.6	9.8	2.62	88	.17					Dense wht to tan Qtzt.
629.7	10.1	2.65	96	.11					

MIS 8074-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF THREE COLLAR ELEV. 3252.8 D.D. HOLE NO. M-67

SURVEY COORD. N 363,548.69

PROPERTY Mission E 761,990.83 TOTAL DEPTH 1172.0

DATE COMPLETED 6/18/65 DRILL GRID COORD. N 49+70 W 52+17 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
629.7									
636.3	6.6	2.61	99	.24					50° Qtzt-Hf cnt
642.4	6.1	2.76	76	.48	2610	.48	.20	Hf-Tt	Mixed; cpy-moly
654.0	11.6	2.63	94	.12	642.8			Arg	Dense tan Arg.
658.2	4.2	2.62	96	.09					658.2' 40° Arg-Hf cnt @ Qtzt
670.2	12.0	2.83	99	.17				Hf	Feld filled flt.
680.1	9.9	3.00	98	.19	2570	.62	.18		
687.0	6.9	3.01	99	.62	682.8			Hf-Tt	683.2-687.0' brn Tt int.
695.2	8.2	2.91	90	.45		.63		Hf	Pale grn Hf
705.2	10.0	2.95	89	.79					
709.5	4.3	2.73	107	.19				Hf-Mb	Mixed grn Hf & wht Mb.
716.3	6.8	2.57	112	.04				Qtzt	709.5' ±60° flt cnt.
725.5	9.2	2.74	86	.17	2530		.41	Qtzt-Hf	Mixed into Qtzt & Hf w/
735.3	9.8	2.82	96	.29	722.8				faint bx text.
744.1	8.8	2.60	97	.06				Qtzt	Med ser alt -
756.6	12.5	2.57	99	.08					756.7' Grad cnt w/ Tt.
762.7	6.1	2.99	93	1.66	2490	1.66	.37	Tt	St cpy; hem stain. flt Text.
771.2	8.5	2.61	100	.05	762.8			Qtzt	762.7' sharp Tt-Qtzt cnt.
783.3	12.1	2.55	103	.19					
788.6	5.3	2.81	98	.22				Hf	St hem @ cnt.
798.6	10.0	2.41	111	.04	2450				Grn-maroon siliceous Hf.
808.6	10.0	2.63	108	.11	802.8		.12		
818.7	10.1	2.74	89	.11				Qtzt	wht Gypsiferous Qtzt; Poss FH.
828.7	10.0	2.55	101	.06					Dense wht Qtzt.
835.3	6.6	2.61	98	.04				Arg-Gyp	
845.3	10.0	2.52	95	.04	2410		.07		
855.3	10.0	2.56	98	.03	842.8				wht to tan Gypsiferous Arg.
865.3	10.0	2.68	99	.05					
875.3	10.0	2.59	99	.04					
885.3	10.0	2.61	102	.08	2370		.05		grad cnt w/ Hf
895.3	10.0	2.67	106	.07	882.8			Hf-Gyp	
905.3	10.0	2.59	102	.13					Gypsiferous Hf.
915.3	10.0	2.69	99	.17					
924.2	8.9	2.56	97	.03	2330		.10	Qtzt	
935.2	11.0	2.56	98	.03	922.8				935.2 Recem flt bx & cnt.
943.7	8.5	2.70	84	.02				Mb-Bx	FH? zone.
949.1	5.4	2.75	114	.02				Mb	
959.0	9.9	2.77	97	.03					Dense wht Mb.
964.7	5.7	2.73	93	1.57	2290	1.57	.17		St cpy; Tr sph, bn.
974.0	9.3	2.75	100	.09	962.8	1.57			
981.5	7.5	2.65	90	.01				Arg(?)	Pats Mb in St alt Arg?
992.7	11.2	2.71	91	.05				Mb	
1002.1	9.4	2.66	99	.02	2250		.12	Arg(?)	
1009.6	7.5	2.66	77	.01	1002.8				Poss Argillic Text. Qtzt?
1016.4	6.8	2.59	100	.06					
1026.6	10.2	2.66	98	.01				Ark & Flt 99	GG-Bx zone @ 60°

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF THREE COLLAR ELEV. 3252.8 D.D. HOLE NO. M-67

SURVEY COORD. N 363,548.89

PROPERTY Mission E. 761,990.83 TOTAL DEPTH 1172.0

DATE COMPLETED 6/18/63 DRILL GRID COORD. N 49+20 INCLINATION Vertical

W 57+12

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1026.6									
1033.3	6.7	2.78	98	.04				Ark (Arg?)	
1039.8	6.5	2.65	93	.02	2210				
1046.4	6.6	2.66	98	.03	1042.8		.03		
1056.9	10.5	2.66	95	.02					1056.0' - 8" flt zone
1066.0	9.1	2.71	79	.01					1064.0' - 9" " "
1076.0	10.0	2.74	92	.01					
1082.8	6.8	2.64	90	.05	2170		.02		1079.6 - 70° wk flt w/ 1' Hf below
1090.6	7.8	2.64	95	.02	1082.8				1082.8' - 4' 50° flt zone
1101.6	11.0	2.66	93	.01				Arg. Sil	1095.8' - 2' Hi ∡ shear zone; flt?
1109.7	8.1	2.61	96	.02				Ark (?)	
1120.1	10.4	2.63	83	.03	2130		.02	Arg. Sil	
1129.2	9.1	2.67	99	.03	1122.8				
1138.7	9.5	2.74	94	.03					
1145.0	6.3	2.67	96	.01					
1149.7	4.7	2.86	107	.02					1149.7' - 16° 10" crushed sul zone.
1155.4	5.7	2.61	82	.03				Bx-Mb	1151.0' - 8° - 6" recem sul bx.
1162.2	6.8	2.54	94	.01	2090		.02	Granite	1153.8' - 20° - 2' flt Bx
1167.6	5.4	2.54	56	.01	1162.8				Mod Alt. Granite
1172.0	4.4	2.62	82	.02					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3252.1 D.D. HOLE NO. M-66

SURVEY COORD. N 361,737.90

PROPERTY Mission E. 762,236.77 TOTAL DEPTH 951.6

DATE COMPLETED 7/4/63 DRILL GRID COORD. N 31+98 W 49+96 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0					3090			Alluv	
202.0	12.0				192.1			CCg	Top CCg ± 165' BR cut 202'
206.0	4.0	2.41	36	.04				Arg	
218.2	12.2	2.55	72	.04					
229.1	10.9	2.46	78	.11	3050		.04		Lt tan to brn Arg wl wk to
240.2	11.2	2.41	80	.04	232.1				med ser, chl, serp & wk cu ox, Nat
252.3	12.0	2.53	88	.04					cu, FeOx to base oxides.
262.0	9.7	2.54	71	.03					
276.8	8.8	2.56	56	.18	3010		.07		
276.7	5.9	2.55	84	.17	242.1				276.7 Base Oxides
289.9	12.1	2.57	87	.09					
301.5	12.7	2.66	91	.12					
310.8	9.3	2.63	91	.11	2910	0.64	.13		
321.6	10.8	2.63	91	.64	312.1	0.64			Sp-med cpy-py
330.2	8.6	2.63	87	.33					
340.3	10.1	2.62	76	.14					Tr py-cpy-cc from 276.7'
352.2	11.9	2.58	88	.10	2930		.29		to 412.6'; Pass flt @ 336'
364.0	11.8	2.60	92	.11	352.1				
374.9	10.9	2.59	89	.14					
384.8	9.9	3.28	90	.18					
392.3	7.5	2.58	98	.16	2890		.15		
403.6	11.3	2.60	65	.11	392.1				
412.6	9.0	2.57	65	.12					
419.3	6.7	2.07	14	.18				ArgEgg	- Arg-Hf bx in ct ggy;
430.2	10.9	2.30	70	.25	2850		.17		Pass flt zone
441.3	11.1	2.24	62	.32	432.1				
453.1	11.8	2.38	12	.26					
462.0	8.9	2.55	51	.34				Hf	- Pale grn Hf wl pale Arg
474.1	12.1	2.69	83	.72	2810	0.76	.41		wk-med cpy-py-mag.
478.2	4.1	2.43	88	.30	442.1	0.76		Arg	30° flt cnt @ 474.1'
482.5	4.3	2.60	15	.11					
492.8	10.3	2.54	68	.05				Qtzt	
503.0	10.2	2.56	10	.04					- wht Qtzt wl med-ct Sri
515.2	12.2	2.51	63	.13	2770		.13		
527.5	12.3	2.62	40	.06	512.1				
530.9	3.4	2.62	57	.05					ggy cnt.
549.0	16.1	2.52	78	.23				Mp	Lt brn ggy Mp wl sp-
551.6	16.6	2.45	66	.32	2720	0.53	.18		wk cpy. 535'-2' flt zone
562.0	10.4	2.50	84	.53	532.1	0.53			30° flt sil cnt.
569.0	7.0	2.56	93	.13				Qtzt	
580.0	11.0	2.54	85	.07					wht locally brn Qtzt.
590.6	10.6	2.58	9[illegible]	.11	2670		.21		
599.7	9.1	2.60	7[illegible]	.19	592.1				
609.6	9.9	2.58	53	.2					
614.8	5.2	2.59	81	.11					
624.2	9.4	2.56	84	.08					

MIS807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3282.1 D.D. HOLE NO. M-66

SURVEY COORD. N 361,737.90

PROPERTY Mission E. 762,736.77 TOTAL DEPTH 951.6

DATE COMPLETED [illegible] DRILL GRID COORD. N 31+98 W 49+98 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
6242								Qtzt	
6326	6.4	2.57	91	.11	2650		.12		
6392	6.6	2.62	46	.10	632.1				639.2' brkn cut
6393	11.1	2.62	79	.12				Arg	645.8' - 30° brkn gay flt zone.
6399	9.5	2.62	54	.14				Qtzt	
6637	3.9	2.63	89	.15					Dense wht Qtzt
6756	11.9	2.57	22	.12	2610		.12		
6778	2.2	2.62	91	.30	672.1			Hf	
6870	9.2	2.64	90	1.12		1.21			Med-st cpy-py w/ mag.
6970	10.0	2.83	100	1.23					
7060	9.0	3.02	98	.25	2570		.71		
7160	10.0	3.13	96	.29	712.1				
7245	6.5	3.38	86	.03				Tt	Dense brn Tt
7330	5.5	3.41	79	.03				Tt-Hf	Mixed Hf-Tt
7430	12.0	3.30	94	.03				Hf	
7515	8.5	3.44	84	.23	2530	0.47	.12		746.5' ∠60° Recem flt w/ gyp.
7622	10.7	3.44	95	.47	752.1	0.47		Hf-Tt	Mixed Hf-Tt w/ blebs Mb.
7715	9.3	2.75	100	.27				Mb	762.2' Hf-Mb cnt; grades to Hf
7797	8.2	3.59	98	1.94		1.35		Hf-Tt-Mb	Mixed w/ med cpy-bn-py
7862	6.5	2.98	95	.61	2490		.12	Mb	bn-cpy-py; Tr. Moly
7970	10.5	2.67	100	.31	792.1				
8065	9.5	2.65	97	.07					wht Mb w/ pats gar, serp, wol.
8134	6.9	2.66	96	.52					813.4' - Mb-Arg cnt.
8231	9.7	3.17	85	.90		0.90		Arg Gyp	wk-mod bn-cpy; st gyp.
8314	8.3	2.64	100	.71	2450		.33	Arg	Tan-brn dense Arg.
8403	5.9	2.61	97	.11	832.1				
8479	7.6	3.17	73	.54				Gyp-Mb-Hf	Mixed w/ bn, cpy, py
8603	12.4	3.29	96	3.18		2.61		Hf Tt	Mod-st bn-cpy
8712	10.9	3.18	59	2.72	2410		2.02	Hf	cpy-bn
8791	7.9	2.45	88	.13	872.1				
8860	11.9	3.03	90	.30					
8936	7.6	3.03	93	1.50					
9040	10.4	2.81	93	.80		1.37			cpy-bn-moly
9140	10.0	2.69	98	1.98	2370	1.48	.99		
9241	10.1	2.66	97	.07	912.1			Qtzt	914' - grad Hf-Qtzt cnt.
9320	7.9	2.96	96	.03					
9411	9.1	2.62	100	.01					wht Qtzt w/ tr-med moly
9516	10.5	2.63	79	.01					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3279.3 D.D. HOLE NO. M-65

SURVEY COORD. N 362,618.54

PROPERTY Mission E. 761,974.40 TOTAL DEPTH 857.0

DATE COMPLETED 5/17/63 DRILL GRID COORD. N 40+41 W 57+47 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
191.0								Alluv	BR @ ± 191'
201.9	10.9	2.42	82	.03				Mp	
210.7	8.8	2.45	69	.10					
220.1	9.4	2.44	97	.11					- St. alt & leached Mp
229.0	8.9	2.44	89	.07	3050		.07		
240.5	11.5	2.52	90	.39	229.3				Base Oxidation ± 236.0'
250.8	10.3	2.52	87	.11					
261.3	10.5	2.53	79	.14					
270.9	9.6	2.55	74	.12	3010		.20		
281.0	10.1	2.51	88	.11	269.3				
291.0	10.0	2.55	91	.11					
301.2	10.2	2.55	87	.12					
311.0	9.8	2.57	98	.12	2970		.11		
319.6	8.6	2.56	95	.09	309.3				
327.7	8.1	2.54	99	.10					
340.2	12.5	2.58	99	.10					
351.1	10.9	2.62	99	.15	2930		.11		
360.6	9.5	2.55	100	.09	349.3				- wht - ltgr - pk Mp w/ wk -
369.0	8.4	2.57	98	.13					med ser alt & local Qtz -
379.4	10.4	2.59	99	.12					Feld repl.
390.1	10.7	2.59	100	.11	2890		.11		
396.5	6.4	2.58	100	.10	389.3				
400.0	3.5	2.58	98	.10					
410.1	10.1	2.58	100	.13					
418.0	7.9	2.60	100	.16					
426.4	8.4	2.56	98	.12	2850		.13		
436.5	10.1	2.48	100	.12	429.3				
446.2	9.7	2.60	99	.11					
456.4	10.2	2.50	100	.12					
465.0	8.6	2.58	99	.12	2810		.13		
472.6	7.6	2.60	100	.22	469.3				
482.8	10.2	2.64	96	.13					
489.1	6.3	2.66	100	.12					489.1 - 50° Mp - Qtzt cnt @ gyp v lt.
496.7	7.6	2.63	96	.05				Qtzt	
505.3	8.6	2.63	100	.04				Qtzt-Arg	- Pats Arg in Qtzt
515.4	10.1	2.60	100	.07	2770		.10	Qtzt	
521.0	5.6	2.61	100	.08	509.3				- wht Qtzt w/ pats tan siliceous
531.2	10.2	2.60	100	.12					rock
541.3	10.1	2.65	100	.06				Arg	531.3° Qtzt - Arg cnt.
551.0	9.7	2.62	99	.06	2730		.08		
561.3	10.3	2.63	81	.04	549.3				- Tan-brn Arg w/ pats Qtzt.
566.4	5.1	2.66	97	.07					
575.2	8.8	2.60	100	.08					
585.2	10.0	2.68	96	.09				Qtzt	- Dense wht Qtzt.
592.0	6.8	2.60	97	.22	2690		.08		

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3,279.3

SURVEY COORD. N 362,618.54
E 761,974.40

D.D. HOLE NO. M-65

PROPERTY Mission

TOTAL DEPTH 857.0

DATE COMPLETED 5/17/63

DRILL GRID COORD. N 40+41
W 57+47

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
592.0					589.3				45° Hf-Qtzt cnt @ 592.0
605.2	13.2	2.91	97	.63		.68		Hf	610.8 possible bx.
610.9	5.7	2.34	100	.79					
620.4	9.5	2.50	73	.38					
626.5	6.1	2.57	99	.16				Mp	6.1' int Mp.
635.6	9.1	2.98	100	1.04	2650	1.04	.50	Tt	
645.6	10.0	3.34	93	.55	629.3				
654.4	9.8	3.37	99	.63		.69			
663.5	8.1	3.33	98	.63					
673.7	10.2	3.38	95	.75	2610		.69		- sp-at cpy-py w/ local Mag
680.1	6.4	3.39	92	.55	669.3				
690.2	10.1	3.26	100	.55		.71			
700.2	10.0	3.36	100	.41					
710.2	10.0	3.05	100	1.33	2570		.71		
720.2	10.0	3.03	98	1.48	709.3				
730.2	10.0	3.04	97	3.49		2.85			- 50.5' of 2.60% Cu
740.5	10.3	3.01	93	2.93					
750.2	10.2	2.97	95	3.76	2530	3.76	2.85		
760.8	10.1	2.66	100	.97	749.3	.97		Tt-Hf	
773.3	12.5	2.59	98	.07				Qtzt	
782.3	9.0	2.53	99	.04					
791.5	9.2	2.59	97	.02	2490		.41		- wht Qtzt w/ wk ser alt.
800.3	8.8	2.47	90	.03	789.3				
806.7	6.4	2.98	96	.02					
814.6	7.9	2.56	100	.03					
824.8	10.2	3.66	85	.02					
833.0	8.2	2.56	100	.02	2450		.02		
839.8	6.8	2.57	95	tr.	829.3			Mp? or Fp	Dense wht siliceous sericitized
847.6	7.8	2.62	99	tr.					rock w/ faint porph text
857.8	10.2	2.60	94	.01				Mp-Qtzt	

MIS-807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF TWO COLLAR ELEV. 3271.1 D.D. HOLE NO. M-64

SURVEY COORD. N 361,748.59

PROPERTY MISSION E. 762,987.75 TOTAL DEPTH 959.0

DATE COMPLETED 4/30/63 DRILL GRID COORD. N 31+55 W 47+47 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
									Top C cg ± 190'
198.0								Alluv	
200.0	2.0	2.45	39	.06				C cg	BR ± 200'
209.0	9.0	2.41	28	.06				Arg	Br Kn, strongly altered Arg
219.6	10.6	2.42	70	.08	3050		.04		Bx in clayed Gg. locally
228.0	8.4	2.46	73	.09	221.1				leached
238.0	10.0	2.51	83	.17					
249.5	11.5	2.18	97	.07					
254.5	5.0	2.56	91	1.26		1.02			Base Oxides 254.5'
262.8	8.3	2.71	72	.84	3010	.84	.37		Mod Nat. Cu w/tr cc
273.0	10.2	2.63	100	.13	261.1				
284.5	11.5	2.59	94	.16					
289.7	5.2	2.61	34	.14					
300.5	10.8	2.62	83	.11	2970		.17		
311.7	11.2	2.62	88	.13	301.1				
321.7	10.0	2.63	88	.12					
331.2	9.5	2.57	76	.18					
341.0	9.8	2.64	95	.31	2930		.18		
352.0	11.0	2.64	81	.20	341.1				Brn to Gr Arg w/ Arkostic
361.5	9.5	2.62	83	.12					texture
371.5	10.0	2.61	65	.16					
379.4	7.9	2.65	79	.23					371.5' to 392.8: Pass. st
383.8	4.4	2.57	47	.15	2890		.18		Flt zone w/ bx-gg
392.8	9.0	2.57	54	.33	381.1				
400.5	7.7	2.61	87	.33					
410.5	10.0	2.59	83	.33					
416.4	5.9	2.61	24	.18					
424.4	8.0	2.45	82	.98	2850	.98	.37	Hf	
433.0	8.6	2.44	51	.70	421.1				
441.5	8.5	2.36	100	1.35					Mod diss. & vlt Cpy-Py
449.9	8.4	2.23	98	1.27		1.18		Hf-Bx	
458.2	8.3	2.43	55	1.60					
462.3	4.1	2.27	55	.93	2810	.93	1.18		
468.5	6.2	2.48	55	.12	461.1			Arg	40° Flt cnt @ 468.5' w/ Mp
478.6	10.1	2.52	90	.18				Mp	st Alt Mp
488.7	10.1	2.53	38	.13					
496.6	7.9	2.33	70	.26				Arg	Brkn-gry Arg
508.6	12.0	2.71	42	.86	2770	.86	.27	Hf	Mod cpy
517.3	8.7	2.56	52	1.56	501.1	1.24			
522.2	4.9	2.59	72	.33				Hf-Arg	Hf-Arg cnt @ 519.2'
532.3	10.1	2.53	43	.18				Arg	
540.3	8.0	2.27	90	.10	2730	3.46	.68		
552.3	12.0	2.65	22	3.46	541.1	3.46			± 540' 75° vlt cpy-py
564.3	12.0	2.58	90	.25					± 551' Mass cpy in Qtz vein
569.9	5.6	2.57	62	.12				Arg-Qtzt	
581.0	11.1	2.57	53	.07				Qtzt	Pass flt zone from 2790'-281.5'

MIS 507A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two

COLLAR ELEV. 3271.1

SURVEY COORD. N 361,748.59
E 762,987.75

D.D. HOLE NO. M-64

TOTAL DEPTH 959.0

PROPERTY Mission

DATE COMPLETED 4/30/63

DRILL GRID COORD. N31+55
W47+47

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
581.0					2690		1.08		
589.0	8.0	2.46	91	.16	581.1			Mp	
597.0	8.0	2.57	88	.15				Arg	
605.0	8.0	2.68	96	.34				Hf	
616.4	11.4	2.72	87	.44		.71			
626.8	10.4	2.32	92	1.37	2650 621.1		.42		wk-mod cpy-py
634.4	7.6	2.56	99	.48		.86		Hf-Arg	
643.8	9.4	2.60	82	.26				Arg	
654.6	10.8	2.57	92	.25				Qtzt	648.6'-60° Recem bx zone
664.5	9.9	2.64	86	.13	2610 661.1		.44		
673.8	9.3	2.65	67	.16					
678.0	4.2	2.64	45	.11					
682.9	4.9	2.65	90	.42		.42			
690.8	7.9	2.64	87	.24					Grad Qtzt-Hf cnt @ 690.8'
700.7	9.9	2.53	76	.75	2570 701.1		.35	Hf	
708.3	7.6	2.45	85	.19					Sp-mod vlt, pat & diss cpy-py wi wk-Tr mag (locally st)
719.5	11.2	2.55	100	2.24		1.15			
729.5	10.0	3.04	98	1.23					
739.5	10.0	3.02	100	.67	2530 741.1		1.15		
749.5	10.0	3.15	95	.24					
759.5	10.0	2.98	98	.23					
765.3	5.8	2.85	100	.28					
775.5	10.2	3.23	92	.38				Hf-Tt	
782.8	7.3	3.06	100	.47	2490 781.1	.47	.31	Hf	
792.7	9.9	2.92	100	.22					
801.3	8.6	3.16	97	1.04				Hf-Tt	wk-mod vlt, pat & diss cpy
811.4	10.1	3.56	83	1.84				Hf-Tt-Mb	bn, sph, py in gra Hf,
820.5	9.1	2.64	100	.14	2450	.57	.80	Mb	yel-gra Tt & wht Mb
829.4	8.9	2.81	100	.57	821.1				Mb grades to Hf @ ± 829'
834.8	5.4	3.11	100	3.82		1.85		Hf	834.8' Hf-Qtzt cnt
845.0	10.2	2.62	96	.07				Qtzt	
851.7	6.7	2.62	100	.05					
856.5	4.8	3.08	98	.08				Hf	Pale gra silf Hf
867.0	10.5	2.69	100	.03	2410 861.1		.67	Qtzt	860.8'-55° Recem Flt? bx
876.8	9.8	2.60	100	.02					
884.5	7.7	2.57	100	.03					
893.5	9.0	2.60	97	.04					
904.1	10.6	2.61	100	.01	2370		.03		904.1' Low Qtzt-Hf cnt
912.6	8.5	2.86	87	1.17	901.1	1.17		Hf	Mod diss py, cpy, bn
921.0	8.4	3.04	99	.27					
931.6	10.6	2.61	87	.03				Qtzt	
941.3	9.7	2.61	100	.02	2330		.32		Dense wht Qtzt wi sp sulfs
948.6	7.3	2.61	97	.03	941.1				
959.0	10.4	2.58	91	.03					

MIS-807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3259.0

SURVEY COORD. N 361,178.73

E. 764,491.51

D.D. HOLE NO. M-63

PROPERTY Mission

TOTAL DEPTH 864.7

DATE COMPLETED 5-1-63

DRILL GRID COORD. N 25 + 63 W 32 + 52

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
								Alluv	
191.0	191.0							Cog	Top CCg ± 184'
199.3	8.3							Arg	
209.1	9.8	2.37	.73	.10			.02		
220.3	11.2	2.53	.92	.08					
226.1	5.8	2.44	.98	.07					±226' Base of oxidation
235.0	8.9	2.61	.91	.17					
244.4	9.4	2.68	.90	.15					Brn-tan Arg w/ Jn-wk'
254.1	9.7	2.67	.93	.20			.13		> sulf & local bx or Cgl
264.5	10.4	2.78	.53	.38					Text.
274.2	9.7	2.63	1.00	.34					
284.3	10.1	2.65	.95	.22					
292.3	8.0	2.62	.97	.25			.30		
301.0	8.7	2.62	1.00	.28					
311.3	10.3	2.68	.96	.26					
312.9	8.6	2.66	1.00	.23					
324.4	9.5	2.65	.74	.20					
333.3	8.9	2.74	.94	.34			.26		327.4 - 35° flt bx-gg, 4"
342.3	9.0	2.59	1.00	.29					
353.9	11.6	2.66	.97	.34					
364.3	10.4	2.69	1.00	.26					
372.3	8.0	2.67	1.00	.31			.27		
382.2	9.9	2.63	.92	.35				Arg-Cgl	
386.3	4.1	2.66	.95	.31					
397.1	10.8	2.64	1.00	.44					
404.9	7.3	2.62	1.00	.43		0.43			
414.6	10.2	2.66	.87	.66		0.66	.42		Brn-Tan dig Cgl w/ wk cpy
424.5	9.9	2.64	1.00	.27					py
431.1	6.6	2.67	.99	.23					70° flt @ 439.5'
442.7	11.6	2.67	.95	.20					
453.7	11.0	2.64	1.00	.18			.28		
463.0	9.3	2.61	1.00	.16				Qtzt	wht Qtzt from 463' to 473'
473.0	10.0	2.70	.97	.25				Arg-Cgl	
484.3	11.3	2.67	.94	.33					
491.6	7.3	2.68	1.00	.26			.25		
499.6	8.0	2.67	.95	.33					
512.2	12.6	2.66	.97	.38					
522.6	10.4	2.64	.98	.33					Silicified Congl texture
532.5	9.9	2.69	1.00	.33			.34		Arg w/ wk mineralization
541.6	9.6	2.70	.98	.43					
550.2	8.6	2.72	.99	.40		0.41			
555.0	4.8	2.60	1.00	.41					
564.1	9.1	2.69	1.00	.35					
575.3	11.2	2.70	.97	.34			.38		
583.2	7.9	2.66	.95	.38					
595.3	12.1	2.68	1.00	.47					

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3259.0

D.D. HOLE NO. M-63

SURVEY COORD. N 361,128.73

E. 764,491.51

PROPERTY Mission

TOTAL DEPTH 864.7

DATE COMPLETED 5-1-63

DRILL GRID COORD. N 25+63 W 32+52

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
595.3									
601.5	6.2	2.78	.95	.67		0.54			
610.0	8.5	2.70	1.00	.54	2450 609.0		.48		
618.0	8.0	2.69	.97	.69		0.69			
625.1	7.1	2.64	1.00	.24					
632.8	12.7	2.55	1.00	.45		0.45			
645.3	7.5	2.59	.91	.18				Qtzt	
657.1	11.8	2.60	.90	.16	2460 649.0		.39		
665.3	8.2	2.61	.91	.19					
678.8	13.5	2.64	.92	.34					wht to tan Qtzt w/ local st gulls
692.1	13.3	2.56	1.00	.18	2520 683.0		.24		
704.0	11.9	2.69	.98	.51		0.78			
715.4	11.4	2.75	.92	1.07					
723.8	8.4	2.74	.98	.23					
731.7	7.9	2.63	1.00	.11	2535 727.0		.53		
742.6	10.9	2.69	.86	.23					
752.8	10.2	2.84	.97	1.55				HF	
760.9	8.1	3.10	.53	1.43		1.53			759.9' - 45° Qzy bx Rare FH to
771.6	10.7	2.72	.98	1.61	2590 767.0		1.08		771.6'. Mins: Cpy, Py, bn w/
780.8	9.2	2.82	.92	.90					mag & Tr Moly
790.8	10.0	2.90	.99	.53		0.68			
800.8	10.0	2.77	1.00	.41					
805.4	4.6	3.00	.97	.13					
813.2	7.8	2.62	.93	.08	2620 807.0		.57	Qtzt	
816.6	3.4	2.66	1.00	.13				HF	813-816 Brkw HF text.
823.0	6.4	2.70	.85	.10					
828.9	5.9	2.76	.97	.05				Mb	
837.8	8.9	2.83	.31	.63		0.63			Pure wht Mb w/ wk parts
846.7	10.9	3.13	.96	.06	2710 840.0		.20		gar & some chert. Bn in
855.1	6.4	2.76	1.00	.01					ore-grade run.
864.7	9.6	2.68	1.00	.03			.02		

MIS 8078 — 79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3283.2

SURVEY COORD. N 362,338.31
E. 762,225.07

D.D. HOLE NO. M-62

PROPERTY Mission

TOTAL DEPTH 878.0

DATE COMPLETED 4/6/63

DRILL GRID COORD. N 37+56
W 55+01

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. @ Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
195.0								Alluv	C.c.g (?)
202.4	7.4							CCg	BR @ 202.4'
213.0	10.6	2.48	96	.12				Mp	
221.0	8.0	2.51	97	.11					
224.5	8.5	2.44	100	.09					
236.6	7.1	2.45	73	.58	3010 / 233.2	0.58	.15		wk-Mod chrys, wk blk Cu Ox
245.5	8.9	2.40	17	.49					Tr Nat Cu, Base Oxides
253.3	7.8	2.36	56	.87		0.73			@ 264.2'
264.2	10.9	2.33	94	.92				Mp-Arg	Arg? w/ Mp text.
275.2	11.0	2.60	76	.19	3010 / 273.2		.62		Mp w/ mis Arg
287.0	11.8	2.51	29	.16				Mp	
294.7	7.7	2.49	85	.12					
296.3	1.6	2.54	21	.10					
307.0	10.7	2.54	84	.10					
312.0	5.0	2.56	65	.16	2970 / 313.2		.13		
316.7	4.7	2.55	38	.10					
322.4	5.7	2.51	84	.10					
331.7	9.3	2.54	67	.12					
340.0	8.3	2.59	70	.15					Lusc-Mp w/ local
355.5	15.5	2.60	99	.16	2930 / 353.2		.14		pats Arg & qtz-gyp vlts
367.7	12.2	2.59	100	.16					wk-Mod ser. local
375.0	7.3	2.58	99	.16					feldspath.
383.6	8.6	2.57	100	.20					
392.0	8.4	2.59	99	.18	2890 / 393.2		.17		
403.0	11.0	2.56	93	.16					
412.0	9.0	2.69	97	.14					
421.7	9.7	2.60	100	.14					
433.4	11.7	2.69	98	.15	2850 / 433.2		.15		
438.6	5.2	2.66	96	.18					
449.0	10.4	2.59	95	.18					
460.8	11.8	2.49	97	.16					
471.8	11.0	2.59	100	.15	2810 / 473.2		.17		
482.1	10.3	2.60	100	.16					
490.9	8.8	2.59	96	.17					
502.1	11.2	2.59	98	.17					
512.4	10.3	2.55	97	.18	2770 / 513.2		.17		
523.9	11.5	2.59	99	.19					
534.2	10.3	2.56	97	.20					
541.2	7.0	2.62	94	.18					541.2 - 10° Mp-Arg cnt.
549.1	7.9	2.63	100	.05				Arg	Tan-brn Arg
559.1	10.0	2.62	98	.05	2730 / 553.2		.15		
571.5	12.4	2.61	100	.05				Qtzt-Arg	short int Mp @ 562.1'
581.0	9.5	2.62	93	.06				Qtzt	573.5 gg-bx poss flt?
589.4	8.4	2.62	100	.09					
598.4	9.0	2.61	98	.08	2690 / 593.2		.06		
606.7	8.3	2.56	100	.08					

MS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3283.2

D.D. HOLE NO. M-62

SURVEY COORD. N 362,338.31

PROPERTY Mission

E. 762,225.07

TOTAL DEPTH 878.0

DATE COMPLETED 4/6/63

DRILL GRID COORD. N 37+56 W 55+01.

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
606.7								Qtzt	
617.2	10.5	2.62	100	.11					
627.4	10.2	2.62	97	.12					
637.2	9.8	2.60	100	.13	2650 / 633.2		.11		
647.3	10.1	2.63	98	.09					-Dense tan to wht Qtzt w/
654.0	6.7	2.61	100	.10					local pats Arg
664.1	10.1	2.60	98	.12					
674.3	10.2	2.62	45	.08	2610 / 673.2		.10		
683.6	9.3	2.59	93	.09					
691.3	7.7	2.62	95	.12					
701.4	10.1	2.59	98	.18					
710.8	9.4	2.58	75	.09					
716.0	5.2	2.70	10	.06	2570 / 713.2		.12		
722.8	6.8	2.65	100	1.32		1.32		Hf-Tt	Pat & wt cpy Tr mag.
732.5	9.7	2.66	75	.06				Qtzt	722.8 - 40° Tt-Qtzt int.
743.3	10.8	2.59	100	.04					
753.1	9.8	2.43	100	.07	2530 / 753.2		.28		
762.9	9.8	2.79	66	.04					
772.2	9.3	2.59	95	.04					Dense wht locally brkn &
779.1	6.9	2.59	96	.05					vuggy Qtzt.
788.2	9.1	2.58	100	.02					
798.6	10.4	2.18	100	.03	2490 / 793.2		.04		
806.2	7.6	2.60	92	.04					
814.5	8.3	2.72	100	.03					30° cnt @ slip
823.5	9.0	2.74	99	.07				Hf-Mb	816.4' 60° Hf-Mb cnt @ gypvlt
830.6	7.1	2.70	100	.09				Mb	
840.7	10.1	2.75	96	.03	2450 / 833.2		.05	Mb-Hf SYP	832.5' - 45° flt zone.
847.5	6.8	2.73	94	.04					
857.6	10.1	2.62	90	.06					853.0' 2.0' gpy zone (flt?)
867.6	10.0	2.50	100	.04					
878.0	10.4	2.80	71	.02	2410 / 873.2		.04 / .02	Mb	wht gypsiferous Mb.

MIS-807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF THREE

COLLAR ELEV. 3267.6

SURVEY COORD. N 361,169.54
E. 763,993.38

D.D. HOLE NO. M-61

PROPERTY MISSION

TOTAL DEPTH 1064.5

DATE COMPLETED 4/15/63

DRILL GRID COORD. N 25+61
W 37+50

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recov. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
191.0								Alluv	
201.3	10.3	—	98	—			16.3' E		
210.8	9.5	2.42	98	.23			2.42	CCg	BR ± 201.3'
220.9	10.1	2.43	96	.55	3050	0.55	.12	Arg-cgl	
226.9	6.0	2.46	98	1.60	217.6	1.23			Mod Cu sfide Cu O.
236.8	9.9	2.60	96	.31					Base Oxides 226.9'
244.4	7.6	3.49	74	.25			2.74		
253.0	8.6	2.60	96	.30					
262.6	9.6	2.61	100	.20	3010		.49		
273.1	10.5	2.62	96	.16	257.6				
281.4	8.3	2.53	94	.29					
286.4	5.0	2.58	100	.36			2.60		
294.6	8.2	2.64	99	.20	2970		.23		
304.2	9.6	2.60	100	.23	297.6				
313.3	9.1	2.61	100	.20					
325.2	11.9	2.59	100	.22			2.61		
331.9	6.7	2.65	97	.15	2930		.20		
343.0	11.1	2.63	100	.17	337.6				
353.8	10.8	2.61	99	.30					
365.3	11.5	2.65	96	.16			2.63		
374.7	9.4	2.63	100	.22	2890		.23		
383.3	8.6	2.69	100	.34	377.6				
394.5	11.2	2.65	97	.27					
405.3	10.8	2.64	91	.28			2.65		
414.8	9.5	2.64	99	.39	2850		.32		
425.0	10.2	2.60	86	.39	417.6				
434.0	9.0	2.66	98	.33					
444.8	10.8	2.64	94	.21			2.64		
455.2	10.4	2.66	99	.19	2810		.26		
465.4	10.2	2.68	97	.21	457.6				
476.3	10.9	2.62	96	.20					
487.0	10.7	2.62	97	.26			2.63		
499.5	12.5	2.62	96	.21	2770		.22		
508.2	8.7	2.66	100	.29	497.6				
519.0	10.8	2.68	94	.68					
529.0	10.0	2.66	96	.70		0.77	2.66		
535.2	6.2	2.65	99	.99	2730		.64		Diss & vlt cpy-py
544.9	9.7	2.62	98	.95	537.6				
554.7	9.8	2.74	90	.58		0.74			
562.7	8.0	2.58	90	.27			2.66		
570.6	7.9	2.68	96	.14					
580.8	10.2	2.68	100	.28	2690		.45		
584.9	4.1	3.05	93	2.73	577.6	2.73		Hf	Alt Hf st cpy Cnt 580.8
594.6	9.7	2.63	96	.33				Qtzt	
601.2	6.6	2.64	100	.21					
612.5	11.3	2.67	95	.48		0.48			

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF THREE COLLAR ELEV. 3267.6 D.D. HOLE NO. M-61

SURVEY COORD. N 361,169.54

PROPERTY MISSION E. 763,993.38 TOTAL DEPTH 1064.5

DATE COMPLETED 4/15/63 DRILL GRID COORD. N 25+61 INCLINATION VERTICAL

W 37+50

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
612.5							2.69	Qtzt	
621.9	9.4	2.62	98	.11	2650 617.6		.57		
629.4	7.5	2.61	100	.14					625.4' 80° Recem flt bx.
639.7	10.3	2.63	96	.21					
646.6	6.9	2.65	100	.20			2.63		
653.3	6.7	2.64	96	.16	2610				
660.0	6.7	2.65	98	.25	657.6		.19		
670.0	10.0	2.63	99	.24					
682.2	12.2	2.63	100	.42		0.42	2.63		wlts & stks cpy-py-moly
688.6	6.4	2.62	100	.15					
697.8	9.2	2.63	96	.19	2570 697.6		.27		
707.8	10.0	2.63	97	.21					
715.6	7.8	2.63	100	.24					
725.1	9.5	2.65	100	.55		0.55	2.63		
734.0	8.9	2.62	100	.22	2530		.31		
746.6	12.6	2.63	100	.29	737.6				
751.5	4.9	2.63	97	.35					
761.0	9.5	2.65	91	.31			2.58		
771.0	10.0	2.42	100	.44					vlt cpy-py-moly
781.0	10.0	2.64	100	.62	2490 777.6	0.62	.39		
790.2	9.2	2.67	100	.33					
799.6	9.4	2.95	90	.19			2.98		cnt 797.8' c wlt slip
811.1	11.5	3.32	100	.08				Hf-Tl	
821.1	10.0	3.04	100	2.45	2450 817.6	2.45	.59		820.2' 40° Recem flt(?) cnt.
832.3	11.2	2.64	21	.41				Qtzt	
842.5	10.2	2.65	74	.32			2.72		
852.1	9.6	2.65	100	.17	2410				
863.7	11.6	2.90	95	.34	857.6		.50		
874.3	10.6	2.66	93	.20					
881.2	6.9	2.61	98	.20			2.66		
889.9	8.7	2.62	99	.23					
898.9	9.0	2.58	98	.12	2370 897.6		.21		
908.9	10.0	2.57	100	.13					
919.7	10.8	2.64	100	.19					
926.5	6.8	3.10	94	.55		0.60	2.84	Qtzt-Hf	
936.0	9.5	3.21	88	.64				Hf	938.0' 70° Qtzt-Hf cnt @ slip.
940.1	4.1	2.90	100	.23	2330 937.6		.34	Qtzt-Hf	
950.7	10.6	3.00	75	.52		0.52		Hf	
955.3	4.6	2.95	54	.11					
964.1	8.8	3.18	100	.70			2.98		20° to 50° Gyp & Sul limestone
972.2	8.1	3.09	87	2.05		1.35			972.4' 60° frac cnt.
979.2	7.0	2.61	100	.10	2290 977.6		.75	Qtzt	
988.4	9.2	2.60	100	.04					
997.1	8.7	2.67	96	.11					
1000.6	3.5	2.80	100	.33				Qtzt-Hf	
1010.5	9.9	3.22	93	1.05				Hf	st cpy & gar pots

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF THREE

COLLAR ELEV. 3267.6

D.D. HOLE NO. M-61

SURVEY COORD. N 361,169.54

E. 763,993.38

PROPERTY MISSION

TOTAL DEPTH 1064.5

DATE COMPLETED 4/15/63

DRILL GRID COORD. N 25+61 W 37+50

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1010.5							2.91	Hf	
1019.4	8.9	3.29	97	1.41	2250		.58		
1029.0	9.6	3.40	85	1.09	1017.6				Tt in this run
1036.5	7.5	3.08	62	.28					
1045.1	8.6	3.13	78	.25			3.14	Hf-Mb	Sp gar pats wk bn
1054.8	9.7	2.95	100	.72	2210	0.72	.62		
1064.5	9.7	2.97	100	.15	1057.6		6.9 @ 2.97	Mb	
Arith	Avg SG	2.73							
WTD	Avg. S.G.	2.72							

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3,267.4

SURVEY COORD. N 362,334.54

E. 762,724.98

D.D. HOLE NO. M-60

PROPERTY MISSION

TOTAL DEPTH 903.2

DATE COMPLETED 3-18-63

DRILL GRID COORD. N 3[illegible] W 5[illegible]

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
165.0								Alluv.	
191.0	26.0				[illegible] 1774		—		Top CCg @ 190'
218.0	27.0		75		[illegible] 2174			CCg	BR @ 218.0
228.4	10.4	2.54	97	0.30				Arg	
239.2	10.8	2.54	82	0.30					
249.3	10.1	2.55	77	0.11					
252.6	3.3	2.48	81	0.16					
264.0	11.4	2.57	98	0.25	[illegible] 2574		0.23		264' Base Oxides
276.7	12.7	2.60	88	0.41					diss cpy
287.2	10.5	2.57	80	0.74		0.56			
297.0	9.8	2.63	65	0.19					
306.2	9.2	2.59	100	0.18	2970 2974		0.41		
316.3	10.1	2.62	77	0.17					
323.4	7.1	2.55	64	0.14					
332.5	9.1	2.56	52	0.10				Mp	
342.7	10.2	2.50	48	0.17	[illegible] 3374		0.15		
352.0	9.3	2.52	19	0.17					
364.0	12.0	2.35	35	0.74				Hf	
373.1	9.1	3.19	38	1.49		1.06			Mod diss & vlt cpy-py-mag.
385.3	12.2	2.57	05	1.24	2370 3774		0.74		Tr Moly Poss Flt zone
394.0	8.7	2.54	26	0.87		0.95			
406.2	12.2	2.50	60	0.21				Arg	
414.1	7.9	2.54	97	0.17					
426.2	12.1	2.51	100	0.14	2850 4174		0.50		
436.3	10.1	2.59	99	1.74		1.74			Mod diss & vlt cpy-py
446.2	9.9	2.61	103	0.30					
455.5	9.3	2.66	99	0.06					
463.8	8.3	2.70	95	0.10	2810 4574		0.56		
473.8	10.0	2.61	101	0.09					
484.2	10.4	2.61	81	0.10					483.0 - 65° Bx-sg zone
496.5	12.3	2.61	98	0.02					
505.0	8.5	2.64	100	0.05	2770 4974		0.07	Arg & Qtzt	
512.3	7.3	2.60	64	0.04					
517.3	5.0		0.0	—					No core recovered
527.4	10.1	2.57	80	0.26				Arg	
531.6	4.2	2.56	82	0.31				Mp	Reduced to Bx @ 531.6'
540.0	8.4	2.57	93	0.13	2730 5374		0.13	Arg & Qtzt	
550.0	10.0	2.58	62	0.06					
557.0	7.0	2.60	69	0.05					
568.0	11.0	2.51	64	0.16				Mp	
573.4	5.4	2.57	81	0.19					
583.4	10.0	2.57	80	0.19	2610 5774		0.12		
593.4	10.0	2.62	71	0.16					
598.5	5.1	2.59	87	0.10					
610.7	12.2	2.59	72	0.08			0.12	Arg	
620.5	9.8	2.62	93	0.09	2650 6174				

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3,267.4

D.D. HOLE NO. M-60

SURVEY COORD. N 362,334.54

E. 762,724.98

PROPERTY MISSION

TOTAL DEPTH 903.2

DATE COMPLETED 3-18-63

DRILL GRID COORD. N 3745.14

W 5001.04

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
620.5								Arg	
623.9	3.4	2.60	88	0.45					wk cpy-py
634.4	10.5	3.02	100	0.54		0.53		Hf	
646.0	11.6	2.75	100	0.54					
654.5	8.5	2.61	96	0.10				Arg	
661.0	6.5	2.75	98	0.53	2610 / 657.4	0.53	0.40	Hf	
671.0	10.0	2.79	99	0.52		0.52			
683.6	12.6	2.85	98	0.22					20° cut
693.6	10.0	2.64	97	0.09				Qtz-t	
701.0	7.4	2.59	100	0.09	2570 / 697.4		0.28	Hf	
711.0	10.0	2.81	100	1.80					Sp-Mal cpy-py; Tr mag
719.8	8.8	2.10	100	0.84		1.35			
728.2	8.4	2.94	96	0.01					
735.0	6.8	3.03	93	0.08					
743.7	8.7	2.91	99	0.45	2530 / 737.4	0.45	0.70		wk cpy tr bn
754.5	10.8	2.84	100	0.01					
764.1	9.6	3.87	72	0.53		0.53			
774.2	10.1	2.74	100	0.20					
784.3	10.1	3.11	92	0.07	2490 / 777.4		0.28		
793.9	9.6	3.03	100	0.09					789.3 - 0.7' 60° st Moly vlts
803.9	10.0	2.98	100	0.03					
812.5	8.6	3.06	100	0.05					
822.2	9.7	3.49	93	0.32	2450 / 817.4		0.09	Hf-Tr Hf	
832.3	10.1	3.38	95	0.04					
842.3	10.0	2.96	100	0.25					
849.0	6.7	3.08	94	0.28				Hf-Tr	
858.7	9.7	3.02	100	1.11	2410 / 857.4	1.11	0.40		
868.8	10.1	3.39	86	1.34					fine diss & vlt bn w/ cpy
874.3	5.5	3.30	98	1.45		1.48			
883.4	9.1	3.38	72	1.72					
889.0	5.6	2.66	100	0.06				Hf	887.3 - 889.0 Pass 52° flt cut
895.5	6.5	2.60	100	0.35				Qtz-t	
903.2	7.7	2.63	91	0.03	2370 / 897.4		1.03		

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3280.5 D.D. HOLE NO. M-59

SURVEY COORD. N 362,335.23

PROPERTY Mission E. 762,473.60 TOTAL DEPTH 915.2

DATE COMPLETED 2/26/63 DRILL GRID COORD. N 37+50; W 52+52 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
200.0	200.0	—	—	—	3090			Alluv	Top CCg ± 160 (?)
217.4	17.4	—	91	—	190.5			CCg	BR ± 217.4
230.5	13.1	2.26	89	.11	3050		0.11	Arg	
241.5	11.0	2.59	87	.20	230.5				Cu Ox
252.0	10.5	2.55	87	.19					
262.7	10.7	2.56	20	.08					
272.2	9.5	2.55	38	.06	3010		0.14		272.2 Base Oxides
282.9	10.7	2.61	89	.08	270.5				
292.1	9.2	2.64	53	.20					
299.6	7.5	2.59	80	.12					
309.6	10.0	2.63	73	.12	2970		0.13		
319.5	9.9	2.60	30	.12	310.5				
324.0	4.5	2.55	55	.08					wh Suls w/ Tr Nat Cu in chl
329.4	5.4	2.61	53	.18					
340.2	10.8	2.63	07	.28				Arg & Hf	
350.0	9.8	2.47	02	.09	2930		0.16		
375.0	25.0	—	00	.08(?)	350.5			Gyp	350'-375' Poss gyp sand in flt (?)
377.0	2.0	2.30	48	.07					
387.4	10.4	2.31	89	.04	2890	0.68	0.12		Reduced to BX @ 377'
397.0	9.6	2.89	81	.68	390.5	0.68		Hf-Arg	387.4' 30° Gyp-Hf cnt @ frac
409.0	12.0	2.61	39	.12				Arg	394.5' -20° Recem flt bx w/ mag
412.3	3.3	—	00	—					
419.5	7.2	2.57	34	.09				Arg &	
429.2	9.7	2.54	11	.12	2850		0.21	Qtzt	Mixed Tan Arg & wht Qtzt w/
437.6	8.4	2.55	18	.11	430.5				Qtz vlts
443.0	5.4	2.59	45	.08					
454.0	11.0	2.57	85	.07					
465.7	11.7	2.59	65	.05					Shattered Qtzt - Mp cnt
475.5	9.8	2.54	66	.15	2810		0.28	Mp	
485.1	9.6	2.54	31	.13	470.5				
490.0	4.9	2.57	87	.15					
500.0	10.0	2.51	30	.24					
510.2	10.2	2.55	42	.17					
519.9	9.7	2.55	70	.14	2770		0.17		Typical Mp.
526.1	6.2	2.50	52	.11	510.5				
530.1	4.0	2.51	35	.13					
532.5	2.4	2.54	71	.16					
542.5	10.0	2.60	46	.10					
549.5	7.0	2.58	39	.13					
553.0	3.5	2.55	17	.07	2730		0.12		cnt missing
563.1	10.1	2.59	47	.08	550.5			Qtzt	
575.0	11.9	2.59	65	.09					
586.5	11.5	2.62	94	.13					wht dense Qtzt
596.7	10.2	2.61	106	.15	2690		0.10		
610.7	14.0	2.61	104	.06	590.5				
622.5	11.8	2.97	94	.51		0.51		Hf	612' ±10° flt cnt.

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3280.5 D.D. HOLE NO. M-59

SURVEY COORD. N 362,335.23

PROPERTY Mission E. 762,473.60 TOTAL DEPTH 915.2

DATE COMPLETED 2/26/63 DRILL GRID COORD. N 37+50; W 52+52 INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
622.5								Hf	
630.5	8.0	2.91	95	.12	2650 / 630.5		0.22		
640.6	10.1	2.85	103	.61					
650.5	9.9	3.15	97	.42				Tc	
659.7	9.2	3.25	96	.54		0.54			wk-Mod cpy py w/ mag
669.5	9.8	2.94	101	.58					
678.2	8.7	2.61	82	.11	2610 / 670.5		0.53	Arg	
687.0	8.8	2.85	100	.86				Hf	
695.4	8.4	2.90	107	.81		0.76			
701.8	6.4	2.97	100	.54					
711.0	9.2	3.07	97	.28	2570 / 710.5		0.53		Diss & vn cpy-py, Tr mag.
721.0	10.0	2.99	105	.43		0.43			
730.5	9.5	3.05	98	.34					
740.7	10.2	2.92	100	1.81		1.28			
750.7	10.0	2.92	84	.72	2530 / 750.5		0.83		
760.7	10.0	3.38	79	.85		0.85			
765.7	5.0	3.61	87	.11				Hf Tc	
773.0	7.3	2.96	99	.33				Hf	
782.3	9.3	3.03	94	.13					
787.5	5.2	2.70	100	1.08		1.05			st-Mass gyp w/ wk-Mod
797.7	10.2	2.69	95	.99	2470 / 790.5	0.99	0.53		cpy Tr bn.
808.0	10.3	2.71	93	.34					
818.0	10.0	2.74	103	.85		0.85		Hf-Mb	Mixed Hf-Mb
828.0	10.0	2.64	97	.04				Qtz.t	
835.3	7.3	2.61	102	TR	2450 / 830.5		0.49		
845.3	10.0	2.75	101	.38				Hf-Mb	Mb int 842.3 - 852.3
855.4	10.1	2.58	102	.14					
865.5	10.1	2.87	95	NIL				Hf	
874.4	8.9	3.01	98	.03	2410 / 870.5		0.14		
885.2	10.8	2.69	95	.03				Hf Mb	
895.2	10.0	2.80	97	.03					
905.2	10.0	2.66	104	TR				Mb	Mixed wht & lt gr Mb
915.2	10.0	2.67	102	TR	2370 / 910.5		0.02		

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two
COLLAR ELEV. 3271.5
D.D. HOLE NO. M-58
SURVEY COORD. N 362,928.75
PROPERTY Mission
E. 761,965.86
TOTAL DEPTH 726.5
DATE COMPLETED 2-5-63
DRILL GRID COORD. N 4350.77
W 5751.08
INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0									
197.5	7.5								
205.5	8.0	2.45	88	.04					Altered, leached; Tr Co, Cu
216.0	10.5	2.50	90	.12					sils, lim
223.0	7.0	2.52	87	.11	3050		.06		Base of Ox @ 223.0
232.0	9.0	2.48	97	.15	221.5				Fresh, alt Mp
241.0	9.0	2.53	100	.13					
251.5	10.5	2.55	95	.09					
255.2	4.2	2.50	100	.14					
267.2	11.5	2.54	84	.12	3010		.12		
277.7	10.5	2.51	90	.11	261.5				
287.6	9.9	2.53	71	.11					
297.6	10.0	2.64	93	.11					
308.7	11.1	2.60	100	.15	2970		.12		
320.2	11.5	2.62	100	.16	301.5				
331.5	11.3	2.61	100	.16					
339.4	7.9	2.59	97	.14	2930		.15	Mp	
351.0	11.6	2.60	99	.10	341.5				
365.5	14.5	2.58	83	.09					
376.6	11.1	2.59	100	.09					Tr Biot
389.3	12.7	2.59	94	.10	2890		.09		
396.4	7.1	2.58	100	.09	381.5				
405.1	8.7	2.60	100	.08					
416.8	11.7	2.61	94	.07					
430.2	13.4	2.58	100	.10	2850		.08		
440.2	10.0	2.60	100	.10	421.5				
450.2	10.0	2.56	99	.14					
462.3	12.1	2.63	96	.09	2810		.11		St alt
467.2	4.9	2.64	100	.15	461.5				"
473.7	6.5	2.59	100	.08					"
477.2	3.5	2.59	100	.07					" Patches Qtzt (?)
487.5	10.3	2.63	98	.12					45° flt ct. bet. Mp & Qtzt
497.7	10.2	2.67	96	.27				Qtzt	Dense wh. Qtzt, pats Tt
501.3	3.6	2.60	95	.09					
514.5	13.2	2.56	99	.27	2770		.15		Mod gyp filled fracs
524.6	10.1	2.93	92	.53	501.5	.53		Hf	Lt grn Hf, pats Tt
534.6	10.0	2.64	97	.20					
543.5	8.9	2.86	94	.81	2730	.81	.41		St gyp filled fracs, Tr mag,
553.5	10.0	2.96	96	.66	541.5				moly; Dense Tt
563.5	10.0	3.07	88	.69		.92			
573.5	10.0	2.90	100	1.49					Sp moly
583.5	10.0	2.85	100	.83	2690		.92	Tt	St moly
593.5	10.0	2.92	100	.97	581.5				
606.0	12.5	3.05	86	1.59		1.14			Dense hem rich Tt; St gyp
616.0	10.0	2.91	96	.91					" " " " "
626.0	10.0	3.18	89	.97	2650		1.14		" " " " "
					621.5	.97			

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3271.5

SURVEY COORD. N 362,928.75

E. 761,965.86

D.D. HOLE NO. M-58

TOTAL DEPTH 726.5

PROPERTY MISSION

DATE COMPLETED 2-5-63

DRILL GRID COORD. N 4350.77 W 5751.08

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
626.0								Tt +	
636.0	10.0	2.50	100	.33				Hf	Dense Tt wi pats gyp
646.0	10.0	2.52	100	.40		0.40			Mod gyp
656.0	10.0	2.58	100	.04				Qtzt	Dense wh. Qtzt
661.0	5.0	2.61	100	.07					wi pats Tt
670.5	9.5	2.62	94	.04	2610 / 661.5		.31		
680.7	10.2	2.72	97	.47					Dense silicified Tt
690.7	10.0	2.51	100	2.19		1.76		Tt	Mod gyp filled fracs
700.5	9.8	3.25	96	2.65					St brown gar
710.7	10.2	2.76	100	.37	2570 / 701.5		1.33	Mb	wh Mb, Pats Tt
718.5	7.8	2.63	99	.04					
726.5	8.0	2.58	98	Tr.			.15	Qtzt	

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3257.2

SURVEY COORD. N 361,176.61

E. 764,243.02

D.D. HOLE NO. 57

PROPERTY MISSION

TOTAL DEPTH 865.8

DATE COMPLETED 3/18/63

DRILL GRID COORD. N 25+64 ; W 35+01

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	Top Cog ± 168
191.0	191.0								BR ± 190
200.0	9.0	2.50	77	0.11				Arg & Cgl	
210.0	10.0	2.56	82	0.99	3050 / 207.2	0.99	0.50		
218.4	8.4	2.61	65	0.98					
227.4	9.0	2.60	90	0.50					
237.9	10.5	2.58	95	0.54		0.62			
247.0	9.1	2.68	97	0.40					
254.5	7.5	2.58	97	0.25	3010 / 247.2		0.62		
265.3	10.8	2.65	96	0.46					
277.4	12.1	2.62	100	0.51		0.57			
287.3	9.9	2.71	96	0.83	2970 / 287.2		0.53		
296.8	9.5	2.67	100	0.78					
306.5	9.7	2.66	94	0.61		0.67			Mixed brn Arg & Cgl w/
316.2	9.7	2.66	100	0.60					local pats & zones Arkosic
327.7	11.5	2.61	96	0.68	2930 / 327.2		0.67		Arg. WK-mod diss & vit cpy
333.6	5.9	2.70	98	1.04					
345.2	11.6	2.63	99	0.88		0.81			
356.2	11.0	2.64	98	0.91					
367.4	11.2	2.66	98	0.53	2890 / 367.2	0.53	0.81		
375.0	7.6	2.68	97	0.28					
386.7	11.7	2.67	100	0.36					
394.0	7.3	2.58	98	0.40		0.40			
402.7	8.9	2.65	100	0.36					
412.4	9.5	2.65	97	0.43	2850 / 407.2	0.43 / 0.43	0.36		
424.9	12.5	2.71	100	0.35					
436.3	11.4	2.70	100	0.45		0.45			
446.1	9.8	2.70	100	0.28					
456.4	10.3	2.69	100	0.29	2810 / 447.2		0.37		
466.7	10.3	2.74	99	0.30					
476.7	10.0	2.77	100	0.34					
485.2	8.5	2.69	100	0.36					
495.1	9.9	2.70	99	0.29	2770 / 487.2		0.32		
505.2	10.1	2.69	100	0.29					
515.4	10.2	2.74	97	0.44		0.44			
525.0	9.6	2.75	90	0.34					
536.7	11.7	2.69	100	0.43	2730 / 527.2	0.43	0.35		
541.0	4.3	2.70	95	0.53					
551.2	10.2	2.70	100	0.51					
564.5	13.3	2.67	100	0.58					
574.7	10.2	2.68	98	0.43	2610 / 567.2	0.43	0.51		
584.9	10.2	2.59	98	0.22					
593.5	8.6	2.63	97	0.24					
603.1	9.6	2.64	100	0.23					
612.8	9.7	2.67	95	0.54	2650 / 607.2	0.54	0.30		
620.0	7.2	2.66	100	0.86					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3257.2

D.D. HOLE NO. 57

SURVEY COORD. N 361,176.61

PROPERTY MISSION

E. 764,243.02

TOTAL DEPTH 865.8

DATE COMPLETED 3/18/63

DRILL GRID COORD. N 25+64, W 35+01

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
620.0								Arg	
632.2	12.2	2.67	100	1.87		1.18		Cgl	Cnt gradational
643.9	11.7	2.63	89	1.30				Qtzt	
652.7	8.8	2.62	100	0.51	2610 / 647.2	0.51	1.18		
663.0	10.3	2.63	80	0.27					
674.5	11.5	2.62	98	0.41		0.46			
682.0	7.5	2.61	100	0.54					603.1 - 843.6 - 240.5' of 0.89% Cu
694.0	12.0	2.61	100	0.37	2570 / 687.2		0.41		in diss, vlts, & strs.
704.0	10.0	2.60	100	0.93		0.93			
709.0	5.0	2.57	100	0.34					
710.2	1.2	2.54	95	2.44		2.44			
721.5	11.3	2.61	100	0.37					
725.6	4.1	2.62	75	0.51					50° cnt
738.3	12.7	3.03	96	2.21	2530 / 727.2		0.66	Hf	50° cnt
748.3	10.0	2.64	98	0.25		1.00		Qtzt	
761.0	12.7	2.61	100	0.54					
768.0	7.0	2.65	100	0.09	2490 / 767.2		0.86		45° cnt @ slip
777.5	9.5	2.76	100	1.56		1.56		Hf	
782.0	4.5	3.00	92	0.09					
792.6	10.6	3.06	95	1.72					768.0 - 820.0 - wk-st Mag.
802.0	9.4	3.14	79	1.58		1.60			796.1 to 816.0: Pass fit zone
813.6	11.6	2.98	81	1.37	2450 / 807.2		1.37		
820.0	6.4	3.14	94	1.07					
830.3	10.3	2.90	99	0.68		0.79			
838.2	7.9	3.06	96	0.39					
843.6	5.4	3.43	97	0.58				Hf-Tt-Mb	Mixed Hf-Tt-Mb
854.3	10.7	2.68	100	0.04	2410 / 847.2		0.72	Mb	30° Hf-Mb cnt @ shear
865.8	11.5	2.70	91	0.03					± 50° gr banding in wht Mb.

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF TWO | COLLAR ELEV. 3266.9 | D.D. HOLE NO. M-56

SURVEY COORD. N 363,227.35

PROPERTY MISSION | E. 761,964.14 | TOTAL DEPTH 785.0

DATE COMPLETED 1/23/63 | DRILL GRID COORD. N 46+49; W 57+48 | INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									Top CCg ± 165'
190.0	190.0				3090		—	Alluv	BR 196.7
					176.9				
196.7	6.7	—	100	—				CCg	
209.1	12.4	2.45	85	.08				Mp	
220.5	11.4	2.53	89	.19	3050		.06		
					216.9				
229.4	8.9	2.51	89	.13					
237.4	8.0	2.55	86	.17					237.4 Base Oxides
248.2	10.8	2.56	88	.14					
258.1	9.9	2.56	31	.12	3010		.14		196.7 - 398.6 Typical Mp
					256.9				
267.1	9.0	2.54	96	.14					
277.0	9.9	2.60	90	.13					
288.3	11.3	2.56	92	.16					
295.2	6.9	2.49	63	.15	2970		.14		
305.5	10.3	2.53	99	.14	296.9				
315.5	10.0	2.56	81	.11					
325.5	10.0	2.62	98	.12					
335.5	10.0	2.57	100	.13	2930		.12		
344.5	9.0	2.57	100	.12	336.9				
355.1	10.6	2.57	100	.10					
364.2	9.1	2.58	98	.12					
376.6	12.4	2.55	99	.12	2890		.12		
384.6	8.0	2.59	99	.13	376.9				
394.0	9.4	2.54	80	.11					
398.6	4.6	2.58	100	.14					
402.5	3.9	2.62	99	.07				Arg	Tan Arg.
411.0	8.5	2.63	100	.12	2850		.11	Qtzt	wht Qtzt
421.1	10.1	2.60	100	.08	416.9				
429.5	8.4	2.58	98	.14					
435.4	5.9	2.62	100	.11					
443.9	8.5	2.62	99	.07					
453.5	9.6	2.61	100	.05					
463.0	9.5	2.61	100	.06	2810		.09		
					456.9				
475.4	12.4	2.61	99	.03					
478.8	3.4	2.60	99	.06					60° cnt @ gyp vlt
487.7	8.9	2.86	100	.40				Hf	
497.7	10.0	2.63	100	.58	2770	.49	.25		
					496.9				
505.5	7.8	2.93	100	1.18					
515.3	9.8	3.00	99	1.01					
525.0	9.7	3.00	94	.95		1.06			
532.8	7.8	2.88	93	1.31				Hf-Tt	
542.8	10.0	3.19	97	.84	2730		1.06		wk-st diss & vlt. cpy; Tr mag.
					536.9				
551.7	8.9	3.20	92	.52					
561.4	9.7	2.80	100	.75		.65		Qtzt / Tt	549 - 553 ±10° Qtzt int.
573.5	12.1	2.83	98	.62					
583.0	9.5	3.34	94	.51	2690		.65		
					576.9				
591.6	8.6	3.16	100	.48		.54			

MIS-807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF TWO

COLLAR ELEV. 3266.9

D.D. HOLE NO M-56

SURVEY COORD. N 363,227.35

PROPERTY MISSION

E. 761,964.14

TOTAL DEPTH 785.0

DATE COMPLETED 1/23/63

DRILL GRID COORD. N 46+49, W 57+48

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
591.6						.54		Tt	
602.0	10.4	3.28	77	.61					598.4-602.0 Recem flt cnt.
612.4	10.4	2.69	86	.19				Qtzt	609.7-11.8 Recem Flt bx.
615.5	3.1	2.85	76	.03	2650		.39		50° cnt @ frac.
620.0	4.5	3.09	100	Nil	616.9			Hf	
630.2	10.2	3.11	91	Nil					
640.0	9.8	3.21	89	Nil				Hf-Tt	
650.2	10.2	3.35	97	.13					
662.0	11.8	3.14	96	.35	2610		.09	Hf	
672.0	10.0	3.47	92	.35	656.9				
682.7	10.7	3.33	98	.32					
693.1	10.4	3.21	91	2.08		2.08			
700.0	6.9	3.20	86	.21	2570		.78		
709.8	9.8	3.37	88	1.58	696.9	1.58			
724.6	14.8	2.61	89	.03				Gyp	Mass gyp w/ Anhy frags in
733.2	8.6	2.56	93	Nil					± 20° lineations
737.0	3.8	2.51	100	Nil	2530		.41	Hf	
743.6	6.6	2.51	100	Nil	736.9			Qtzt	Dense wht Qtzt w/ pats
750.6	7.0	2.51	100	Nil					tan qtzt & st gyp
758.8	8.2	2.54	100	Nil					
765.4	6.6	2.52	94	Nil					
775.0	9.6	2.60	95	Nil	2490		Nil		
785.0	10.0	2.63	100	Nil	776.9				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3279.1

SURVEY COORD. N 361555.50

E. 762981.43

D.D. HOLE NO. M-55

TOTAL DEPTH 880.0

PROPERTY Mission

DATE COMPLETED 5/20/63

DRILL GRID COORD. N 25 + 62 W 47 + 56

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0								Hlas	Top CCg ± 170'
220.8	30.8		40					CCg	BR ± 220.8
230.5	9.7	2.46	49	.08	2990/289.1		.01	Arg	
241.5	11.0	2.51	48	.08					
251.3	9.8	2.42	82	.08					
260.6	9.3	2.49	69	.18					Base Oxides 260.6
271.0	10.4	2.62	82	.23	2960/279.1		.19		
279.0	8.0	2.58	67	.09					
284.6	5.6	2.60	75	.12					
295.0	10.4	2.59	60	.12				Mp	Mod-st alt
305.0	10.0	2.55	31	.15	2970/299.1		.4	Mp-Arg	Mixed
314.0	9.0	2.62	94	.13				Arg	
323.9	9.9	2.61	74	.12				Arg Mp	Gr Arg w/ mts Leuco-Porph
329.4	5.5	2.58	100	.10					
337.0	7.6	2.60	57	.16					
346.2	9.2	2.52	71	.12	2950/329.1		.27		
357.4	11.2	2.59	90	.21				Arg	
367.1	9.7	2.55	79	.23					- Lt gr silt [illegible] Arg, Brkn
371.3	4.2	2.61	79	.16					& 99%
382.4	11.1	2.63	82	.13					
390.7	8.3	2.60	95	.15	2940/359.1		.18		395.6 - 97.7' Pass Hi & Flt.
400.3	9.6	2.60	74	.16				Arg-Mp?	Arkosic to Porphyritic
411.8	11.5	2.59	97	.18					Texture.
418.0	6.2	2.64	89	.21				Arg	417.7 ± 40' Arg-Mp [illegible]
423.4	5.4	2.60	99	.13				Mp	wk silt
431.9	8.5	2.60	89	.14	2930/419.1		.17	Arg	
440.3	8.4	2.59	75	.08				Arg Mp	Mixed gr to brn Arg & leuco-Mp w/ wk-st silt & ser alt.
450.5	10.2	2.60	56	.15					
453.6	3.1	2.66	65	.10				Arg-Cgl	
463.0	9.4	2.59	90	.12			.12	Arg	
474.9	11.9	2.62	95	.12	2910/[illegible]				
486.3	11.4	2.7[illegible]	79	.20					
496.9	10.6	2.62	94	.22					
507.3	10.4	2.60	100	.17	2900/[illegible]		.18		Dense brn locally siliceous
512.3	5.0	2.60	91	.16					- Arg
521.8	9.5	2.59	100	.15					
532.7	10.9	2.59	94	.11					
543.6	10.9	2.58	70	.11					
551.6	8.0	2.60	90	.18	2890/549.1		.13		
561.9	10.3	2.62	93	.08					
570.1	8.2	2.53	80	.09					
581.7	11.6	2.60	89	.11					
589.9	8.2	2.65	94	.66	2880/[illegible]	0.68 / 0.68	.66	Hf	581.7' - 5° [illegible] Arg cnt; Mod Cpy
592.9	2.9	2.70	75	.11				Mp	
601.8	9.0	2.60	50	.11					- St Alt vuggy Test
610.5	8.7	2.47	71	.16					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF two

COLLAR ELEV. 3279.1

D.D. HOLE NO. M-55

SURVEY COORD. N 361,155.50

PROPERTY Mission

E. 762,987.43

TOTAL DEPTH 880.0

DATE COMPLETED 5/20/63

DRILL GRID COORD. N 25+62 W 47+56

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
610.5								Mp	
616.7	6.2	2.55	36	.33					
621.0	4.3	2.43	85	.46				Hf	Pots Mp
625.0	4.0	2.45	28	.41				Hf-Mp	622' Hf-Mp cont 625' Mp-Hf cont
635.9	10.8	2.82	36	.40	2650 629.1		.26	Hf-Qtzt	Mixed brkn & gry Hf &
644.5	8.7	2.48	61	.76					Qtzt. 640.3-44.5 pass flt?
653.0	8.5	2.59	16	.10				Qtzt	
655.8	2.8	2.52	76	.10					
667.0	11.2	2.59	89	.15	2610 669.1		.21		
677.2	10.2	2.56	66	.08					
687.1	9.9	2.60	94	.08					
694.2	7.1	2.57	50	.11					Tan impure, wht & lt gr
703.5	9.3	2.52	93	.27					Qtzt w/ wk 20-80° slips
713.5	10.0	2.52	93	.45	2570 709.1	0.45 0.45	.19		- & frags w/ wk sch.
722.6	9.1	2.62	75	.10					
732.0	9.4	2.64	69	.12					
740.3	8.3	2.62	96	.22					
747.8	7.5	2.58	92	.11	2530 749.1		.17		
758.9	11.1	2.81	86	.14					
767.3	8.4	2.66	87	.14					
776.2	8.9	2.63	97	.15					
786.3	10.1	2.65	85	.17	2490 789.1		.16		
791.6	5.3	2.63	97	.30					
800.0	8.4	2.92	85	2.04		2.04		Hf	799.6 - 5 60° Bx flt zone
811.5	11.5	3.25	76	.19					+ Pots Tt
819.2	7.7	3.57	74	.94		0.94		Tt	811.5' Hf-Tt cont; Mod py
830.0	10.8	3.43	88	.20	2450 829.1		.75		
840.2	10.2	3.22	100	.18					
850.2	10.0	3.25	97	.17					
861.2	11.0	3.16	95	2.18		2.18			858.5' St cpy vn 6"; diss cpy
870.0	8.8	2.77	96	.07	2410 869.1		.17	Mb	Pure wht Mb
880.0	10.0	2.10	83	.02			.12		

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two
COLLAR ELEV. 3269.0
D.D. HOLE NO. M-54
SURVEY COORD. N 362,913.82
PROPERTY Mission
E. 761,723.58
TOTAL DEPTH 747.9
DATE COMPLETED 1/8/63
DRILL GRID COORD. N 43+40, W 59+94
INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
					3090			ALLUV & CCG	Top CCg ± 170'
190.0	–	–	–	–	179.0				
201.4	11.4	2.53	90	.11				Mp	
211.7	10.3	2.55	84	.10					
217.5	5.8	2.54	96	.10					217' Base Oxides
220.2	2.7	2.59	80	.12	3050		.08		
223.0	2.8	2.51	17	.10	219.0				
233.8	10.8	2.55	90	.09					
243.6	9.8	2.50	92	.09					
252.3	8.7	2.52	57	.08					
262.3	10.0	2.54	89	.11	3010		.09		
270.0	7.7	2.58	93	.10	259.0				
280.6	10.6	2.55	95	.10					
290.7	10.1	2.63	97	.08					
301.2	10.5	2.59	98	.10	2970		.10		
310.0	8.8	2.55	100	.10	299.0				
320.0	10.0	2.61	94	.14					
327.7	7.7	2.59	100	.09					Typical Mp wi wk py-cpy,
335.5	7.8	2.59	100	.10					Traces moly
343.7	8.2	2.59	100	.15	2930		.11		
349.7	6.0	2.56	99	.12	339.0				
360.6	10.9	2.58	98	.13					
366.6	6.0	2.56	100	.11					
377.2	10.6	2.58	97	.11					
387.4	10.2	2.60	99	.13	2890		.12		
398.9	11.5	2.57	96	.16	379.0				
408.7	9.8	2.61	100	.12					
416.3	7.6	2.58	100	.14					
425.0	8.7	2.59	98	.12	2850		.14		
433.5	8.5	2.60	98	.10	419.0				
440.5	7.0	2.87	100	.60		.60		Hf	Mp-Hf ct-low ✱ wi 6" ggy zone
450.0	9.5	2.52	89	.15					
458.9	8.9	2.52	99	.23	2810		.23		
468.2	9.3	2.58	97	.13	459.0			Mp	
476.6	8.4	2.59	99	.06				Arg	Dense, silicious
485.6	9.0	2.63	100	.07					
494.4	8.8	2.57	100	.36				Tt	
495.8	1.4	2.63	69	.33					45° Tt-Mp ct @ 495.8 @ gyp vlt
501.4	5.6	2.55	100	.17	2770		.16	Mp	
509.8	8.4	2.87	97	.90	499.0			Tt-Hf	Mixed Tt-Hf-st moly in gyp
520.0	10.2	3.29	97	.53		.67		Tt	Local mass gyp, st moly
530.2	10.2	3.22	100	.48					
540.4	10.2	3.35	95	.82	2730		.64		
550.6	10.2	3.29	95	.66	539.0				Low ✱, near massive .4' cpy
560.5	9.9	3.18	100	1.92					vn @ 555.2
569.5	9.0	3.22	94	1.06		1.02			70° recem flt bx wi cpy @ 567.1

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3269.0

SURVEY COORD. N 362,913.82

E. 761,723.58

D.D. HOLE NO. M-54

PROPERTY MISSION

TOTAL DEPTH 747.9

DATE COMPLETED 1/8/63

DRILL GRID COORD. N 43+40; W 59+94

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
569.5									
579.7	10.2	3.33	97	.44	2690 / 579.0		1.02		
590.0	10.3	3.16	96	1.45				Tt-Hf	Recem flt bx-gg w/ 45°∡ @ 585'
600.2	10.2	3.22	91	1.58		1.66			
610.4	10.2	2.85	98	.79					Local mass gyp
620.4	10.0	3.17	100	3.13	2650 / 619.0		1.66	Tt	
630.6	10.2	3.43	97	1.10		1.35			90° Tt-Mb ct @ 629.4
640.8	10.2	2.70	100	.12				Mb	wh-lt gr Mb; grades to
650.5	9.7	2.66	100	.10					Hf
655.6	5.1	2.50	100	.02				Hf	
664.5	8.9	2.61	99	.03	2610 / 659.0		.45	Qtzt	Low ∡ Hf-Qtzt ct @ 655.2
673.0	8.5	2.60	97	.03					(flt?)
682.9	9.9	2.62	100	.03					
687.7	4.8	2.63	90	.03					
694.4	6.7	2.60	100	.02					Dense siliceous rk, appears
704.0	9.6	2.60	100	.02	2570 / 699.0		.03		to be alt Qtzt; st feld
714.5	10.5	2.61	99	.02					introduced
725.2	10.7	2.58	98	.03					
735.2	10.0	2.61	100	.02	2530 / 739.0		.02		
747.9	12.7	2.62	95	.02					

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3282.4

SURVEY COORD. N 361,443.62

E. 762,990.20

D.D. HOLE NO. M-53

PROPERTY MISSION

TOTAL DEPTH 984.7

DATE COMPLETED 2/25/63

DRILL GRID COORD. N 2850.32 W 4749.32

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
191.0								Alluv	Top ccg ± 165'
197.8	6.8								BR ± 197.8
207.6	9.8	2.37	75	.08					WK CuOx, MnOx, FeOx
217.1	9.5	2.43	81	.03					TF "Live Lim", Cc, CuSiO₄;
228.7	11.6	2.54	77	.07				Mp	Leuco-Mp, st clay & bx.
239.6	10.9	2.40	84	.06	3050		.05		± 242. cut in gg zone.
248.4	8.8	2.54	94	.06	232.4			Arg	
257.6	9.2	2.58	92	.17					± 251 Base Oxides
268.5	10.9	2.64	94	.10					
278.7	10.2	2.64	87	.12	3010		.10		
288.8	10.1	2.61	90	.11	272.4				
298.3	9.5	2.61	73	.11					
307.5	9.2	2.59	72	.09					
312.5	5.0	2.57	100	.11	2970		.11		
322.4	9.9	2.62	73	.16	312.4				319.9' - 30° - 1' gg-bx zone.
332.7	10.3	2.66	84	.21					
343.1	10.4	2.58	64	.23					
352.4	9.3	2.49	94	.13	2930		.18		
361.2	8.8	2.54	77	.14	352.4				
371.3	10.1	2.47	65	.11					
381.8	10.5	2.61	83	.10					337.5 - 343.1 ± 40° flt zone
387.0	5.2	2.59	63	.21					
392.0	5.0	2.56	74	1.13	2890	1.11	.26		
402.6	10.6	2.59	29	.80	392.4				
408.6	6.0	2.62	64	.63		.74			
417.4	8.8	2.57	37	.13					
422.1	4.7	2.51	11	.14					
431.0	8.9	2.56	70	.26	2850		.43		
439.2	8.2	2.31	100	.72	432.4	.72			
449.5	10.3	2.20	93	.78					
457.5	8.0	2.26	91	.40		.64		Mp	
467.4	9.9	2.60	88	.06				Qtzt	
477.4	10.0	2.59	69	.09	2810		.43		
486.3	8.9	2.64	39	.13	472.4				
496.3	10.0	2.62	100	.08					491.3 - 40° Recem flt bx
503.5	7.2	2.57	97	.08					
514.1	10.6	2.59	90	.13	2770		.10		
518.3	4.2	2.62	99	.12	512.4				
522.5	4.2	2.62	100	.11					
532.2	9.7	2.61	100	.07					
542.2	10.0	2.62	98	.29					
552.0	9.8	2.63	100	.16	2730		.16		
562.6	10.6	2.60	100	.25	552.4				562.0 - 30° Recem flt bx.
573.3	10.7	2.61	100	.19					
583.4	10.1	2.63	100	.20					
595.2	11.8	2.62	51	.13	2690		.19		

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3282.4

D.D. HOLE NO. M-53

SURVEY COORD. N 361,443.62

E 762,990.20

PROPERTY MISSION

TOTAL DEPTH 984.7

DATE COMPLETED 2/25/63

DRILL GRID COORD. N28+50; W 47+49

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
595.2					2690 592.4		.19	Qtzt	
601.8	6.6	2.56	65	.07					30° cnt
604.6	2.8	2.47	63	.16				Mp	40° cnt
611.1	6.5	2.61	81	.19				Arg	20° cnt @ vuggy frac.
615.8	4.7	2.78	88	.45				Hf	
622.5	6.7	2.70	73	1.17		.72			wk-st diss & vlt cpy w/ occas
635.0	12.5	2.69	54	.55	2650 632.4		.45		pats Mag.
647.0	12.0	2.72	79	.51		.52			620.0-22.5 Pass flt
656.9	9.9	2.66	81	.17				Qtzt	70° cnt @ frac.
669.2	12.3	2.59	82	.11					
671.0	1.8	2.62	80	.34	2610 672.4		.28		670.0-72.0 Int. Mp
681.8	10.8	2.59	99	.14					
692.1	10.3	2.61	96	.21					
703.0	10.9	2.58	88	.19					
712.9	9.9	2.60	28	.14	2570 712.4		.17		
722.6	9.7	2.60	94	.25					
732.0	9.4	2.62	99	.19					
740.2	8.2	2.62	95	.12					
748.4	8.2	2.60	92	.08					
755.3	6.9	2.62	97	.08	2530 752.4		.16		55° cnt @ frac.
763.5	8.2	2.87	86	.16				Hf	
774.4	10.9	2.89	91	1.37					st-mod diss & vlt cpy, local
784.7	10.3	3.00	98	1.23		1.30			Mag.
787.5	2.8	2.79	100	.27					
800.1	12.6	2.57	94	.07	2490 792.4		.76	Arg	
810.0	9.9	2.89		1.18				Arg-Hf	804.3 Arg-Hf cnt; Grad cnt to Tt
821.9	11.9	3.08	92	.44		1.20		Tt	
833.4	11.5	3.70	97	2.09	2450 832.4		.98		
842.2	8.8	3.45	99	.47					Mod st cpy, Tr Mag.
855.0	12.8	3.33	105	.66		.88			
866.0	11.0	3.50	92	1.34					
870.9	4.9	2.70	110	.39	2410 872.4		.78	Mb	45° cnt
880.6	9.7	2.75	98	.02				Qtzt	
888.0	7.4	2.63	103	Tr					
898.0	10.0	3.04	96	.08				Hf	
908.7	10.7	3.23	92	2.80		2.80			st cpy, Bn
913.6	4.9	2.93	72	.19	2370 912.4		.79		
924.5	10.9	3.14	94	.60					Bn - cpy - sph
934.0	9.5	2.98	98	.61		.60			
943.2	9.2	2.70	86	.15				Qtzt	
953.4	10.2	2.62	103	.08	2330 952.4		.37		
962.7	9.3	2.73	105	.52		.52		Qtzt-Hf	Bn
970.3	7.6	2.85	101	.03				Mb-Hf	
977.2	6.9	2.56	106	.19				Mb-Qtzt	Mixed silt Mb & Qtzt; Cnts grad
984.7	7.5	2.63	98	.04				Qtzt	

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV 3261.0 DDH HOLE NO M-52

SURVEY COORD N 363,523.46

PROPERTY MISSION E 761,708.38 TOTAL DEPTH 873.0

DATE COMPLETED 12/7/62 DRILL GRID COORD N49+49 60+00W INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Rec'v %	Core Assay % Cu	Bench Elev in Depth	Core Assay Sp. Gr. Averages (weighted)	Composite Assay	Rock Class.	REMARKS
191.0								Alluv	Top of Ccg ± 168'
193.8	2.8	1.98	71	—				Ccg	B.R. 193.8
202.5	8.7	2.57	94	.18				Arg	
209.7	7.2	2.58	92	.31	3050		.11		209.7 Base Oxides
222.7	13.0	2.61	99	.33	211.0				Tr nat cu, moly
234.5	11.8	2.65	97	.15					
243.8	9.3	2.61	98	.12					
247.3	3.5	2.56	90	.12	3010		.19	Arg-Mp	249.2 - 30° Arg. Mp cont
256.8	9.5	2.56	90	.12	251.0			Mp	Mod moly
265.0	8.2	2.61	91	.12				Arg	254.5 - 56.8 flt cut
275.0	10.0	2.57	87	.16					270.3 - 75.0 flt bx
279.6	4.6	2.70	85	.29					277.0 - 79.6 flt cut w/ Mp.
288.4	8.8	2.53	92	.11	2970		.15	Mp	
297.7	9.3	2.53	92	.13	291.0				This run poss flt.
307.4	9.7	2.51	82	.12					
316.6	9.2	2.53	85	.11					
325.0	8.4	2.54	98	.11					
331.3	6.3	2.56	97	.14	2930		.12		
337.3	6.0	2.55	50	.11	331.0				Mineralization: Tr - wk
345.5	8.2	2.56	99	.12					cpy; Mod - nil moly;
354.2	8.7	2.55	100	.11					occasional tr sph; wk-
361.4	7.2	2.57	94	.13					mod py.
371.0	9.6	2.57	99	.13	2890		.12		Alteration: Mod to st
380.0	9.0	2.57	99	.13	371.0				ser, gyp; local silf &
388.5	8.5	2.58	94	.11					feld spathization
395.5	7.0	2.58	100	.14					
404.0	8.5	2.54	100	.12					
411.8	7.8	2.56	100	.10	2850		.12		
421.8	10.0	2.58	100	.13	411.0				
431.8	10.0	2.56	100	.21					
441.8	10.0	2.52	100	.13					
451.0	9.2	2.54	94	.13	2810		.15		
461.4	10.4	2.53	99	.15	451.0				
468.7	7.3	2.54	93	.15					
477.1	8.4	2.55	100	.11					
487.7	10.6	2.55	100	.11	2770		.13		
500.5	12.8	2.59	96	.16	491.0				
512.6	12.1	2.55	98	.08					
521.8	9.2	2.55	98	.10					516.4 Poss 70° flt.
530.7	8.9	2.56	99	.13	2730		.12		
539.9	9.2	2.52	98	.14	531.0				
547.3	7.4	2.55	100	.14					
555.5	8.2	2.57	100	.15					
564.7	9.2	2.58	98	.14					
573.9	9.2	2.59	96	.12	2690		.14		
582.6	8.7	2.61	100	.19	571.0				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 | COLLAR ELEV. 3261.0 | D.D. HOLE NO. M-52

SURVEY COORD. N 363,523.46

PROPERTY MISSION | E. 761,708.38 | TOTAL DEPTH 873.0

DATE COMPLETED 12/7/62 | DRILL GRID COORD. N 49+49 60+00W | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
589.3	6.7	2.63	99	.19				Mp	
596.8	7.5	2.58	99	.13				Mp-Qtzt	Mixed
605.9	9.1	2.59	98	.07					605.9 ∠ 30° cnt
612.5	6.6	2.60	100	.17	2650		.14	Qtzt	wht - ltgr Qtzt.
620.6	8.1	2.63	100	.14	611.0				
632.5	11.9	2.59	98	.33				Hf	20° Qtzt-Hf cnt
642.6	10.1	2.80	98	.11					
650.3	7.7	2.82	95	.30	2610	.42	.23	Hf-Qtzt	650.3-651.1 Recem flt cnt @ 50°
652.8	2.5	3.11	91	.42	651.0			Tt	
663.0	10.2	3.10	100	.66		.72			Mod - st cpy; Tr bn;
667.7	4.7	3.44	92	1.34					
677.7	10.0	3.03	98	.54					
687.7	10.0	2.87	98	.21	2570		.55		
700.3	12.6	3.04	100	.20	691.0				
705.7	5.4	2.40	97	.04				Gyp	80° Gyp - Anhydrite vn
718.5	12.8	3.15	97	.34				Tt	
728.5	10.0	3.00	95	.79		.72			
732.4	3.9	3.00	98	.43	2530		.38	Tt-Hf	Mod diss & vlt cpy
742.3	9.9	3.10	98	.56	731.0	.54		Tt	
748.4	6.1	3.11	100	.14					
754.1	5.7	3.31	100	.03					
759.0	4.9	2.46	100	Tr				Gyp	Massive gyp vn w/ Tt frags
761.8	2.8	3.02	100	Tr				Tt	80° Tt - Qtzt cnt
764.5	2.7	2.58	98	.19				Qtzt	Grad Qtzt - Tt cnt
773.4	8.9	3.24	99	.11	2490		.21	Tt	
782.0	8.6	2.70	98	.05	771.0			Gyp-Hf	779.8' 10° flt bx & gg
787.4	5.4	2.52	100	.02					
792.2	4.8	2.95	97	.17				Hf	last 0.8' Sulgg & gyp vlts @ 50°
802.3	10.1	3.03	100	.24				Hf-Tt	
812.3	10.0	2.95	100	.97	2450	.97	.31	Tt	
822.0	9.7	3.38	100	.39	811.0				wk - v. st vlt & diss cpy; Tr bn.
827.3	5.3	2.76	99	.54		.86		Hf	
830.7	3.4	2.82	96	2.65					Last 0.1' Mag vlt.
842.3	11.6	2.60	96	.06					
847.1	4.8	2.68	97	.04	2410		.51		847.1 Irreg Hf - Qtzt cnt
857.0	9.9	2.57	92	.02	851.0			Qtzt	
867.6	10.6	2.60	97	.02					
873.0	5.4	2.59	93	.03			.02		

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF THREE COLLAR ELEV 3286.2 D.D. HOLE NO. M-51

SURVEY COORD. N 361,144.82

PROPERTY MISSION E 763,230.69 TOTAL DEPTH 1066.4

DATE COMPLETED 12/26/62 DRILL GRID COORD N 25+48 W45+13 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv %	Core Assay % Cu	Bench Elev & Depth	Ore Assay Sp Gr Averages (weighted)	Composite Assays	Rock Class	REMARKS
190.0								Alluv	Top of Ccg ± 170'
202.0	12.0		82		3090			Ccg	B.R. 200.1
207.3	5.3	2.54	94	.04	196.2			Arg	
214.5	7.2	2.46	90	.03					Broken, clay & Fe Ox
218.4	3.9	2.43	40	.05					
229.5	11.1	2.33	82	.11					
234.4	4.9	2.55	91	.09	3050		.06		Fe-Mn Ox, Serp & Talc
244.2	9.8	2.63	88	.17	236.2				Base Ox 234.4
254.5	10.3	2.64	95	.17					Py, tr moly & Cu
265.2	10.7	2.64	95	.17					
275.4	10.2	2.61	100	.10	3010		.15		
287.1	11.7	2.60	83	.14	276.2				Arg-Mp ct
296.7	9.6	2.58	100	.10				Mp	
303.3	6.6	2.48	67	.12					
304.6	1.3			—					No core rec
307.2	2.6	2.54	59	.07					Bx 304.6' - 305.8
315.3	7.1	2.58	78	.22	2970		.14	Arg	Mp-Arg ct 307.4
325.3	10.0	2.57	93	.21	316.2				
334.8	9.5	2.57	98	.24					Flt zone 60-70° 328.3-31.4
344.0	9.2	2.58	96	.34					Lt gr-brn Arg, local clay
352.2	8.2	2.59	99	.20	2930		.24		Sulf wk, tr moly
361.9	9.7	2.60	99	.15	356.2				
371.7	9.8	2.68	98	.32					
382.3	10.6	2.62	93	.13				Mp	Arg-Mp ct, high ∠
392.0	9.7	2.60	94	.11	2890		.17		
401.7	9.7	2.59	91	.10	396.2				
409.4	7.7	2.58	98	.10					
418.2	8.8	2.63	92	.23					Wk diss, ult py & cpy
429.2	11.0	2.56	86	.25					w/ tr moly
439.9	10.7	2.62	93	.23	2850		19		
447.7	7.8	2.62	95	.24	436.2				
454.5	6.8	2.61	100	.26					
466.2	11.7	2.62	97	.28					
476.4	10.2	2.60	91	.21	2810		.25	Arg	Mp-Arg ct 466.8
485.5	9.1	2.60	93	.13	476.2				
496.2	10.7	2.66	99	.13					Dk gr Arg w/ lt alt zones
507.4	11.2	2.62	100	.20					Wk sulf, local st moly
516.0	8.6	2.64	98	.26	2770		.24		
523.1	7.1	2.62	98	.18	516.2				
532.0	8.9	2.61	98	.15				Mp	Arg-Mp ct, ± 20°
540.3	8.3	2.61	94	.18					
548.6	8.3	2.60	91	.13					
557.5	8.9	2.59	85	.13	2730		.15		
566.6	9.1	2.56	88	.16	556.2				
577.6	11.0	2.55	96	.13					
585.4	7.8	2.59	93	.10					

MLS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF THREE COLLAR ELEV. 3286.2 D.D. HOLE NO. M-51

SURVEY COORD. N 361,144.82

PROPERTY MISSION E. 763,230.69 TOTAL DEPTH 1066.4

DATE COMPLETED 12/26/62 DRILL GRID COORD. N 25+48 W45+13 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
593.2	7.8	2.60	93	.11	2690		.13		
604.0	10.8	2.59	94	.11	596.2			Mp	
614.1	10.1	2.59	92	.10					Grad Low & cnt w/ Arg
620.7	6.6	2.61	100	.06				Arg	
626.0	5.3	2.62	89	.08					70° Arg-Mp cnt
636.1	10.1	2.60	96	.04	2650		.08	Mp	
646.0	9.9	2.60	93	.08	636.2				Lense-Mp ; mod Alt.
656.3	10.3	2.57	91	.10					
667.4	11.1	2.60	77	.11					Grad Mp - Arg cnt
674.1	6.7	2.58	78	.10				Arg	
679.6	5.5	259	94	.13	2610		.10	Arg-Mp	
686.1	6.5	2.52	62	.97	676.2	.97		C-Arg-Hf	WK- mod 20° qtz-cpy vlts.
695.1	9.0	2.62	97	.10				Qtzt.	20° flt cnt
704.5	9.4	2.58	99	.16					
713.3	8.8	2.60	86	.18	2570	1.13	.35		10-20° flt cnt w/ Hf
721.0	7.7	2.46	22	1.13	716.2	1.13		Hf	0-20° cpy-qtz vlts.
724.0	3.0	—	0	—					No core.
727.6	3.6	2.24	22	.23					
729.4	1.8	2.16	0	—					No core.
740.0	10.6	2.34	36	.30					
742.6	2.6	2.26	60	.07					Gyp vn
751.0	8.4	2.61	91	.64		.64			diss & vlt cpy
762.0	11.0	2.64	93	.16	2530		.42	Qtzt	±752 Grad. Hf-Qtzt cnt.
773.5	11.5	2.62	90	.17	7562				765.3, 0.2', Hi % flt.
780.5	7.0	2.60	98	.13					780.5 - 45° Qtzt-Mp cnt.
792.5	12.0	2.59	74	.14				Mp-Qtzt	Mixed to 788.8
802.7	10.2	258	40	.20	2490		.16	Qtzt	
813.3	10.6	2.59	84	.18	796.2				
818.5	5.2	259	97	.17					
827.5	9.0	260	27	.17					Fg wht Qtzt.
839.0	11.5	2.62	86	.19	2450		.18		
850.6	11.6	2.65	100	.20	836.2				
857.6	7.0	2.89	94	.75					40° pre-min flt cnt w/ Hf
866.9	9.3	2.92	96	1.01		1.04		Hf	850.6 - 51.1 fltgg w/ suls
875.8	8.9	2.83	97	.25	2410		.55		Mod diss cpy-py
886.7	10.9	2.76	97	.18	876.2				
896.9	10.2	2.70	100	.66				Hf-Qtzt	895.2 Grad Hf-Qtzt cnt
908.0	11.1	2.74	94	.64		.65		Qtzt	diss cpy.
915.9	7.9	2.60	96	.17	2370	.66	.43		915.9 Qtzt-Hf cnt.
925.0	9.1	3.01	93	.66	916.2			Hf	pats-stgs cpy
932.2	7.2	3.28	93	1.62				Hf-Tx	diss & vlt cpy
942.4	10.2	3.32	96	1.56		1.09		Tx	939-42.4 Hi % Recem flt bx.
952.2	9.8	3.56	93	.41				Hf-Tx	Tr diss bn
958.0	5.8	3.10	100	1.54	2330		1.09		wk diss bn, mod diss & vlt
968.0	10.0	3.27	100	1.35	956.2	1.38		Tt	cpy.
977.9	9.9	2.68	100	.08				Mb	968.4 - 20° Tt-Mb cnt

MISB07A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF THREE

COLLAR ELEV. 3286.2

D.D. HOLE NO. M-51

SURVEY COORD. N 361,144.82

PROPERTY MISSION

E. 763,230.33

TOTAL DEPTH 1066.4

DATE COMPLETED 12/26/62

DRILL GRID COORD. N 25+48 W45+13

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
988.0	10.1	2.69	100	.04	2290		.45	Mb	
998.1	10.1	2.69	99	.05	996.2				Ltgr to wht Mb
1005.0	6.9	2.74	99	.02					
1008.2	3.2	2.73	74	.14				Mb-Hf	1007 - 20° Mb - Hf cnt
1010.8	2.6	2.74	100	.03				Qtzt-Hf	1010.3 - 20° Qtzt - Hf cnt
1013.7	2.9	2.82	96	Nil				Hf	1013.7 - low ∠ Hf-Qtzt cnt
1025.0	11.3	2.62	97	.01					
1030.2	5.2	2.63	100	.03	2250				wht - ⊥ low Qtzt
1045.1	14.9	[illegible]	99	[illegible]	1036.2			Qtzt	
1056.2	11.1	2.63	99	.03					
1066.4	10.2	2.64	98	[illegible]					
		Avg.	94%						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two
COLLAR ELEV. 3269.0
D.D. HOLE NO. M-50
SURVEY COORD. N 362,942.14
PROPERTY Mission
E. 762,218.87
TOTAL DEPTH 806.8
DATE COMPLETED 12/20/62
DRILL GRID COORD. 4360 N - 5498 W
INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
					3090			Alluv	Ccg ± 160'
					179.0				
180.0	—	—		—				Ccg	B.R. ± 200
205.5	25.5	—	21	—					
208.8	3.3	2.49	26	.04					Mod alt Biot-Mp; local
218.5	9.7	2.49	62	.09	3050		.03		st gg. - Broken; CuOx
229.5	11.0	2.52	75	.15	219.0				
234.6	5.1	2.63	71	.15					
238.9	4.3	2.57	28	.12					
249.1	10.2	2.55	86	.13					St moly on fracs
260.3	11.2	2.55	88	.14	3010		.14		" " " "
269.5	9.2	2.59	92	.16	259.0				
276.7	7.2	2.56	96	.16					
284.8	8.1	2.51	95	.19					
292.0	7.2	2.52	91	.13					St alt - local chl, st
303.4	11.4	2.52	93	.12	2970		.15		ser, qtz vlts, orthoclase
315.1	11.7	2.54	95	.10	299.0				
324.3	9.2	2.52	85	.15				Mp	Bx-gg w/ st py - poss flt
333.7	9.4	2.52	94	.14					45°
345.2	11.5	2.56	81	.18	2930		.14		342-452 - st bx, gg, py
352.1	6.9	2.69	87	.16	339.0				
359.7	7.6	2.58	100	.14					
369.1	9.4	2.56	98	.21					
380.4	11.3	2.52	94	.16	2890		.17		
394.2	13.8	2.64	99	.16	379.0				
401.9	7.7	2.61	99	.17					
411.7	9.8	2.58	100	.17					Mod-st alt, abun fresh
421.2	9.5	2.57	99	.16	2850		.16		biot
435.2	14.0	2.59	100	.17	419.0				
443.8	8.6	2.59	100	.17					
451.4	7.6	2.58	100	.17					
459.0	7.6	2.61	100	.17	2810		.17		
469.2	10.2	2.56	100	.18	459.0				@ 474.3 - .4' post Mp bx (25°)
474.3	5.1	2.58	100	.22					@ 474.5 - Flt cnt Mp-Hf
485.5	11.2	2.79	97	.35					Dense, soft lt grn Hf; pots
495.5	10.0	2.83	96	.54		.54			Arg (?) Qtzt - 70° post min
505.5	7.7	2.79	95	.18	2770		.32		flt - st bx, gg - Pots brn Arg
513.2	10.2	2.86	96	.25	499.0			Hf	
523.4	10.2	2.88	97	.47		.47			Short ints Qtzt
533.6	10.2	2.96	95	.36					
543.6	10.0	2.67	98	.15	2730		.31		60° Qtzt-Hf cnt @ flt w/ gvp
553.6	10.0	2.59	100	.03	539.0			Hf-Qtzt	@ 552.8
563.6	10.0	3.00	97	.15				Hf	Lt grn Hf
573.7	10.1	3.07	97	.21				Hf-Tt	Mixed tan Tt & Lt. grn Hf
583.8	10.1	3.38	100	.03	2690		.12		
589.7	5.9	3.27	99	.74	579.0			Tt	Dense dk br, maroon & grn Tt
599.7	10.0	3.54	98	1.66		1.47			w/ hem

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3269.0

D.D. HOLE NO. M-50

SURVEY COORD. N 362,942.14

PROPERTY MISSION

E. 762,218.87

TOTAL DEPTH 806.8

DATE COMPLETED 12/20/62

DRILL GRID COORD. 4360N, 5498W

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
604.3	4.6	3.51	96	.61		1.47			
613.7	9.4	3.32	100	2.16					
624.3	10.6	3.37	96	.36	2650 / 619.0		1.15	Tt	Recem flt bx @625' (60°)
629.6	5.3	3.35	99	.02					
639.6	10.0	3.01	94	.10				Tt-Hf	Recem flt bx @629.6-32.6 (50-60°)
649.6	10.0	3.18	94	NIL					
654.6	5.0	3.20	98	NIL				Tt	
663.0	8.4	2.62	100	.04	2610 / 659.0		.08	Qtzt	Low % Tt-Qtzt cnt @ 654.6
668.4	5.4	2.63	100	.10					Low % Qtzt-Hf cnt @ frac @ 668.4
672.6	4.2	2.80	89	.09				Hf-Tt	Poss recem flt - run ∥60°
682.6	10.0	2.83	97	.05					Poss flt zone - st gyp - Mixed Hf-Tt
690.0	7.4	2.65	97	.90		.90		Gyp Anhy	Gyp matrix - .1 mass moly @ 689.2
702.0	12.0	3.27	100	.02	2570 / 699.0		.21	Tt	Recem flt bx @ 696' (50°)
705.8	3.8	3.29	82	.95		.95			Tt-Qtzt ct @ gyp. v/t @ 705.8 (60°)
712.6	6.8	2.61	99	.02				Qtzt	Lt. gr Qtzt
722.6	10.0	2.56	96	.02					
732.6	10.0	2.83	93	.01	2530 / 739.0		.10	Hf	Soft Lt. grn Hf
740.6	8.0	2.57	100	.01					Hf-Qtzt ct @ recem flt @
753.5	12.9	2.57	94	.03					731.3 (30°)
759.0	5.5	2.61	99	.01					
769.0	10.0	2.61	99	.02				Qtzt	Lt gr to wh Qtzt
776.4	7.4	2.60	97	.03					
784.8	8.4	2.60	99	.09	2490 / 779.0		.02		
791.8	7.0	2.62	98	.05					
802.0	10.2	2.61	99	.04					
806.8	4.8	2.59	99	.01			.04		
		M/S Rec	95%						

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF THREE
COLLAR ELEV. 3277.5
D.D. HOLE NO. M-49
SURVEY COORD. N 361,447.20
E. 763,239.63
PROPERTY MISSION
TOTAL DEPTH 1095.0
DATE COMPLETED 1/21/63
DRILL GRID COORD. N 28+50, W 45+00
INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0									
196.0					3090 / 187.5		—	Alluv.	Top CCg ± 170 BR 196.0
207.7	11.7	2.54	76	.73		.73		Arg	
217.8	10.1	2.44	74	.08					
228.4	11.4	2.52	71	.10	3050 / 227.5		.26		
238.9	10.5	2.50	97	.12					Magn. Oxides 238.0
247.6	8.7	2.60	96	.18					
256.3	8.7	2.51	89	.16				Mp	196–335. brn & tan Arg w/
266.5	10.2	2.61	80	.15	3010 / 267.5		.15	Arg	wk-mod ser & Mp ints.
276.2	9.7	2.63	87	.13					
283.6	7.4	2.71	95	.40		.40			
292.2	8.6	2.60	97	.15					
302.0	9.8	2.63	97	.14				Mp	
312.8	10.8	2.63	99	.21	2970 / 307.5		.20	Arg	
322.0	9.2	2.66	94	.15					
333.3	11.3	2.60	95	.15					
340.2	6.9	2.62	94	.22				Mp	338.0 Mp-Arg cnt brkn & gray
351.5	11.3	2.58	75	.10	2930 / 347.5		.16		352.4 30° cnt
360.2	8.7	2.55	75	.13				Arg	
368.0	7.8	2.62	74	.10					
381.4	13.4	2.62	100	.13					
389.8	8.4	2.63	78	.13	2890 / 387.5		.12		45° cnt @ qtz vlt
398.2	8.4	2.57	99	.16				Mp	
404.0	5.8	2.58	66	.16					404.7 cnt in flt.
411.7	7.7	2.60	74	.11				Qtzt	
422.0	10.3	2.56	73	.08					
434.6	12.6	2.62	96	.09	2850 / 427.5		.12		
443.0	8.4	2.57	93	.09					
446.7	3.7	2.62	96	.12					60° cnt @ frac
453.0	6.3	2.59	96	.06				Mp	
457.0	4.0	2.43	35	.46					
462.1	5.1	2.55	80	1.10		85		Qtzt	455' cnt in bx zone. 40° Qtzt-Hf cnt
472.0	9.9	2.75	94	.11	2810 / 467.5		.35	Hf	453–495 Mod-st diss & vlt cpy
480.8	8.8	2.76	95	1.18					
489.5	8.7	2.62	74	1.09		.99			
495.3	5.8	2.37	71	.61					50° Hf-Arg cnt
505.5	10.2	2.46	64	.33	2770 / 507.5		.79	Arg	
518.0	12.5	2.39	46	.26					
528.4	10.4	2.35	84	.49		.49			
539.5	11.1	2.55	94	.39				Qtzt	Hf 2' intercept
551.9	12.4	2.59	90	.33	2730 / 547.5		.37		
563.8	11.9	2.53	62	.09					
573.3	9.5	2.59	93	.13					
578.6	5.3	2.61	42	.11					
586.4	7.8	2.62	89	.31	2690 / 587.5		.18		
593.2	6.8	2.51	85	.34					592.5 Qtzt-Hf cnt-60°

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF THREE | COLLAR ELEV. 3277.5 | D.D. HOLE NO. M-49

SURVEY COORD. N 361,447.20

PROPERTY MISSION | E. 763,239.63 | TOTAL DEPTH 1095.0

DATE COMPLETED 1/21/63 | DRILL GRID COORD. N 28150; W 45400 | INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
603.9	10.7	2.80	83	1.40				Hf	Incl. st diss & vlt cpy
614.9	11.0	2.77	86	.70		.96			611.5 30° flt bx-gg
625.5	10.6	2.55	97	.78	2650		.83		
632.0	6.5	2.67	94	.16	627.5				
638.8	6.8	2.54	59	.36					flt bx-gg; cnt 30°
650.8	12.0	2.62	100	.13				Arg	
661.0	10.2	2.13	100	.06					
669.2	8.2	2.33	42	.32	2610		.19		
679.0	9.8	2.27	17	1.55	667.5				V. brkn & gg (Poss flt
690.0	11.0	2.65	48	.90		1.65			
698.1	8.1	2.95	47	2.62				Hf	702.8 30° cnt
709.1	11.0	3.18	79	1.79	2570		1.57	Tt	
717.2	8.1	2.75	54	1.67	707.5				
729.0	11.8	—	00	1.62					No core recovered
730.0	1.0	2.75	102	4.18		1.56		Tt-Hf	
741.4	11.4	2.77	21	1.57				Hf	Mod-st cpy-py-mag
751.5	10.1	2.79	77	.96	2530		1.56		
762.7	11.2	2.69	97	.90	747.5				
772.7	10.0	2.83	100	2.30		1.61			
783.0	10.3	3.11	96	2.05					
793.0	10.0	3.23	97	1.40	2490		1.61		
805.0	12.0	3.00	98	.85	787.5	1.02			
815.0	10.0	2.90	100	.34					
820.0	5.0	2.95	97	.29					30° Hf. Qtzt cnt @ gyp vlt
825.0	5.0	2.62	100	.12				Qtzt	
835.0	10.0	2.69	97	.22	2450		.60		
846.8	11.8	2.66	100	.27	827.5				
859.1	12.3	2.61	100	.03					
871.1	12.0	2.77	96	.32	2410		.20		Grad. cnt
881.1	10.0	3.01	100	.75	867.5	.75		Hf-Tt	
892.0	10.9	3.34	96	.16					
901.4	9.4	3.30	98	1.13		1.15			
911.4	10.0	3.22	100	1.18	2370		.70	Hf	Mod-st cpy-py; Tr moly
921.6	10.2	3.38	93	.97	907.5				
931.5	9.9	3.49	97	.62		1.31		Hf-Tt	
941.5	10.0	3.31	99	2.40					30° cnt @ frac.
951.5	10.0	2.67	100	NIL	2330		1.12	Mb	952.3 Low & cnt @ frac.
955.1	3.6	2.67	100	.04	947.5			Qtzt	45° cnt
961.7	6.6	3.19	100	1.28				Hf-Tt	
970.4	8.7	2.91	100	1.45		1.38			65° cnt
983.0	12.6	2.63	100	.16				Qtzt	
991.7	8.7	2.63	100	.11	2290		.59		
1001.7	10.0	2.61	100	.06	987.5				
1012.3	10.6	2.61	100	.04					
1022.0	9.7	2.61	100	.05					
1032.0	10.0	2.63	100	.01	2250		.05		
					1027.5				

MIS 807A—79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF THREE

COLLAR ELEV. 3277.5

SURVEY COORD. N 361,447.20

E. 763,239.63

D.D. HOLE NO M-49

PROPERTY MISSION

TOTAL DEPTH 1095.0

DATE COMPLETED 1/21/63

DRILL GRID COORD. N 28+50, W 45+00

INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1043.8	11.8	2.60	100	.03				Qtzt	
1053.8	10.0	2.73	100	.11				Hf	
1063.8	10.0	2.65	100	.02				Mb	
1072.6	8.8	2.67	100	.12	2210 / 1067.5				
1079.6	7.0	3.21	83	1.04		.68		Hf	st-wk diss bn-cpy w/ py, sph
1090.5	10.9	2.93	100	.45				Mb	
1095.0	4.5	3.00	80	.02					
	BOTTOM								

MIS 807A—78

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two | COLLAR ELEV. 3258.9 | D.D. HOLE NO. M-48

SURVEY COORD. N 326,527.78

PROPERTY Mission | E. 762,207.98 | TOTAL DEPTH 836.0

DATE COMPLETED 11/17/62 | DRILL GRID COORD. 49+50N; 55+00W | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
195.0	195.0	—	—	—					Top CCg ± 190 (?)
200.6	5.6	—	41	—	3050 / 208.9		.02	CCg	BR ± 200.6
210.0	9.4	2.42	81	.07					weakly mineralized, strongly
219.0	9.0	2.54	84	.09					altered Mp.
226.9	7.9	2.52	72	.12					
236.0	9.1	2.52	85	.16					
242.3	6.3	2.53	92	.12					
251.5	9.2	2.51	59	.17	3010 / 248.9		.13		243.3-260.6 Poss flt; st bx-gg
260.6	9.1	2.52	13	.13					Base Oxides @ 260.6
271.4	10.8	2.49	82	.22					
281.5	10.1	2.51	75	.19					
292.6	11.1	2.53	82	.21	2970 / 288.9		.19		
302.3	9.7	2.54	89	.19					
315.6	13.3	2.55	92	.17					
324.7	9.1	2.58	100	.19					
335.5	10.8	2.59	100	.19	2930 / 328.9		.19		
345.8	10.3	2.60	97	.19					
357.2	11.4	2.60	95	.22				Mp	347.5-48.2 – flt bx (65°)
361.8	4.6	2.61	100	.15					
371.8	10.0	2.59	96	.17	2890 / 368.9		.19		
381.8	10.0	2.61	100	.22					
391.9	10.1	2.60	97	.16					
402.0	10.1	2.57	100	.17					
412.1	10.1	2.58	100	.15	2850 / 408.9		.18		
417.1	5.0	2.59	99	.19					In general: Typical Mp
425.6	8.5	2.62	98	.22					w/ local gg zones - poss
434.8	9.2	2.58	96	.22					flts; clay, ser, chl, talc
445.0	10.2	2.56	98	.16					alt; Qtz v/lts, local
455.0	10.0	2.58	99	.14	2810 / 448.9		.19		moly; local st gyp
465.1	10.1	2.59	99	.16					
469.4	4.3	2.59	100	.20					
479.3	9.9	2.59	99	.19					
489.4	10.1	2.59	100	.16	2770 / 488.9		.17		
499.5	10.1	2.50	100	.12					
509.6	10.1	2.60	98	.13					
517.8	8.2	2.59	98	.07					
520.7	2.9	2.53	98	.11					40° Mp - Qtzt ct @ 520.7 w/ gyp
525.8	5.1	2.62	100	.06					
535.5	9.7	2.61	99	.05	2730 / 528.9		.09		
545.5	10.0	2.57	100	.08				Qtzt	lt gr-wh Qtzt; local st gyp,
555.5	10.0	2.58	100	.11					diss & v/lt moly; local st clay
565.5	10.0	2.58	100	.11	2690 / 568.9		.07		& bx
572.5	7.0	2.60	100	.12					
582.9	10.4	2.56	100	.13				Qtzt-Mp	Low Δ Mp int 573.9 - 576.6
591.0	8.1	2.63	94	.10				Qtzt	

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3258.9

D.D. HOLE NO. M-48

SURVEY COORD. N 326,527.78

PROPERTY Mission

E 762,207.98

TOTAL DEPTH 836.0

DATE COMPLETED 11/17/62

DRILL GRID COORD. 49+50N, 55+00W

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
596.7	5.7	2.62	100	.16				Qtzt	
604.7	8.0	2.86	100	.23					596.1-596.7 Flt ct w/ Hf @ 50°
607.8	3.1	2.58	100	.06				Hf	604.7 20° Hf Qtzt ct
614.0	6.2	2.88	96	.42	2650 608.9	.42	.16	Qtzt	607.8 - 30° ct w/ Hf
621.4	7.4	2.79	99	.36				Hf	diss cpy-py, sp flts
630.0	8.6	2.65	100	.14					621.4 - 15° ct w/ Qtzt
640.5	10.5	2.62	81	.07				Qtzt	
644.5	4.0	2.63	100	.14					644.5 Low A ct w/ Hf
650.6	6.1	2.85	100	.55	2610 648.9	.55	.24		
660.7	10.1	2.88	98	.46				Hf	
667.2	6.5	3.06	100	1.63		.83			667.2 grad ct w/ Tt
672.1	4.9	2.81	100	1.05				Tt	672.1 30° ct w/ Hf @ gyp. flt.
678.7	6.6	2.86	92	.91					
688.7	10.0	2.82	97	.55	2570 688.9	.61	.83	Hf	
700.0	11.3	2.67	98	.61					700.0 ct w/ Qtzt
710.0	10.0	2.62	97	.05				Qtzt	
717.8	7.8	2.57	100	.07					717.8 irreg ct w/ Hf
728.5	10.7	2.86	95	.26	2530 728.9		.27	Hf	
736.3	7.8	2.56	98	.13					736.2 ct w/ Qtzt in broken zone
745.5	9.2	2.58	99	.03				Qtzt	
753.9	8.4	2.57	100	.03					
765.0	11.1	2.59	96	.03					
775.6	10.6	2.61	94	.03	2490 768.9		.05		
785.5	9.9	2.61	98	TR					
792.8	7.3	2.60	100	.04				Qtzt	Wh to lt gr Qtzt, Traces moly; local gg, recem. zones. local gyp, st fracs
802.2	9.4	2.60	100	TR					
815.0	12.8	2.58	98	.04	2450 808.9		.02		
828.2	13.2	2.59	100	.06					
836.0	7.8	2.61	95	.03					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF THREE COLLAR ELEV. 3271.2 D.D. HOLE NO. M-47

SURVEY COORD. N 361,148.91

PROPERTY MISSION E 163,493.95 TOTAL DEPTH 1115.1

DATE COMPLETED 11/23/62 DRILL GRID COORD 25+47N; 42+50W INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alov	Top Cgl ± 170'(?)
184.0	184.0							Cgl	Cu, Fe, Mn Oxides
216.5	28.5								
220.4	8.4	2.36	91	.78	3050 / 221.2	0.43NS / 0.78	.17	Arg	V-broken; st Mn, Fe, Cu Oxides & Cu Mn Silc, Tr Fe; Py-Cpy; Base Ox 221'
228.6	7.7	2.65	97	.81					
237.8	9.2	2.66	92	.56		0.65		Arg-Cgl	Py wi wk cpy, cc
244.2	6.4	2.63	96	.59				Arg-Mp	Arg-Mp ct @ 243.5
254.9	10.7	2.56	95	.07				Mp	wk cpy; Sulgg., moly on fracs
263.3	8.4	2.60	98	.27	3010 / 261.2		.44	Mp-Arg	
274.4	11.1	2.65	99	.46					
283.0	8.6	2.63	96	.32		0.46			
293.0	10.0	2.68	96	.97					
303.0	10.0	2.63	100	.50	2970 / 301.2		.45		
313.0	10.0	2.61	98	.48				Cgl	Lt to dk br to bl Cgl; local st silif; local qtz-feld repl., qtz vlts; wk diss & vlt py-cpy
325.0	12.0	2.68	97	.39		0.45			
335.0	10.0	2.70	99	.37					
345.0	10.0	2.60	100	.57	2930 / 341.2		.45		
355.0	10.0	2.68	100	.63					
365.0	10.0	2.69	92	.39		0.61			
375.0	10.0	2.66	96	.58					370.2-73.2 Bx-gg zone
384.0	9.0	2.66	96	1.03	2890 / 381.2		.61		
394.0	10.0	2.58	98	.68		0.71			
404.0	10.0	2.66	100	.64				Cgl-Arg	Grades to dark br-blk Arg
414.0	10.0	2.64	100	.32					
421.0	7.0	2.63	100	.88	2850 / 421.2	0.88	.64		
430.0	9.0	2.69	39	.39					
440.0	10.0	2.65	98	.20					
450.0	10.0	2.63	99	.40					
460.0	10.0	2.63	92	.75	2810 / 461.2	0.58	.44		
470.0	10.0	2.61	93	.40					
480.0	10.0	2.65	96	.34		0.55			
490.6	10.6	2.68	98	.88				Arg	
500.6	10.0	2.61	100	.10	2770 / 501.2		.43		
506.5	5.9	2.64	100	.15					
515.0	8.5	2.64	100	.07					
523.1	8.1	2.67	94	.42		0.42			Dense tan-dk gr Arg; wi general wk fine diss py-cp; local moly, qtz strs, local feld, serp & ser
533.3	10.2	2.61	97	.10					
541.0	7.7	2.63	100	.08	2730 / 541.2		.17		
551.0	10.0	2.63	100	.11					
561.0	10.0	2.65	94	.15					
569.4	8.4	2.66	90	.25					
577.8	8.4	2.66	98	.14					
586.8	9.0	2.65	100	.14	2690 / 581.2		.16		
596.8	10.0	2.62	96	.16					
604.4	7.6	2.68	97	.08					
611.0	6.6	2.63	100	.12					

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF THREE COLLAR ELEV. 3271.2 D.D. HOLE NO. M-47

SURVEY COORD. N 361,148.91

PROPERTY Mission E 763,493.95 TOTAL DEPTH 1115.1

DATE COMPLETED 11/23/62 DRILL GRID COORD. 25+47 N; 42+50 W INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
620.1	9.1	2.64	99	.06	2650 / 621.2		.11		
632.4	12.3	2.65	100	.09				Arg	
645.5	13.1	2.65	95	.07					
653.0	7.5	2.63	94	.45		0.45			
663.0	10.0	2.65	94	.17	2610 / 661.2		.17		
670.7	7.7	2.58	98	.20					
679.3	8.6	2.63	94	.08				Arg-Qtzt	Grades to impure Qtzt.
688.5	9.2	2.63	84	.07					Impure lt tan-lt gr Qtzt
697.9	9.4	2.66	83	.04				Qtzt	Local ser, talc alt.
698.9	1.0	2.61	32	.05	2570 / 701.2		.10		Poss Mp in frac @ 689.1'
706.2	7.3	2.63	54	.08				Qtzt-Arg	Qtzt-Arg Bx; V-broken; poss flt.
710.5	4.3	2.85	39	1.47				Hf	Grn Hf; st gar; Qtzt-Hf ct ≈ 706.0
716.3	5.8	2.34	37	.56				Hf-gg	St clay w/ frags Hf; Suls in clay
725.0	8.7	2.68	31	.83		0.85		Hf	
725.9	0.9	—	0	.78				?	NO RECOVERY
730.4	4.5	2.78	54	.78				Hf-Qtzt	≈ 727.8 Hf-Qtzt ct (50°)
734.3	3.9	2.56	.09	.14					
741.0	6.7	2.57	63	.16	2530 / 741.2		.57		
751.0	10.0	2.58	67	.14					
755.4	4.4	2.54	61	.21					Lt gr-wh Qtzt - locally
759.2	3.8	2.58	69	.17				Qtzt	v-broken, shattered, vuggy,
760.6	1.4	2.58	32	.14					some recmtion; local
762.8	2.2	2.54	74	.17					moly, gg.
773.5	10.7	2.57	16	.08					
777.5	4.0	2.58	39	.08					Qtzt-Hf ct @ 777.5'
786.0	8.5	2.43	71	.15	2490 / 781.2	0.75	.19		
790.3	4.3	2.63	60	1.18		0.95		Hf	Vuggy lt-gr Hf w/ sulf-chlor bands; Grades to Qtzt
798.8	8.5	2.57	82	.21					
803.2	4.4	2.55	7	.08					
809.6	6.4	2.57	71	.21					
815.4	5.8	2.63	88	.12					Tr diss py-cpy, v/lts
817.5	2.1	2.56	27	.06					moly, Num gyp v/lts
828.3	10.8	2.61	70	.16	2450 / 821.2		.34		
832.0	3.7	2.59	97	.32					
842.0	10.0	2.62	100	.27				Qtzt	
852.0	10.0	2.61	100	.12					
862.0	10.0	2.63	96	.23	2410 / 861.2		.21		861.0 45° Bx & gg
872.0	10.0	2.63	99	.26					
881.8	9.8	2.62	100	.26					Tr py cpy, gyp v/lts
891.4	9.6	2.64	99	.37					
903.6	12.2	2.63	100	.28	2370 / 901.2		.29		
912.2	8.6	2.62	100	.19					
922.1	9.9	2.62	98	.14					921-22 Steep slips w/moly
929.3	7.2	2.62	91	.17					929.3 30° Grad cnt
937.0	7.7	2.84	96	1.12				Qtzt-Hf	Gypsiferous w/ st diss cpy

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF THREE COORDINATES 3271.2 DRILL HOLE M-47

SURVEY COORD N 361,148.91

PROPERTY MISSION E 763,493.95 TOTAL DEPTH 1115.1

DATE COMPLETED 11/23/62 DRILL GRID COORD 25+47N, 42+50W INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recovery %	Core Assay %	Bench Elev. & Depth	Core Assay Au Oz/Ton Avg. Values (wgtd)	Composite Assay	Rock Type	REMARKS
						1.10		Qtzt-Hf	934.7 Grad cnt w/ Hf
							.42		
945.2	9.2	3.11	93	.77	2330 / 941.2				940.6 30° Bx ¢ gg
955.0	9.8	2.99	98	.98					954.2 60° Bx w/ mag, cp, gyp
965.0	10.0	3.09	100	.88		0.77		Hf	Diss & vlt cpy, py, tr moly, mag. Vlts gyp.
975.0	10.0	3.10	97	.55					
985.0	10.0	3.08	98	.58	2290 / 981.2		.77		
998.0	13.0	3.13	95	1.34		1.17			
1008.0	10.0	3.16	100	.23				Hf-Tt	Diss cpy, py moly
1022.8	14.8	2.59	100	Tr	2250 / 1021.2		.55	Qtzt	50° Hf - Qtzt cnt
1033.4	10.6	2.62	100	.21					Gyp vlts.
1038.4	5.0	2.76	100	.49				Qtzt-Hf	Diss cpy-py tr moly
1050.0	11.6	3.05	98	.58		0.55		Hf-Tt	1047.9 40° Tt-Hf cnt
1056.6	6.6	2.99	100	.34				Hf	Diss cpy, py bn.
1065.0	8.4	2.69	100	.05	2210 / 1061.2		.35		1056.6 - 30° Bx cnt
1075.0	10.0	2.69	100	Nil				Mb	
1080.2	5.2	2.69	100	Nil					
1090.4	10.2	2.73	100	.07					
1095.1	4.7	2.85	97	.04				Mb-Hf	Tr cpy in Hf
1104.5	9.4	2.87	91	.03	2170 / 1101.2		.01	Amb-Hf	
1115.1	10.6	2.86	96	.04			.04	Hf Mb	Tr cpy in Hf

M.S.807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 2 COLLAR ELEV. 3266.5 D.D. HOLE NO. M-46

SURVEY COORD. N 362,642.12

PROPERTY Mission E. 762,469.55 TOTAL DEPTH 815.2

DATE COMPLETED 11/2/62 DRILL GRID COORD. N 40+57; W 52+52 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
192.0					3090 / 176.5		—	Alluv	CCg ± 170' BR ± 192'
203.7	11.7	2.53	71	.22					
212.2	8.5	2.59	94	.16					wk Fe-Mn Cu oxides, cu sils
224.5	12.3	2.54	93	.15	3050 / 216.5		.11		
233.7	9.2	2.51	61	.18					
242.9	9.2	2.49	76	.19					Tr wulf.
250.7	7.8	2.54	76	.25				Arg	250.7' Base Oxides
260.7	10.0	2.62	81	.19	3010 / 256.5		.19		
268.0	7.3	2.60	91	.11					
271.3	3.3	2.59	53	.09					
274.7	3.4	2.59	57	.13					
280.0	5.3	2.59	53	.10					
290.5	10.5	2.62	90	.16					
300.7	10.2	2.65	40	.26	2970 / 296.5		.15		
306.4	5.7	—	0	—				Arg-Hf	? No core ct in this run (?)
323.6	17.2	2.73	21	1.14		1.02		Hf-Tt	Not reliable sample or
335.5	11.9	2.45	18	.85				Hf	bench assay st chl; wk not Cu.
338.0	2.5	—	0	—	2930 / 336.5		.77	Hf?	No core
341.5	3.5	2.51	19	.35				Hf-Arg	Mixed pebbles Arg-Hf.
345.6	4.1	2.55	93	.51					Mixed Hf-Arg, vlt & diss cpy py
356.9	11.3	2.71	93	.60		.58			Mixed Hf & massive Gyp
365.6	8.7	2.34	100	.23				Hf-Gyp	
374.5	8.9	2.47	100	.30	2890 / 376.5	.78 / .78	.41		
380.2	5.7	2.70	96	.28				Hf-Qtzt	377.5 Grad Hf-Qtzt ct.
387.9	7.7	2.73	93	.28				Arg & Qtzt	Grades Qtzt to Arg to Qtzt
395.5	7.6	2.63	100	.07					
406.1	10.6	2.62	100	.08				Qtzt	406.1 - 15° Qtzt - Mp ct
415.5	9.4	2.58	97	.13	2850 / 416.5		.19		
425.6	10.1	2.57	98	.13					
436.8	11.2	2.56	95	.13					
445.6	8.8	2.63	93	.19				Mp	st. ser alt. biot, pk feld,
453.2	7.6	2.58	100	.17	2810 / 456.5		.15		Gyp vlts, moly, wk py-cpy
463.2	10.0	2.57	99	.13					
473.1	9.9	2.60	100	.13					
482.8	9.7	2.59	100	.12					Mp-Qtzt ct, 50°, @ 482.8'
491.6	8.8	2.62	100	.06					wht Qtzt, locally impure
500.2	8.6	2.63	100	.06	2770 / 496.5		.10		
510.2	10.0	2.62	98	.07				Qtzt	wk vlt & diss sulf.
521.3	11.1	2.62	100	.18					moly, cpy, py,
531.0	9.7	2.58	100	.24					
540.8	9.8	2.61	100	.12	2730 / 536.5		.15		
550.0	9.2	2.63	97	.12				Qtzt-Mp	25° Qtzt-Mp ct @ 542.6'
560.5	10.5	2.64	95	.16					
572.4	11.9	2.69	96	.14				Mp	st ser, vlt & diss cpy, py, moly
575.7	3.3	2.52	88	.11	2690 / 576.5		.14		
586.9	11.2	2.49	14	.08				Mp-Qtzt	ct lost in low rec'y

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 2 COLLAR ELEV. 3266.5 D.D. HOLE NO. M-96

SURVEY COORD. N 362,642.12

PROPERTY Mission E. 762,469.55 TOTAL DEPTH 815.2

DATE COMPLETED 11/2/62 DRILL GRID COORD. N40+57; W52+52 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
586.9	—	—	—	—					
591.8	4.9	2.59	100	.15				Qtzt	wk sulfs; st ser.
596.5	4.7	2.57	98	.09					Qtzt-Hf ct @ 40° @ 596.5
607.0	10.5	2.93	82	.68		.79			608.1, Hi & cpy, mag vn.
618.3	11.3	2.97	92	.91	2650 / 616.5		.44	Hf	617'-618' Low & cpy-mag vn
625.0	6.7	2.92	91	.41					Sp vlts cpy-py
635.2	10.2	3.09	95	.58		.55		Hf-Tt	vlt & diss py-cpy.
643.0	7.8	2.90	80	.50				Hf	
650.5	7.5	2.71	95	.60					650.5' Grad Hf-Qtzt ct.
658.8	8.3	2.58	75	.09	2610 / 656.5		.48		
667.2	8.4	2.60	100	.19				Qtzt	
671.2	4.0	2.61	100	.17					
681.2	10.0	2.62	100	.12				Qtzt & Arg	Mixed Arg & Qtzt
686.2	5.0	2.66	100	.96		.60			Grad ct to Hf @ 686.2 mod cpy
695.5	9.3	2.92	100	.41	2570 / 696.5		.31	Hf	pats & vlt cpy py
705.6	10.1	3.19	100	.19				Hf-Tt	Jnts stgar, gyp vns
715.6	10.0	3.33	100	.16					
723.5	7.9	3.37	100	.80				Tt	
730.7	7.2	3.16	100	2.41		1.70			vlt & diss py, cpy, bn
737.0	6.3	3.56	100	2.05	2530 / 736.5		.97		
745.2	8.2	3.10	100	2.43		2.41			438.2' - 0.3' mass bn, cpy, sph
755.4	10.2	3.34	96	.04				Tt-Hf	
765.6	10.2	3.24	100	2.90					vlt, pat & diss bn, cpy, sph.
770.5	4.9	2.81	93	1.48		1.96		Hf	
778.6	8.1	2.77	100	.75	2490 / 776.5	.75	1.16		777.3 - 78.6', 25° Recemflt ct.
787.1	8.5	2.63	87	.04					
795.7	8.6	2.60	94	.05				Qtzt	Tr sulfs, moly
804.6	8.9	2.62	88	.04					
815.2	10.6	2.67	88	.03			.08 / 38.7'		
					815.2				

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 3 COLLAR ELEV. 3271.4 D.D. HOLE NO. M-45

SURVEY COORD. N 361,449.01

PROPERTY Mission E 763,488.75 TOTAL DEPTH 974.0

DATE COMPLETED 10/24/62 DRILL GRID COORD N28+48 ; W42+51 INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0					3090 / 181.4		—		
192.0	2.0	—	—	—				Ccgl	BR ± 192.0'
204.0	12.0	2.37	84	.49		.49			.12 Ns Cu.
208.8	4.8	2.45	83	.10				Cgl	.02 " "
219.1	10.3	2.50	95	.46		.46			.12 " "
229.2	10.1	2.55	96	.44	3050 / 221.4		38		.17 " " Base Oxides 229.2'(?)
241.3	12.1	2.57	96	.34				Cgl-Mp	4.4' Mp - 236.9' to 241.3'
250.1	8.8	2.61	95	.42		.44			cpy, py 245.4 Mp-Cgl cnt.
258.0	7.9	2.66	94	.55					
268.0	10.0	2.65	99	.60	3010 / 261.4		44		
280.0	12.0	2.69	96	.52				Cgl	Grey-brown cgl
284.2	4.2	2.68	99	.73		.57			Mod py-cpy
294.4	10.2	2.69	100	.64					
304.4	10.0	2.66	100	.45	2970 / 301.4		57		
314.4	10.0	2.64	100	.49				Arg & Cgl	Mod vlt-diss cpy
321	6.6	2.64	100	.50		.60			as above
330.3	9.3	2.65	100	.76				Cgl	
340.0	9.7	2.63	100	.66				Hf-Cgl	
348.5	8.5	2.77	92	.68	2930 / 341.4	.68	60	Cgl	348.5 cgl-Mp cnt
354.3	5.8	2.62	97	.20				Mp	354.3 Mp-Cgl cnt
365.5	11.2	2.62	88	.45					Mod vlt-diss cpy
370.1	4.6	2.59	95	.63		.50		Cgl	370.1-371' Trans zone w/ qtz-fold
380.1	10.0	2.60	92	.24			42		st ser alt.
393.1	13.0	2.59	97	.24	2890 / 381.4			Mp	393.1 - 40° Mp-cgl cnt.
400.7	7.6	2.69	100	.50		.52			Mod diss cpy Through-
410.4	9.7	2.63	100	.53					out.
420.6	10.2	2.65	100	.26					
431.0	10.4	2.63	100	.55	2850 / 421.4	.55	37	Cgl	Local pX Fold
441.1	10.1	2.73	96	.49					
448.0	6.9	2.65	86	.60		.57			
458.1	10.1	2.66	98	.68					
465.5	7.4	2.75	97	.64	2810 / 401.4		57		
472.7	7.2	2.68	100	.96				Cgl-Mp	3.5' Mp intercept
482.5	9.8	2.64	89	.63		.77			
492.6	10.1	2.66	97	.58				Cgl	492.6 Grad Cgl-Arg ct.
501.5	8.9	2.71	100	1.11	2770 / 501.4		77		
510.7	9.2	2.64	100	.74					
518.0	7.3	2.68	95	.51		.66			Fate, vlt, diss cpy
526.9	8.9	2.64	99	.53					wK-mod ser alt.
535.4	8.5	2.67	96	.85					
547.5	12.1	2.61	93	.29	2730 / 541.4		61	Arg	
551.0	3.5	2.58	51	.18					
560.1	9.1	2.64	76	.95					
563.0	2.9	2.49	30	1.25					
570.6	7.6	2.65	86	.79					
576.6	6.0	2.62	85	.63		.83			

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 3 COLLAR ELEV. 3271.4 D.D. HOLE NO. M - 45

SURVEY COORD. N 361,449.01

PROPERTY Mission E 763,488.75 TOTAL DEPTH 974.0

DATE COMPLETED 10/24/62 DRILL GRID COORD. N 28+48 ; W 42+51 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
576.6	—	—	—	—		.83	—	—	—
580.6	4.0	2.58	27	.56	2690		.69	Arg	580.6 Flt ct w/ Qtzt (Hi 4?)
585.5	4.9	2.43	24	1.23	581.4	1.23			576.6 - 585.5' Pre-min Flt?
590.2	4.7	—	0	—					
596.0	5.8	2.48	22	.16					Tr to wk moly throughout.
599.4	3.4	2.48	89	.16					
604.5	5.1	2.55	38	.19					Low recoveries indicate poss
608.2	3.7	2.57	14	.26					flt or shatter zones
618.0	9.8	2.57	86	.26					
626.8	8.8	2.58	65	.28	2650 / 621.4		.30	Qtzt	
633.0	6.2	2.57	20	.13					
635.0	2.0	2.61	74	.18					
638.1	3.1	—	0	—					
640.3	2.2	2.60	87	.14					
645.6	5.3	2.64	61	1.58		1.58			cpy in Qtz vlts
656.1	10.5	2.57	28	.28					Run crushed & broken w/ gg.
665.8	9.7	2.51	27	.15	2610 / 661.4		.38		
672.9	7.1	2.60	29	.19					± 672.9 Qtzt - Hf ct
678.0	5.1	2.84	80	.78				Hf	
688.0	10.0	2.88	89	1.56		1.27		Hf-Tt	
695.7	7.7	3.14	83	1.56				Tt	
706.0	10.3	3.01	92	.79	2570 / 701.4		.95	Tt-Hf	diss, 30-45° vlts, strs cpy-py
708.9	2.9	2.86	96	.44					
714.7	5.8	3.43	17	.80		1.19			
725.0	10.3	3.45	93	1.79				Tt	
734.5	9.5	3.12	96	.24				Tt-Hf	
742.1	7.6	3.00	100	.14	2530 / 741.4		.78		
752.3	10.2	3.20	95	1.18				Tt	
761.0	8.7	3.21	92	.60		6.87			
771.1	10.1	3.34	97	6.53					19.1' @ 12.77% Cu St mag
780.1	9.0	3.71	100	19.78	2490 / 781.4		6.56	cpy vn	Mass cpy-py-pyrrhotite(?)
789.4	9.3	3.27	100	.15				Tt	
796.5	7.1	3.38	98	.34					796.5 grad cnt w/ Hf.
805.8	9.3	3.20	91	.31				Hf	pats brn Tt
813.0	7.2	2.99	100	.08					
816.5	3.5	3.04	100	.04		1.30		Mb	Hard dense lt grn Mb
824.4	7.9	3.07	100	1.30	2450 / 821.4	1.30	.34	Hf	Med-st diss py-cpy.
834.8	10.4	2.62	100	.12				Qtzt	824.4 Grad cnt w/ Qtzt
840.3	5.5	2.65	100	.40		.53			840.3 Hf cnt.
842.6	2.3	3.14	100	.83				Hf	flt bx recem to 842.6
852.7	10.1	2.61	100	.08					842.6 Cnt w/ Qtzt.
863.6	10.9	2.61	100	.07	2410 / 861.4		.27	Qtzt	
873.6	10.0	2.61	100	.12					
877.3	3.7	2.61	100	.13					877.3 to 78.1 Flt cnt w/ Hf.
885.5	8.2	3.06	100	.53		1.04		Hf	diss, pat, & vlt cpy-py
894.8	9.3	3.16	94	1.49					Same

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF 3 COLLAR ELEV. 3271.4 D.D. HOLE NO. M-45

SURVEY COORD. N 361,449.01

PROPERTY Mission E 763,468.75 TOTAL DEPTH 974.0

DATE COMPLETED 10/24/62 DRILL GRID COORD. N 28+48; W 42+51 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
894.8	—	—	—	—			—	—	894.8 - 50° Hf-Mb ct
901.7	6.9	2.76	100	.02	2370 / 901.4		.50		
910.9	9.2	2.84	100	.09					
920.7	9.6	2.71	100	.04					
930.7	10.0	2.74	100	.01				Mb	Lt gr ⅓ wh Mb.
936.8	6.1	2.75	100	Nil					occasional 30 to 50° color
946.8	10.0	2.69	100	Nil	2340 / 941.4		.03		banding
955.8	9.0	2.70	100	Nil					
965.8	10.0	2.70	100	Nil					
974.0	8.2	2.77	100	Nil			Nil		

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3260.2 D.D. HOLE NO. M-44

SURVEY COORD. N 363,236.50

PROPERTY MISSION E. 762,462.24 TOTAL DEPTH 729.1

DATE COMPLETED 10/9/62 DRILL GRID COORD. N46+49, W 52+50' INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
0.0								Alluv	
191.0	191.0	—	—	—	3090 / 170.2		—		Top CCg ± 170 (?)
194.3	3.3	—	100	—				CCg	BR 194.3
205.3	11.0	2.44	61	.02					
213.8	8.5	2.57	90	.17	3050 / 210.2		.03		
222.3	8.5	2.52	80	.18					
232.0	9.7	2.36	85	.18					
243.1	11.1	2.55	84	.19					
253.3	10.2	2.55	98	.15	3010 / 250.2		.18		
262.5	9.2	2.65	100	.16					Lt brn (in oxide zone) to
269.7	7.2	2.56	100	.16					Lt gr Mp;
279.7	10.0	2.60	100	.14					Minerals: wk to mod
287.2	7.5	2.55	100	.17	2970 / 290.2		.16	Mp	py w/ wk cpy in strs &
299.2	12.0	2.63	95	.19					vlts, scattered diss &
307.0	7.8	2.58	100	.18					vlts moly.
314.7	7.7	2.57	100	.18					Alt.: chl in oxide zone;
328.0	13.3	2.55	100	.18	2930 / 330.2		.16		wk to mod ser; biot; pats
338.3	10.3	2.58	98	.16					pk to wh feld; Tr Fl, serp.
348.2	9.9	2.60	100	.27					Structures: 15° to 70°
358.5	10.3	2.59	100	.19					Fracs, 306.1' and 311.6' Flts
369.0	10.5	2.60	100	.20	2890 / 370.2		.21		w/ bx-gg. Gyp in some
379.0	10.0	2.62	99	.24					fracs.
388.4	9.4	2.65	96	.26					
398.2	9.8	2.61	100	.22					
406.5	8.3	2.59	100	.21					
414.5	9.0	2.57	100	.21	2850 / 410.2		.23		
424.8	10.1	2.63	100	.11				Arg-Qtzt	414.5': Mp-Arg-Qtzt ct
435.0	10.2	2.61	92	.10				Qtzt	wh Qtzt Local clay
445.6	10.6	2.60	83	.11				Qtzt-Mp	444.0 - 55° Qtzt-Mp ct.
454.5	8.9	2.55	97	.21	2810 / 450.2		.13		
465.6	11.1	2.52	92	.25				Mp	20-60° Fra cs.
476.6	11.0	2.53	96	.14					wk suls.
482.5	5.9	2.59	96	.16					
488.8	6.3	2.61	84	.21	2770 / 490.2		.19		482.5 Mp-Qtzt ct.
497.0	8.2	2.58	85	.06					
510.0	13.0	2.59	82	.12					wk diss & vlts suls
517.0	7.0	2.61	98	.13				Qtzt	w/ mod to st moly on some
525.6	8.6	2.59	100	.11					fracs in wh to pk Qtzt.
535.4	9.8	2.60	93	.13	2730 / 530.2		.11		
543.5	8.1	2.62	91	.18					
550.5	7.0	2.78	97	.46		.45		Hf	543.5' - 40° - Qtzt-Hf ct.
563.3	12.8	2.75	99	.44					Mod cpy-py diss & vlts.
575.5	12.2	2.60	100	.07	2690 / 570.2		.29	Arg &	563.3 Hf-Arg ct
586.9	11.4	2.58	100	.09				Qtzt	40-70° Fracs.
595.5	8.6	2.80	100	.68		.62			586.9' - 50° - Grad Qtzt-Hf ct.

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two COLLAR ELEV. 3260.2 D.D. HOLE NO. M-44

SURVEY COORD. N 363,236.50

PROPERTY Mission E 762,462.24 TOTAL DEPTH 729.1

DATE COMPLETED 10/9/62 DRILL GRID COORD. N 46+49 W 52+50 INCLINATION VERTICAL

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
604.2	8.7	2.99	93	.57		.62			Pats & strs cpy-py first 2 runs
614.2	10.0	3.07	99	.38	2650 / 610.2		.36	Hf	
623.4	9.2	3.19	95	.29					
633.6	10.2	3.24	93	Nil				Hf-Tt	
643.6	10.0	3.18	99	Nil					
653.6	10.0	3.46	97	.09	2610 / 650.2		.12		
663.5	9.9	3.40	100	.56				Tt	60° bn vlts w/ cpy-qtz.
671.0	7.5	3.37	100	4.45		2.05			Massive bn-cpy 665.2 - 7.1
679.4	8.4	3.27	96	.68				Tt-Hf	vlts, stks, diss bn-cpy.
689.3	9.9	2.89	92	2.83	2570 / 690.2		1.89		Mod to v. st. diss, strs, vlts of
693.6	4.3	2.58	100	2.78		2.78		Hf	bn - cpy, some hem.
702.3	8.7	2.50	97	.04					
712.7	10.4	2.63	91	.05				Qtzt	wh broken Qtzt w/ tr
721.1	8.4	2.65	89	.07					sulf, wk clay
729.1	8.0	2.64	99	.06	— / 729.1		.29		

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF 4 | COLLAR ELEV. 3265.9 | D.D. HOLE NO. M-43

SURVEY COORD. N 361,161.54

PROPERTY Mission | E 763,743.49 | TOTAL DEPTH 1470.4

DATE COMPLETED 9-28-62 | DRILL GRID COORD. N25+57, W40+00 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
								Alluv	
191.0									Top Ccg I 190
216.0	25.0	—	100	—	3050 215.9		—	Ccg	BR - 216.0
220.7	4.7	2.53	91	.24					
230.2	9.5	2.67	100	.26					
242.7	12.5	2.68	96	.28					
251.0	8.3	2.69	99	.24					st moly
261.6	10.6	2.70	99	.27	3010 255.9		.25		
271.7	10.1	2.61	99	.32					
282.9	11.2	2.67	98	.34					Ltgr Cgl w/ st ser, local
293.0	10.1	2.65	99	.50	2970 295.9	.48	.37		serp; talc. wk stks &
303.1	10.1	2.72	100	.41		.41			vlts & diss cpy, py;
310.2	7.1	2.62	100	.26					occasional moly on fracs
320.9	10.7	2.65	95	.29					& in qtz vlts. Mod. sul gg.
331.0	10.1	2.69	95	.30	2930 335.9		.31		
341.8	10.8	2.68	96	.30					
351.9	10.1	2.69	100	.33					
360.2	8.3	2.77	96	.46				Cgl	
371.0	10.8	2.63	95	.43		.48			
380.4	9.4	2.66	99	.61	2890 375.9		.41		
389.3	8.9	2.72	95	.75					
400.3	11.0	2.70	92	.76		.74			
409.8	9.5	2.59	88	.65					409.8 - 12.1 - 60° flt bx - gg.
419.0	9.2	2.66	97	.93	2850 415.9		.74		Ltgr cgl w/ dk brn frags;
429.1	10.1	2.68	97	.81					increase in qtz - feld repl
437.9	8.8	2.68	91	.81		.72			toward end; Increase in
445.0	7.1	2.67	97	.61					py - cpy; suls in 30° to 70° vlts
455.0	10.0	2.68	99	.57	2810 455.9		.72		& diss. sp wk moly.
465.2	10.2	2.68	92	.86		.86			
472.5	7.3	2.66	100	.25					
482.9	10.4	2.70	94	.26					
491.7	8.8	2.63	100	.23					488.3 - 89.1 - 45° Bx - gg (Poss flt)
500.5	8.8	2.68	98	.29	2770 495.9		.39		
510.4	9.9	2.73	96	.31					
522.2	11.8	2.75	100	.72					
532.4	10.2	2.70	100	.77		.73			
542.4	10.0	2.71	98	.67	2730 535.9		.58		
552.4	10.0	2.70	100	1.00		.86		Cgl-Arg	Grades Cgl to Arg; No ct.
565.5	13.1	2.67	98	.85					
577.8	12.3	2.65	97	.31	2690 575.9		.72		
587.2	9.4	2.67	96	.18					Tan to dk brn Arg w/ mod
595.0	7.8	2.66	96	.28				Arg	to st silf.; 30°-45° Qtz vlts.
601.5	6.5	2.63	97	.09					
611.7	10.2	2.65	100	.13					
621.5	9.8	2.68	100	.12	2650 615.9		.17		621.5 - 25° - Arg - Tt ct
631.2	9.7	3.40	94	2.23		2.23		Tt	Poss flt w/ massive mag & suls.

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF 4 | COLLAR ELEV. 3265.9 | D.D. HOLE NO. M-43

SURVEY COORD. N 361,161.54

PROPERTY MISSION | E. 763,743.49 | TOTAL DEPTH 1470.4

DATE COMPLETED 9-28-62 | DRILL GRID COORD. N25+57, W40+00 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
638.9	7.7	2.57	100	.21					631.2 - 25° - 72 trg ct.
646.6	7.7	2.62	92	.05				Arg or Qtzt	
655.0	8.4	2.62	100	.10	2610 / 655.9		.63		High sil lt tan Arg.
660.1	5.1	2.64	99	.02					
670.2	10.1	2.61	100	.13					670.0 Arg-Qtzt ct.
681.2	11.0	2.59	100	.29				Qtzt	
691.2	10.0	2.65	100	.51	2570 / 695.9	0.51	.27		varied & vlts & diss cpy-py
702.2	11.0	2.62	100	.26					
714.0	11.8	2.62	100	.21					
724.1	10.1	2.62	98	.31					Frosty lt gr & wh Qtzt
727.2	3.1	2.61	99	.24					w/ wk to mod clays &
737.2	10.0	2.58	100	.13	2530 / 735.9		.17	Qtzt	ser along fracs. 30° to 60°
747.2	10.0	2.61	100	.11					gyp vlts common.
757.2	10.0	2.74	100	.83		0.83			wk sulf & moly throughout
765.8	8.6	2.60	100	.13					
775.5	9.7	2.61	96	.11	2490 / 775.9	1.21	.31		
782.0	6.5	2.88	100	1.21					776.0 Gradational ct w/ Hf.
792.2	10.2	2.87	95	.46					
800.7	8.5	2.82	98	1.21		0.98		Hf	Pods, vlts, str. py, cpy, lesser diss
810.9	10.2	2.81	99	1.26	2450 / 815.9		.98		Local wk hem; lt gr Hf w/
825.0	14.1	2.81	100	.80		0.67			st to mass gyp; serp & clay;
833.8	8.8	2.60	96	.54					Local st mag.
841.4	7.6	2.62	100	.18				Qtzt	
851.8	10.4	2.60	100	.15					
860.2	8.4	2.63	100	.13	2410 / 855.9		.39		Wk diss, pat & vlt py, cpy;
868.6	8.4	2.61	100	.26					local moly; Lt gr-buff
877.8	9.2	2.64	98	.39					qtzt; local st ser; local
885.0	7.2	2.63	100	.30					small intercepts Mpg bx &
895.0	10.0	2.64	100	.21	2370 / 895.9		.27		gg zones, gyp.
906.7	11.7	2.69	99	.27					
911.8	5.1	2.63	94	.11					
923.2	11.4	2.64	100	.20					
930.5	7.3	2.63	99	.20					
936.8	6.3	3.03	100	1.60	2330 / 935.9	1.60	.40		60° Hf-qtzt ct @ 930.5'
945.0	8.2	2.80	100	.19				Hf	Mod-st vlt py, cpy; some sph.
955.0	10.0	2.64	100	.67		0.67			moly; local mass serp; gyp
965.0	10.0	2.63	98	.03					50° Qtzt-Hf ct @ 990.4'
975.0	10.0	2.64	100	TR	2290 / 975.9		.25		Lt gr qtzt; wk ser serp
987.8	12.8	2.61	100	.05				Qtzt	wk sulf
990.7	2.9	2.62	100	.05					
995.0	4.3	3.14	100	.58		0.58		Hf	Diss pat cpy, py; poss flt zone
1005.2	10.2	2.68	100	.15				Qtzt	55° Hf Qtzt ct @ 995.4' lt tan qtzt
1010.0	4.8	3.05	100	1.07	2250 / 1015.9	1.07	.29	Hf & Qtzt	grad ct; strs & diss cpy, py;
1023.3	13.3	3.20	100	.32					serp, gyp, gg; Trem Act present
1031.1	7.8	3.03	72	.36				Hf	Strs & pat cpy, hem; well gar, silf pres
1041.2	10.1	2.69	100	.05					wk diss sulf; st serp, well

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 3 OF 4 | COLLAR ELEV. 3265.9 | D.D. HOLE NO. M-43

SURVEY COORD. N 361,161.54

PROPERTY Mission | E 763,743.49 | TOTAL DEPTH 1470.4

DATE COMPLETED 9-28-62 | DRILL GRID COORD N25+57, W 40+00 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif	REMARKS
1051.0	9.8	2.90	98	.33				Hf	Diss py-cpy, sph; poss flt zone Bx
1056.4	5.4	3.22	100	1.80	2210 / 1055.9	1.80 / 1.80	.44	Hf-Mb	ults, pat sph-cpy-py, St clay in Mb
1065.0	8.6	2.65	100	TR					
1074.6	9.6	2.69	100	Nil					
1084.8	10.2	2.69	100	TR					
1094.8	10.0	2.69	100	TR	2170 / 1095.9		.02		
1104.7	9.9	2.76	100	.09					
1114.6	9.9	2.71	100	.02				Mb	
1123.0	8.4	2.70	100	.05					Wh-dk gr Mb; local st
1133.2	10.2	2.70	99	.03					clay, serp, gyp; Anhyd
1140.0	6.8	2.68	97	.04	2130 / 1135.9		.05		intervals present; Tr sulf
1151.0	11.0	2.71	93	.03					
1162.3	11.3	2.71	100	TR					
1172.0	9.7	2.77	98	TR	2090 / 1175.9		.01		
1181.8	9.8	2.73	100	TR					
1191.9	10.1	2.71	98	.10				Hf & Mb	Mixed gr & wh Mb & Hf w/ Serp,
1201.9	10.0	2.75	100	.19					Gyp, clay. Py, cpy, tr bn
1206.2	4.3	3.28	92	.25					Poss flt zone - run
1208.5	2.3	2.71	100	Nil					
1215.1	6.6	2.56	100	Tr	2050 / 1215.9		.10		1215.9 - 40° Hf-Qtzt ct
1221.9	6.8	2.65	100	.09				Qtzt & Hf	
1224.9	3.0	2.61	100	.05					Ints Serp Hf & gr-tan Qtzt
1235.9	11.0	2.65	99	.09					1232.5-35.9 40° flt ct
1246.5	10.6	2.69	97	Tr					
1253.2	6.7	2.69	99	.03	2010 / 1255.9		.04		Gr Arg w/ Serp, Gyp ults
1263.0	9.8	2.68	100	Tr				Arg	
1270.0	7.0	2.70	98	Tr					Brn Arg w/ chl to end
1281.3	11.3	2.79	95	Tr					1281.3 flt gg @ 10°
1293.2	11.9	2.67	99	.03	1970 / 1295.9		.01	MP	Poss alt sed
1300.0	6.8	2.66	98	.04					1293.2 40° flt ct
1310.0	10.0	2.73	90	.04					
1318.2	8.2	2.72	98	Nil				Ls-Mb	Wh-gr-blk Mb w/ Serp, Talc
1327.8	9.6	2.72	99	Nil					Graph, tr sulf on slips
1337.9	10.1	2.70	99	Nil	1930 / 1335.9		.01		
1344.1	6.2	2.71	100	Nil					
1354.5	10.4	3.09	93	Tr				Ls & Hf	Var Wol, Tremo, Serp
1359.7	5.2	2.73	96	Nil					
1365.0	5.3	2.85	87	Nil					40° ct @ 1359.7
1373.2	8.2	2.95	99	Nil	1890 / 1375.9		Nil		
1383.0	9.8	2.78	99	Nil					
1393.0	10.0	2.83	99	.02				Gyp-An Hf	Var col Gyp-An-Serp Hf
1403.3	10.3	3.07	91	.01					w/ local mass An. Tr sulf
1412.3	9.0	2.92	90	.01	1850 / 1415.9		.01		
1422.6	10.3	2.68	100	.01					
1433.0	10.4	2.70	85	.02					1429.0-33.0 bx & gg
1442.4	9.4	2.76	99	.01					1442.4 low Δ ct

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 4 OF 4 COLLAR ELEV. 3265.9 D.D. HOLE NO. M-43

SURVEY COORD. N 361,161.54

PROPERTY MISSION E. 763,743.49 TOTAL DEPTH 1470.4

DATE COMPLETED 9-28-62 DRILL GRID COORD. 25+57N, 40+00 W INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
1454.2	12.0	2.64	100	.01	1810		.01		Mod-st alt Gr. High
1460.0	5.6	2.65	100	.02	14704				Qtz-K-feld content
1470.4	10.4	2.63	1.00	.01					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3264.1 D.D. HOLE NO. M-42

SURVEY COORD. N 362,922.12

PROPERTY Mission E 762,464.09 TOTAL DEPTH 941.0

DATE COMPLETED 9/24/82 DRILL GRID COORD N43+38 W52+53 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev / Depth	Ore Assay Avg Sp Gr (weighted)	Composite Assays	Rock Constituent	REMARKS
0.0									
185.0	185.0	—	—	—	3090 / 174.1		—	Allu	Poss. lenses CCg @ 165'-174' Top CCg ± 174
194.6	9.6	—	78	—				CCg	BR 194.6
203.3	8.7	2.51	88	.06					
210.6	7.3	2.59	100	.14					
219.0	8.4	2.48	95	.17	3050 / 214.1		.05		
229.0	10.0	2.55	97	.15					Lt gr Mp w/ st ser & clay, biot, serp, chl; WK sulfs; v WK nat cu from 240.8 to 249.7; 30 to 80° fracs; WK to mod moly on some fracs.
241.0	12.0	2.54	74	.13					
249.7	8.7	2.52	100	.24					
260.6	10.9	2.53	72	.23	3010 / 254.1		.18	Mp	
272.0	11.4	2.54	91	.12					
280.5	8.5	2.50	70	.21					
289.2	8.7	2.52	89	.09					
298.5	9.3	2.52	82	.11	2970 / 294.1		.15		
310.0	11.5	2.57	65	.13					
319.9	9.9	2.59	68	.08					
327.6	7.7	2.58	99	.08					
334.6	7.0	2.57	100	.15	2930 / 334.1		.11		334.6 - Mp - Qtzt ct.
341.0	6.4	2.60	95	.31				Qtzt	WK sulfs.
352.0	11.0	2.56	100	.31				Mp	St - massive gyp - WK sulfs
363.0	11.0	2.49	100	.38				Mp-Qtzt	Much banded gyp 360.2 Qtzt ct
370.0	7.0	2.63	90	.14				Arg-Mp	363.2 Arg-Mp ct
380.0	10.0	2.66	97	.12	2890 / 374.1		.28		
392.6	12.6	2.60	100	.13					
402.6	10.0	2.59	100	.15					@ 410.4 - 13.2 - flt zone w/ st gg - bx, sulf gg
409.7	7.1	2.61	97	.13					
420.0	10.3	2.60	90	.15	2850 / 414.1		.14		Diss & vlt cpy, py; local moly
429.2	9.2	2.60	100	.14				Mp	Mp w/ biotite, pk feld; local st ser; local talc, sulf gg, bx, gyp in fracs
438.1	8.9	2.60	100	.13					
445.5	7.4	2.59	100	.13					
452.7	7.2	2.58	100	.20	2810 / 454.1		.15		
461.5	8.8	2.45	100	.20					
466.6	5.1	2.65	100	.17					
478.3	11.7	2.60	100	.17					
488.6	10.3	2.59	100	.17					
498.9	10.3	2.59	99	.16	2770 / 494.1		.17		
512.0	13.1	2.61	97	.16					510.0 - 30° Mp - Qtzt ct
525.0	13.0	2.60	100	.06				Qtzt	vlts, pat, diss py; ser sulfgg, gyp; local int. lt tan-pk Arg-like rk
535.5	10.5	2.62	100	.08	2730 / 534.1		.11		
545.4	9.9	2.72	93	.18				Mp	wk diss sulf; tr moly
555.4	10.0	2.63	97	.17				Mp-Qtzt	As above
563.1	7.7	2.60	97	.16					
572.0	8.9	2.60	100	.12	2690 / 574.1		.15	Qtzt	wk str, pat py, cpy; tr moly
584.1	12.1	2.60	85	.11					Lt gr - tan Qtzt; ser, gyp
594.3	10.2	2.63	88	.11					587-90' flt bx, gg, sulf.
604.5	10.2	2.70	98	.60		.92		Qtzt-Hf	597.0 - 50° Qtzt-Hf ct.

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two | COLLAR ELEV. 3264.1 | D.D. HOLE NO. M-42

SURVEY COORD. N 362,922.12

PROPERTY Mission | E. 762,464.09 | TOTAL DEPTH 941.0

DATE COMPLETED 9/24/62 | DRILL GRID COORD. N43+38 W 52+53 | INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
611.5	7.0	2.78	97	1.39		.92			
621.0	9.5	2.70	98	.36	2650 / 614.1		.47		30° to 60° vlts & strs cpy-py w/
631.0	10.0	2.61	100	.91					st to wk Mag & local wk to mod
638.0	7.0	2.89	90	1.06		.97			hem stain.
645.5	7.5	2.99	98	.95				Hf	Lt grn, gr, wh, & maroon
654.6	9.1	3.07	91	.30	2610 / 654.1		.72		dense to clayey Hf w/ 30-50°
663.8	9.2	3.34	93	2.35		2.35			gyp vlts & fracs. (597 - 691.5)
673.8	10.0	3.02	96	.05					660.3 & 662.6 - 0.4 to .5' vlts st bn
681.3	7.5	3.19	95	.10					
691.5	10.2	2.65	100	.21	2570 / 694.1		.63		691.5 - 40° Hf - Qtzt ct.
702.6	11.1	2.58	96	.03					
715.5	12.9	2.58	81	.03					702.6 - 4.6 flt bx-gg
724.2	8.7	2.59	99	.04				Qtzt	Lt gr Qtzt w/ local st ser,
732.5	8.3	2.63	100	.03	2530 / 734.1		.03		wk suls, Tr moly.
743.5	11.0	2.60	92	TR					746.6 & 748.2 @ 30 & 50° cts poss
748.7	5.2	2.93	91	.80				Qtzt-Hf	flt.
758.3	9.6	2.86	96	.13					
769.0	10.7	2.58	99	TR					
781.5	12.5	2.59	100	.04	2490 / 774.1		.02	Qtzt	Lt gr Qtzt w/ mod to wk
791.0	9.5	2.61	99	TR					ser; wk to Tr suls; 30°-Hi &
798.2	7.2	2.66	98	.16					fracs
808.1	9.9	2.62	95	.06					808.1 - 85° - Qtzt-Hf ct @ frac
816.1	8.0	2.88	92	.06	2450 / 814.1		.06	Hf	816.1-20° Hf-qtzt ct.
828.5	12.4	2.62	100	.19				Qtzt	
834.5	6.0	2.88	93	.25				Qtzt-Hf	829.5-50° Qtzt-Hf ct
845.4	10.9	2.82	100	Tr				Hf-Mb	834.5-37.1 Mass gyp 15° ct.
855.4	10.0	2.82	100	.15	2410 / 854.1		.13		
865.4	10.0	2.89	100	.07					
875.4	10.0	2.69	100	.03					
885.2	9.8	2.67	100	.03					wh to blue-gray banded
895.2	10.0	2.71	100	TR	2370 / 894.1		.04	Mb	Mb w/ short ints wh
905.4	10.2	2.69	100	Nil					w/ Hf, mod to st serp
915.4	10.0	2.69	100	Nil					Tr to nil suls.
925.4	10.0	2.70	100	Nil					
935.4	10.0	2.70	94	.06	2340 / 934.1		.01		
941.0	5.6	2.63	89	.18	941.0		.16		Mixed w/ short ints Hf
	756.0		94						

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two

COLLAR ELEV. 3262.7

D.D. HOLE NO. M-41

SURVEY COORD. N 361,456.62

PROPERTY MISSION

E 763,737.31

TOTAL DEPTH 992.5

DATE COMPLETED

DRILL GRID COORD. N 28+52 W 40+02

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
									Top CCg ± 170 (?)
205.0									BR ± 204.5
215.5	10.5	2.47	95	.43	3050 212.7	.43 .43	.08	Arg	
222.7	7.2	2.39	69	.32					222.7 Base Oxides
230.8	8.1	2.39	97	.27					
241.9	11.1	2.65	96	.25					
255.3	13.4	2.65	95	.37	3010 252.7		.31		
261.0	5.7	2.67	91	.93					
272.4	11.4	2.63	87	.41		.51			
283.2	10.8	2.66	85	.40					
294.9	11.7	2.68	90	.38	2970 292.7		.47		Loally Broken Arg Cgl
304.0	9.1	2.61	92	.36				Cgl	wi wk diss py, cpy. Fracs
309.4	5.4	2.59	94	.28					& slips wi ser, moly; local
320.8	11.4	2.67	90	.28					bx, gg, smeared sulf
332.0	11.2	2.67	95	.34	2930 332.7	.45	32		
343.0	11.0	2.65	97	.45					30 & 60° vlt & wk diss py, cpy
354.6	11.6	2.69	99	.50		.50			
360.5	5.9	2.60	97	.58					@ 358.4 55° vlt cpy
369.5	9.0	2.63	96	.37					
376.2	6.7	2.68	92	.30	2890 372.7		.45		@ 382.9'-3.6' bx-gg-ft wi mod
386.5	10.3	2.65	92	.40		.40			to st py & sul gg, st moly
395.5	9.0	2.61	94	.29				Cgl & Arg	vlt, pat, diss py; wk cpy
409.9	14.4	2.69	98	.39	2850 412.7		.35		
418.6	8.7	2.73	92	.23					
423.3	4.7	2.65	95	.29					
434.4	11.1	2.67	91	.36					
445.4	11.0	2.65	94	.45					
456.4	11.0	2.69	93	.45	2810 452.7	.45 .45	.37		
464.3	7.9	2.66	92	.35					
476.4	12.1	2.68	97	.50		.50		Cgl	Arg Cgl wi wk diss py, cpy
486.3	9.9	2.69	98	.29					Fracs & slips wi ser, moly, gyp
496.2	9.9	2.67	95	.41	2770 492.7	.41	.40		
504.7	8.5	2.70	98	.44					
513.3	8.6	2.70	99	.46		.46			
524.6	11.3	2.69	100	.42					
533.4	8.8	2.70	100	.54	2730 532.7		.46		Wk ep along some fracs
540.4	7.0	2.64	100	.63		.62			@ 540.4 bx-gg ct wi Arg
543.5	3.1	2.59	85	.14					
553.2	9.7	2.61	96	.18					@ 561' Bx-gg, st ser
563.2	10.0	2.62	98	.15				Arg	Lt tan to pk Arg, very dense
572.5	9.3	2.58	96	.07	2690 572.7		.23		Tr moly on fracs
583.7	11.2	2.59	100	.10					
593.7	10.0	2.65	97	.25				Arg & Qtzt	wk vlt & pat py, cpy; fracs wi bx gg
602.9	9.2	2.58	98	.07				Arg	vlts & fine diss py wi slips
609.0	6.1	2.56	96	.03	2650 612.7		.13		moly on fracs
617.8	8.8	2.57	60	.10				Arg & Qtzt	As above

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COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3262.7

SURVEY COORD. N 361,456.62

E 763,737.31

DRILL GRID COORD. N28+52 W40+02

D.D. HOLE NO. M-41

TOTAL DEPTH 992.5

INCLINATION Vertical

PROPERTY Mission

DATE COMPLETED

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev & Depth	Ore Assay and Sp. Gr Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
627.4	9.6	2.57	43	.14					
636.0	8.6	2.64	97	.21					- St moly on some fracs
649.5	13.5	2.63	100	.15	2610		.15		- wk sph
658.3	8.8	2.63	92	.14	662.7				- 662-65' flt(?) bx zone; st ser
665.5	6.2	2.61	68	.22					
671.0	5.5	2.62	16	.17					
681.4	10.4	2.64	99	.33					- Tr moly; 1" dia pod cpy, py
691.4	10.0	2.66	98	.23	2570		.23	Qtzt	WK diss, vlt, pods cpy, py
702.1	10.7	2.64	100	.25	692.7				- Tr moly
713.6	11.5	2.63	94	.21					- Tr moly, sph
717.7	4.1	2.73	93	1.96		1.96			- wk moly
726.3	8.6	2.64	97	.18					- " " + sph
733.0	6.7	2.68	84	.32	2530		.41		
739.0	6.0	2.67	94	.31	732.7				- mod sph
747.3	8.3	2.62	88	.12					- wk sph, moly
749.5	2.2	3.19	90	4.33					- st diss & Hi & vlt py, cpy
761.4	11.9	3.03	94	1.40				Tt	Vlt & diss py, cpy; hem stain
769.4	8.0	3.22	100	1.68		1.81			" " "
772.6	3.2	2.81	93	1.95	2490		1.22	Tt-Qtzt	st py, cpy
781.1	8.5	2.71	36	1.33	772.7	1.33		Hf	Strs & diss cpy, py; WK sph, bn
791.0	9.9	2.63	86	.13				Qtzt	WK vlt, diss py, cpy;
801.2	10.2	2.62	96	.13					Tr moly
808.5	7.3	2.98	100	.80	2450	.81	.58		30-65° vlts wi st py, lesser cpy - sph
818.0	9.5	3.00	100	.83	812.7			Hf	20-30° " py-cpy; Abun CO3 mtx
830.5	12.5	2.92	100	.92					Tr ep, hem, sph
838.9	8.4	2.70	100	.42		.81		Qtzt	Wk-Mod diss & vlt cpy-py; Tr moly
848.5	9.6	3.01	100	.91					@ 839' 50° cpy-py vlt
856.5	8.0	2.93	100	.98	2410		.81	Tt	Vlt & diss py, lesser cpy; wk sph
868.8	12.3	2.68	97	.39	852.7	.48		Qtzt	30-70° vlts py-cpy, sph
879.8	11.0	3.03	80	.40				Hf	Tr diss sul; pat cpy, sph @ 877
883.4	3.6	2.81	97	.04				Hf-Qtzt	Tr sul, wk hem
891.0	7.6	2.59	100	Tr	2370		.33	Qtzt	Tr sul
900.0	9.0	2.63	94	.08	892.7				" , Tr cpy
909.5	9.5	3.18	100	.33				Hf-Tt	0.1 vlt st sph; wk-mod vlt py-cpy-sph
913.2	3.7	3.01	95	.48		.48		Hf	wk mod local diss py, cpy, sph
922.1	8.9	2.95	96	.04					Tr sul
932.3	10.2	2.79	96	Tr	2330		.15		Small 45° vlt py-cpy
942.6	10.3	2.74	100	Tr	932.7				Barren
950.1	7.5	2.71	100	.03				Mb	"
960.0	9.9	2.79	86	Tr					Tr sul
970.0	10.0	2.83	99	Tr	2290		Tr		Barren
980.3	10.3	2.70	100	Nil	972.7				"
992.5	12.2	2.70	97	Nil			Nil		"

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 1 OF Two COLLAR ELEV. 3255.2 D.D. HOLE NO. M-40

SURVEY COORD. N 363,531.55

PROPERTY MISSION E. 762,455.48 TOTAL DEPTH 905.8

DATE COMPLETED 8/20/62 DRILL GRID COORD N 49+46 W 52+52 INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
190.0					3090 / 165.2		—	Alluv	Top CCg ± 170' (?)
201.1	10.1	—	100	—				CCg	200.1 - CCg-BR ct.
207.4	7.3	2.49	66	.03	3050 / 205.2		Tr		
215.5	8.1	2.47	96	.46					Cu Fe, Mn Oxides
223.4	7.9	2.51	83	.25					223.0 Base Oxides
233.4	10.0	2.56	93	.19					
242.6	9.2	2.57	91	.29					238.0-15° - flt bx
250.0	7.4	2.59	97	.17	3010 / 245.2		.27		
259.0	9.0	2.61	88	.23					
266.0	7.0	2.46	96	.20					
277.2	11.2	2.51	87	.18					
285.9	8.7	2.59	88	.18	2970 / 285.2		.19		Cream colored Mp w/ local
296.0	10.1	2.69	94	.15				Mp	bio. Alt: ser, chl, serp
304.9	8.9	2.56	98	.18					& clay. Mins: WK vlts,
311.9	7.0	2.49	100	.21					strs, & diss pats py, cpy,
320.2	8.3	2.55	100	.19					& local mod moly in Qtz &
330.4	10.2	2.56	100	.16	2930 / 325.2		.18		on fracs
340.5	10.1	2.54	100	.14					
351.0	10.5	2.58	98	.15					
361.0	10.1	2.73	96	.21					
370.3	9.2	2.55	100	.25	2890 / 365.2		.17		361.8 - 0.6' Vn Qtz w/ st moly
382.7	12.4	2.54	100	.25					
390.5	7.8	2.59	100	.21					
400.8	10.3	2.58	100	.22					
413.9	13.1	2.55	94	.21	2850 / 405.2		.23		
417.8	3.9	2.50	13	.10				Mp-Qtzt	Ct lost between 415' & 418'
422.5	4.7	2.56	78	.08				Qtzt	422.5 Qtzt-Arg ct. (15°)
428.2	5.7	2.59	100	.08				Arg & Qtzt	425.0 - 15° - Arg - Qtzt ct.
434.0	5.8	2.52	85	.16				Mp-Qtzt	428.4 - 10° Qtzt - Mp ct (lower ct lost)
446.8	12.8	2.63	84	.16	2810 / 445.2		.14		
456.6	9.8	2.62	88	.15					
465.0	8.4	2.60	95	.13					
474.9	9.9	2.61	100	.15					
484.2	9.3	2.61	100	.17					
488.4	4.2	2.61	100	.11	2770 / 485.2		.15		
498.6	10.2	2.63	100	.11					
508.8	10.2	2.64	98	.11				Qtzt	? Lt gr to frosty Qtzt
514.4	5.6	2.61	100	.13					Alt: WK ser, local serp.
524.3	9.9	2.60	100	.11	2730 / 525.2		.11		Mins: WK diss & vlts py-cpy
534.3	10.0	2.61	100	.09					Local moly on some fracs.
541.0	6.7	2.62	100	.09					
548.8	7.8	2.62	99	.09					
560.9	12.1	2.63	96	.07					
570.1	9.2	2.62	75	.10	2690 / 565.2		.09		
580.5	10.4	2.61	63	.16					

MIS 807A-79

COMPOSITE DRILL LOG — MISSION UNIT

PAGE 2 OF Two

COLLAR ELEV. 3255.2

SURVEY COORD. N 363,531.55

E. 762,455.48

D.D. HOLE NO. M-40

PROPERTY MISSION

TOTAL DEPTH 905.8

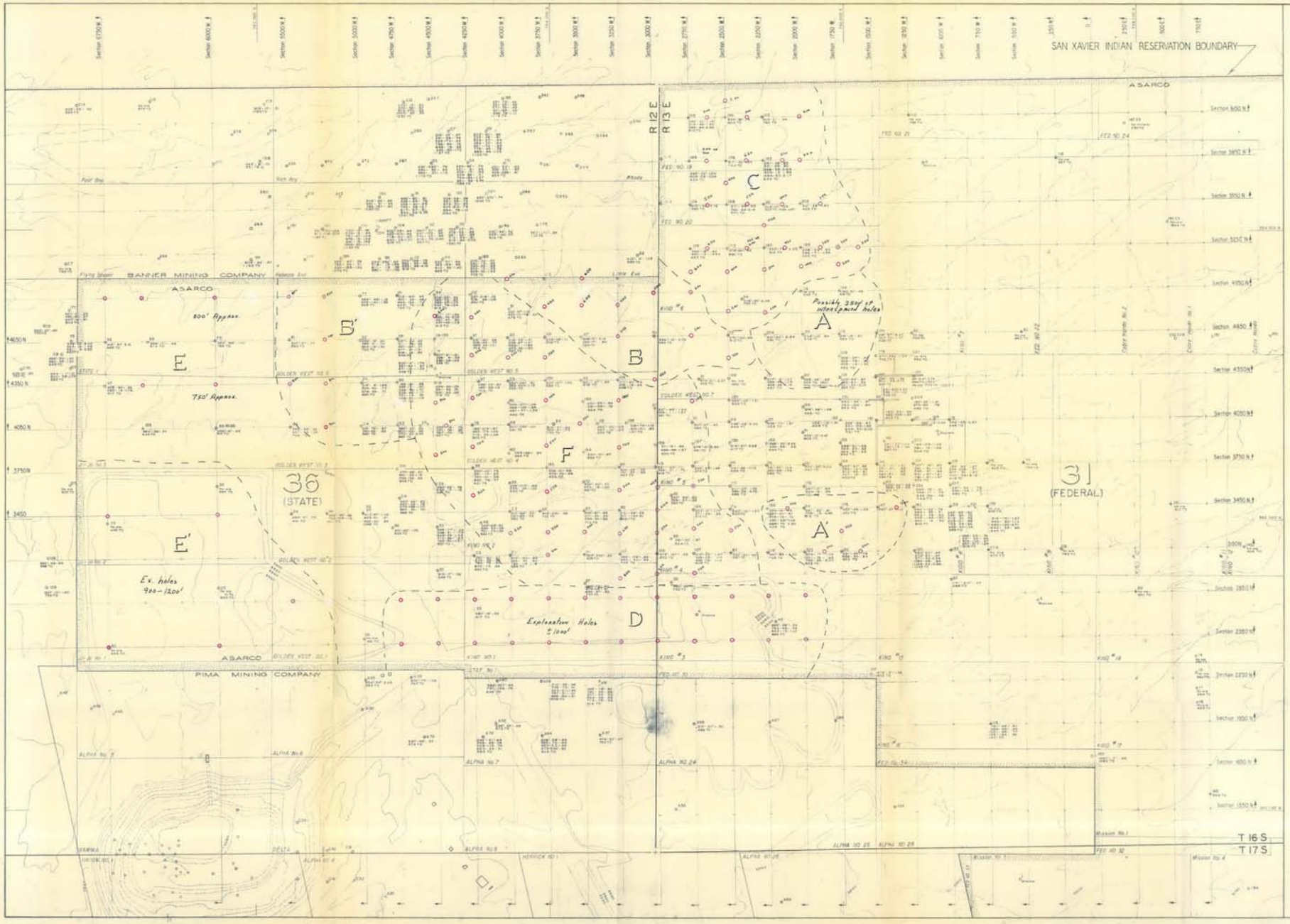
DATE COMPLETED 8/20/62

DRILL GRID COORD. N 49+46 W 52+52

INCLINATION Vertical

Depth	Interval	Specific Gravity	Core Recv. %	Core Assay % Cu	Bench Elev. & Depth	Ore Assay and Sp. Gr. Averages (weighted)	Composite Assays	Rock Classif.	REMARKS
583.1	2.6	2.77	96	.28				Qtzt	583.1 - 30° Qtzt - Hf ct.
594.8	11.7	2.68	93	.77					590 - 1.9' - 45° vn stmag w/ cpy-py
603.3	8.5	2.74	90	1.15		1.02			
					2650 605.2		.64	Hf	St mag - cpy - py Poss flt.
611.7	8.4	2.82	88	.74		.74			Mag - cpy - poss flt zone.
615.2	3.5	2.41	84	.20					bx - continued flt (?)
623.6	8.4	2.55	79	.13				Arg	615.2 - 30° - bx - Arg ct.
632.1	8.5	2.76	88	.23				Hf - Tt	623.6 - Low X Tt ct.; 625.6 - 15° Tt -
644.8	12.7	2.86	97	.47		.47	.37		Hf ct; 632.1 - Low X - Hf - Tt ct
					2610 645.2				
651.7	6.9	2.63	89	.35				Tt	20-35° vlts + pats py - cpy
660.0	8.3	2.83	72	.41					diss & vlts py - cpy Tr moly
670.4	10.4	3.02	94	.60		.53			
672.7	2.3	2.67	100	.64				Tt-Hf	30 & 45° vlts cpy-py wk moly
678.7	6.0	2.59	82	.02				Arg	672.7 - 20° - Tt - Arg ct.
681.0	2.3	2.61	22	.03					681.0 - Arg - Qtzt frac.
					2570 685.2		.35		
692.8	11.8	2.62	90	.10					
701.9	9.1	2.58	100	.08				Qtzt	Moly - cpy - py (Tr)
713.5	11.6	2.60	100	.10					
721.2	7.7	3.17	100	.66		.66			713.6 - 50° Tt - Qtzt flt ct. cpy
					2530 725.2		.20	Tt-Hf	
731.5	10.3	3.24	100	.06					
738.7	7.2	2.97	100	.13					738.7 - 50° Hf - Tt ct.
743.2	4.5	3.39	100	1.53		1.53		Tt	740.4 - st diss bn (0.5')
752.0	8.8	2.94	100	.38				Tt-Hf	wk diss bn 750.7 Tt-Hf ct.
762.3	10.3	3.22	99	.79		.72			760.3 - 15° Tt-Hf ct. Mod bn
					2490 765.2		.53		
771.1	8.8	3.35	100	.45				Tt	bn + sph (diss)
775.1	4.0	3.58	93	1.58		2.20			Diss sph, bn, cpy, py
788.2	13.1	3.18	100	3.18					Same but stronger.
797.4	9.2	2.68	100	.09				Mb	788.3 50° Tt - Mb ct.
806.0	8.6	2.60	100	Tr			1.29		797.4 - 50° Mb - Qtzt ct
					2450 805.2				
817.4	11.4	2.60	99	Tr					
827.7	10.3	2.60	91	Tr					
836.0	8.3	2.61	93	Tr					828.2 - 30.5' Flt bx
846.1	10.1	2.61	100	Tr			Tr		Ltgr & wht Qtzt w/
					2410 845.2				
855.1	9.0	2.63	100	Tr				Qtzt	wk alt, sulgg 15° to vert
863.5	8.4	2.63	100	Tr					fracs local Tr moly
872.8	9.3	2.62	100	Tr					
881.0	8.2	2.62	100	.04					
					2370 885.2				
889.5	8.5	2.63	100	.05					
898.1	8.6	2.63	100	.03					
905.8	7.7	2.63	100	.02			.03		
			94		905.8				

MIS 807A-79



EXPLANATION

ORE INTERCEPTS IN DRILL HOLES

① Depth to top of ore
② Length of ore intercept
③ Average % Cu (≥ .40 cutoff)
④ Total depth of hole

Holes drilling
Hole complete but all assays not available

OWNERSHIP MINERAL RIGHTS

American Smelting and Refining Company
Pima Mining Company
Banner Mining Company

○ Proposed Drill Holes Mission Mine

All Depths Are Estimated From Original Ground Elevation

TO ACCOMPANY Memo.
DATED Dec. 21, 1961
BY Kenyon Richard

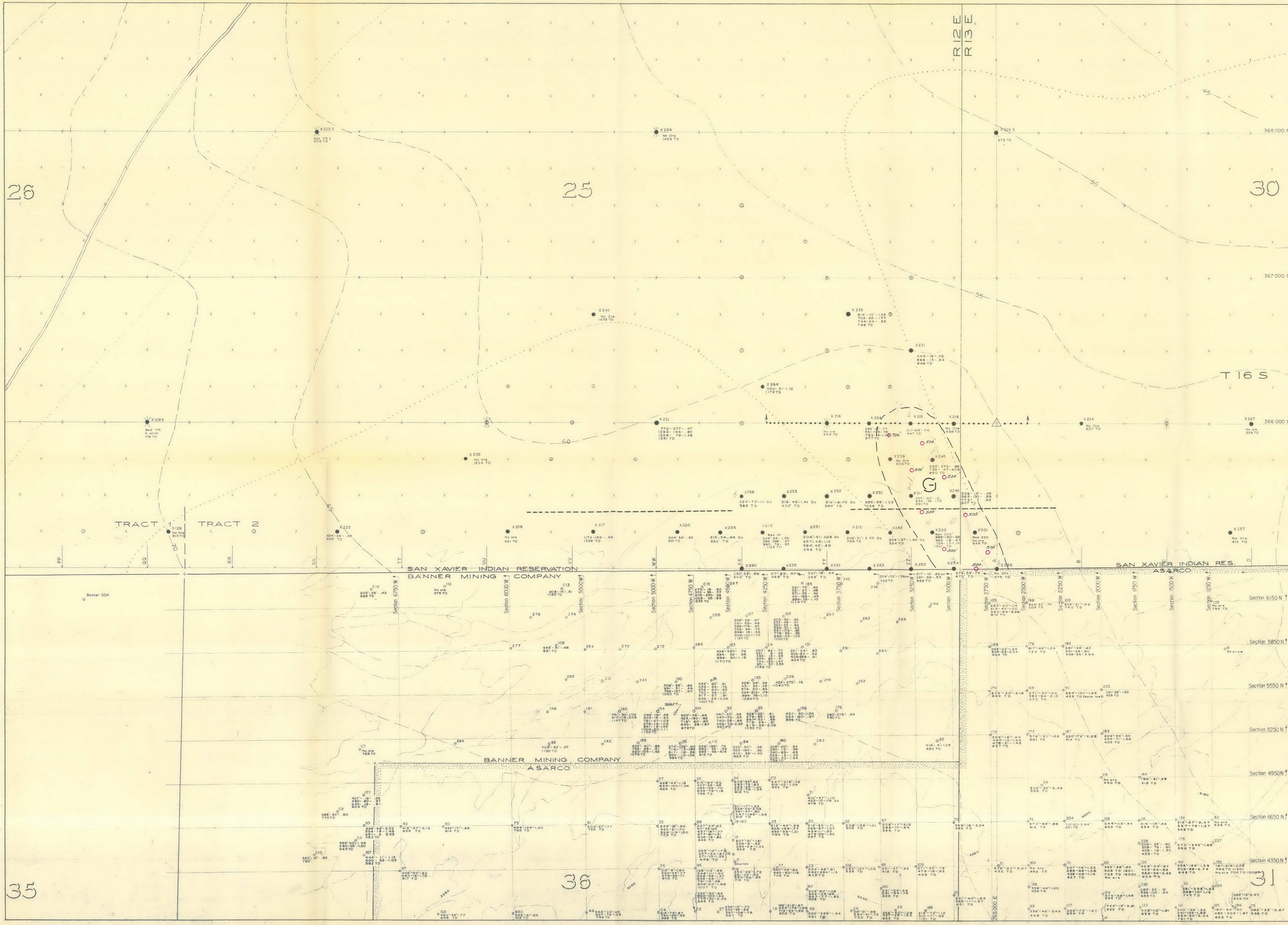
ASARCO
EAST PIMA PROJECT
Pima County, Arizona

DRILLING MAP

SCALE 1" = 300'
CONTOUR INTERVAL - 20'

MAY, 1957 MAP NO. 28-11-45

SEPTEMBER, 1958 JULY, 1959
MARCH, 1960
MAY, 1960
JULY, 1960
JUNE, 1961



EXPLANATION

Hole Numbering System On Reservation

Tract I —— X101, X102, etc.
Tract II —— X201, X202, etc.
Tract III —— X301, X302, etc.

Shallow Holes Designated X101S, etc.

Holes Drilling • X206S, etc.

Hole Location Prepared o

Holes To Be Drilled Next Deep Shallow

Holes complete but all assays not available •

Magnetic High (Erwin letter 9-11-57)

Relative Gravity Contours CI=0.5 milligal

EM "Tandem" effect

EM "Edge" effect

Proposed Drill Holes Mission Mine

All Depths Are Estimated From Original Ground Elevation

TO ACCOMPANY Memo
DATED Dec 29, 1961
BY Kenyon Richard

ASARCO

SAN XAVIER PROJECT

Pima County, Arizona

DRILLING MAP

SOUTHERN TRACT II

SCALE 1" = 300'

CONTOUR INTERVAL 20'

September 1957 Map No. 1383

July, 1959

ABBREVIATIONS

Used on El Tiro-Imperial
and Mission Drill Logs

Rock Types

Al	Alluvium
Ccg	Caliche Conglomerate
Sed	Sedimentary
Arg	Argillite
S-Arg	Sandy Argillite
C-Arg	Calcareous Argillite
Ark	Arkose
Qtzt, Qt	Quartzite
Cgl	Conglomerate
Ls	Limestone
Ss	Sandstone
Sh	Shale
Sltst	Siltstone
Met	Metamorphic
Mb	Marble
Tac, Tt	Tactite
DHF	Diopside Hornfels
AHF	Actinolite Hornfels
Hf	Hornfels
Volc	Volcanic
Ig	Igneous
Dior	Diorite
Gb	Gabbro
Ap	Andesite porphyry
An	Andesite (post-mineral)
Mz	Monzonite porphyry
Ak	Alaskite
Da	Dacite
Dp	Dacite porphyry
Mp	Metaporphyry
Fp	Felsite porphyry
Fr	Feldspathized rock
Qf	Quartz feldspar rock

Formations

Pif	Pima formation
Pgf	Papago formation
Kf	Kino formation

Structures

BR	Bedrock
frac	fracture
vlt	veinlet
vn	vein
gg	gouge
bx	breccia
flt	fault
peb	pebble
diss	disseminated
ct, cnt	contact
mtx	matrix
br	broken
sh	shear (ing) (ed)
jt	joint
por	porphyritic
fr,frag	fragment
bd,bed	bedding, bedded

Minerals

Cup	Cuprite
CuSi	Chrysocolla
CuOx	Copper Oxide
$CuCo_3$	Malachite Azurite
Nat Cu	Native Copper
Suls	Sulphides
Cpy	Chalcopyrite
Cc	Chalcocite
Bn	Bornite
Cov	Covellite
Lim	Limonite
LLm	Live Limonite
Py	Pyrite
Hem	Hematite
Mag	Magnetite
Spec	Specularite
Sph	Sphalerite
Gal	Galena
Moly	Molybdenite

1 Set

M-38
M-39
M-41
M-43

abbreviations

ABBREVIATIONS - Continued

Minerals - continued

Fl	Fluorite
Gar	Garnet
Feld	Feldspar
Qtz	Quartz
Biot	Biotite
Chl	Chlorite
Serp	Serpentine
Ep	Epidote
Act	Actinolite-tremolite
Diop	Diopside
Asb	Asbestos (asbestiform)
Wol	Wollastonite
Cal	Calcite
CO3	Carbonate
WO3	Tungstate
CaSiO3	Lime Silicates
Bar	Barite
Gyp	Gypsum
Smiths	Smithsonite
Calc	Calcareous
Si	Silica

Others

hor	horizontal
vert	vertical
sp	sparse
sc	scarce
r	rare
tr	trace
abun	abundant
num	numerous
sct	scattered
st	strong
mod	moderate
wk	weak
v	very
silf	silicified
sil	siliceous
cs	coarse
fg	fine-grained
mg	medium-grained
cg	coarse-grained
sd	sandy
slty	silty
PM	post mineral
min	mineral
xtl	crystal
rext	recrystallized
RB	Rock Bit
RoBit	Rotary Bit
trans	transitional
poss	possible
pat	patches
alt	altered, alteration
dk	dark
lt	light
blk, bl	black
wht, wh	white
gr	gray
brn	brown
pk	pink
grn	green
yel	yellow

HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66

Dip Vert Bearing ----

Date started 7/6/62 Completed 7/24/62

Collar Elevation 3252.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0	210.0					Alluv cg						cg ± 176' BR ± 207
	220.4	10.4	.05	.25		Arg-Cgl	Run	Fe-Mn-Cu Ox-Jarosite wk sulf last 0.3'	220.4 Run	Low L varied	Base Oxides fracs w/ fe Ox & CO_3 30° & 60° most common fracs.	Lt gr & tan Arg w/ ser along & near fracs. Strongly broken short ints cgl
	234.8	14.4	.01	.32		Arg	Run	wk to mod vlts & diss pats py w/ wk cpy	Run	"	As before less Ox. py on fracs.	Lt gr to gr Arg w/ local st ser wk cpy
	245.9	11.1		.34		Arg	Run	30° & 60° vlts py w/ weak cpy	Run	Hi L	" w/ in most of run	" (Reliable assay?)
	255.2	9.3				Arg	Run	60° & hi L vlts & coas pats & fine diss py & cpy Tr moly on fracs	Run	"	Same w/ 70° to 80° fracs more common.	Local qtz & feld.
	266.7	11.5		.44	31.4' @ 0.40	Arg-Cgl	Run	"	Run	"	"	Longer ints cgl
	275.7	9.0		.30		Arg-Cgl	Run	"	Run	30 to 60	Coas Hi L fracs	cgl dominant last 5.5'
	286.6	10.9		.44		Cgl	Run	Mod to st vlts py between 45 & 60° w/ mod local cpy.	286.5 Run	75° 45-80°	Slip w/ st mod fracs & slips w/ st ser-serp local qg.	Tan-lt gr-brown cgl w/ local st qtz-feld. st ser near fracs.
	296.8	10.2		.33		Cgl	Run	Varied dip vlts py w/ wk cpy Tr moly			"	"
	306.8	10.0		.32		Cgl	Run	"	Run	30-60°	Fracs & slips as before	Short ints (Low L) Arg. Local st qtz.
	316.6	9.8		.42	.42	Cgl	Run	Vlts & fine diss py & cpy Tr moly	306.8-311.8	Hi L	Frac w/ smeared sulf ser-clay.	"
									Remainder Run	30-50°	fracs (30° most common)	
	326.3	9.7		.19		Cgl	Run	"	Run	30-70°	fracs	Short 30° ints Arg (gr).
	335.5	9.2		.18		Cgl	Run	"			"	St silt. Tr Ep
	347.2	11.7		.29		Cgl	Run	wk to mod 30° to 45° vlts py. Tr cpy	342.9 346.0	50° 65°	Bx-gg (0.3') 0.7' Bx-gg	gr & wb cgl local ints dense gr arg.
	357.0	9.8		.16		Cgl	Run	"	Run 353.1	30 to 75 25°	fracs & slips Bx-gg (0.4')	"
	368.8	11.8		.39		Cgl	Run	wk vlts & diss py Tr cpy	Run	30 to 70°	fracs w/ CO_3, qtz ser.	st CO_3 & Qtz.
	377.0	8.2		.15		Cgl & Arg	Run	"				
							373.2	0.2' st py 35° vlt w/ wk cpy pats.	Run	"	"	" Mixed Arg
	388.0	11.0		.29		Cgl & Arg.	Run	As above run	Run	"	"	"

MIS-807-A 75

HOLE NO. M-38

Coordinates N 361,463.16 E 764,237.66
Dip vert Bearing —
Date started 7/6/62 Completed 7/29/62
Collar Elevation 3256.7 Total Depth 801.3

GEOLOGIC LOG
MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
388.0	397.5	9.5		.29		Cgl	Run	wk vlts & diss py, Tr cpy	391.5-392.0		6" flt bx	Lt gr cgl w/ pats frg, st ser wk cas
									Run		As before	
	401.0	3.5		.21		Cgl	Run	40-50° py vlts tr cpy	Run	50°	slips, vlts	Grey-brn mottled w/ local feld rex
	411.0	10.0		.34		Cgl	Run	Vlt, diss py, blebs cpy	Run	40, 80°	Gyp vlts	Grey-brn cgl, local st feld-clay alt
	421.1	10.1		.19		Cgl	Run	30-40 py-cpy vlts fine diss cpy	Run	Highly	Slips	Grey cgl w/ st feld ser alt
	428.7	7.6		.36		Cgl	Run	Vlts, pats py, cpy	Run	40, 70°	Gyp vlts	As before
	438.7	10.0		.36		Cgl	Run	Same	Run	30, 75°	"	"
	448.5	9.8		.31		Cgl	Run	Finely diss & vlts py, cpy Tr Mn Ox	Run	"	"	"
	460.7	12.2		.45		Cgl	Run	"	448.9	80°	2-parallel slips w/ thin vlts cpy-py	As before w/ local st silt, w/ serp, sts
									Run	30-70	Gyp vlts	
	470.8	10.1		.57		Cgl	Run	30-50° vlts cpy & py. Fine diss cpy occas pats	Run		As above	"
	483.0	12.2		.52		Cgl	Run	"	Run	–	"	"
	495.7	12.7		.41		Cgl	Run	Local st pats py-cpy vlts py-cpy diss cpy	Run	–	"	"
									495.0	30°	0.7' flt bx-gg	
	505.0	9.3		.56		Cgl	Run	vlts & pats py-cpy Tr molp.	1957-1996 Hil.		Slip w/ smeared sulf gyp & ser.	Mod qtz - St feld & ser
									1996-end	30-60°	fracs & slips w/ ser, gyp	
	514.7	9.7		.55	77.2 @	Cgl	Run	vlts, pats, & fine diss py-cpy	Run	Lowh. 35°	gyp vlts. fracs & slips	St qtz & feld mod ser
	519.6	4.9		.49	0.54	Cgl	Run	As above	Run		Same	"
	527.0	7.4		.83		Cgl-Bx	Run	Smeared sulf & diss py-cpy	Run	60°	Flt bx, gg w/ short ints cgl.	Flt zone w/ short ints cgl bounded by 60° fracs & slips. St. ser & clay
	538.2	11.2		.67		Cgl	Run	vlts, sts, pats & fine diss py w/ cpy - Tr molp	Run	30-60°	Gyp vlts, fracs & slips	Hgr to gr & brown cgl w/ st qtz-feld rep'l
	545.7	7.5		.42		Cgl	Run	As above	Run	"	Same	"
	554.8	9.1		.34		Cgl	Rock	Same	Run	"	fracs & slips	Zones of mod ser.

GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-38
Coordinates: N 361,463.16 E 764,237.66
Dip Vert Bearing —
Date started 7/6/62 Completed 7/24/62
Collar Elevation 3256.7 Total Depth 801.3

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
554.8	564.4	9.6		.35		Cgl	Run	Vlts, strs, pats & fine diss py-cpy; moly on fracs.	Run	30 to 45°	fracs & slips w/ gyp, smeared sulfs, ser, serp	Ltgr-tan-pk cgl w/ st silt. Local feld. Ser content increasing Tr Ep.
	574.3	9.9		1.03	1.03	Cgl	Run	As before w/ last 1.0' of st cpy 30° parallel vlts.	573.3	35°	flt bx showing 30° parallel veining of cpy to end. (Bd?)	Same w/ last 1.0' flt bx w/ pats buff colored Arg. St ser
	581.0	6.7		.27		Qtzt	Run	Fine diss & strs py-cpy Smeared sulfs in cracks & fracs.	579.3	60°	flt at w/ broken Qtzt.	Ltgr to wh Qtzt w/ pats of brn & cinnamon
									Run	Varied	fracs & slips w/ ser & smeared sulfs.	Arg cgl in first 2.5' of run. Pats & zones st ser alt throughout run.
	585.7	4.7		.28		Qtzt	Run	St smeared sulfs in fracs.	Run	—	Broken & ground some 30 to 45° fracs.	Minus 50% recy.
	589.6	3.9		.77	0.77	Qtzt	Run	30° vlts py-cpy sph pats py-cpy	Run	30 & 60°	fracs & slips w/ ser & smeared sulfs.	Ltgr to clear qtzt locally vuggy near fracs. Mod ser.
	599.9	10.3		.16		Qtzt	Run	wk vlts & strs py-cpy Tr Moly	591.8 593.0 Run	40° 30° 30-40°	Bx-gg w/ py Bx w/ Tr Ep. fracs (Bd?)	As above
	610.3	10.4		.20		Qtzt.	Run	wk strs & 30° vlts, py-cpy smeared sulfs on fracs.	Run	30-45°	As above	Locally very vuggy w/ increasing ser.
	622.2	11.9		.27		Qtzt	613.2 Run	60° frac w/ st moly As above	Run	30-70°	fracs & slips w/ ser, smeared sulfs, moly	Aim previous 3 runs w/ qtz. sand in fracs near end, locally broken.
	626.3	4.1		.74		Qtzt		Low L & 30° vlts py-cpy Tr moly	Run		Same	Same
	631.0	4.7		1.13		Hf	1st 1.0' 3.7'	flt zone w/ st cpy-py 30 & 60° vlts st py w/ mod cpy	626.3 631.0	80° 30°	flt bx w/ st sulfs. Flt at Qtzt-Hf. Hf-Qtzt at	Ltgrn Hf w/ Act, Qtz & feld. Pats Ep @ 678'
	637.3	6.3		.45	37.0' @ 0.86	Qtzt	Run	Various angled vlts & strs py w/ lesser cpy	Run	30°	Common fracs.	

HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66

Dip vert Bearing ——

Date started 7/6/62 Completed 7/24/62

Collar Elevation 3256.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
637.3	642.8	5.5		.84		Hf	Run	fine diss & 60° vlts py w/ cpy. Mrg ct.	Run	20-35°	slips, off-setting sul vlts c.l.	Lt grn dense Hf w/ st Act, wk hem stain & gyp on fracs, wk CO_2 Local st Ep wk serp.
									637.3		"	
	653.0	10.2		.93		Hf		"			"	As before
	659.2	6.2		1.08		Hf	653.5	0.1' 30° vlt st cpy below bx-gg zone	654.8	40°	flt bx	As before w/ local st ser & serp. local pats Qtzt.
									656.9	45°	0.8' gradational ct. to Qtzt.	
							Run	15 to 60° vlts py w/ cpy. Also fine diss cpy py.				
	669.2	10.0		.08		Qtzt	Run	vlts & strs py w/ wk cpy	Run	30°	fracs w/ serp smeared sulf.	Lgr Qtzt w/ local st ser
	676.1	6.9		.11		Qtzt	Run	"	Run	30-50°	"	Same w/ pats Arg.
	680.4	4.3		.13		Qtzt	Run	strs & 30° vlts py cpy	Run	15-30°	fracs.	Lgr to gr Qtzt w/ lenses & pats Arg, Serp & Tr Ep.
									680.1	50°	0.1' int Hf w/ py	
	682.8	2.4		.38		Hf.	Run	vlt & st fine diss py w/ weaker cpy	680.2	20°	Qtzt-Hf ct.	Lgrn to grn Hf w/ Act & serp, pats chl & Ep. Tr feld & qtz
									682.6	20°	Hf-Qtzt ct w/ chl.	
	694.4	11.6		.15		Qtzt	Run	wk strs py-cpy w/ occas 30 & 60° vlts.	Run	varied	Vuggy fracs; slips w/ str. CO_2 in vuggs.	Lgr to wh Qtzt w/ st ser & clay in last 2.0' of run, wk pats & lenses Arg near end.
							689.2	large pat cpy				
	703.4	9.0		.51		Qtzt-Hf-Arg	Run	Diss & vlts py & cpy in Hf & Qtzt w/ Arg nearly between.	Run	50-70°	Cnts between each type.	Mixed Tan Arg, Lt grn grn & Tan Hf, & Lgr Qtzt. Feld in Arg. Trem-Act in Hf. wk CO_2 in all types.
									700.6-702.3	60°	Bx zone (flt?) w/ st serp & chl & sulf. Wk Ep Act.	
	714.9	11.5		2.01	35.2 @ 1.85	Hf-bx-gg	708.0 to 711.5	Massive Vn Sph Mag w/ st cpy & py @ 30°	703.9	low ∠	Arg-Hf ct.	Lt tan-grn-cream colored Hf w/ short ints Arg in upper 3 ft of run. st gg & clay in last 3.9'
									705.2	"	Hf-Arg ct.	
							703.9 to 706.2	wk sulfs	706.2	30°	Arg-Hf ct.	
							706.2 to 708.0	30° to 50° vlts py & cpy	711.5 to 713.0	30°	poss flt zone	
							711.5 to end	30° to 45° vlts py, cpy & smeared sulf.				

GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-38
Coordinates: N 861,463.16 E 764,237.66
Dip Vert Bearing —
Date started 7/6/62 Completed 7/24/62
Collar Elevation 3256.2 Total Depth 801.3

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
714.9	724.9	10.0		1.99		Hf.	Run	st vlts & diss cpy-py-sph v. wk mag.	Run	30°	gyp vlts & fracs w/ sulf & clay.	Ltgrn & cream colored dense Hf w/ st Trem-Act
	729.6	4.7		3.73		Hf	727.9	0.3' 60° vn massive cpy w/ py.	729.6	45°	Hf-Arg ct w/ st serp & Talc (pass tilt ct)	"
							Run	diss pats & vlts py & cpy.				
	734.8	5.2		.03		Arg	Run	wk diss sulf.	Run	30°-60°	fracs & slips w/ ser & Talc.	Ltgr sandy Arg w/ st ser.
	747.9	13.1		.05		Arg	Run	"	Run	"	"	wk pats near some fracs of Hf.
	751.6	3.7		.13		Hf	Run	wk sulf	747.9	Low ∠	Arg-Hf ct.	Ltgrn to ltgr Hf w/ local Trem-Act st
									Run	Varied	slips w/ smeared sulf, clay & Talc.	clay. v. soft.
	760.4	8.8		.11		Hf-Mb	Run	small 30° vlts & some strs sulf (smeared) wk Mn Ox - $MnEO_3$.	760.4	30°	Hf-Mb ct showing minute drag folding.	Mixed wh soft clayey Hf w/ wk wol & Ltgr to wh Mb w/ wk serp. Locally vuggy
									Run	25-50°	fracs & slips w/ clay.	"
	770.5	10.1		.04		Hf-Mb	Run	Tr sulf, MnOx	Run	–	As above	
	781.2	10.7		.01		Mb	Run	wk sulf, MnOx. Tr moly.	Run	Low ∠	fracs w/ clay some vuggy	Ltgr to wh Mb w/ local st clay & serp, wk pats Hf.
	791.1	9.9		.02		Mb	Run	As above	Run		"	"
	801.3	10.2		.01		Mb	Run	Tr sulf, MnOx	Run	30°	wk gr banding	Ltgr Mb w/ pats clay
	Bottom											

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HOLE NO. M-39

GEOLOGIC LOG
MISSION UNIT

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Coordinates: N 361,458.13 E 763,985.30
Dip Vert Bearing —
Date started 7/6/62 Completed 7/25/62
Collar Elevation 3259.5 Total Depth 820.8

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0	180.0					Alluv						ccg ± 175'
	211.9	31.9			Ns Tot	CCg	Run	wk spots Cu Ox				BR 211.9'
	224.1	12.2	.32	.41	.12 .41	Arg & cgl	Run	St Fe, Mn, Cu Ox, Mod Jarosite, WK sulf near end of run	224.1	30°	frac - base Ox. w/ st serp on frac,	Lt gr mixed Arg & cgl w/ local st ser & serp near frac
									Run	Varied	fracs - most common 30°.	
	234.3	10.2	.01	.33		Arg & cgl	Run	wk to mod vlts & diss py w/ Tr cpy	Run	"	Same w/ 60° fracs becoming more common	Lt gr to gr Arg & cgl as before w/ less ser & serp.
	244.0	9.7		.47	.47	Arg & cgl	237.5 Run	St 70° vlt 0.2' py-cpy wk vlts & diss py-cpy	Run	"	St slips & fracs w/ smeared sulf.	Local st gtz & fold. strongly broken
	254.7	10.7		.17		Arg & cgl	Run	"	Run	"	"	extreemly broken
	267.0	12.3		.30		Arg & Cgl gg	Run	wk-Mod diss py wk cpy, wk moly in fracs	261.0 - end	30°±	gg zone w/ smeared sulf, clay; poss flt.	Lt gr. Arg w/ ser, clay in fracs, local gg, bx
	279.0	12.0		.19		Arg & Cgl	Run	vlts & diss pats py w/ wk cpy - Tr moly	Run	30°-60°	Occas. Hi L fracs w/ smeared sulf, ser, clay.	strongly broken Local st silt & fold
	289.1	9.1		.15		Arg & cgl	Run	"	Run	"	30° to 50° most common.	Local st CO_2 in some fracs
	296.4	8.3		.19		Arg & cgl	Run	wk vlts & diss py & cpy			"	Grading to dk brn
	306.6	10.2		.16		Arg	Run	"	Run	"	Same w/ local st talc	Shert into cgl. St silt
	318.7	12.1		.14		Arg	"	30 to 60° vlts as above.	Run	"	"	"
								Tr moly on fracs.	316.9 - end	—	Strongly broken zone	
	329.8	11.1		.21		Arg & cgl	"	"	Run	Varied	Frac's 30 to 45° common	As above - locally broken
	340.2	10.4		.26		Arg & cgl	"	cpy somewhat stronger	Run	"	"	"
	347.4	7.2		.18		Arg & cgl	Run	varied dip vlts py w/ Tr cpy - moly on some fracs.	Run		"	coarse grained gr & brown Arg w/ cgl st silt.
	359.2	11.8		.22		Arg & cgl	Run	60°-70° vlts py w/ cpy, Tr moly	Run	30 to 70°	fracs & slips w/ st ser, smeared sulf.	" "
	369.4	10.2		.49	21.7 @	Arg & Bx	Run	wk vlts py w/ Tr cpy smeared sulf in flts & fracs.	Run		Flt bx @ 359.5 (45°, 0.5') 361.7 (45°, 0.7') 365.0 (30°, 0.7') 367.8 (50°, 1.6')	" locally strongly broken bx between flts.
	380.9	11.5		.51	0.50	Arg & cgl	Run	wk cpy & py vlts. ~~some pots cpy~~	Run	Varied	fracs & slips.	locally broken

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GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-39

Coordinates: N 361,458.13 E 363,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3269.5 Total Depth 820.8

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
380.9	388.4	7.5		.24		Arg.	Run	vMa & diss py Tr cpy, moly	Run	30 to 50°	fracs & slips w/ ser & wK gyp.	Ltgr Arg w/ short ints cgl local st qtz & ser.
	400.2	11.8		.25		Arg & cgl	Run	Varied dis vlts py w/ wK cpy fine diss py & cpy Tr moly on some fracs.	Run	–	As above	Strongly broken from 391.6 to 395.5. sp pots dK brn Arg in cgl ints.
	411.3	11.1		.19		Arg	Run	wK to mod diss & vlts py w/ wK cpy	Run	—	" Locally very broken	dK brn Silf Arg w/ wK ser & gyp along fracs
	421.8	10.5		.21		Arg & cgl	Run	As above	Run	–	Same w/ some Hi & slips.	As above w/ local st ser & mostly cgl.
	433.0	11.2		.16		Cgl	Run	diss pats & vlts py w/ wK cpy, Tr moly on fracs.	Run	25 to 70°	fracs & slips w/ smeared sulfs, ser, gyp.	Grades Ltgr to dK brn Congl w/ st qtz repl. wK zones fold.
	444.8	11.8		.34		Cgl	Run	As above	Run	"	As before w/ occas vugs & CO_2 30° common	Same.
	454.2	9.4		.50	18.6 @ 0.47	Cgl	Run	fine diss, pats, vlts py & cpy in Qtz-fold.	Run	30 to 50°	fracs & vlts sulfs.	st qtz-fold repl. in most of this run
	463.4	9.2		.44		Cgl-Bx	Run	30-60° vlts py w/ wK cpy	460.0-end	35 to 30°	flt bx-gg	st ser & clay.
	471.6	8.2		.32		Cgl	Run	wK vlts cpy-py-fine diss sulfs.	Run	30 to 50°	fracs & slips w/ ser, serp, gyp.	Local ints st qtz. mod ser.
	481.4	9.8		.31		Cgl	Run	vlts, pats & fine diss py w/ wK cpy.	Run		As before	st qtz-fold repl.
	492.2	10.8		.31		Cgl	Run	Mod py-wK cpy, smeared sulfs. Tr moly	Run	—	Highly broken	Very broken w/ st ser & talc
	503.6	11.4		.39		Cgl.	Run	"	Run	25 to 50°	fracs & slips w/ st ser, smeared sulfs & gyp.	Local st qtz. st ser & talc.
	514.0	10.4		.26		Cgl	Run	As above w/ wK strs sph near end.	Run	"	"	Locally strongly broken
	523.6	9.6		.45		Cgl	Run	Diss py-cpy	517.4 Run	50°	0.3 flt bx-gg. As above	Ltgr cgl w/ cinnamon colored pats. st silf.
	532.7	9.4		.40	28.1 @ 0.49	Cgl	Run	Vlts & disseminated py-cpy	Run	30-50°	vlts gyp-fracs & slips w/ ser.	"

HOLE NO. M-39

Coordinates: N 361,458.13 E 263,985.30

Dip Vert Bearing ——

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3254.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
532.7	542.1	9.4		.63		Cgl	Run	diss & 30-55° vlts & strs py, cpy Tr sph & moly	Run	30-70°	fracs & slips w/ st ser, smeared sulfs & wk CO_2.	Ltgr, tan & brwn cgl w/ st ser & clay & Qtz
	553.2	11.1		.28		Cgl	Run-	Same	Run	"	As above w/ wk serp	As above w/ feld-CO_2
	566.0	12.8		.26		Cgl	Run	vlts & diss pats py w/ wk cpy. Tr moly	Run	25-40°	fracs & slips w/ wk gg on some. also Qtz vlts w/ feld. gyp on some fracs.	Shows st. silf & more feld. Shorts ints brn Arg.
	573.2	7.2		.11		Arg	Run	wk sulfs.	Run	15-20° 15-50°	Lt tan banding Qtz gyp vlts	St. silf brn Arg w/ feld repl wk local qtz, ser.
	579.9	6.7		.16		Arg	Run	wk pats & 30-60° vlts py-cpy Tr moly	Run	30-70°	fracs w/ gyp & ser.	As above less Alt.
	587.9	8.0		.79		Qtzt	Run	wk pats & strs py, cpy. Tr moly	Run	Varied	fracs & slips w/ ser, smeared sulfs, gyp	Ltgr tan locally broken Qtzt w/ short ints bx, Tr Fl
							585.9	45° vlt cpy-py	583.4	20°	Bx-gg	wk clay & ser. contains
									584.3	50°	Bx-gg.	faint low ∠ banding.
									585.1	15°	Arg. qtzt at	
	598.0	10.1		.51		Qtzt	Run	Mod strs & pats cpy-py. Tr moly smeared sulfs on fracs.	Run	15-30°	parallel frac set occas, 20° fracs	As before
									588.7	50°	Bx-gg.	
	605.8	7.8		.24		Qtzt	Run	wk strs & pats cpy-py	599.8	30°	0.3' Bx-gg-sulfs	Local st ser & clay
									Run	±30°	fracs & slips w/ gyp-ser & clay.	Broken zones
	615.4	9.6		.54		Qtzt	Run	Mod strs & diss py cpy-wk moly on fracs.	Run	±30°	"	Same but less broken & no banding
	624.2	8.8		.40		Qtzt	Run	As before w/ st smeared sulfs in fracs.	Run	30-70°	Higher ∠ fracs more common	St broken Lt gr Qtzt w/ st ser & clay around fracs.
	634.2	10.0		.60	111.3 @	Qtzt	Run	vlts, strs & fine diss py w/ cpy Tr moly	Run	30-50°	fracs & slips w/ ser & smeared sulfs.	Less broken & less clay
	645.6	11.4		.52	0.54	Qtzt	Run	"	Run	"	Same w/ few Hi ∠ fracs.	Less ser wk EP. Locally vuggy
	655.0	9.4		.41		Qtzt	Run	"	Run	"	Same w/ parallel low ∠ fracturing	"

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HOLE NO. M-39

Coordinates: N 361,458.13 E 763,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/29/62

Collar Elevation 3254.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
655.0	665.5	10.5		.51		Qtzt	Run	vlts & strs & diss py w/ weaker cpy	361.0 Run	30° Run	Brk broken zone As before	Ltgr Qtzt w/ wk ser Tr Act & Ep
	676.1	10.6		.51		Qtzt.	Run	wk vlts py-cpy, 30°. Also strs & spdissp pts.	Run	30-50°	fracs & slips w/ wk ser & smeared suls.	Same
	684.1	8.0		.80		Qtzt	Run	strs & pats py-cpy wk moly on fracs.	Run	"	As before	Same less Act & Ep
	691.2	7.1		.65		Qtzt	Run	strs & 30° to 60° vlts py-cpy	Run	"	"	"
	700.0	8.8		2.11		Hf	Run	st 60° vlts & diss py cpy	Run	50-60°	vlts CO_3	Dense lt gr to grn Hf w/ wk CO_3, Mod Act, serp
	705.0	5.0		1.65		Hf	Run	30 to 50° vlts py w/ cpy	Run	"	" + clay	Same changing to soft clayey Hf near end
	714.5	9.5		.62		Hf	Run	30 & 60° vlts py w/ cpy in gr-grn Hf. wk mag.	Run	30 to 60°	fracs w/ suls serp	Soft clayey cream colored Hf w/ 60° ints lt gr-grn dense Hf. st serp.
	726.9	12.4		1.97	65.7 @ 1.73	Hf	Run	vlts & pats cpy, py, local st Mag along fracs & sul zones	Run	30-70°	fracs & slips w/ serp, Talc, Suls, Hem.	Gr-grn Hf w/ local pats clay & serp & Talc
	737.1	10.2		2.62		Hf-gg	Run	Same throughout	727.9 to end		30° to 50° flt bx & gg w/ st suls & mag.	first 1.0' As before Remainder flt bx-gg w/ Hf bx.
	745.2	8.1		1.76		Hf	Run	Diss Mag, py, cpy	Run	30°	fracs & slips	short clayey zones
	756.9	11.7		1.31		Hf	Run	st. Mag-py vlts (50-70°) w/ weaker cpy & wk hem.	Run	50-70°	fracs & apparent lineation & drag folding (poss fault zone)	Lt to dk grn Hf w/ abundant CO_3 vlts, st serp & Act. locally vuggy.
	765.5	8.6		.06		Arg	Run	30° to 50° vlts suls (sparse)	Run 756.9	30 to 60° 20°	fracs Hf-Arg ct.	Lt gr and tan Sandy Arg w/ local siltf, wk ser
	774.7	9.2		.36		Arg	Run	"	Run 774.7	30° 55°	fracs w/ wk ser. Arg-Hf flt ct.	"

HOLE NO. M-39

Coordinates N 361,458.13 E 763,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3254.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
774.7	785.4	10.7		.69	.69	Hf	Run	Diss & 50 to 1/2" vlts py & cpy	Run	50°	Slips off. setting mineralized vlts.	Lt grn, Tan & lt gr Hf w/ si clay, Abundant CO_3, Act. local vuggy fracs.
	794.0	8.6		.12		Mb	786.3	0.3' vlt st sph w/ mod cpy-py. (60°)	785.4	25°	Hf-Mb cont.	Lt gr & wh Mb w/ st serp. Occas w/ pats Hf w/ vlets.
							787.7 Rest	Pat cpy w/ sph & py. w/ Sulfs, Mn Ox, Pat Mn CO_3.				
	800.4	6.4		Tr		Mb	Run	Barren	Run	30-50°	fracs & slips w/ clay	wh to lt gr mb w/ wk strs serp.
	810.6	10.2		Tr		Mb	Run	V. wk pats sph. py.	Run		Faint low b grounds.	"
	820.8	10.2		Nil		Mb	Run	Barren	Run	50-70°	vuggy fracs	"
	Bottom											

HOLE NO. M-41

Coordinates: N 84,456.62 E 263,732.31

Dip Vert Bearing —

Date started 7/25/62 Completed 8/31/62

Collar Elevation 2262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0.0	206.0				ds Tot	Alluv						B.R = 204.5 Cg ± 170
206.0	215.5	10.5	.25	.43	.25 .43	Arg	Run	Fe ox - Tr grn Cu ox	Run	30-70°	Fracs	
	222.7	7.2	.20	.32		Arg	Run	"	"	"	"	Sligy & base of 222.7
	230.8	8.1		.27		Cgl	Run	Tr py-cpy, St sul gg	225.4-230.8	70-80°	Ex & sul gg	
	241.9	11.1		.25		Cgl	Run	Tr py cpy vlts				Dk Brn - blk - locally [illegible]
	255.3	13.4		.37		Cgl	Run	Tr py-cpy moly vlts	Run	50-80°	Fracs w/ sul gg	
									255.9-256.6	0°	St blk gg	
	261.0	5.7		.93		Cgl	Run	Wk-Mod diss cpy py				
	272.4	11.4		.41	27.9' @ 0.51	Cgl	Run	vlts-pats-diss py w/ wk cpy.	268.0	35°	0.7' Bx-gg.	strongly broken w/ sul gg
									Run	30-70°	Fracs & gg	Same.
	288.2	10.8		.40		Cgl	Run	"	Run	"	"	
	294.9	11.7		.38		Cgl	Run	As before w/ tr moly	Run	varied	fracs & slips w/ bx-gg - smeared sulfs.	short ints. dkgr. frg. wk ser.
	304.0	9.1		.36		Cgl	Run	Strs & diss py-cpy	Run	30-65°	"	Mod ser & sgy on fracs.
	309.4	5.4		.28		Cgl	Run	As above + moly	Run	30-70°	fracs w/ sul gg sgy.	wk alt. to ser.
	320.8	11.4		.28		Cgl	Run	Strs & vlts py-cpy Tr moly	Run	30-65°	fracs & slips	Short ints dgr. frg
	332.0	11.2		.34		Cgl	Run	30 & 60° vlts & wk diss py w/ cpy moly on fracs.	Run	30-60	fracs & slips w/ ser - gypsum sul gg.	Locally broken
	346.0	11.0		.45	28.5' @ 0.50	Cgl	Run	60° vlts - strs & pats Diss py-cpy wk moly.	Run	30-60	fracs & slips	wk pats felt near fracs.
	356.6	11.6		.50		Cgl	Run	Same, + Mo vlts.	Run	"	"	wk alt.
	360.5	5.9		.58		Cgl	358.4 Run	55° vlt cpy Strs sols along fracs w/ moly.	Run	"	"	St ser on fracs.
	369.5	9.0		.37		Cgl	Run	20 to 70° vlts py w/ wk cpy Moly on fracs	Run	30-55	fracs & slips w/ moly, Tale, ser.	dkgr cgl w/ dkgr frags.
	376.2	6.7		.30		Cgl	Run	30 & 60° vlts - diss py-cpy Tr moly on fracs.				locally broken
									Run	"	"	Mod ser - wk talc
	386.5	10.3		.40	.40	Cgl	Run	"	382.9	45°	3.6' bx-gg - filt w/ mod to st ppd sulgg & much moly	st clayey gg zone

1 Set Holes

M 38
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41
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HOLE NO. M-41

Coordinates: N 361,456.62 E 763,737.31

Dip Vert Bearing ____

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
386.5	395.5	9.0		.29		Arg-Cgl	Run	Vlts-pats-fine diss py w/ wk cpy	Run	30-40°	fracs & slips w/ gyp ser, sulfg.	Grades Cgl-Arg-cgl. Lt gr to tan w/ dk brn & pk frags
	409.9	14.4		.39		Cgl	Run	30 to 60° vlts py-cpy	Run	20°-60°	"	wk ser & gyp on fracs local 85° qtz vlts w/ sulfs.
	418.6	8.7		.23		Cgl	Run	30° & m/L vlts-gp pats-wk diss py-cpy Tr molyb.	Run	30-45	fracs w/ ser	As above
	423.3	4.7		.29		Cgl	Run	Strs & diss small pats py w/ cpy	Run	"	"	wk local serp.
	434.4	11.1		.36		Cgl	Run	30-70° vlts & fine diss py w/ weak cpy.	Run	30-70°	fracs w/ ser-Talc sulfg.	DK brn & maroon frags local st ser
	445.4	11.0		.45	22.0' @ 0.45	Cgl	"	As above + Tr moly	Run	30-50°	"	Coarse grained
	456.4	11.0		.45		Cgl	Run	vlts & diss py-cpy Sulfg on fracs.	Run	"	Same	strongly broken Mod Alt.
	464.3	7.9		.35		Cgl	Run	As above	Run	Varied	fracs & slips	DK gr pats, Tr Fl, st ser.
	476.4	12.1		.50	0.50	Cgl	Run	Strs & pats py-cpy 30-45° vlts py w/ cpy	Run	30-60°	"	" + wk cpy
	486.3	9.9		.29		Cgl	Run	Same	Run	"	As before	Locally broken
	496.2	9.9		.41		Cgl	Run	Mod diss cpy-py	Run	30°	parallel fracs & slips w/ ser & Talc	Mod alt.
	504.7	8.5		.44		Cgl	Run	Same	Run	40 to 60	" + gyp	"
									500-501	—	shatter zone	
	513.3	8.6		.46	54.1' @ .47	Cgl	Run	"	Run	30-70°	As above	short 25° vlts DK brn Arg.
	524.6	11.3		.42		Cgl	Run	vlts & diss pats py-cpy Moly	Run	25-40°	Gyp vlts & fracs w/ st ser.	Qtz-feld rep along some fracs.
	533.4	8.8		.54		Cgl	Run	As before	530.1-530.9	15°	Intercept slip w/ bic	locally broken, st ser in slip. wk cpy along some fracs
	540.4	7.0		.63		Cgl	Run	Diss & 35° vlts py-cpy.	Run	36 to 60	fracs w/ ser, serp, Talc, Sulfgs.	Run ends @ 30° gg bx zone.
	543.5	3.1		.19		Arg			540.4	30°	bx-gg ct w/ Arg.	Lt tan to pk Arg w/ Qtz-like vlts (Wdense)

HOLE NO. M-41

Coordinates: N 361,456.62E 763,737.31

Dip Vert Bearing —

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
543.5	553.2	9.7		.18		Arg.	Run	Hi6 vlts & diss pats py-cpy	Run	30-Nil	fracs w/ st ser-serp.	Brecciated & fill zones
	563.2	10.0		.15		Arg	"	as above	"	"	Same	Locally broken st ser. mod serp
									561.0	75°	Bx-gg st ser.	
	572.5	9.3		.07		Arg	Run	wk suls Tr moly	Run	25-70°	fracs w/ ser.	As before
	582.7	11.2		.10		Arg	Run	Same w/ wk moly	Run	"	Same + Talc	"
	593.7	10.0		.25		Arg & Qtzt	Run	wk vlts & pats diss cpy-py	Run	30°	fracs w/ bx-gg.	Mixed Arg & Qtzt showing alteration of Arg w/ some into Qtzt.
	602.9	9.2		.09		Arg	Run	As before but weaker	Run	30-60°	fracs & slips	
	609.0	6.1		.03		Arg	Run	vlts & fine diss py molyon fracs.	Run	30-60°	"	"
	617.8	8.8		.10		Arg & Qtzt	Run	" cpy	Run	—	Very broken	Mixed brn Arg fragments all - ser. (1 of frags) w/ Qtzt w/ ser.
	627.4	9.6		.14		Qtzt	Run	Strs & diss cpy-py	Run	—	"	
	636.0	8.6		.21		Qtzt	Run	Same + st moly on some fracs.	Run	30-50°	fracs	As before
	649.5	13.5		.15		Qtzt	Run	As before w/ wk sph	Run	"	"	
	658.3	8.8		.14		Qtzt	Run	wk suls.	Run	—	Broken	increase in ser.
	665.5	6.2		.22		Qtzt	Run	wk diss & pods cpy, py	661.8-665	Low ∠	fit(?) bx	st ser in fit(?) zone
	671.0	5.5		.17		Qtzt	Run	wk py, cpy; finely diss	Run	—	Very Broken	-50% recovery
	681.4	10.4		.33		Qtzt	Run	wk py, cpy; vlt, diss & pods, Tr Moly	612.6	—	1" dia pod cpy, py	lesser ser; local silica fracs
									Run	40-60°	Fracs & slips	
	691.4	10.0		.23		Qtzt	Run	Strs & diss py & cpy Tr moly	Run	"	Fracs w/ sulgg. ser & wk talc.	wk ser
	702.1	10.7		.25		Qtzt	Run	45-70° vlts, strs & fine diss py-cpy, Tr moly	Run	"	"	As before; locally broken.
	713.6	11.5		.21		Qtzt	Run	As before + sph	Run	40-75°	Fracs & slips w/ st sul gg, ser, & talc.	Stronger ser & suls
	717.7	4.1		1.96	1.96	Qtzt	Run	st vlts & diss cpy-py-sph - wk moly	Run	30-70°	Fracs & slips w/ st suls, ser, Serp & Talc, bx	st ser, mod carb Run poss fit zone
	726.3	8.6		.18		Qtzt	Run	Strs & diss pats py-cpy - wk sph & Moly	Run	"	St sul gg on some fracs also ser & Talc.	weaker ser, wk carb

HOLE NO. M-41

Coordinates N 361,456.62 E 763,737.31

Dip Vert Bearing —

Date started 7/26/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
726.3	733.0	6.7		.32		Qtzt	Run	vlts & strs py w/ weaker cpy	Run	30-50°	fracs w/ sulfgg.	Ltgr to wd Qtzt w/ wk ser.
	737.0	6.0		.31		Qtzt	Run	Pats & Hi & vlts st py w/ less cpy. mod sph	Run	10-45°	As above	med ser
	747.3	8.3		.12		Qtzt	Run	vlts, strs, pats py-cpy, w/ sph, Tr Moly	Run 742.0	Hi ∠ 30°	fracs as before flt bx	wk ser
	749.5	2.2		4.33		Qtzt	Run	St diss & Hi & vlts py w/ lesser cpy wk hem stain	749.5	10°	Gradational Qtzt-Tt ct.	As above
	761.4	11.9		1.40		Tt	Run	St 10° to 50° vlts & diss py w/ less cpy. Mod hem stain	Run 753.8-762	10-50° 40°	fracs w/ gyp, sulf, chl. Silf bx zone (Pass FM)	Grn & maroon Tt w/ pats Qtzt, st local Qtzt-Tt cont, chl, mod CO_2
					33.8 @ 1.69							
	769.4	8.0		1.68		Tt	Run	As before	Run	10-40°	fracs w/ CO_2, gyp, st sulfs.	As above
	772.6	3.2		1.95		Tt-Qtzt	Run	St. py w/ lesser cpy	770.2 770.9	10° 15°	Tt-Qtzt ct. Bx w/ st qtz, Tt stain to 780.5	Tt as before. Qtzt lt gr w/ st clay & sulfs.
	781.1	8.5		1.33		Hf	Run	Strs & vlts & diss cpy, py, wk sph, Tr bn.	772.6 781.1	Last Last	Qtzt-Hf ct. Hf-Qtzt ct.	Cream colored Hf strongly broken w/ st ser, local st qtz. (-50% recy) Pass Bx-gg zone
	791.0	9.9		.13		Qtzt	Run	Sp vlts & wk diss py w/ cpy. Tr moly.	Run	30-60°	fracs & gyp vlts	wk sul gg on fracs w/ gyp & ser.
	801.2	10.2		.13		Qtzt	Run	Tr sulfs, Moly on some fracs	Run 801.2	60° 85°	vuggy fracs Qtzt-Hf ct.	wk ser; serp @ end.
	808.5	7.3		.80		Hf	Run	30°-65° vlts st py w/ lesser cpy-sph.	Run	30-60°	fracs w/ st sulfs wk CO_2	Lt grn dense silf Hf w/ wk gyp fact.
	818.0	9.5		.83		Hf	Run	20°-80° cpy-py vlts				Lt grn dense abun CO_3 mtx
	830.5	12.5		.92		Hf	Run	"	825-30.5	0-30°	vlts-pats qtz or qtzt and cpy-py	Grad cnt w/ qtzt @ 830.5 Num pat bn gen in Hf Tr op-hem-sph in Hf
					78.6 @ 0.69							
	838.7	8.4		.42		Qtzt	Run	wk-mod vlts & diss cpy py. Tr moly on fracs.				Bun alt in qtzt 830.5 -31.5 - Wht qtzt below
	848.5	9.6				Tt	839 & 844	50° Cpy-py vlt				Qtzt-Tt grad cnt 838.9

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HOLE NO. M-41

Coordinates: N 361,456.62 E 763,737.31

Dip Vert. Bearing ——

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
838.9	848.5	9.6		0.91		Tt	Run	Tr wk diss cpy				Pat CO_3 w/ brn gar Pat Hf, tr ep
	856.5	8.0		0.98		Tt	Run	vlts & diss py w/ less cpy wk diss sph	Run 856.5	30-55° Low ∡	slips w/ serp & sul vlts Tt - Qtzt ct.	As above w/ serp
	868.8	12.3		0.39		Qtzt	Run	Strs & 30°-70° vlts py-cpy-sph.	868.1	28(?)	Qtzt - Hf ct	Lt gr qtzt w/ wk ser
	879.8	11.0		0.40		Hf	Run 877.4	Tr diss suls Pat cpy - sph	Run	25-70°	CO_3 & gyp vlts.	Lt grn dense Hf w/ local st serp & clay CO_3.
	883.4	3.6		0.04		Hf-Qtzt	Run	Tr suls; wk hem @ ct.	880.8	60°	Hf - Qtzt ct @ frac.	Lt grn Hf & lt gr qtzt wk serp & ser.
	891.0	7.6		Tr		Qtzt	Run	Tr suls.	Run	30-60°	Gyp vlts & fracs.	Lt gr qtzt w/ wk ser.
	900.0	9.0		0.08		Qtzt	Run	Wk vlts & strs py; Tr cpy.	900.0	30°	Qtzt - Hf ct @ frac w/ chl & sph.	Wk to mod ser on Hf & fracs. wk CO_3 @ cont.
	909.5	9.5		0.33		Hf-Tt	900.0 Tt	Oil vlt st sph. wk to mod vlts & diss py-cpy-sph.	901.5 908.5	- 30°	Gradational ct w/ Tt Tt-Hf ct. Hf w/ pats gar.	Lt grn dense Hf grades into grn & maroon Tt w/ pats Mb. St CO_3 & serp.
	913.2	3.7		0.48	0.48	Hf	Run	Wk to mod local diss py-cpy; wk sph	913.2 Run	50° 30-60°	Hf - Mb ct Gyp vlts & fracs.	Wk clayey Hf w/ pats wol & Tt - Mod CO_3
	922.1	8.9		0.04		Mb	Run	Tr suls	Run	30-60°	fracs & slips w/ serp. wk clay.	Wk Mb w/ local zones wol & serp.
	932.3	10.2		Tr		Mb	922.6	Small 45° vlt cpy-py	Run	30°	"	As before
	942.6	10.3		Tr		Mb	Run	Barren			Same	Wk pats clay & wol.
	950.1	7.5		0.03		Mb	Run	"	Run	Hi ∡	Gyp vlts.	" wk serp.
	960.0	9.9		Tr		Mb	Run	Tr suls	Run	60°	Local gr bands.	As before
	970.0	10.0		Tr		Mb	Run	Barren	962.8-70.0 Run	50° Hi ∡	Wk banding gyp vlt.	Last 2.2' gr Mb w/ wk color banding. wk wol.
	980.3	10.3		Nil		Mb	Run	Barren	Run	50°	Wk color banding	Gr Mb w/ no alt.
	992.5 Bottom	12.2		Nil		Mb	Run	"	Run	"	As above	Same

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HOLE NO. M-43

Coordinates: N 36,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 8265.9 Total Depth 1470.4

GEOLOGIC LOG
MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0.0	191.0					overburden						Cg I 170
191.0	216.0	25.0				C Cg			216.0	70°	Cg-BR cont.	
	220.7	4.7	.08	.24		Cgl	Run	Mn-Fe Ox	Run	60-80°	fracs w/ CCg & clay	Ugr Fe stained Cgl
									220.7	Low	frac Base Cribes	w/ dk'br to maroon
												frags.
	230.2	9.5		.26		Cgl	Run	Strs & diss py-cpy	Run	30-70°	fracs & slips w/	As above less Fe stain
								Sulgg			Sulgg, ser & gyp.	incr. ser-serp.
	242.7	12.5		.28		Cgl	Run	As above Tr moly	Run	"	Same + serp.	Stronger ser.
	251.0	8.3		.29		Cgl	Run	As before w/ less	Run	30-70°	fracs & slips, some	less ser wk silf
								st moly on some fracs			w/ minor BX	
	261.6	10.6		.27		Cgl	Run	Hi vlts & strs py-cpy	261.2	45°	Bx-gg	Local zones ltgr Arg
								Molyon fracs.	Run	15-45°	hyerlite & slips	st serp & Talc on fracs
	271.7	10.1		.32		Cgl	Run	wk strs & diss sulfs.	Run	"	"	st ser, serp, Talc.
	282.9	11.2		.34		Cgl	Run	varied & strs & vlts	Run	15-65°	fracs & slips w/ st	"
								cpy-py-Tr moly			ser, serp, Talc wk	
											gyp.	
	293.0	10.1		.50	20.2' @ 0.46	Cgl	Run	As above	289.7-290	60°	Bx-gg (poss flt)	Short into dk'brn
												Arg & cgl. st alt.
	303.1	10.1		.41		Cgl	Run	Strs & diss py-cpy	297.4-298.2	60°	Bx-gg w/ st serp,	As above w/ occas
								moly on some fracs.			Talc & moly (poss flt)	puggy fracs & wk CO2
	310.2	7.1		.26		Cgl	Run	Wk py-cpy-Sulgg	Run	20-vert	fracs & slips w/	St alt. to ser.
											ser, Talc, gyp.	
	320.9	10.7		.29		Cgl	Run	Wk py-cpy	Run	20-50	fracs, qtz vlts	On gray-blk cgl
									319.3	30°	Bx & gg	
	331.0	10.1		.30		Cgl	326.2	45° Qtz-py cpy vlt	Run	20-Vert	Frac-gg	Pols qtz-talc vlt
	341.8	10.8		.30		Cgl	Run	wk py-cpy in qtz vlts	Run	20-45°	Qtz-sul vlts	339.6 Tr Sph
									341.8	50°	Gouge seam & cpy	
	351.9	10.1		.33		Cgl	342.6	45° Qtz-moly-cpy vlt				
							Run	More abun qtz-py-cpy vlts	Run	20-45°	Qtz-sul vlts	
	360.2	8.3		.46		Cgl	Run	As Above	Run	20-80°	Qtz-sul vlts & fracs	
	371.0	10.8		.43		Cgl	Run	Sp vlts py w/ less cpy	369.5	60°	gg-sulf seam.	St ser. wk serp.
								Tr moly, Sulgg				
	380.4	9.4		.61		Cgl	Run	50°-vert py & cpy	Run	30-50°	Qtz-sul vlts & fracs	wk porta fold.
								vlts. Sulgg			& slips	

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HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
380.4	389.3	8.9		.75		Cgl	Run	Varied & vlts & diss cpy-py	Run	varied	fracs & slips	Sver. serpent walls
	400.3	11.0		.76		Cgl	Run	As before but weaker	Run		very broken	at sec. level lag
	409.8	9.5		.65		Cgl	Run	wk diss & stks cpy-py	409.5-7.0	30°	Bx-gg zone w/ Tr sulfs	strongly broken w/ mud & clay
	419.0	9.2	.5	.93	113.3' @ 0.69	Cgl	Run	Stks & fine diss cpy-py - Moly on fracs.	Run 409.8-12.1	30-45 60°	fracs w/ moly bx-gg (poss flt)	St sec & clay
	429.1	10.1	1	.81		Cgl	Run	Diss py-cpy; st moly on fracs.	Run	70°-vert	fracs w/ st moly	As before
	437.9	8.8		.81		Cgl	Run	70° vlts, wk stks & diss cpy-py, wk moly	Run	30-70°	fracs w/ sulfs, ser, gyp. locally broken	wk sec. local lag
	445.0	7.1		.61		Cgl	Run	wk to mod diss cpy-py	Run	"	As above	Mod ser.
	455.0	10.0		.57		Cgl	Run	Varied to vlts & diss cpy-py	Run 445.3	40-80° 60°	fracs w/ ser. 0.4' Bx zone w/ qtz. & wk CO_2	Fate field in upper half of run
	465.2	10.2		.86		Cgl	Run	Mod diss py-cpy, st sul gg	464-end Run	70° 30-70°	Bx-gg (poss flt) fracs & slips w/ ser, serp, wk CO_2	St ser & clays
	472.6	7.3		.25		Cgl	Run	Diss & 45° vlts py-cpy	Run	70°-vert	fracs & slips w/ ser.	local qtz. fold & placement
	482.9	10.4		.26		Cgl	Run 479.8	Stks & diss py-cpy Large pat cpy	Run	30-70°	fracs	Less ser & clay. Local wk silt
	491.7	8.8		.23		Cgl	Run	Stks, diss, & 30° vlts py-cpy	488.3-88.1 491.0	45° 70°	Bx-gg zone (poss flt) slip w/ gg.	Mod silt to qtz.
	500.5	8.8		.29		Cgl	Run	vlts, stks, diss, pats py-cpy; Tr moly in qtz. Sul gg.	499.5-end 492.8	30° 40°	Bx-gg w/ sul gg gyp vlt, bx, sul gg	Local mod fold; wk qtz, mod silt
	510.4	9.9		.31		Cgl	Run 503.3	vlts, stks, diss, pats py-cpy, Tr sph. 30°-0.1' vlt cpy	Run 500.0-7.2	30-45 30°	fracs & slips w/ clays, bx & sul gg & sulfs bx-gg & cpy vlts.	As above
	522.2	11.8		.72		Cgl	Run	70° vlts & diss pats py cpy; Tr moly	Run	30-60° Local	Qtz-feld vlts. gyp vlts	St qtz-less feld cpl. Ser on fracs, st silt
	532.4	10.2		.71	55.1' @ 0.80	Cgl	Run	As above	Run		Same.	As before
	542.4	10.0		.67		Cgl	Run	vlts, stks & diss py-cpy - Tr moly in qtz.	Run	30-50° & vert	fracs w/ gyp, wk ser & qtz.	" "

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HOLE NO. M-43

Coordinates: N 311,161.54 E 763,743.49
Dip Vert Bearing —
Date started 8/30/62 Completed 9/28/62
Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG
MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
542.9	552.9	10.0		1.00		Sgl-Arg	Run	Mod diss py-cpy, Tr moly-sph	548.2	50°	Qtz-feld vlt (0.5') w/ mod cpy-py-Tr moly	St silf sgl w/ cpy vlts, wk sericite grades to Arg gross con
									Run	30 to 60°	fracs (gradat)	
	565.5	13.1		.85		Arg	Run	As above + stks.	Run	30-vert	fracs w/ ser scap, gyp & qtz vlts.	Mod fr. sec. lay; st silf
	577.8	12.3		.31		Arg	Run	30°-50° vlts & stks py w/ less cpy Tr moly in Qtz.	Run	30-70°	As before	As above
	587.2	9.4		.18		Arg	Run	Mod vlts py w/ wk cpy.	Run	"	"	less & more set.
	595.0	7.8		.28		Arg	Run	diss & vlts py w/ less cpy Tr moly	Run	30-vert	Gyp & qtz vlts & fracs w/ ser & sulfgg.	Mod ser, locally broken
	601.5	6.5		.09		Arg	Run	vlts & diss py Tr cpy sulfgg - wk moly	565.7	30°	Qtz-feld vlt.	Tan & dk brn Arg w/ mod silf.
	611.7	10.2		.13		Arg	Run	wk vlts & diss py Tr cpy	601.8	65°	flt brw w/ st py, Tr cpy-moly & sulfgg.	As above
	621.5	9.8		.12		Arg	Run	diss & vlts py-cpy mod moly in Qtz vlts & on fracs.	615.2	60°	Ex-gg-st. gg	Same w/ wk ser
									Run	30-45°	Qtz vlts w/ moly	
									621.5	25°	Arg-Tt ct.	
	631.2	9.7		2.23	2.23	Tt	622-623.9	St 15° & 60° vlts py w/ cpy	625.0-629.0	30°	Pegs in mineralized flt.	Grn Tt w/ st scap; wk sep; patches gtzt; short lt w/ Hf
							625-629.0	30° massive vn py-mag cpy.	631.2	25°	Tt-Arg ct	massive sulf.
	638.9	7.7		.21		Arg (Qtzt)	Run	wk diss sulf.	Run	varied	fracs & slips, very broken	lt tan & pk Arg w/ short intervals of hi qtz Arg
	646.6	7.7		.05		Arg (Qtzt)	Run	As above	Run		Same	As before
	655.0	8.4		.10		Arg (Qtzt)	Run	wk stks & diss py-cpy	Run	50-85°	fracs & slips w/ ser, sulfgg.	lt tan Arg w/ local st qtz, wk ser.
	660.1	5.1		.02		Arg (Qtzt)	Run	wk stks & fine diss py-cpy moly on fracs w/ st qtz.	Run	30-vert	fracs & slips w/ clay, moly & gyp	As above
	670.2	10.1		.13		Arg (Qtzt)	Run	Small pats & wk stks sulf sulfgg w/ cpy on fracs.	670.0	60°	Arg-Qtzt ct (Change from Hi qtz Arg to pure Qtzt.)	Mod ser on fracs. st silf throughout.
									660.2	70°	Qtz vlt w/ sulf.	

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GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
670.2	681.2	11.0		.29		Qtzt	Run	wk to mod vlts & diss py-cpy - Molybdenum fracs.	679.8-80.9	Low ∠	st broken zone w/ bx & clay	Frosty white, large Qtzt w/ local clay & ser
							679.2	Low ∠ vlt cpy-spn	Run	30-50°	fracs w/ wk ser.	
	691.2	10.0		.51	.51	Qtzt	Run	Varied ∠ vlts & diss cpy-py; Tr Moly	Run	"	"	As before. Less ser & clay.
	702.2	11.0		.26		Qtzt	Run	30° & 60° vlts py w/ cpy sul gg along slips.	Run	30-50°	fracs & slips w/ sul gg	Ltgr & frosty wk qtzt.
	714.0	11.0		.21		Qtzt	Run	varied ∠ vlts & fine diss py-cpy, Tr moly	Run	20-40°	vuggy fracs	
									716.3	25°	Bx using fracs w/ sul gg	As above & wk clay
	724.1	10.1		.31		Qtzt	Run	wk vlts & diss pats py cpy -	Run	30-60°	Gyp vlts & fracs w/ sul gg & short wk Bx	Lt gr Qtzt.
	727.2	3.1		.24		Qtzt	Run	wk diss suls.				Ser on fracs
	737.2	10.0		.13		Qtzt	Run	Hi ∠ vlts & fine diss py-cpy	Run	Varied	vuggy fracs	wk ser.
	747.2	10.0		.11		Qtzt	Run	As before				Wk ser alt in fracs
	757.2	10.0		.83	.83	Qtzt	747.2-52.1	As before	752.1-end	30°	Less flt w/ st clays, bx & mod sulfs; Qtzt throughout.	As above to 752.1 & less flt bx-gg-suls to end. Ends in cl clay Qtzt.
							752.1-end	Mod py-cpy diss & vlts w/ pats hem & st clays in less flt zone.				
	765.8	8.6		.13		Qtzt	Run	Varied ∠ vlts py w/ wk cpy; Tr moly	Run	30-60	Gyp vlts & fracs	Wk clays
	775.5	9.7		.11		Qtzt	Run	wk suls & sul gg	775.0	50°	Gyp vlt	More clay near end.
									Run	30°	Gyp vlts & fracs	
	782.0	6.5		1.21		Hf	Run	Diss & 30° to 60° vlts py-cpy w/ pats hem.	776.0	-	Gradational ct w/ Hf.	V. st gyp & clay in Ltgrn Hf. wk ser
									Run	0-85°	Gyp vlts w/ st ser	
	792.2	10.2		.46		Hf	Run	Mod cpy w/ lesser py in local pods & vlts; wk diss	Run	0-85°	Freq. angle 40-50° - Gyp vlts w/ serp	Lt gr to cream Hf; V. st gyp w/ serp & clay; Mass Gyp layer 787.0-788.0'; Hf locally Calcareous
	800.7	8.5		1.21	58.3° @ 0.89	Hf	Run	St-v. st vlts cpy, py; lesser diss cpy	799.7-800.7	85°	1/2-1" vlt py, cpy; lesser cpy	Lt gr-cream Hf w/ V. st Gyp; local pat gr gar
									797.3-798.8	30°	Series ribbon-like vlts of mod cpy	
									Run	30-50°	Gyp vlts w/ serp	

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 5/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
800.7	810.9	10.2		1.26		Hf		Mod diss & vlt py, cpy, local st mag	803.1	20°	Gg seam w/ gyp	Lt gra-green Hf w. sd gyp & serp, 803.1-804.7 mass gyp
									804.7	70°	Gyp-Hf ct	
									Run	20-75°	Gyp vlts, ave. 50°	
	825.0	14.1		.80		Hf		Pats-vlts cpy-py-mag-serp	Run	20-15	Gyp vlts	Lt grn wht Hf tr ep
									815.0	30°	Thin mag vlts	
	833.8	8.8		.54		Hf	830-32.0	Mod cpy-hem	825.0	20°	Gg & gyp vlt	Buff to wht Hf
									833.8	50°	1' Gg & bx zone	
	841.4	7.6		.18		Qtzt	Run	Tr cpy-py-moly	Run	30°	Fracs.	F.g. wht gray
	851.8	10.4		.15		Qtzt	Run	As above	Run	30°	Fracs	847.0 Pat. Mp
	860.2	8.4		.13		Qtzt-Mp	Run	Tr fine diss & vlt cpy, py, moly	860.2	35°	Mp-Qtzt ct	Lt gr-buff Qtzt, st ser w/ porphyry-like text gyp vlts; 0.7' mp intercept @ end of run
									Run	20-40°	Fracs	
	868.6	8.4		.26		Qtzt	Run	Tr diss & vlt py, cpy	866.7	70°	Bx-gg zone, 0.4'	Lt gr Qtzt
									Run	30°	Fracs	
	877.8	9.2		.39		Qtzt-Mp	Run	As above w/ mod moly on fracs	873.4	60°	Qtzt-Mp ct w/ mod Moly	Lt gr Qtzt w/ Mp intercept from 873.4-878.0 local ser, gyp
									Run	30°	Fracs	
	885.0	7.2		.30		Qtzt	Run	vlts, stks, & pats py-cpy	Run	30-50°	" w/ wk serf Gyp	Lt gr to frosty wh qtzt w/ wk ser
	895.0	10.0		.21		Qtzt	Run	vlts & fine diss py-cpy; sulgg.	885.6-886.1	50°	Bx-gg-gyp	Same
									Run	60°	fracs & gyp vlts.	
	906.7	11.7		.27		Qtzt	Run	As above.	Run	30-40	fracs	v. wk ser, sul gg.
	911.8	5.1		.11		Qtzt	Run	Sp pats & 50° vlts py-cpy	Run	15-60°	fracs & gyp vlts	" "
	923.2	11.4		.20		Qtzt	Run	60° vlts cpy-py + wk fine diss.	914.5	40	0.1' Bx along frac	Thin varied dip Qtz vlts.
									Run	30-60°	As in previous run	
	930.5	7.3		.20		Qtzt	Run	Wk diss & pat py, cpy	Run	30-65°	Fracs	Lt gr Qtzt w/ wk gyp, ser & smeared sulf on fracs
									930.5	60°	Qtzt-Hf ct	
	936.8	6.3		1.60		Hf	Run	St vlts (50°-85°) py-cpy-sph, Tr diss moly all weakening toward end of run.	Run	60°	Gyp vlts parallel fracturing w/ bx-like appearance, poss pre-min shears	Lt grn dense Hf w/ short zones Tram-Act. st serp in last 0.3'
									930.5-933.8	60°		

GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-43
Coordinates: N 361,161.54 E 263,793.49
Dip Vert Bearing —
Date started 8/20/62 Completed 9/28/62
Collar Elevation 3265.9 Total Depth 1470.4

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
936.8	945.0	8.2		.19	24.6 @ 0.75	Hf	938.3 & 385 Run	2 small 50° vlts py-cpy Tr diss sulfs.	Run	20-50°	Fracs, slips & gyp vlts. (Poss flt zone)	Lt grn dense Hf w/ wk pots wol, grades to dk gyp massive serp w/ 20° to 50° gyp vlts, vwk Cu
	955.0	10.0		.67		Hf	Run 950.9 952.3	WK diss sulfs. pot cpy 60° vlt py w/ less cpy.	Run	15-35°	Same	Alternate lt gr-grn clayey Hf & massive grn-yel serp w/ gyp vlts
	965.0	10.0		.03		Qtzt	Run	Tr sulfs on some fracs	955.1 Run	40° 30°-50°	Hf-Qtzt ct. fracs w/ wk sulfs, gg, ser, serp.	Lt gr qtzt w/ zones lt tan material; wk ser, serp.
	975.0	10.0		TR		Qtzt	Run	As above	Run	30-60°	Same	Same minus serp.
	987.8	12.8		.05		Qtzt	Run	" "	Run	30-20°	"	" " "
	990.7	2.9		.05		Qtzt	Run	" "				" " "
	995.0	4.3		.58	.58	Hf	Run	Diss pots cpy-py wk hem.	990.9 Run	50° —	Qtzt-Hf ct. bx like fracs Qtzt throughout. Poss flt.	Grn & tan Hf w/ st serp & Trem. Contains pots Qtzt.
	1005.2	10.2		.15		Qtzt	Run	Strs & diss py-cpy in last 1.0' of run	995.8	55°	Hf-Qtzt ct.	Lt tan Qtzt w/ gyp on frac.
	1010.0	4.8		1.07	1.07	Hf-Qtzt mixed	Run	Hi & vlts & diss py-cpy-Su gg-Tr Moly	1005.0	—	Gradational Qtzt-Hf ct.	Mixed Hf & Qtz w/ pots Trem, Serp, Ser, Feld.
	1023.3	13.3		.32		Hf-Qtzt	Run	Strs & diss py-cpy	1012.2	45°	st slip w/ gyp, serp & sulfs.	Lt gr-grn Hf w/ shift into Qtzt. St clay & med serp.
									1015.5	30°	flt w/ med sulfs, serp gyp, Trem-sec, gg	1015.9-17.5-30° Qtzt int wk CO_2
	1031.1	7.8		.36		Hf	Run	Tr strs & pots cpy, lesser py; Tr hem in strs	1031.5	40-55°	slips w/ serp, clay	Wh-lt gr Hf; .7' alt qtzt @ beg. of run; Run well, local gar, silif.
	1041.2	10.1		.05		Hf	Run	Local wk diss sulfs	1037.7	60°	0.3' gyp vlt w/ qtz vlts on either side.	Wh Hf w/ pots Mo st serp & well, local silf, st CO_2

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1041.2	1051.0	9.8		.33		Hf-Bx	Run 1047.6	Wk diss sph, cpy-py 0.5' zone st diss sph-cpy-py.	1042.5-44.0	30°	Silf bx zone w/ frags qtzt. Poss flt w/ Diss pats sph-cpy	Wh dense Hf w/ local st silf & wol. st. CO_3
	1056.4	5.4		1.80	1.80	Hf-Mb	1051.7-54.7	St 70° Vns & pats sph-cpy-py.	1055.9	30°	Hf-Mb at.	Hf as before. Ltgr Mb w/ st clay
	1065.0	8.6		TR		Mb	Run	Tr suls.	Run	30-50°	fracs some w/ gyp.	Ltgr mb w/ med serp & clay on fracs
	1074.6	9.6		Nil		Mb	Run	"	Run	"	"	Same
	1084.8	10.2		TR		Mb	Run	Barren	Run	50°	Ltgr & wh banding	gr & wh Mb w/ wh & gr banding respectively.
										30-70°	Gyp vlts in fracs	
										vert	Gyp vlt @ start of run	Local wk strs & pats serp.
	1094.8	10.0		TR		Mb	Run	Barren	Run		Same	As before.
	1104.7	9.9		.09		Mb	Run	"	1103.5	50°	0.1' gyp vlt w/ 0.4' anhydrite on either side.	"
	1114.6	9.9		.02		Mb	Run	"	Run	50°	Ltgr & wh banding	Same
										30-70°	Gyp vlts & fracs.	
	1123.0	8.4		.05		Mb	Run	"	Run	"	As above.	"
	1133.2	10.2		.03		Mb	Run	"	Run	"	" "	Lt to dk gr Mb w/ wh 50° banding & wk serp & clay
	1140.0	6.8		.04		Mb	Run	"	Run	30-50°	"	v wk banding.
	1151.0	11.0		.03		Mb	Run	Barren	Run	70-vert	fracs w/ clay & v wk serp.	wh Mb w/ small local pats gr Mb; st clay wk serp & hi & fracs. sp pats wol
	1162.3	11.3		Tr		Mb	Run	Sp tr diss suls.	1169.3	40°	0.7' int. W-Hf.	As above.
									1165.6	Hi ∠	frac w/ serp, gyp & clay	
	1172.0	9.7		Tr		Mb-Hf	Run	Sp wk strs suls.	Run	20-50°	fracs & slips w/ serp.	Wh Mb & W. Hf mixed w/ st clay & wk serp.
	1181.8	9.8		Tr		Mb-Hf	Run	Tr suls & moly in pats qtz.	Run	"	As above.	As before to 779' then gr Mb w/ wk clay & pats wh mb.
									779.1	70°	ct between mixed wh Hf & Mb & gr Mb	

HOLE NO. M-93

Coordinates N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1181.8	1191.9	10.1		.10		Mb-Hf-Qtzt.	1186.2 to 1188.3 Run	wis puto & 50° vlts sph-cpy-py w/ tr bn in bx-gg wk diss & vlts suls.	Run	—	Gr Mb to 1182.8 ct @ 30° w/ wh Mb-Hf to 1183.4 ct @ 40° w/ ltgr Qtzt to 1184.9, ct @ 30° w/ mixed wh Hf & Mb	Gr Mb unaltered. Qtzt w/ wh ser. Mixed Hf-Mb w/ local st clay & low & gyp vlts.
	1201.9	18.0		.19		Hf-Mb	Run 1201.9-end	Tr py-cpy bn-cpy-sulgg in brec. zone. (0.1')	1181.9 1201.4	30° 15°	0.4' bx gg w/ wk suls. bx-gg w/ suls. ct w/ pure Hf.	Mixed Hf-Mb w/ wd qtz, gyp, & wk clay; st ser in last 0.5' of run.
	1206.2	4.3		.25		Hf	Run	diss & vlts py-cpy Tr bn	1206.2	30°	frac ct w/ wh clayey ma.	Ltgr-Ltarn-& pk Hf w/ bx-like appearance containing pats qtz-fold-gyp-clay.
									Run	35°	Cons Flt zone	
	1208.5	2.3		Nil		Mb	Run	Barren	1208.5 1207.9	Low A 35°	Mb-Hf ct to end. int. anhydrite	wh clayey Mb w/ c.9' int wh tetan anhydrite @ end.
	1215.1	6.6		Tr		Hf	Run	wk diss suls.	Run	45-70°	fracs, some showing drag folds. Pass flt zone.	Ltgrn, Ltgr, & few tan pk Hf w/ bx-like appearance containing pats wh & tan Qtzt, Fold, qtz, chl, serp, gyp & clay. Ends in c.5' tan Qtzt.
									1215.1	40°	Hf-Qtzt ct @ frac	
	1221.9	6.8		.09		Qtzt-Hf	Run	fine diss suls.	1219.2 1221.3	50° 50°	Qtzt-Hf ct } Hf-Qtzt ct } Pass flt	Ltgr Qtzt w/ st ser & 50-70° fracs; dkgrn Hf w/ st serp & fracs
									Qtzt	50-70°	st fracturing w/ fold & qtz along zone fracs in last 0.6'	Qtzt & fold & qtz.
	1224.9	3.0		.05		Qtzt	Run	Tr suls	Run	30-60°	fracs w/ serp.	Lt tan to pk Qtzt w/ w/ wk ser & fold.
	1235.9	11.0		.08		Qtzt-Arg-Bx	Run	wk suls. Fds cpy in FH zone.	1232.5-end	35° & 40°	flt zone ct w/ Lt gr Arg below.	Mixed Ltgr Qtzt & Ltbrn Arg to 1232.5 & Bx-gg w/ st chl, serp, fold, Qtz to end.
									Run	30-70°	fracs w/ serp & gg	
									1234.1	—	Large pat wh Mb.	
	1246.5	10.6		Tr		Arg	Run	Tr suls.	1246.5	90°	Bx-sulgg zone (0.3') w/ serp.	Ltgr Arg w/ st silt wk ser.
									Run	40-60	fracs w/ bx-serp.	

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GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-43
Coordinates: N 361,161.54 E 763,743.49
Dip Vert Bearing —
Date started 8/20/62 Completed 9/28/62
Collar Elevation 3265.9 Total Depth 1470.4

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1246.5	1253.2	6.7		.03		Arg	Run	Tr sulf	Run	30-80°	fracs w/ bx-serp-ser.	Lt gr to gr Arg w/ st serp, talc along fracs.
	1263.0	9.8		Tr		Arg	Run	" "	1254.3	40 & 30°	Bx zone (0.7') separating Gr & Gr-buff Arg.	Gr-Gr buff & brn Arg w/ wk ser along fracs
									1256.4	55°	Gr-buff & brwn Arg ct @ frac.	
	1270.0	7.0		Tr		Arg	Run	Tr to Nil sulf	Run	Var	Co3 vlts	Reddish brn Arg w/ chl? — mafic impurity
	1281.3	11.3		Tr		Arg	Run	As above	1276.2	45°	Grad sed cnt	1270.0 – 1276.2 As Above
									1281.3	10°	Thin flt - gg	1276.2 – 1281.3 Arg w/ st chl - mott. pseudo diorite Few bands gyp end run
	1293.2	11.9		.03		Mp	Run	Tr py - cpy	1291-93.2	40°	Schistose bands - serp	Med alt - some biot prob alt sed 1290.6 - 0.3' dense gyp
									1293.2	40°	Flt cnt w/ Mb	
	1305.0	6.8		.04		Lms-Mb	Run	Sulf nil	Run	40°-70°	Shears - fracs w/ Co3 some gyp	Black lms w/ abun pots, vlts wh Co3
									1298.5	20°	Fault - gg zone	
	1310.0	10.0		.04		Lms-Mb	Run	Tr sulf; poss graphite (?) on slips	Run	40°	Shears & fracs w/ serp Talc.	As before
	1318.2	8.2		Nil		Lms-Mb	Run	Same	317.4	30-80°	Bx-gg-shear w/ drag folds.	Blk Ls w/ gr Mb w/ 35-50° banding along shears & serp & Talc
	1327.8	9.6		Nil		Lms-Mb	Run	As before + Tr moly	Run	30-50°	fracs & slips w/ st serp & talc, v. wk aula & st gg. (black & sooty)	As above pots w/ Mb
	1337.9	10.1		Nil		Lms-Mb	Run	Tr fine diss py; graphite (?) on slips.	1332.9	40°	flt bx-gg 0.2'	As before w/ more gr Mb.
									Run	30-50	As above.	
	1344.1	6.2		Nil		Lms-Mb	Run	Same	Run	50°	faint wh banding	dk gr to black Lms
										15-50°	fracs. w/ wk serp.	
									1344.1	40°	Ls - Hf ct @ frac w/ wk serp.	

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1344.1	1354.5	10.4		TR.		Hf	Run	fine diss suls.; Moly on some fracs. wk pat $MnCO_3$	Run	15-50°	fracs & slips w/ serp & clay.	Varies Lt grn to tan Hf w/ pats CO_3, Wol, Trem, serp, clay
	1359.7	5.2		Nil		Ls-Hf	Run	Graphite (?) on some fracs; Tr suls	1358.4	irreg.	Ls-Hf ct. Hf to end w/ bx. brn @ end.	Blue-gray Ls w/ pats wh, st serp. Ltgrn-tan dense Hf w/ bx-like appearance.
									1359.6	20°	Hf-Ls ct @ frac w/ serp.	
	1365.0	5.3		Nil		Gyp(?)-Hf	Run	Tr suls.	1359.7	40°	Hf-gyp ct @ frac	blue-gr & tan Anhydrite w/ pats Ltgrn w/ wk local CO_3 & Mb-like Texture. wk clayey Hf w/ st serp. Poss. impure massive gyp.
									1363.1	20°	Gyp-Hf ct @ pure gyp vlt.	
	1373.2	8.2		Nil		Gyp-Anhydrite (?)	Run	Suls Nil	1365.7	30°	Hf-gyp ct @ st pure gyp vlt.	Massive blue, gray, grn, & brown impure gyp or anhydrite; Nil CO_3
									Run	30°	fracs w/ pure gyp vlts & wk clay.	
	1383.0	9.8		Nil		Gyp-Anhydrite (?)	Run	" "	Run	30-50°	fracs & slips w/ clay	As before w/ pats Lt grn Hf & clay; v wk pats CO_3.
	1393.0	10.0		.02		Gyp-Anhydrite (?)	Run	Tr suls.	Run	30-70	Same + serp.	wk serp along fracs.
	1403.3	10.3		.01		Gyp-Anhydrite (Hf?)	Run	" "	Run	"	"	As before w/ 3.7' int cream colored Hf.
									1397.3	50°	Gyp-Hf ct.	
									1401.0	50°	Hf-Gyp ct.	
	1412.3	9.0		.01		Gyp(?)-Anhydrite	Run	Tr fine diss suls.	Run	30-70°	fracs.	wk ser along fracs
									1412.3	20°	Gyp-Hf ct @ slip w/ serp	
	1422.6	10.3		.01		Hf-Ls	Run	Tr suls	1418.7	20°	Gyp vlt (0.2')	Mixed Ltgr-grn Hf & black Ls w/ 15-30° cts. Med to st yel-grn serp
									Run	15-30°	fracs w/ gyp, serp	
	1433.0	10.4		.02		Serp Hf	Run	Suls Nil	Run	30-50°	Same	Lt gr & wh Hf w/ st serp & CO_3. Bx-gg zone contains Lt brn gyp(?) frags.
									1429-end	30-45°	Bx-gg zones; poss flt.	
	1442.4	9.4		.01		Hf	Run	Tr suls in fracs	1441.6-end	10°	flt gg w/ st serp.	Ltgr-grn Hf w/ st serp talc & wk gypvlts.

MIS-807-A 75

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing _____

Date started 8/20/62 Completed _____

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH			% COPPER			ROCK TYPE	MINERALIZATION		STRUCTURES			REMARKS
From	To	Interval	N.S.	Total	Weighted Average		Depth	Description	Depth	Dip	Description	
1442.4	1454.4	12.0		.01		Granite(?)	Run	Tr py; faint hem stain first 2.0' & on occas surfaces of biot.	1442.4 Run	Low & 30-45°	Flt-granite(?) ct. fracs most common	Ltgr Granite w/ st alt of feld to ser & biot to chl. First 0.6' shows some lineation of qtz grains @ ± 30°. Orthoclase predominant feld. Pass recrystallization of qtz & feld.
	1460.0	5.6		.02		Granite (?)	Run	Tr suls; n-Khem stain on some fracs.	Run	10-30° 50-70	most common fracs. Cacas fracs.	As above.
	1470.4 Bottom	10.4		.01		Granite (?)	Run	" "	Run		As above	" "

MIS-807-A 75

HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66

Dip Vert Bearing ——

Date started 7/6/62 Completed 7/28/62

Collar Elevation 3252.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0	210.0					Alter ccg						ccg ± 176' BR ± 207
	220.4	10.4	.05	.25		Arg-Cgl	Run	Fe-Mn-Cu Ox-Jarosite wk sulf last c.3'	220.4	Low ∠	Base Oxides	Lt gr & tan Arg w/
									Run	Varied	fracs w/ fe ox & CO_3	ser along & near
											30° & 60° most common	fracs. Strongly broken
											fracs.	Short ints cgl
	234.8	14.4	.01	.32		Arg	Run	wk to mod vlts & diss	Run	"	As before less Ox.	Lt gr to gr Arg w/
								pats py w/ wk cpy			py on fracs.	local st ser wk aps
	245.9	11.1		.34		Arg	Run	30° & 60° vlts py w/	Run		"	"
								weaker cpy		Hi ∠	vn in most of run	(Reliable assay?)
	255.2	9.3		.36		Arg	Run	60° & hi ∠ vlts & occas	Run	"	Same w/ 70° to 80°	Local qtz & feld.
								pats & fine diss py & cpy			fracs more common.	
								Tr moly on fracs				
	266.7	11.5		.44		Arg-Cgl	Run	"	Run	"	"	Longer ints cgl
	275.7	9.0		.30	31.4' @ 0.40	Arg-Cgl	Run	"	Run	30 to 50	Ccas Hi ∠ fracs	cgl dominant last 5.5'
	286.6	10.9		.44		Cgl	Run	Mod to st vlts py	286.5	75°	slip w/ st mdg	Tan-lt gr-brown cgl
								between 45 & 60° w/ mod	Run	45-80°	fracs & slips w/ st	w/ local st qtz-feld
								local cpy.			ser-serp local gg.	st ser near fracs.
	296.8	10.2		.33		Cgl	Run	Varied dip vlts py w/			"	"
								wk cpy Tr moly				
	306.8	10.0		.32		Cgl	Run	"	Run	30-60°	Fracs & slips as before	Short ints (Low ∠) Arg.
												Local st qtz.
	316.6	9.8		.42	.42	Cgl	Run	vlts & fine diss py & cpy	306.8-311.8	Hi ∠	Frac w/ smeared sulf	"
								Tr moly			ser-clay.	
									Remainder	30-50°	Fracs (30° most common)	
	326.3	9.7		.19		Cgl	Run	"	Run	30-70°	Fracs	Short 30° ints Arg (gr)
	336.5	9.2		.18		Cgl	Run	"			"	St silf. Tr Ep
	347.2	11.7		.29		Cgl	Run	wk to mod 30° to 45° vlts	342.9	50°	Bx-gg (0.3')	gr & wk cgl local
								py. Tr cpy	346.0	65°	0.7' Bx-gg	ints dense gr arg.
	357.0	9.8		.16		Cgl	Run	"	Run	30 to 75°	fracs & slips	"
									353.1	25°	Bx-gg (c.4')	
	368.8	11.8		.39		Cgl	Run	wk vlts & diss py Tr cpy	Run	30 to 70°	Fracs w/ CO_3, qtz.	St CO_3 & Qtz.
	377.0	8.2		.15		Cgl & Arg	Run	"			ser.	
							373.2	0.2' st py 35° vlt w/	Run	"	"	" Mixed Arg
								wk cpy pats.				
	388.0	11.0		.29		Cgl & Arg.	Run	As above run	Run	"	"	"

MIS-807-A 75

HOLE NO. M-38

Coordinates N 361,463.16 E 764,237.66

Dip Vert Bearing —

Date started 7/6/62 Completed 7/24/62

Collar Elevation 3256.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
388.0	397.5	9.5		.29		Cgl	Run	wk vlts & diss py, Tr cpy.	391.5-392.0	60°	flt bx	Ltgr cgl w/ pats Arg, st ser wk CO_2.
									Run		As before	
	401.0	3.5		.21		Cgl	Run	40-50° py vlts, tr cpx	Run	50°	slips, vlts	Grey-brn mottled w/ local fold rex
	411.0	10.0		.34		Cgl	Run	Vlt, diss py, blebs cpy	Run	40,80°	Gyp vlts	Grey-brn cgl, local st fold-clay alt.
	421.1	10.1		.19		Cgl	Run	30-40 py-cpy vlts fine diss cpy	Run	High	slips	Grey cgl w/ st fold-ser alt
	428.7	7.6		.36		Cgl	Run	Vlts, pats py, cpy	Run	40,70°	Gyp vlts	As before "
	438.7	10.0		.36		Cgl	Run	Same	Run	30,75°	"	"
	448.5	9.8		.31		Cgl	Run	Finely diss & vlts py, cpy Tr MnOx.	Run	"	"	"
	460.7	12.2		.45		Cgl	Run	"	448.9	80°	2-parallel slips w/ thin vlts cpy-py	As before w/ local st silf, w/ serp, st ser
									Run	30-70	Gyp vlts.	
	470.8	10.1		.57		Cgl	Run	30-50° vlts cpy & py Fine diss cpy occas pats	Run	–	As above	"
	483.0	12.2		.52		Cgl	Run	"	Run	–	"	"
	485.7	12.7		.41		Cgl	Run	Local st pats py-cpy vlts py-cpy diss cpy	Run	–	"	"
									495.0	30°	0.7' flt bx-gg	
	505.0	9.3		.56		Cgl	Run	vlts & pats py-cpy Tr moly.	495.7-496	Hi L	Slip w/ smeared sulfs gyp & ser.	Mod qtz - st fold & ser.
									499'-end	30°-50°	fracs & slips w/ ser, gyp	
	519.7	9.7		.55	97.2' @	Cgl	Run	vlts, pats, & fine diss py-cpy	Run	Low L 35°	gyp vlts. fracs & slips	st qtz & feld mod ser
	519.6	4.9		.49	0.54	Cgl	Run	As above	Run		Same	"
	527.0	7.4		.83		Cgl-Bx	Run	Smeared sulfs & diss py-cpy	Run	60°	flt bx, gg w/ short ints cgl.	Flt zone w/ short ints cgl bounded by 60° fracs & slips. st ser & clay
	538.2	11.2		.67		Cgl	Run	vlts, stks, pats & fine diss py w/ cpy - Tr moly	Run	30-60°	Gyp vlts, fracs & slips	Ltgr to gr & brown cgl w/ st qtz-fold Rep.
	545.7	7.5		.42		Cgl	Run	As above	Run	"	Same	"
	554.8	9.1		.34		Cgl	Run	Same	Run	"	fracs & slips	Zones of mod ser.

GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66
Dip Vert Bearing —
Date started 7/6/62 Completed 7/24/62
Collar Elevation 3256.7 Total Depth 801.3

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
554.8	564.4	9.6		.35		Cgl	Run	Vlts, strs, pats & fine diss py-cpy; moly on fracs.	Run	30 to 45°	fracs & slips w/ gyp, smeared sulfs, ser, serp	Ltgr-tan-pk cgl w/ st silf. Local feld. Ser content increasing. Tr Ep.
	574.3	9.9		1.03	1.03	Cgl	Run	As before w/ last 1.0' of st cpy 30° parallel vlts.	573.3	35°	flt bx showing 30° parallel veining of cpy to end. (Bd?)	Same w/ last 1.0' flt bx w/ pats chuffi colored Arg. St ser
	581.0	6.7		.27		Qtzt	Run	Fine diss & strs py-cpy smeared sulfs in cracks & fracs.	574.3	60°	flt at w/ broken Qtzt.	Ltgr to wh Qtzt w/ pats of brn & common Arg cgl in first 2.5' of run. Pats & zones st ser alt throughout run.
									Run	Varied	fracs & slips w/ ser & smeared sulfs.	
	585.7	4.7		.28		Qtzt	Run	St smeared sulfs in fracs.	Run	—	Broken & ground some 30 to 45° fracs.	Minus 50% recy.
	589.6	3.9		.77	0.77	Qtzt	Run	30° vlts py-cpy sph pats py-cpy	Run	30 & 60°	fracs & slips w/ ser & smeared sulfs.	Ltgr to clear qtzt locally vuggy near fracs. Mod ser.
	599.9	10.3		.16		Qtzt	Run	wk vlts & strs py-cpy Tr Moly	591.8	40°	Bx-gg w/ py	As above
									593.0	30°	Bx w/ tr Ep.	
									Run	30-40°	fracs (Bd?)	
	610.3	10.4		.20		Qtzt.	Run	wk strs & 30° vlts py-cpy smeared sulfs on fracs.	Run	30-45°	As above	Locally very vuggy w/ increasing ser.
	622.2	11.9		.27		Qtzt.	613.2	60° frac w/ st moly	Run	30-70°	fracs & slips w/ ser, smeared sulfs, moly	Asin previous 3 runs w/ qtz sand in fracs near end, locally broken
							Run	As above				
	626.3	4.1		.74		Qtzt		Low L & 30° vlts py-cpy Tr moly	Run		Same	Same.
	631.0	4.7		1.13		Hf	1st 1.0'	flt zone w/ st cpy-py	626.3	80°	flt bx w/ st sulfs.	
							3.7'	30 & 60° vlts st py w/ mod cpy			Flt at Qtzt-Hf.	Ltgrn Hf w/ Act, Qtz & feld. Pats Ep @ 628'
									631.0	30°	Hf-Qtzt at	
	637.3	6.3		.45	37.0' @ 0.86	Qtzt	Run	Various angled vlts & strs py w/ lesser cpy	Run	30°	Common fracs.	

HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66

Dip vert Bearing ——

Date started 7/6/62 Completed 7/24/62

Collar Elevation 3256.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
637.3	642.8	5.5		.84		Hf	Run	fine diss & 60° vlts py w/ cpy. Moly @ ct.	Run	20-35°	slips off-setting sul vlts o.l.	Lt grn dense Hf w/ st Act, wk fam stain & gyp on fracs, wk CO_2 local st Ep. wk serp.
									637.3		c.t.	
	653.0	10.2		.93		Hf		"			"	As before
	659.2	6.2		1.08		Hf	653.5	0.1' 30° vlt st cpy below bx-gg zone	654.8	40°	flt bx	As before w/ local st ser & serp. local pats Qtzt.
									658.4	45°	0.8' gradational ct. to Qtzt.	
							Run	15 to 60° vlts py w/ cpy. also fine diss cpy py.				
	669.2	10.0		.08		Qtzt	Run	vlts & strs py w/ wk cpy	Run	30°	fracs w/ ser & smeared suls	Ltgr qtzt w/ local st ser.
	676.1	6.9		.11		Qtzt	Run	"	Run	30-50°	"	Same w/ pats Arg.
	680.4	4.3		.18		Qtzt	Run	strs & 30° vlts py-cpy	Run	15-30°	fracs.	Ltgr to gr Qtzt w/ lenses & pats Arg, Serp & Tr Ep.
									680.1	50°	0.1' int Hf w/ py	
	682.8	2.4		.38		Hf.	Run	vlt & st fine diss py w/ weaker cpy	680.7	20°	Qtzt-Hf ct	Ltgrn to grn Hf w/ Act & Serp, pats chl & Ep. Tr feld & pats
									682.6	20°	Hf-Qtzt ct w/ chl.	
	694.4	11.6		.15		Qtzt	Run	wk strs py-cpy w/ occas 30°, 60° vlts.	Run	varied	vuggy fracs; slips w/ ser. CO_2 in vuggs.	Ltgr to wh Qtzt w/ st ser & clay in last 2.0' of run. wk pats & lenses Arg nearend.
							689.7	Large pat cpy				
	703.4	9.0		.51		Qtzt-Hf Arg	Run	Diss & vlts py & cpy in Hf & Qtzt w/ Arg nearly barren.	Run	50-70°	Cnts between rock types.	Mixed Tan Arg, ltgrn, grn & Tan Hf, & ltgr Qtzt. Feld in Arg.
									700.6-702.3	60°	Bx zone (flt?) w/ st serp & chl & suls, wk Ep Act.	Trem-Act in Hf. wk CO_2 in all types.
	714.9	11.5		2.01	35.2 @ 1.85	Hf-bx-gg	708.0 to 711.5 Massive VnSpk Mag w/ st cpy & py @ 30°		703.9	Low ∠	Arg-Hf ct.	H Tan-grn-creamcolored Hf w/ short into Arg in upper 3 ft of run. st gg & clay in last 3.4'
							703.9 to 706.2 wk suls		705.2	"	Hf-Arg ct.	
							706.2 to 708.0 30° to 50° vlts py & cpy		706.2	30°	Arg-Hf ct.	
							711.5 to end	30° to 45° vlts py, cpy & smeared suls	711.5 to 713.0	30°	poss flt zone	

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HOLE NO. M-38

Coordinates: N 361,463.16 E 764,237.66

Dip Vert Bearing —

Date started 7/6/62 Completed 7/29/62

Collar Elevation 3256.7 Total Depth 801.3

GEOLOGIC LOG

MISSION UNIT

(5)

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
714.9	724.9	10.0		1.99		Hf	Run	St vlts & diss cpy-py-sph v. wk mag.	Run	30°	gyp vlts & fracs w/ sulf & clay.	Ltgrn & cream colored dense Hf w/ st Trem-Act
	729.6	4.7		3.73		Hf	727.9	0.3' 60° vn massive cpy w/ py.	729.6	45°	Hf-Arg ct w/ st serp & Talc (pass filet)	"
							Run	diss pats & vlts pyt & cpy.				
	734.8	5.2		.03		Arg	Run	Wk diss sulf.	Run	30-60°	fracs & slips w/ ser & Talc.	Ltgr sandy Arg w/ st ser.
	747.9	13.1		.05		Arg	Run	"	Run	"	"	wk pats near some fracs of Hf.
	751.6	3.7		.13		Hf	Run	wk sulf	747.9	Low L	Arg-Hf ct.	Ltgrn to ltgr Hf w/ local Trem-Act st clay. v. soft.
									Run	Varied	Slips w/ smeared sulf, clay & Talc.	
	760.4	8.8		.11		Hf-Mb	Run	Small 30° vlts & some strs sulf (smeared) wk Mn Ox - Mn CO3.	760.4	30°	Hf-Mb ct showing minute drag folding.	Mixed wh soft clayey Hf w/ wk wol & Ltgr to wh Mb w/ wk serp. Locally vuggy
									Run	25-50°	fracs & slips w/ clay.	
	770.5	10.1		.04		Hf-Mb	Run	Tr sulf, Mn Ox	Run	-	As above	"
	781.2	10.7		.01		Mb	Run	wk sulf, Mn Ox. Tr moly.	Run	Low L	fracs w/ clay some vuggy	Ltgr to wh Mb w/ local st clay & serp. wk pats Hf.
	791.1	9.9		.02		Mb	Run	As above.	Run		"	"
	801.3	10.2		.01		Mb	Run	Tr sulf, Mn Ox	Run	30°	wk gr banding	Ltgr Mb w/ pats clay
	Bottom											

MIS-807-A 75

HOLE NO. M-39

Coordinates N 361,458.13 E 763,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3259.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

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DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0	180.0					Alluv						ccg ± 175'
	211.9	31.9			Ns Tot	CCg	Run	wk spots Cu Ox				BR 211.9'
	224.1	12.2	22	.41	.12 .41	Arg & cgl	Run	St Fe, Mn, Cu Ox, Mod Jarosite, wk	224.1	30°	frac - base Ox. w/ st serp on frac,	Lt gr mixed Arg & cgl w/ local st
								suls near end of run	Run	Varied	fracs - most common 30°,	ser & serp near fracs
	234.3	10.2	.01	.33		Arg & cgl	Run	wk to mod vlts & diss py w/ Tr cpy	Run	"	same w/ 60° fracs becoming more common	Lt gr to gr Arg & cgl as before w/ lesser ser & serp.
	244.0	9.7		.47	.47	Arg & cgl	237.5 Run	St 70° vlt 0.2' py-cpy wk vlts & diss py-cpy	Run	"	St slips & fracs w/ smeared suls.	Local st qtz & fold. strongly broken
	254.7	10.7		.17		Arg & cgl	Run	"	Run	"	"	extreemly broken
	267.0	12.3		.30		Arg & cgl 33	Run	wk-Mod diss py w/ cpy, wk moly in fracs	261.8 - end	30°±	33. zone w/ smeared sulf. clay; poss flt.	Lt gr Arg w/ ser, clay in fracs, local gg, bx
	279.0	12.0		.19		Arg & cgl	Run	vlts & diss pats py w/ wk cpy - Tr moly	Run	30°-60°	Occas. Hi L fracs w/ smeared suls, ser, clay.	strongly broken. Local st silt & fold.
	288.1	9.1		.15		Arg & cgl	Run	"	Run	"	30° to 50° most common.	Local st cbg in some fracs
	296.4	8.3		.19		Arg & cgl	Run	wk vlts & diss py & cpy			"	Grading to dk brn
	306.6	10.2		.16		Arg	Run	"	Run	"	Same w/ local st talc	Short into cgl. Stilf
	318.7	12.1		.19		Arg	"	30 to 50° vlts as above.	Run	"	"	"
								Tr moly on fracs.	316.9 - end	—	Strongly broken zone	
	329.8	11.1		.21		Arg & cgl	"	"	Run	Varied	fracs 30 to 45° common	As above - locally broken
	340.2	10.4		.26		Arg & cgl	"	cpy somewhat stronger	Run	"	"	"
	347.4	7.2		.18		Arg & cgl	Run	varied dip vlts py w/ Tr cpy - moly on some fracs.	Run		"	coarse grained gr & brown Arg w/ cgl st silf.
	359.2	11.8		.22		Arg & cgl	Run	60°-70° vlts py w/ cpy, Tr moly	Run	30 to 70°	fracs & slips w/ st ser smeared suls.	" "
	369.4	10.2		.49	21.7 @	Arg & Bx	Run	wk vlts py w/ Tr cpy smeared suls in flts & fracs.	Run		flt bx @ 359.5 (60°, 0.5') 361.7 (45°, 0.7') 365.0 (30°, 0.7') 367.8 (50°, 1.6')	" " locally strongly broken between flts.
	380.9	11.5		.51	0.50	Arg & cgl	Run	wk cpy & py vlts. pats cpy	Run	Varied	fracs & slips.	Locally broken

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HOLE NO. M-39

Coordinates: N 361,458.13 E 363,985.30
Dip Vert Bearing —
Date started 7/6/62 Completed 7/25/62
Collar Elevation 3269.5 Total Depth 820.8

GEOLOGIC LOG
MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
380.9	388.4	7.5		.24		Arg.	Run	vlts & diss py Tr cpy, moly	Run	30 to 50°	fracs & slips w/ ser & wk gyp.	Ltgr Arg w/ short ints cgl local st qtz & ser.
	400.2	11.8		.25		Arg & cgl	Run	Varied dip vlts py w/ wk cpy fine diss py & cpy Tr moly on some fracs.	Run	–	As above	Strongly broken from 391.6 to 395.5. Sp pots dk brn Arg in cgl ints
	411.3	11.1		.19		Arg	Run	wk to mod diss & vlts py w/ wk cpy	Run	–	" locally very broken	dk brn S/f Arg w/ wk ser & gyp along fracs
	421.8	10.5		.21		Arg & cgl	Run	As above	Run	–	Same w/ some Hi 6 slips.	As above w/ local st ser & mostly cgl.
	433.0	11.2		.16		Cgl	Run	diss pats & vlts py w/ wk cpy, Tr moly on fracs.	Run	25 to 70°	fracs & slips w/ smeared suls, ser, gyp.	Grades Ltgr to dk brn congl w/ st qtz repl. wk zones fold.
	442.8	11.8		.34		Cgl	Run	As above	Run	"	As before w/ occas vugs & CO_3 30° common	Same.
	454.2	9.4		.50	18.6 @ 0.47	Cgl	Run	fine diss, pats, vlts py & cpy in Qtz-fold.	Run	30 to 50°	fracs & vlts suls.	st qtz-fold repl. in most of this run
	463.4	9.2		.44		Cgl-Bx	Run	30-60° vlts py w/ wk cpy	460-end	25 to 30°	flt bx-gg	st ser & clay.
	471.6	8.2		.32		Cgl	Run	wk vlts cpy-py-fine diss suls.	Run	30 to 50	fracs & slips w/ ser, serp, gyp.	Local ints st qtz. mod ser.
	481.4	9.8		.31		Cgl	Run	vlts, pats & fine diss py w/ wk cpy.	Run		As before	st qtz-fold repl.
	492.2	10.8		.31		Cgl	Run	Mod py-wk cpy, smeared suls. Tr moly	Run	—	Highly broken	Very broken w/ st ser & talc
	503.6	11.4		.39		Cgl.	Run	"	Run	25 to 50°	fracs & slips w/ st ser, smeared suls & gyp.	Local st qtz. st ser & talc.
	514.0	10.4		.26		Cgl	Run	As above w/ wk strs sph near end.	Run	"	"	Locally strongly broken
	523.6	9.6		.45		Cgl	Run	Diss py-cpy	517.4 Run	50°	0.3 flt bx-gg. As above	Ltgr cgl w/ cinnamon colored pats. st silt.
	532.7	9.1		.40	28.1 @ 0.49	Cgl	Run	vlts & diss pats py-cpy	Run	30-50°	vlts gyp-fracs & slips w/ ser.	"

HOLE NO. M-39

Coordinates: N 361,458.13 E 763,985.30

Dip Vert Bearing ——

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3254.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

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DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
532.7	542.1	9.4		.63		Cgl	Run	diss & 30-55° vlts & strs py, cpy. Tr sph & moly	Run	30-70°	fracs & slips w/ st ser, smeared sulfs & wk CO_2.	Ltgr, tan & brwn cgl w/ st ser & clay & Qtz
	553.2	11.1		.28		Cgl	Run	Same	Run	"	As above w/ wk serp	As above w/ feld-CO_2
	566.0	12.8		.26		Cgl	Run	vlts & diss pats py w/ wk cpy. Tr moly	Run	25-90°	fracs & slips w/ wk gg on some. also gtz vlts w/ feld. gyp on some fracs.	Shows st. silf & mor feld. verts into brn Arg.
	573.2	7.2		.11		Arg	Run	wk sulfs.	Run	15-20° 15-50°	Lt tan banding Qtz & gyp vlts	Sl. silf brn Arg w/ feld repl wk local Act, ser.
	579.9	6.7		.16		Arg	Run	wk pats & 30 to 60° vlts py-cpy. Tr moly	Run	30 to 70°	fracs w/ gyp & ser.	As above less Act.
	587.9	8.0		.79		Qtzt	Run	wk pats & strs py & cpy. Tr moly	Run	Varied	fracs & slips w/ ser, smeared sulfs, gyp	Ltgr to wh locally broken Qtzt w/ short ints bx, Tr Fl
							585.4	45° vlt cpy-py	583.4	60°	Bx-gg	wk clay & ser. contain.
									586.3	30°	Bx-gg.	faint Law & banding.
									586.1	15°	Arg-qtzt ct.	
	598.0	10.1		.51		Qtzt	Run	Mod strs & pats cpy-py, Tr moly, smeared sulfs on fracs.	Run	15-30°	parallel frac set. occas. 60° fracs	As before.
									588.7	50°	Bx-gg.	
	605.8	7.8		.24		Qtzt	Run	wk strs & pats cpy-py	599.8	30°	0.3' Bx-gg - sulfs	Local st ser & clay
									Run	±30°	fracs & slips w/ gyp-ser & clay.	Broken zones.
	615.4	9.6		.54		Qtzt	Run	Mod strs & diss py cpy - wk moly on fracs.	Run	±30°	"	Same but less broken & no banding
	624.2	8.8		.40		Qtzt	Run	As before w/ st smeared sulfs in fracs.	Run	30-70°	Higher ∠ fracs more common	St. broken Lt gr Qtzt w/ st. ser & clay around fracs.
	634.2	10.0		.60	111.3' @ 0.54	Qtzt	Run	vlts, strs & fine diss py w/ cpy. Tr moly	Run	30-50°	fracs & slips w/ ser & smeared sulfs.	Less broken & less clay
	645.6	11.4		.52		Qtzt	Run	"	Run	"	Same w/ few Hi ∠ fracs.	Less ser wk EP locally vuggy
	655.0	9.4		.41		Qtzt	Run	"	Run	"	Same w/ parallel low ∠ fracturing	"

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HOLE NO. M-39

Coordinates: N 361,458.13 E 763,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/24/62

Collar Elevation 3254.6 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
655.0	665.5	10.5		.51		Qtzt	Run	vlts & strs & diss py w/ weaker cpy	361.0 Run	30° ·	Bx & broken zone As before	Ltgr Qtzt w/ wk ser Tr. Act & Ep
	676.1	10.6		.51		Qtzt.	Run	wk vlts py-cpy, 30°. Also strs & spdiss pats.	Run	30-50°	fracs & slips w/ wk ser & smeared suls.	Same
	684.1	8.0		.80		Qtzt	Run	strs & pats py-cpy wk molg on fracs	Run	"	As before	Same less Act & Ep.
	691.2	7.1		.65		Qtzt	Run	strs & 30° to 60° vlts py-cpy	Run	"	"	"
	700.0	8.8		2.11		Hf	Run	st 60° vlts & diss py cpy	Run	50-60°	vlts CO_2	Dense lt gr to grn Hf w/ wk CO_2, Mod Act, serp
	705.0	5.0		1.65		Hf	Run	30 to 50° vlts py w/ cpy	Run	"	" + clay	Same changing to soft clayey Hf near end
	714.5	9.5		.62		Hf	Run	30 & 60° vlts py w/ cpy in gr-grn Hf. wk mag.	Run	30 to 60°	fracs w/ suls serp.	Soft clayey cream colored Hf w/ 60° ints lt gr-grn dense Hf. st serp.
	726.9	12.4		1.97	>65.7 @ 1.73	Hf	Run	vlts & pats cpy, py, local st Mag. along fracs & sul zones	Run	30-70°	fracs & slips w/ serp, Talc, Suls, Hem	Gr-grn Hf w/ local pats clay & st serp & Talc.
	737.1	10.2		2.62		Hf-gg	Run	Same throughout	727.9 to end	30° to 50°	flt bx & gg w/ st suls & mag.	first 1.0' As before Remainder flt bx-gg w/ Hf bx.
	745.2	8.1		1.76		Hf	Run	Diss Mag, py, cpy	Run	30°	fracs & slips	short clayey zones
	756.9	11.7		1.31		Hf	Run	st. Mag-py vlts (50-75) w/ weaker cpy & wk Hem.	Run	50-70°	fracs & apparent lineation & drag folding (poss fault zone)	Lt to dk grn Hf w/ abundant CO_2 vlts, st serp & Act. Locally vuggy.
	765.5	8.6		.06		Arg	Run	30° to 50° vlts suls (sparse)	Run 756.9	30 to 60° 20°	fracs Hf-Arg ct.	Lt gr and tan Sandy Arg w/ local siltf, wk ser
	774.7	9.2		.36		Arg	Run	"	Run 774.7	30° 55°	fracs w/ wk ser. Arg-Hf flt ct.	"

HOLE NO. M-39

Coordinates: N 361,458.13 E 763,985.30

Dip Vert Bearing —

Date started 7/6/62 Completed 7/25/62

Collar Elevation 3259.5 Total Depth 820.8

GEOLOGIC LOG

MISSION UNIT

DEPTH			% COPPER			ROCK TYPE	MINERALIZATION		STRUCTURES			REMARKS
From	To	Interval	N.S.	Total	Weighted Average		Depth	Description	Depth	Dip	Description	
774.7	785.4	10.7		.69	.69	Hf	Run	Diss & 50 to 60° vlts py & cpy	Run	50°	Slips off-getting mineralized vlts.	Lt grn, Tan & lt gr Hf w/ st clay, Abundant CO_3, Act. Local vuggy fracs.
	794.0	8.6		.12		Mb	786.3	0.3' vlt st sph w/ mod cpy-py. (60°)	785.4	25°	Hf-Mb cont.	Lt gr & wh Mb w/ st serp. Occas wk pats Hf w/ Act.
							787.7 Rest	Pat cpy w/ sph & py. w/ H Sulfa, $MnCO_3$, Pat $MnCl_2$.				
	800.1	6.4		Tr		Mb	Run	Barren	Run	30-50°	Fracs & slips w/ clay	wh to lt gr mb w/ wk strs serp.
	810.6	10.2		Tr		Mb	Run	v. wk pats sph-py.	Run	-	Faint few ⊥ gr bands.	"
	820.8	10.2		Nil		Mb	Run	Barren	Run	50-70°	Vuggy fracs	"
	Bottom											

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HOLE NO. M-41

Coordinates: N 361,456.62 E 763,737.31

Dip Vert Bearing —

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0.0	205.8				Ns Tot	Alluv						S.R ± 204.5 cg ± 170
205.0	215.5	10.5	.25	.43	.25 .43	Arg	Run	Fe ox - Tr grn CuOx	Run	30-70°	Fracs	
	222.7	7.2	.20	.32		Arg	Run	"	"	"	"	St gg & base of 222.7
	230.8	8.1		.27		Cgl	Run	Tr py-cpy, St sul gg	225.4-30.0	70-80°	Bx & sul gg	
	241.9	11.1		.25		Cgl	Run	Tr py cpy vlts				Dk Brn - blk - small frags
	255.3	13.4		.37		Cgl	Run	Tr py-cpy moly vlts	Run	50-80°	Fracs w/ sul gg	
									255.9-56.6	0°	St blk gg	
	261.0	5.7		.93		Cgl	Run	Wk-Mod diss cpy py				
	272.4	11.4		.41	27.9' @ 0.51	Cgl	Run	vlts-pats-diss py w/ wk cpy.	362.0	35°	0.7' Bx-gg.	strongly broken w/ sul gg
									Run	30-70°	fracs & gg	
	283.2	10.8		.40		Cgl	Run	"	Run	"	"	Same
	294.9	11.7		.38		Cgl	Run	As before w/ tr moly	Run	Varied	fracs & slips w/ bx-gg-smeared sulf.	short ints ltgr Arg wk ser.
	304.0	9.1		.36		Cgl	Run	Strs & diss py-cpy	Run	30-85°	"	Mod serp & gyp on fracs.
	309.4	5.4		.28		Cgl	Run	As above + moly	Run	30-70°	fracs w/ sul gg gyp.	wk alt to ser.
	320.8	11.4		.28		Cgl	Run	Strs & vlts py-cpy Tr moly	Run	30-60°	fracs & slips	short ints ltgr arg
	332.0	11.2		.34		Cgl	Run	30° & 60° vlts & wk diss py w/ cpy moly on fracs.	Run	30-60	fracs & slips w/ ser-gypsum sul gg.	Locally broken
	343.0	11.0		.45	28.5' @ 0.50	Cgl	Run	60° vlts - strs & pats Diss py-cpy wk moly.	Run	30-60°	fracs & slips	wk pats feld near fracs
	354.6	11.6		.50		Cgl	Run	Same + Hi L vlts cpy.	Run	"	"	wk alt.
	360.5	5.9		.59		Cgl	358.4 Run	55° vlt cpy Strs suls along fracs w/ moly.	Run	"	"	St ser on fracs.
	369.5	9.0		.37		Cgl	Run	20 to 70° vlts py w/ wk cpy. Moly on fracs.	Run	30-85°	fracs & slips w/ moly, Talc, ser.	dk gr cgl w/ dk brn frags.
	376.2	6.7		.30		Cgl	Run	30 & 60° vlts - diss py-cpy Tr moly on fracs.	Run	"	"	Locally broken Mod ser - wk talc
	386.5	10.3		.40	.40	Cgl	Run	"	382.9	45°	3.6' bx-gg - flt w/ mod to st py & sul gg & much moly	St clay in gg zone

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HOLE NO. M-41

Coordinates: N 261,456.62 E 763,737.31

Dip Vert Bearing ____

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
386.5	395.5	9.0		.29		Arg-Cgl	Run	Vlts-pats - fine diss py w/ wk cpy	Run	30°-45°	fracs & slips w/ gyp, ser, sulgg.	Grades Cgl-Arg-Cgl. Lt gr to tan w/ dk brn & pk frags.
	409.9	14.4		.39		Cgl	Run	30 to 60° vlts py-cpy	Run	25°-60°	"	wk ser & gyp on fracs local 30° qtz vlts w/ suls.
	418.6	8.7		.23		Cgl	Run	30° & Hi L vlts - sp pats - wk diss py-cpy Tr moly	Run	30-45	fracs w/ ser.	As above
	423.3	4.7		.29		Cgl	Run	Strs & diss small pats py w/ cpy	Run	"	"	wk local serp.
	434.4	11.1		.36		Cgl	Run	30-70° vlts & fine diss py w/ weak cpy.	Run	30-70°	fracs w/ ser-Talc sulgg.	DK brn & maroon frags. local st ser.
	445.4	11.0		.45	22.0' @ 0.45	Cgl	"	As above + Tr moly	Run	30-50°	"	Coarse grained
	456.4	11.0		.45		Cgl	Run	Vlts & diss py-cpy Sulgg on fracs.	Run	"	Same	Strongly broken. Mod Alt.
	464.3	7.9		.35		Cgl	Run	As above	Run	Varied	fracs & slips	DK gr pats, Tr Fl, st ser.
	476.4	12.1		.50	0.50	Cgl	Run	Strs & pats py-cpy 30-45° vlts py w/ cpy	Run	30-60°	"	" + wk coz
	486.3	9.9		.29		Cgl	Run	Same	Run	"	As before	Locally broken
	496.2	9.9		.41		Cgl	Run	Mod diss cpy-py	Run	30°	parallel fracs & slips w/ ser & Talc	Mod alt.
	504.7	8.5		.44		Cgl	Run	Same	Run	40 to 60°	" + gyp	"
									500-501	—	Shatter zone	
	513.3	8.6		.46	54.1' @ .47	Cgl	Run	"	Run	30-70°	As above	Short 25° ints dk brn Arg.
	524.6	11.3		.42		Cgl	Run	Vlts & diss pats py-cpy Moly	Run	25-40°	Gyp vlts & fracs w/ st ser.	Qtz-fold repl along some fracs.
	533.4	8.8		.54		Cgl	Run	As before	530.1-530.9	15°	Intercept Mp w/ bio	Locally broken, st ser in Mp. wk Epdmg some fracs.
	540.4	7.0		.63		Cgl	Run	Diss & 35° vlts py-cpy.	Run	35° Hi L	fracs w/ ser, serp, Talc, sulgg.	Run ends @ 30° gg hx zone.
	543.5	3.1		.14		Arg			540.4	30°	hx-gg ct w/ Arg.	Lt tan to pk Arg w/ Qtz-like vlts (v dense)

HOLE NO. M-41

Coordinates: N 361,456.62 E 763,737.31

Dip Vert Bearing —

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
543.5	553.2	9.7		.18		Arg.	Run	Hik vlts & diss pats py-cpy	Run	30-Hiz	Fracs w/ st ser-serp.	Bleached & Hi sil zones
	563.2	10.0		.15		Arg	"	as above	"	"	Same	Locally broken
									561.0	75°	Bx-gg st ser.	st ser. mod serp.
	572.5	9.3		.07		Arg	Run	wk suls Tr moly	Run	25-70°	Fracs w/ ser.	As before
	583.7	11.2		.10		Arg	Run	Same w/ wk moly	Run	"	Same + Talc.	"
	593.7	10.0		.25		Arg & Qtzt	Run	wk vlts & pats diss cpy-py	Run	30°	Fracs w/ bx-gg.	Mixed Lt Tan Arg & Lt gr Qtzt showing interfingering
	602.9	9.2		.09		Arg	Run	As before but weaker	Run	30-60°	Fracs & slips	Lt Tan Arg w/ short int's Qtzt.
	609.0	6.1		.03		Arg	Run	vlts & fine diss py moly on fracs.	Run	30-60°	"	"
	617.8	8.8		.10		Arg & Qtzt	Run	" + cpy	Run	—	Very broken	Mixed Lt brn Arg & wk Qtzt alt - ser. (± 5% inag)
	627.4	9.6		.14		Qtzt	Run	Strs & diss cpy-py	Run	—	"	wk Qtzt w/ ser.
	636.0	8.6		.21		Qtzt	Run	Same + st moly on some fracs.	Run	30-50°	Fracs	As before
	649.5	13.5		.15		Qtzt	Run	As before w/ wk sph	Run	"	"	Less ser.
	658.3	8.8		.14		Qtzt	Run	wk suls.	Run	—	Broken	increase in ser.
	665.5	6.2		.22		Qtzt	Run	wk diss & pods cpy, py	664.8-665.5	Low ∠	flt(?) bx	st ser in flt(?) zone;
	671.0	5.5		.17		Qtzt	Run	wk py, cpy; finely diss	Run	—	Very Broken	-50% recovery
	681.4	10.4		.33		Qtzt	Run	wk py, cpy; v lt, diss & pods; Tr Moly	612.6	—	1" dia pod cpy, py	lesser ser; local silifin fracs
									Run	90-60°	Fracs & slips	
	691.4	10.0		.23		Qtzt	Run	Strs & diss py & cpy Tr moly	Run	"	Fracs w/ sulgg-ser & wk talc.	wk ser
	702.1	10.7		.25		Qtzt	Run	45-70° vlts, strs & fine diss py-cpy, Tr moly	Run	"	"	As before; locally broken.
	713.6	11.5		.21		Qtzt	Run	As before + sph	Run	40-75°	Fracs & slips w/ st sul gg, ser, & talc.	Stronger ser & suls.
	717.7	4.1		1.96	1.96	Qtzt	Run	st vlts & diss cpy-py-sph - wk moly	Run	30-70°	Fracs & slips w/ st suls, ser, serp & talc, bx	st ser, mod cpy. Run pass flt zone
	726.3	8.6		.18		Qtzt	Run	Strs & diss pats py-cpy - wk sph & Moly	Run	"	st sul gg on some fracs also ser & talc.	weaker ser, wk cpy.

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HOLE NO. M-41

Coordinates N 361,456.62 E 763,737.31

Dip Vert Bearing —

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

(4)

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
726.3	733.0	6.7		.32		Qtzt	Run	Vlts & strs py w/ weaker cpy	Run	30-50°	fracs w/ sulfgg.	Ltgr to wh Qtzt w/ wk ser.
	739.0	6.0		.31		Qtzt	Run	Pats & Hi & vlts st py w/ less cpy - mod sph	Run	10-45°	As above	med ser
	747.3	8.3		.12		Qtzt	Run	vlts, strs, pats py-cpy, wk sph, Tr Moly	Run 742.0	Hi & 30°	fracs as before flt bx	wk ser.
	749.5	2.2		4.33		Qtzt	Run	St diss & Hi & vlts py w/ lesser cpy wk hem stain	749.5	10°	Gradational Qtzt-Tt ct.	As above
	761.4	11.9		1.40	33.8 @ 1.69	Tt	Run	St 10° to 50° vlts & diss py w/ less cpy - Mod hem stain	Run 753.0-56.2	10-50° 40°	fracs w/ gyp, sulf, chl. Silf bx zone (Poss flt)	Grn & maroon Tt w/ pats Qtzt, st local Act-Trem, chl, mod CO_3
	769.4	8.0		1.68		Tt	Run	As before	Run	10-40°	fracs w/ CO_3, gyp. st sulfs.	As above
	772.6	3.2		1.95		Tt-Qtzt	Run	St. py w/ lesser cpy	770.2 770.9	10° 15°	Tt-Qtzt ct. Bx w/ st qtz, fe stain to 782.5	Tt as before. Qtzt Ltgr w/ st clay & sulfs.
	781.1	8.5		1.33		Hf	Run	Strs & vlts & diss cpy, py, wk sph, Tr bn.	772.6 781.1	Last Last	Qtzt-Hf ct. Hf-Qtzt ct.	Cream colored Hf strongly broken w/ st ser, local st qtz. (-50% recy) Poss Bx-gg zone
	791.0	9.9		.13		Qtzt	Run	Sp vlts & wk diss py w/ cpy. Tr moly.	Run	30-40°	fracs & gyp vlts	wk sul gg on fracs w/ gyp & ser.
	801.2	10.2		.13		Qtzt	Run	Tr sulfs, Moly on some fracs.	Run 801.2	60° 45°	vuggy fracs Qtzt - Hf ct.	wk ser; serp @ end.
	808.5	7.3		.80	78.6 @ 0.69	Hf	Run	30°-65° vlts st py w/ lesser cpy - sph.	Run	30-60°	fracs w/ st sulfs wk CO_3	Lt grn dense silf Hf w/ wk carb act.
	818.0	9.5		.83		Hf	Run	20°-80° cpy-py vlts				Lt grn-dense-abun Co mtls
	830.5	12.5		.92		Hf	Run	"	825-30.5	0-30°	vlts-pats qtz or qtzt and cpy-py	Grad cnt w/ qtzt 830.5 Num pat bn gar in Hf
	838.9	8.4		.42		Qtzt	Run	Wk-mod vlts & diss cpy py. Tr moly on fracs.				Tr ep-hem-sph in Hf Brn alt in qtzt 830.5 -31.5 - wht qtzt below
	848.5	9.6				Tt	839 & 844	50° Cpy-py vlt				Qtzt-Tt grad cnt 838.9

MIS-807-A 75

HOLE NO. M-41

Coordinates: N 361,456.62 E 763,737.31

Dip Vert. Bearing ——

Date started 7/25/62 Completed 8/31/62

Collar Elevation 3262.7 Total Depth 992.5

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
838.9	848.5	9.6		0.91		Tt	Run	Tr wk diss cpy				Pat CO_3 w/ brn gar
												Pat Hf, tr ep
	856.5	8.0		0.98		Tt	Run	Vlts & diss py w/ less cpy	Run	30-55°	Slips w/ serp & sul vlts.	As above w/ serp
								wk diss sph	856.5	Low ∡	Tt - Qtzt ct.	
	868.8	12.3		0.39		Qtzt	Run	Strs & 30°-70° vlts py-cpy - sph.	868.1	28° (?)	Qtzt - Hf ct.	Lt gr qtzt w/ wk ser
	879.8	11.0		0.40		Hf	Run	Tr diss suls	Run	25-70°	CO_3 & gyp vlts.	Lt grn dense Hf w/
							877.4	Pat cpy - sph				local st serp & clay.
												CO_3.
	883.4	3.6		0.04		Hf - Qtzt	Run	Tr suls; wk hem @ ct.	880.8	60°	Hf - Qtzt ct @	Lt grn Hf & lt gr qtzt.
											frac.	wk serp & ser.
	891.0	7.6		Tr		Qtzt	Run	Tr suls.	Run	30-60°	Gyp vlts & fracs.	Lt gr qtzt w/ wk ser.
	900.0	9.0		0.08		Qtzt	Run	Wk vlts & strs py; Tr	900.0	30°	Qtzt - Hf ct @ frac	Wk to mod ser on Hf
								cpy.			w/ chl & sph.	& fracs. wk CO_3 @ end
	909.5	9.5		0.33		Hf - Tt	900.0	0.1' vlt st sph.	901.5	-	Gradational ct w/ Tt.	Lt grn dense Hf grades
							Tt	Wk to mod vlts & diss	908.5	30°	Tt - Hf ct. Hf w/ pats	into grn & maroon Tt
								py-cpy-sph.			gar.	w/ pats Mb. St CO_3 &
												serp.
	913.2	3.7		0.98	0.48	Hf	Run	Wk to mod local diss	913.2	50°	Hf - Mb ct	Wh clayey Hf w/
								py - cpy; wk sph	Run	30-60°	Gyp vlts & fracs.	pats wol & Tt - Mod CO_3.
	922.1	8.9		0.04		Mb	Run	Tr suls	Run	30-60°	Fracs & slips w/	Wh Mb w/ local
											serp. wk clay.	zones wol & serp.
	932.3	10.2		Tr		Mb	922.6	Small 45° vlt cpy-py	Run	30°	"	As before.
	942.6	10.3		Tr		Mb	Run	Barren			Same	Wk pats clay & wol.
	950.1	7.5		0.03		Mb	Run	"	Run	Hi ∡	Gyp vlts.	" wk serp.
	960.0	9.9		Tr		Mb	Run	Tr suls	Run	50°	Local gr bands.	As before
	970.0	10.0		Tr		Mb	Run	Barren	967.8-70.0	50°	Wk banding	Last 2.2' gr Mb w/ wk
									Run	Hi ∡	gyp vlt.	color banding. wk
												wol.
	980.3	10.3		Nil		Mb	Run	Barren	Run	50°	Wk color banding	Gr Mb w/ no alt.
	992.5	12.2		Nil		Mb	Run	"	Run	"	As above.	Same.
	Bottom											

MIS-BOT-A 78

HOLE NO. M-43

Coordinates: N 36,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 8265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

315.6

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
0.0	191.0					overburden						Cg ? 170 (?)
191.0	216.0	25.0				CCg			216.0	70°	CCg-BR ct.	
	220.7	4.7	.08	.24		Cgl	Run	Mn-Fe Ox	Run	60-80°	Fracs w/ CCg, clay	Ugr Fe stained cgl.
									220.7	Low	Frac. Base Oxides	w/ dk brn to maroon
												frags.
	230.2	9.5		.26		Cgl	Run	Strs & diss py-cpy	Run	30-70°	Fracs & slips w/	As above less Fe stain.
								Sulgg			Sulgg, ser & gyp.	Local ser-serp.
	242.7	12.5		.26		Cgl	Run	As above + Tr moly	Run	"	Same + serp.	Stronger ser.
	251.0	8.3		.24		Cgl	Run	As before w/ local	Run	50-70°	Fracs & slips, some	Less ser. wk alt
								st moly on some fracs			w/ minor BR	
	261.6	10.6		.27		Cgl	Run	Hi c vlts & strs py-cpy	261.2	45°	Bx-gg	Local zones Hgr Arg.
								Moly on fracs.	Run	15-45°	Hyp vlts & slips.	St serp & Talc on fracs
	271.7	10.1		.32		Cgl	Run	wk strs & diss sulf.	Run	"	"	St ser, serp, Talc.
	282.9	11.2		.34		Cgl	Run	varied & strs & vlts	Run	15-65°	fracs & slips w/ st	"
								cpy-py-Tr moly			ser, serp, Talc wk	
											gyp.	
	293.0	10.1		.50	20.2 @ 0.46	Cgl	Run	As above	289.7-570	60°	Bx-gg (poss flt)	Short ints dk brn
												Arg in cgl. St Alt.
	303.1	10.1		.41		Cgl	Run	Strs & diss py-cpy	297.4-982	60°	Bx-gg w/ st serp,	As above w/ occas
								moly on some fracs.			Talc & moly (poss flt)	vuggy fracs & wk CO3
	310.2	7.1		.26		Cgl	Run	Wk py-cpy-Sulgg	Run	20-vert	Fracs & slips w/	St alt. to ser.
											Ser, Talc, gyp.	
	320.9	10.7		.28		Cgl	Run	Wk py-cpy	Run	20-50°	Fracs, qtz vlts	Dk gray-blk cgl
									317.3	30°	Bx & gg	
	331.0	10.1		.30		Cgl	326.2	45° Qtz py cpy vlt	Run	20-Vert	Frac-gg	Pots qtz-talc vlt
	341.8	10.8		.30		Cgl	Run	wk py-cpy in qtz vlts	Run	20-45°	Qtz-sul vlts	339.6 Tr Sph
									341.8	50°	Gouge seam & cpy	
	351.9	10.1		.32		Cgl	342.6	45° Qtz-moly-cpy vlt				
							Run	More abun qtz-py-cpy vlts	Run	20-45°	Qtz-sul vlts	
	360.2	8.3		.46		Cgl	Run	As Above	Run	20-80°	Qtz-sul vlts & fracs	
	371.0	10.8		.43		Cgl	Run	Sp vlts py w/ less cpy	369.5	60°	gg-sul's seam.	St ser, wk serp.
								Tr moly Sulgg				
	380.4	9.4		.61		Cgl	Run	50° vert py & cpy	Run	30-50°	Qtz-sul vlts & fracs	wk poss fold.
								vlts. Sulgg			& slips	

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HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

12.014 / 11.8

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44.185 / 53.1

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
380.4	389.3	8.9		.75		Cgl	Run	Varied % vlts & diss cpy-py	Run	varied	fracs & slips	Stser. serpen slips
	400.3	11.0		.76		Cgl	Run	As before but weaker.	Run		Very broken	St ser local gg bx
	409.8	9.5		.65		Cgl	Run	wk diss & strs cpy-py	409.3-7.0	30°	Bx-gg zone w/ Tr sulf.	Strongly broken w/ much clay
	419.0	9.2	.5	.93	113.3' @ 0.69	Cgl	Run	Strs & fine diss cpy-py - Moly on fracs.	Run 409.8-12.1	30-45 60°	fracs w/ moly bx-gg (Poss flt)	St ser & clay
	429.1	10.1	.1	.81		Cgl	Run	Diss py-cpy; st moly on fracs.	Run	70°-vert	fracs w/ st moly	As before
	437.9	8.8		.81		Cgl	Run	70° vlts wk strs, & diss cpy-py, wk moly	Run	30-70°	fracs w/ sulf, ser, gyp. Locally broken	wk ser local clay
	445.0	7.1		.61		Cgl	Run	wk to mod diss cpy-py	Run	"	As above	Mod ser.
	455.0	10.0		.51		Cgl	Run	Varied % vlts & diss cpy-py	Run 445.3	40-80° 60°	fracs w/ ser. 0.4' Bx zone w/ qtz & wk CO_2	Pots feld in upper half of run
	465.2	10.2		.86		Cgl	Run	Mod diss py-cpy, st sul gg.	464-end Run	70° 30-70°	Bx-gg (poss flt) fracs & slips w/ ser, serp, wk CO_2	St ser & clays.
	472.5	7.3		.25		Cgl	Run	Diss & 65° vlts py-cpy	Run	70°-vert	fracs & slips w/ ser.	local qtz-feld replacements
	482.9	10.4		.26		Cgl	Run 479.8	Strs & diss py-cpy Large pat cpy	Run	30-70°	fracs	Less ser & clay Local wk silf
	491.7	8.8		.23		Cgl	Run	Strs, diss, & 30° vlts py-cpy	488.3-89.1 491.0	45° 70°	Bx-gg zone (poss flt) slip w/ gg.	Mod alt to ser.
	500.5	8.8		.29		Cgl.	Run	vlts, strs, diss, pats py-cpy, Tr moly in qtz, sul gg.	499.5-end 493.8	30° 40°	Bx-gg w/ sul gg gyp vlt, bx, sul gg	Local mod feld, wk qtz, mod ser.
	510.4	9.9		.31		Cgl	Run 503.3	vlts, strs, diss, pats py-cpy, Tr sph. 30°-0.1' vlt cpy	Run 506.0-7.2	30-45 30°	fracs & slips w/ clays, bx & sul gg & sulf. bx-gg & cpy vlts.	As above
	522.2	11.8		.72		Cgl	Run	70° vlts & diss pats py cpy; Tr moly	Run	30-60° LowA	Qtz-feld vlts. gyp vlts	St qtz-Less feld repl.
	532.4	10.2		.77	55.1' @ 0.80	Cgl	Run	As above	Run		Same	Ser on fracs, st silf. As before.
	542.4	10.0		.67		Cgl	Run	vlts, strs & diss py-cpy - Tr moly in Qtz.	Run	30-50° & vert	fracs w/ gyp wk ser & qtz.	" "

MIS-807-A 75

HOLE NO. M-43

Coordinates: N 34,161.54 E 763,743.49
Dip Vert Bearing —
Date started 8/30/62 Completed 9/28/62
Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG
MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
542.4	552.4	10.0		1.00		Cgl-Arg	Run	Mod diss py-cpy, Tr moly-sph	548.2	50°	Qtz-feld vlt (0.5') w/ mod cpy-py-Tr moly	St silf cgl w/ gyp vlts, wk ser, Tr Fl.
									Run	30 to 60°	fracs (grad. ct)	grades to Arg across run
	565.5	13.1		.85		Arg	Run	As above + strs.	Run	30-vert	fracs w/ ser, serp, gyp & qtz vlts.	Mod Qtz-feld repl. St silf
	577.8	12.3		.31		Arg	Run	30°-60° vlts & strs py w/ less cpy Tr moly in Qtz.	Run	30-70°	As before	As above
	587.2	9.4		.18		Arg	Run	Mod vlts py w/ wk cpy.	Run	"	"	Less silf, more ser.
	595.0	7.8		.28		Arg	Run	diss & vlts py w/ less cpy Tr moly	Run	30-vert	Gyp & qtz vlts & fracs w/ ser & sulgg.	Mod ser, locally broken
	601.5	6.5		.09		Arg	Run	vlts & diss py Tr cpy sulgg - wk moly	595.7	30°	Qtz-feld vlt	Tan & dk brn Arg w/ mod silf.
	611.7	10.2		.13		Arg	Run	wk vlts & diss py Tr cpy	601.8	65°	flt brw/ st py, Tr cpy-moly & sulgg.	As above
	621.5	9.8		.12		Arg	Run	diss & vlts py-cpy mod moly in Qtz vlts & on fracs.	615.2	60°	Br-gg-sulgg	Same w/ wk ser
									Run	30-85°	Qtz vlts w/ moly	
									621.5	25°	Arg-Tt ct.	
	631.2	9.7		2.23	2.23	Tt	622-623.4	St 15° & 60° vlts py w/ cpy	625.0-29.0	30°	Pegs in mineralized flt.	Grn Tt w/ st serp; wk ser pats grdt; short 1.6' int Mt massive suls.
							625-629.0	30° Massive vn py-mag cpy.	631.2	25°	Tt-Arg ct	
	638.9	7.7		.21		Arg (Qtz-Tt)	Run	wk diss suls	Run	varied	Fracs & slips, very broken	Lt tan & pk Arg w/ short into Qtz-Tt or hi qtz Arg.
	646.6	7.7		.05		Arg (Qtz-Tt)	Run	As above	Run		Same	As before
	655.0	8.4		.10		Arg (Qtz-Tt)	Run	wk strs & diss py-cpy	Run	50-80°	Fracs & slips w/ ser, sulgg.	Lt tan Arg w/ bad st qtz, wk ser.
	660.1	5.1		.02		Arg (Qtz-Tt)	Run	wk strs & fine diss py-cpy moly on fracs w/ st qtz.	Run	30-vert	fracs & slips w/ clay, moly, & gyp.	As above
	670.2	10.1		.13		Arg (Qtz-Tt)	Run	Small pats & wk strs suls sulgg w/ cpy on fracs.	670.0	60°	Arg-Qtz-Tt ct (Change from Hi qtz Arg to pure Qtz-Tt.)	Mod ser on fracs. St silf throughout.
									660.2	70°	Qtz vlt w/ suls.	

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing ——

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
670.2	681.2	11.0		.29		Qtzt	Run	wk to mod vlts & diss py-cpy - Molyon fracs.	679.8-80.7	Low ∠	st. broken zone w/ bx & clay	Frosty wh to ltgr Qtzt w/ local clay & ser
							679.2	Low & vlt cpy-sph	Run	30-60°	fracs w/ wk ser.	
	691.2	10.0		.51	.51	Qtzt	Run	Varied & vlts & diss cpy-py; Tr Moly	Run	"	"	As before Less ser & clay.
	702.2	11.0		.26		Qtzt	Run	30° & 60° vlts py w/ cpy Sul gg along slips.	Run	30-50°	fracs & slips w/ sul gg	Ltgr & frosty wh qtzt.
	714.0	11.8		.26		Qtzt	Run	varied & vlts & fine diss py-cpy, Tr moly	Run	30-60°	Vuggy fracs	
									710.3	25°	Bx along frac w/ sul gg	As above + wk clay
	724.1	10.1		.31		Qtzt	Run	wk vlts & diss pats py cpy -	Run	30°-60°	Gyp vlts & fracs w/ sul gg & short intl BX	Lt gr Qtzt.
	727.2	3.1		.24		Qtzt	Run	wk diss suls.				Ser on fracs
	737.2	10.0		.13		Qtzt	Run	Hi ∠ vlts & fine diss py-cpy	Run	Varied	vuggy fracs	wk ser.
	747.2	10.0		.11		Qtzt	Run	As before				wk ser alt in fracs.
	757.2	10.0		.83	.83	Qtzt	747.2-52.1	As before	752.1-end	30°	Poss flt w/ st clays, bx & mod sulsi; Qtzt throughout.	As above to 752.1 & poss flt bx-gg-sul to end. Ends in ok clear Qtzt.
							752.1-end	Mod py-cpy diss & vlts w/ pats hem & st clays in poss flt zone.				
	765.8	8.6		.13		Qtzt	Run	Varied & vlts py w/ wk cpy; Tr moly	Run	30-60°	Gyp vlts & fracs	wk clays
	775.5	9.7		.11		Qtzt	Run	wk suls & sul gg	775.0	50°	Gyp vlt.	More clay near end.
									Run	30°	Gyp vlts & fracs	
	782.0	6.5		1.21		Hf	Run	Diss & 30° to 60° vlts py-cpy wk pats hem.	776.0	-	Gradational ct w/ Hf.	V. st. gyp & clay in Ltgrn Hf. wk ep & serp
									Run	0-85°	Gyp vlts w/ st ser.	
	792.2	10.2		.46		Hf	Run	Mod cpy w/ lesser py in local pods & vlts; wk diss	Run	0-85°	Pred. angle 40-50° - Gyp vlts w/ serp	Lt gr to cream Hf; V. st gyp w/ serp & clay; Mass Gyp layer 787.0-788.0'; Hf locally Calcareous
	800.7	8.5		1.21	58.3° @ 0.89	Hf	Run	St-V. st vlts cpy, py; lesser diss cpy	798.7-800.7	85°	1/2-1" vlt py, cpy; lesser cpy	Lt gr - Cream Hf w/ V. st Gyp; local pat gr gar
									793.3-798.8	30°	Series ribbon-like vlts of mod cpy	
									Run	30-50°	Gyp vlts w/ serp	

MIS-807-A 75

GEOLOGIC LOG
MISSION UNIT

HOLE NO. M-43
Coordinates: N 361,161.54 E 763,743.49
Dip Vert Bearing —
Date started 8/20/62 Completed 9/28/62
Collar Elevation 3265.9 Total Depth 1470.4

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
800.7	810.9	10.2		1.26		Hf		Mod diss & vlt py, cpy, local st mag	803.1	20°	Gg seam w/ gyp	Lt gn-cream Hf w/ st. gyp & serp; 803.1-804.7 mass gyp
									804.7	70°	Gyp-Hf ct	
									Run	20-75°	Gyp vlts; ave. 50°	
	825.0	14.1		.80		Hf		Pats-vlts cpy-py-mag serp	Run	20-75	Gyp vlts	Lt gr-wht Hf + ep
									815.0	30°	Thin mag vlts	
	833.8	8.8		.54		Hf	830-32.0	Mod cpy-born	825.0	20°	Gg & gyp vlt	Buff to wh Hf
									833.8	50°	1' Gg & bx zone	
	841.4	7.6		.18		Qtzt	Run	Tr cpy-py-moly	Run	30°	Fracs.	F.g. wht qtzt
	851.8	10.4		.15		Qtzt	Run	As above	Run	30°	Fracs	847.0 - Fat Mp
	860.2	8.4		.13		Qtzt-Mp	Run	Tr fine diss & vlt cpy, py, moly	860.2	35°	Mp-Qtzt ct	Lt gr-Buff Qtzt; st ser w/ porphyry-like text; gyp vlts; 0.7' mp interbed @ end of run
									Run	20-90°	Fracs	
	868.6	8.4		.26		Qtzt	Run	Tr diss & vlt py, cpy	886.7	70°	Bx-gg zone; 0.4'	Lt gr Qtzt
									Run	30°	Fracs	
	877.8	9.2		.39		Qtzt-Mp	Run	As above w/ mod moly on fracs	873.4	60°	Qtzt-Mp ct w/ mod Moly	Lt gr Qtzt w/ Mp intercept from 873.4-720; local ser, gyp
									Run	30°	Fracs	
	885.0	7.2		.30		Qtzt	Run	Vlts, stks, & pats py-cpy	Run	30-50°	" w/ wk serf & gyp	Lt gr to frosty wh qtzt w/ wk ser
	895.0	10.0		.21		Qtzt	Run	vlts & fine diss py-cpy; sul gg.	885.6-886.7	50°	Bx-gg-gyp	Same
									Run	60°	fracs & gyp vlts	
	906.7	11.7		.27		Qtzt	Run	As above	Run	30-40°	fracs	V. wk ser, sul gg.
	911.8	5.1		.11		Qtzt	Run	Sp pats & 50° vlts py-cpy	Run	15-60°	fracs & gyp vlts	" "
	923.2	11.4		.20		Qtzt	Run	60° vlts cpy-py + wk fine diss	914.5	40	0.1' Bx along frac	Thin varied dip Qtz vlts.
									Run	20-60°	As in previous run	
	930.5	7.3		.20		Qtzt	Run	Wk diss & pat py, cpy	Run	30-65°	Fracs	Lt gr Qtzt w/ wk gyp, ser & smeared sulf on fracs
									930.5	60°	Qtzt-Hf ct	
	936.8	6.3		1.60		Hf	Run	Sl vlts (50°-85°) py-cpy-eph, Tr diss moly all weakening toward end of run.	Run	60°	Gyp vlts	Lt gray dense Hf w/ short zones Trem-Act. st serp in last 0.3'
									932.5-933.8	60°	parallel fracturing w/ bx-like appearance, poss pre-min fl. recon.	

HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3245.9 Total Depth 1470.4

GEOLOGIC LOG
MISSION UNIT

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DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
936.8	945.0	8.2		.19	24.6 @ .75	Hf	938.3 & 38.5	2 small 50° vlts py-cpy	Run	20-50°	Fracs, slips, & gyp	Lt grn dense Hf w/wk
							Run	Tr diss suls			vlts. (Poss flt zone)	pots wel; grades to dk
												grn massive serp w/
												20° to 50° gyp vlts; v wk co.
	955.0	10.0		.67		Hf	Run	Wk diss suls.	Run	15-35°	Same	Alternate Lt gr-grn
							950.4	Pat cpy				clayey Hf & massive
							952.3	60° vlt py w/ less cpy.				grn-yel serp w/ gyp
												vlts
	965.0	10.0		.03		Qtzt	Run	Tr suls on some fracs	955.1	40°	Hf - Qtzt ct.	Lt gr qtzt w/ zones
									Run	30°-50°	fracs w/ wk sulfgg,	Lt tan material; wk ser,
											ser, serp.	serp.
	975.0	10.0		TR		Qtzt	Run	As above	Run	30-60°	Same	Same minus serp.
	987.8	12.8		.05		Qtzt	Run	" "	Run	30-70°	"	" " "
	990.7	2.9		.05		Qtzt	Run	" "				" " "
	995.0	4.3		.58	.58	Hf	Run	Diss pots cpy-py	990.9	50°	Qtzt - Hf ct.	Grn & tan Hf w/ st
								wk hem.	Run	—	bx like frags Qtzt	serp & Trem. Contains
											throughout. Poss flt.	pots Qtzt.
	1005.2	10.2		.15		Qtzt	Run	Strs & diss py-cpy in	995.8	55°	Hf - Qtzt ct.	Lt tan Qtzt w/ gyp
								last 1.0' of run				on fracs.
	1010.0	4.8		1.07	1.07	Hf-Qtzt mixed	Run	Hi & vlts & diss	1005.0	—	Gradational Qtzt-Hf	Mixed Hf & Qtz w/
								py-cpy-Sul gg-Tr Moly			ct.	pots Trem, serp,
												ser, Feld.
	1023.3	13.3		.32		Hf-Qtzt	Run	Strs & diss py-cpy	1012.2	45°	st slip w/ gyp, serp	Lt gr-grn Hf w/
											& sul gg.	chert into Qtzt. st
									1015.5	30°	flt w/ mod suls, serp	clay & mod serp.
											gyp, Trem-Act, gg	1015.9 - 17.5 - 30° Qtzt
												int. wk CO_2
	1031.1	7.8		.36		Hf	Run	Tr strs & pots cpy, lesser	1031.5	40-55°	slips w/ serp, clay	Wh - lt grn Hf. .7' olt
								py; Tr hem in strs				qtzt @ beg. of run; Run -
												well, local gar, silf
	1041.2	10.1		.05		Hf	Run	Local wk diss suls.	1037.7	60°	0.3' gyp vlt w/ qtz	Wh Hf w/ pots Mb
											vlts on either side	st serp & well, local
												silf, st CO_2

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HOLE NO. M-43

Coordinates: N 361,161.54 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 5265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1041.2	1051.0	9.8		.33		Hf-Bx	Run 1047.6	WK diss sph, cpy-py 0.5' zone st diss sph-cpy-py.	1042.5-44.0	30°	Silf bx zone w/ frags qtzt. Poss flt w/ Diss pats sph-cpy	Wh dense Hf w/ local st silf & wol. st. CO_3
	1056.4	5.4		1.80	1.80	Hf-Mb	1051.7-54.7	St 70° Vns & pats sph-cpy-py.	1055.9	30°	Hf-Mb ct.	Hf as before. Ltgr Mb w/ st clay
	1065.0	8.6		TR		Mb	Run	Tr suls.	Run	30-50°	fracs some w/ gyp.	Ltgr mb w/ med serp & clay on fracs
	1074.6	9.6		Nil		Mb	Run	"	Run	"	"	Same
	1084.8	10.2		TR		Mb	Run	Barren	Run	50° 30-70° vert	Ltgr & wh banding Gyp vlts in fracs Gyp vlt @ start of run	gr & wh Mb w/ wh & gr banding respectively. Local wk strs & pats serp.
	1094.8	10.0		TR		Mb	Run	Barren	Run		Same	As before.
	1104.7	9.9		.09		Mb	Run	"	1103.5	50°	0.1' gyp vlt w/ 0.4' anhydrite on either side.	"
	1114.6	9.9		.02		Mb	Run	"	Run	50° 30-70°	Ltgr & wh banding Gyp vlts & fracs.	Same
	1123.0	8.4		.05		Mb	Run	"	Run	"	As above	"
	1133.2	10.2		.03		Mb	Run	"	Run	"	" "	Lt to dk gr Mb w/ wh 50° banding & wk serp & clay
	1140.0	6.8		.04		Mb	Run	"	Run	30-50°	"	v wk banding.
	1151.0	11.0		.03		Mb	Run	Barren	Run	70-vert	fracs w/ clay & v wk serp.	Wh Mb w/ small local pats gr Mb; st clay wk serp on hi ∠ fracs. sp pats wol
	1162.3	16.3		Tr		Mb	Run	Sp tr diss suls.	1169.3 1165.6	40° Hi ∠	0.7' int. W-Hf. frac w/ serp, gyp & clay	As above
	1172.0	9.7		Tr		Mb-Hf	Run	Sp wk strs suls.	Run	20-50°	fracs & slips w/ serp.	Wh Mb & W. Hf mixed w/ st clay & wk serp.
	1181.8	9.8		Tr		Mb-Hf	Run	Tr suls & moly in pats qtz.	Run 779.1	" 70°	As above Ct between mixed wh Hf & Mb & gr Mb	As before to 779' then gr Mb w/ wk clay & pats wh mb.

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HOLE NO. M-43

Coordinates N 361,161.59 E 763,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1181.8	1191.9	10.1		.10		Mb-Hf-Qtzt.	1186.2 to 1188.3 Run	wk patch & 50° vlts sph-cpy-py w/ tr bn in bx-gg wk diss & vlts sulfs.	Run	—	Gr Mb to 1192.8 ct @ 30° w/ wk Mb-Hf to 1183.4 ct @ 40° w/ ltgr Qtzt to 1184.9; ct @ 30° w/ mixed wk Hf & Mb.	Gr Mb unaltered. Qtzt w/ [illegible] Mixed Hf-Mb w/ local st clay & low % gyp vlts.
	1201.9	10.0		.19		Hf-Mb	Run 1201.9-end	Tr py-cpy bn-cpy-sul gg in low % frac zone (0.1')	1191.9 1201.4	30° 15°	0.4' bx-gg w/ wk sulfs. ci w/ pure Hf.	Mixed Hf-Mb w/ wol, qtz, gyp & wk clay; st ser in last 0.5' of run.
	1206.2	4.3		.25		Hf	Run	diss & vlts py-cpy Tr bn	1206.2	30°	frac ct w/ wh clayey Mb	Ltgr-Ltgrn & pK Hf w/ bx-like appearance containing pats qtz-fold-gyp-clay.
									Run	35°	Pass fit zone	
	1208.5	2.3		N.I.		Mb	Run	Barren	1208.5 1207.9	Low ∠ 30°	Mb-Hf ct. to end int. anhydrite	wh clayey Mb w/ 0.9' int wh tetan anhydrite @ end.
	1215.1	6.6		Tr		Hf	Run	wk diss sulfs.	Run	45-70°	fracs, some showing drag folds. Pass fit zone.	Ltgrn, Ltgr, & tan to pK Hf w/ bx-like appearance containing pats wh & tan Qtzt, Fold, qtz, chl, serp, gyp & clay. Ends in 0.5' tan Qtzt.
									1215.1	40°	Hf-Qtzt ct @ frac.	
	1221.9	6.8		.09		Qtzt-Hf	Run	fine diss sulfs.	1219.3 1221.3	50° 50°	Qtzt-Hf ct } Pass fit Hf-Qtzt ct }	Ltgr Qtzt w/ st ser & 50-70° fracs; dKgrn Hf w/ st serp & frags Qtzt & fold & qtz.
									Qtzt	50-70°	st fracturing w/ fold & qtz along zone fracs in last 0.6'	
	1224.9	3.0		.05		Qtzt	Run	Tr sulfs	Run	30-60°	fracs w/ serp.	Lt tan to pK Qtzt w/ w/ wk ser & fold.
	1235.9	11.0		.08		Qtzt-Arg-Bx	Run	wk sulfs. Pats cpy in fH zone.	1232.5-end	35° & 40°	fit zone ct w/ Lt gr Arg below.	Mixed Ltgr Qtzt & Ltbrn Arg to 1232.5 & Bx-gg w/ st chl, serp, fold, Qtzt to end.
									Run	30-70°	fracs w/ serp & gg	
									1234.1	—	Large pat wh Mb.	
	1246.5	10.6		Tr		Arg	Run	Tr sulfs.	1246.5	40°	Bx-sulgg zone (0.3') w/ serp.	Lt gr Arg w/ st silf wk ser.
									Run	40-60	fracs w/ bx-serp.	

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HOLE NO. M-43

Coordinates N 361,161.54 E 163,743.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1246.5	1253.2	6.7		.03		Arg	Run	Tr sulfs	Run	30-80°	fracs w/ bx-serp-ser.	Lt gr to gr Arg w/ 6" serp, talc along fracs.
	1263.0	9.8		Tr		Arg	Run	" "	1254.3	40 & 30°	Bx zone (0.7') separating Gr & Gr-buff Arg.	Gr-Gr buff & brn Arg w/ wK ser along fracs
									1256.4	55°	Gr-buff & brwn Arg ct @ frac.	
	1270.0	7.0		Tr		Arg	Run	Tr to nil sulfs	Run	Var	Co3 v/lts	Reddish brn Arg w/chl? — mafic impurity
	1281.3	11.3		Tr		Arg	Run	As above	1276.2	45°	Grad. sed cnt	1270.0 – 1276.2 As Above
									1281.3	10°	Thin flt - gg	1276.2 – 1281.3 Arg w/ St chl mort. pseudo diorite Few bands gyp end run
	1293.2	11.9		.03		Mp	Run	Tr py - cpy	1281-93.2	40°	Schistose bands - serp	Mod alt - some biot prob alt sed
									1293.2	40°	Flt cnt w/ Mb	1290.6 – 0.3' dense gyp
	1300.0	6.8		.04		Lms-Mb	Run	Sulfs nil	Run	40-70	Shears-fracs w/ Co3 some gyp	Black lms w/ abun pots, v/lts w/ Co3
									1298.5	20°	Fault gg zone	
	1310.0	10.0		.04		Lms-Mb	Run	Tr sulfs, poss graphite(?) on slips	Run	40°	Shears & fracs w/ ser Talc.	As before
	1318.2	8.2		Nil		Lms-Mb	Run	Same	317.4	30-45°	Bx-gg-shear w/ diag folds.	Blk Ls w/ gr Mb w/ 35-50° banding along shears St serp & Talc
	1327.8	9.6		Nil		Lms-Mb	Run	As before + Tr moly	Run	30-50°	fracs & slips w/ st serp & talc, v wK sulfs & st gg. (black (soot?))	As above patches of Mb
	1337.9	10.1		Nil		Lms-Mb	Run	Tr fine diss py, graphite (?) on slips.	1332.9	40°	flt bx-gg 0.2'	As before w/ more gr Mb.
									Run	30-50	As above.	
	1344.1	6.2		Nil		Lms-Mb	Run	Same	Run	50°	faint wh banding	dK gr to black Lms
										15-50°	fracs. w/ wK serp.	
									1344.1	40°	Ls-Hf ct @ frac w/ wK serp	

HOLE NO. M-43

Coordinates N 361,161.54 E 763,783.49

Dip Vert Bearing —

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.9

GEOLOGIC LOG

MISSION UNIT

DEPTH From	DEPTH To	DEPTH Interval	% COPPER N.S.	% COPPER Total	% COPPER Weighted Average	ROCK TYPE	MINERALIZATION Depth	MINERALIZATION Description	STRUCTURES Depth	STRUCTURES Dip	STRUCTURES Description	REMARKS
1344.1	1354.5	10.7		Tr.		Hf	Run	Fine diss suls.; Moly on some fracs. wk pat CO_3	Run	15-50°	fracs & slips w/ serp & clay.	varies lt grn to tan Hf w/ pots CO_3, wkl, iron, serp, clay
	1359.7	5.2		Nil		Ls-Hf	Run	Graphite (?) on some fracs; Tr suls	1358.4	irreg.	Ls-Hf ct. Hf to end w/ bx. bxn @ end	Blue-gray ls w/ pots wk at serp. ltgrn-tan dense Hf w/ bx-like appearance.
									1359.6	20°	Hf-Ls ct @ frac w/ serp.	
	1365.0	5.3		Nil		Gyp(?) Hf	Run	Tr suls	1359.7	40°	Hf-gyp ct @ frac	blue-gr & tan Anhydrite w/ pots ltgrn w/ wk iron CO_3 & Nb-like Texture. wk clayey Hf w/ st serp.
									1363.1	20°	Gyp-Hf ct @ pure gyp vlt	
	1373.2	8.2		Nil		Gyp-Anhydrite (?)	Run	Suls Nil	1365.7	30°	Hf-gyp ct @ ct pure gyp vlt	Pass. impure massive gyp. Massive blue, gray, grn, & brwn impure gyp or anhydrite; Nil CO_3
									Run	30°	fracs w/ pure gyp vlts & wk clay.	
	1383.0	9.8		Nil		Gyp-Anhydrite (?)	Run	" "	Run	30-60°	fracs & slips w/ clay	As before w/ pots ltgrn Hf & clay; v wk pots CO_3.
	1393.0	10.0		.02		Gyp-Anhydrite (?)	Run	Tr suls.	Run	30-70	Same w/ serp.	[illegible]
	1403.3	10.3		.01		Gyp-Anhydrite Hf(?)	Run	" "	Run	"	"	[illegible] w/ 37 int. [illegible] colored Hf.
									1397.3	50°	Gyp Hf ct.	
									1401.0	50°	Hf-Gyp ct.	
	1412.3	9.0		.01		Gyp-Anhydrite (?)	Run	Trace diss suls.	Run	30-90°	fracs.	[illegible] along fracs
									1412.3	20°	Gyp-Hf ct @ slip w/ serp	
	1422.6	10.3		.01		Hf-Ls	Run	Tr suls	1418.7	20°	Gyp vlt (0.2')	Mixed ltgr-grn Hf & black Ls w/ 15-30% sts. Most st yel-grn serp. ltgr & wk Hf w/ st serp & CO_3. Bx-gg zone contains ltbrn gyp(?) fracs.
									Run	15-90°	fracs w/ gyp, serp	
	1433.0	10.4		.02		Serp Hf	Run	Suls Nil	Run	30-50°	Same	
									1429.0 and	30-45°	Bx-gg zones; pass flt.	
	1442.4	9.4		.01		Hf	Run	Tr suls in frac	1441.6-end	10°	flt gg w/ st serp.	ltgr-grn Hf w/ st serp talc & wk gyp vlts.

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HOLE NO. M-43

Coordinates N 361,161.54 E 763,743.49

Dip Vert Bearing ____

Date started 8/20/62 Completed 9/28/62

Collar Elevation 3265.9 Total Depth 1470.4

GEOLOGIC LOG

MISSION UNIT

(11)

DEPTH			% COPPER			ROCK TYPE	MINERALIZATION		STRUCTURES			REMARKS
From	To	Interval	N.S.	Total	Weighted Average		Depth	Description	Depth	Dip	Description	
1442.4	1454.4	12.0		.01		Granite(?)	Run	Tr py; faint hem stain first 2.0' & on occas surfaces of biot.	1442.4 Run	Low & 30-45°	Flt-granite(?) ct. fracs most common	Ltgr Granite w/ st all of feld to ser & biot to chl. First 0.6' shows some lineation of qtz grains @ ± 30°. Orthoclase predominant feld. Pass recrystallization of qtz & feld.
	1460.0	5.6		.02		Granite (?)	Run	Tr suls; w/ hem stain on some fracs.	Run	10-30° 50-70	most common fracs Occas fracs.	As above.
	1470.4 Bottom	10.4		.01		Granite (?)	Run	" "	Run		As above	" "

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