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

The following file is part of the

James Doyle Sell Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

Final Depth 176.7
Collar Elevation 2,716.61
Coordinates 28,432.00 N, 32,323.27
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-25
Sheet No. 1 of 1
Date Completed 4-6-67
Logged By N.R.N.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER	JAR LIM HEM	Rock Type	Remarks
0.0-4.5	4.5	N.C. STARTING	—	—	—	—	—	—	—	—	—	—	—	—	—	N.C. STARTING BIT -
13.2	8.7	NX w/	2.30	81	.05			.05					ST-Inten Ser, CP Clay	Mod-ST Hem, Lim Sp Jar	Bp ∩ Mz	ST ALT; Mod Sil'n; wk-mod Hem and Lim; Lim on fracs and Hem in Grd mass
22.5	9.3		2.54	72									ST-Inten Ser-Clay	Mod-ST Hem-Lim	Sp (?)	ST ALT; Locally ST Sil'n; wk-mod Lim and Hem; Tex Obscured. In silicified areas Rk has a pseudo qtzite appearance. Original tex was fine-med grained.
33.5	11.0		2.51	64									/	Mod-ST Hem-Lim w/ some JAR		ST ALT; Mod-ST Sil'n; Mod Hem-JAR-Lim; Sp ALUNITE; Tr amorphous gypsum
42.4	8.9		2.48	91	.03			.03					1	1		ST-Inten ALT mod Sil'n; Mod-ST Hem-Jar-Lim; Rk has been shattered and remineralized. This rk has the appearance of a qtzite, but I believe it is a silicified igneous
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Numerous sulf cavities and ST in gossans-bas mem.-partial
51.2	8.8		2.40	95	.04			.04					1	Mod Hem w/ Lim		ST ALT; Sil'n decreases from Inten at beginning to sp-wk at end of run; ST Hem, mod Jar
60.2	9.0		2.50	93	.03			.03					1	Mod-ST Hem-Lim		fine-med grained lath-like felds euhedral to angular show a Sp Tex ST, ALT, ST Sil'n; Mod-ST Lim-Hem and sp Jar
68.7	8.5		2.52	93	.06			.06					1	Mod-ST Lim		ST ALT; Inten Sil'n; Mod JAR-Lim + Hem occurring as stains and gossans in fracts
78.1	9.4		2.35	94	.03			.03					1	Mod JAR-Lim	Mz Tex Begin 77'	ST ALT; ST Sil'n + Qtz Vaning (30°-40°); Mod Hem + Yellow Lim Stain; Mz tex @ 77'
87.7	9.6		2.56	89	.06			.06					1	ST Lim Mod Hem		ST ALT; ST Sil'n; ST Hem-Lim; occasional Sp Tex
96.5	8.8		2.59	88	.07			.07					ST Ser Clay,	ST Lim		ST-Inten ALT; ST Sil'n; ST Lim, Mod Hem; Sil'n destroys felds leaving only tiny remnants which give the impression that the rock was finer grained, but rk is Mz
105.3	8.8		2.56	93	.08			.08					ST-Inten Ser, Clay, Qtz	/		ST-Inten ALT, wk Sil'n; ST Lim-Hem; only Hydromica remnants of Biot in Grd Sericitic mass
114.8	9.5		2.62	93	.07			.02	wk		.05		/	ST Hem Mod Lim-Jar	Bulge w/inter-mass washing 107-114 then Suits.	ST-Inten ALT + Sil'n; ST Hem Stain; wk well disem Py w/sp CP. Coatings; Suits inters w/ leached Material to 113.6' then no leaching; Good Mz tex end of run
123.8	9.0		2.66	91	.31			.02	wk-mod		.29		ST Ser, Clay, Qtz	Mod Lim		ST ALT; Mod Sil'n, wk Lim on fracs; wk Py, sp-wk C.C., ~~sp-CPy~~, K-Sp flooding of grd mass (minor)
132.7	8.9		2.57	93	.23			.02	/		.21		ST Qtz-Ser wk Clay	Mod Lim wk Hem		ST ALT, Mod Sil'n; wk Lim on fracs; wk-mod Py, wk C.C., sp CPy
141.4	8.9		2.61	92	.14			.02	Mod	.02	.10		/	wk Lim		ST ALT + Sil'n; wk Lim + Hem; wk-mod Py, sp-wk C.C., Tr-sp CPy; Some Vaning of S
150.1	8.7		2.73	93	.15			.01	/	.04	.10		Mod Qtz Ser, wk Clay	Sp-wk Lim		Mod ALT; wk-mod Sil'n along num old fracts; sp Lim; mod Py, Tr-sp C.C. + CPy
158.2	8.1		2.61	94	.14			.01	/	.08	.05		/	Wk Lim		Mod ALT; Mod-ST Sil'n + Qtz Vaning; wk Lim on fracts; mod Py, Tr-sp C.C. + CPy
167.2	9.0		2.63	95	.21			.01	Mod-ST	.10	.10		/	—		Mod ALT; Mod Sil'n + Qtz Vaning; sp Lim; Mod Py, Tr-sp CPy, Tr C.C.
176.7	9.5		2.55	96	.10			tr	Mod	.10	tr		/	tr lim		Mod ALT + Sil'n; Mod Py, Tr-sp CPy, Tr MoS2
EOH			Avg Rec's	89%												E.O.H.

Final Depth 170.4
Collar Elevation 2,708.18
Coordinates 28,433.72 N, 33,033.59
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-24
Sheet No. 1 of 1
Date Completed 4-3-67
Logged By N.R.N

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER CHLOR	HEM JAR LIM	Rock Type	Remarks
0.0 – 4.7	4.7	N.C.														
11.0	6.3		2.53	100	.06			.06					ST Qtz-Ser.	Mod JAR HEM	Sp Q Mz	ST ALT, Mod-ST Sil'n; Mod-ST Hem, wk Jar, Sp CuOx; Tex-fine-Med grained felsic silicified grained mass. Tr Sulfs.
21.2	10.2	NX WL	2.58	69	.05			.05					/	Mod JAR wk Hem		Mod-ST Alt, Mod Sil'n; Mod Hem, wk JAR, Sp Lim; Sp wk CuOx; Sp Alunite
29.6	8.4		2.47	89	.05			.05					ST Qtz Ser - Sp Clay	Mod-ST JAR wk Hem, Bull		ST ALT + Sil'n; wk Hem, wk JAR + ALUNITE; Sp-wk CuOx; Tex - Med grained euhedral to sub hedral felds set in grnd mass of finer felds + 2nd(?) Silica
37.7	8.1		2.38	94	.05			.05					Mod Qtz Ser - wk Clay	Mod-ST JAR-Lim Sp Hem	Mz	ST ALT, Mod Sil'n; Pervasive Lt Brn Lim, Sp-wk ALUNITE; Sp CuOx
46.5	8.8		2.37	94	.06			.06					Mod Qtz-Ser Mod Clay	/		Mod-ST ALT; wk Sil'n; wk Hem + Lt Lim, wk ALUNITE veining; Sp CuOx; 8% Med grained (to 1/8") Subhedral felds set in fine grained Matrix. 3% Qtz eyes
56.2	9.7		2.49	88	.05			.05					/	/	Sp (?) Circa 54'	Mod ALT + Sil'n, sp-wk JAR-LIM in Fracs + Box work; Sp CuOx
60.1	3.9		2.42	96	.09			.09					/	/		Mod ALT wk-Mod Sil'n; wk-Mod JAR-HEM, wk ALUNITE, Sp CuOx; 10% Feld Phenos set in silic Matrix. Felds are Euhedral to subhedral & 1/8" long
65.0	4.9		2.56	92	.28				wk-Mod				ST Clay Mod Ser	Tr Lim	SULF. CT. @ 60.1'	Mod-ST ALT, Sp Sil'n; Mod v. fine well dissem Py w/ thin Coat of CC.
74.4	9.4		2.60	86	.13				/				Mod Qtz Ser, wk Clay	Mod Lim		Mod-ST ALT, Mod Sil'n; wk JAR + ALUNITE; wk Py, sp CC, Sp-wk CuOx; Rk appears to have had a carb matrix, possibly due to v. fine biot.
83.0	8.6		2.59	93	.26				/				/	wk Lim		Mx-Mod ALT, wk Sil'n; Mod-ST well dissem f-grained Py, Mod CC; Sp-wk Lim, Sp CuOx Felds. become less distinct as v. f-grained Biot increases. The more Biot The more CC is present.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
92.3	9.3		2.54	89	.12			.03	/	.01	.08		Mod Qtz, Ser, Clay	Mod-ST Lim	OXIDATION CUTTING Sulfs. Mz @ 94'	wk-Mod ALT; wk Lim; Mod Py, Sp-wk CC, Tr CPy; High Biot Content. Tr-Sp MoS2
101.0	8.7		2.54	80	.10			.01	wk	.01	.09		Sp-Qtz Mod ser Clay	Mod Lim		Mod ALT; Mod Lim; Mod Py, Tr CC + CPy
109.8	8.8		2.55	86	.15			.01	Mod	.04	.10		/	/	Sp (?) @ 105'	Mod ALT; wk Lim; wk-Mod Py, Sp CC, Tr CPy; Tex-fine-Med felds Phenos in high biot ground mass. May be 2nd. Biot as it is fine grained and somewhat frosty.
119.5	9.7		2.31	100	.06			Tr	Mod	.01	.05		Mod Ser-Clay	ST Lim	END OF OXIDATION @ 119.5	Mod alt, Sp Sil'n; Mod Lim; Mod Py, Tr-Sp CC & CPy; Felds become finer and biot stronger
126.5	6.8		2.76	93	.08			Tr	Mod-ST	.01	.07		Mod Silica Clay-Ser	Sp Lim		Mod ALT, Mod Sil'n 119.5-125'; Mod Py Tr-Sp CPy, Tr CC; Rk was quite high Biot Ct.
133.4	7.1		2.68	100	.07			Tr	/	.03	.04		/			Mod ALT; wk-Mod Sil'n locally; Mod Py, Tr-Sp CPy; Felds fine-Med grained euhedral lath
139.6	6.2		2.64	96	.06				/	.03	.03		/	—		Mod ALT; High Biot CONTENT. Mod Py, Tr-Sp CPy; Biot is seen to replace felds
142.6	9.0		2.62	74	.05				/	.03	.02		Sp Silica wk-Mod Clay-Ser	—		wk-Mod ALT; Mod-ST Py; Mod Chlor; Num. fine-Med grained lathy felds Phenos Comp 30% of Rk
157.3	8.7		2.64	80	.07				/	.03	.04		Mod Silica wk Clay-Ser			Mod-ST ALT; Mod Sil'n; Mod Py; what was thought to be biot may not be. It does however, appear to be 2nd or lim alt. Product.
165.8	8.5		2.64	86	.06				ST	.03	.03		Mod Sil. 2a Sp Clay		Mz (?) Circa 159'	Mod-ST ALT; wk Sil'n; Mod Py, Sp CPy; Felds are Coarser grained, not lath like
170.4	4.6		2.66	95	.03				/	.03			/			ST ALT + Sil'n; Mod-ST Py, Sp CPy; Tex obscured by Sil'n
EOH			Avg. Rec'y	89%												E.O.H.

Final Depth 168.5
Collar Elevation 2,689.03
Coordinates 28,119.53 N, 32,851.15 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-23
Sheet No. 1 of 1
Date Completed 3-30-67
Logged By NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim hem	Rock Type	Remarks
0.0 - 7.0	7.0	N.C	–	0	–	–	–	–	–	–	–	–	–	–	–	N.C Starting Bit
16.1	9.1	NXWL	2.31	92	.02			.0					ST Ser	WK lim Mod hem Tr lim	Sp	ST Alt ST clay + Ser, Mod Sil'n Mod-ST hem Mod lim, sp-wk jar wk lim
25.8	9.7		2.58	82	.01			.01					clay	Mod lim Wk hem Wk-mod jar		ST Alt, Sil'n, Mod(-) hem, wk jar, lim, all texture is destroyed
35.2	9.4		2.50	86	.02			02							Bx 25.8' to Circa 33'	St Alt, Mod-ST Sil'n; Mod Yellow & Orange hem lim; Tex fair-Mod ignimb. Eroded - Sub hed Tuffs w/ 3% Qtz eyes; Bx Tex from 25.8' - Circa 33'
44.5	9.3		2.28	99	.03			.03						Wk-lim hem Mod jar		ST-Inten Alt; sp Sil'n; wk pervasive Jar-lim stain
53.7	9.2		2.35	97	.14			.01	wk	+-	.13			wk lim, wk Mod jar	Sulfs @ Circa 44.5'	ST-Inten Alt; Sp lim; Med. well dissem fine grained Py, Sp C.C.
66.8	13.1		2.54	94	.45	.05		.05	Wk-Mod	tr?	.41			tr lim		ST-Inten Alt, Tr lim; ST Py, wk C.C.
80.8	14.0		2.37	94	.03			.03	tr?	—	—			wk lim hem	ST. Oxidation @ 66.8 Mz. ? @ 80'	ST-Inten Alt; Mod-ST Hem-Lim; Sp Py; Tex Mod. grained Ign. Mz ?
85.8	5.0		2.38	87	.03			.03	Tr ?					/	Sulfs @ 85.8	ST-Inten Alt; Mod Lim-Hem; Tr Sulfs; Tex As above
90.7	4.9		2.63	82	.05			.02	Sp		.03			Tr-sp lim hem	Qtz Mz.	ST-Inten Alt; Tr lim; Inten Sil'n 85.7-90.7; Mod Py, Tr CPy, wk C.C.
100.3	9.6		2.60	89	.17			.01	Mod	.08	.08		ST-Inten Ser-Clay			ST-Inten Alt; Inten Sil'n to 94.5' Then wk; ST. well dissem V. fine Py, Tr C.C. From 99 to 100.3 Rock wkly silic.; Contains Num. Qtz. eyes + Vague Remnants of Biot
109.7	9.4		2.83	84	.10				Mod-ST	.03	.07					ST Alt; wk Sil'n; ST Py, Sp R.C.; Feld. Phenos are Variably Silic'd up to 1/4" and are two neared - euhedral Sil'n affected grey Mass. + 5% qtz eyes.
118.8	9.1		2.50	100	.04					Tr	.04					ST Alt; Wk Sil'n; Mod Py, Tr-Sp C.C. & CPy; Freq. V. thin irreg. milky Blue quartz veinlets & Vf seams.
127.6	8.8		2.69	94	.07				ST	Tr	.07					ST Alt; Mod Sil'n; wk-Mod Py, opt. C.C.; Sp. qtz.
136.8	9.2		2.61	97	.07						.07					Mod-ST Alt + Sil'n; Mod Py, Tr-Sp C.C. & CPy; Sil'n obscures Tuff tex
146.0	9.2		2.68	89	.11				Mod	.02	.09					As above; tex appears to be finer grained than low qtz eyes.
155.4	9.4		2.62	93	.07				Mod	.02	.05					ST Alt; wk Sil'n; Mod-ST well dissem Py, Tr-Sp C.C. & CPy; No distinct Feldspar visible
168.5	13.1		2.63	84	.07					.02	.05					ST Alt; Sp-wk Sil'n; Mod-ST Py, Tr C.C. & CPy; Sp qtz; Tr lim Sil
EOH			Avg. Rec'y	91%												

Final Depth 200.6
Collar Elevation 2,667.98
Coordinates 27,813.96 N, 34,493.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-22
Sheet No. 1 of 1
Date Completed 3-21-67
Logged By N.R.N. + J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	Lim Hem Jar	Rock Type	Remarks
0.0-5.1	5.1	N.A.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.3	9.2	NxWL	2.00	100	.02			.02					St-Inten Ser, Mod Qtz wk Clay	St Jar Sp Hem	Sp ???	St Alt, wk Sil'n Tex not recognizable; wk mod pervasive Jar
23.9	9.6		2.43	87	.01			.01					1	St Jar-Lim Sp-wk Hem		As above; Sp-wk hem assoc w/ Jar;
35.5	11.6		2.34	65	.02			.02					1	St Jar Sp-wk Hem		St Alt; wk Jar, Sp Hem; Vague remnants of small angular fells
44.2	8.7		2.30	93	.02			.02					Inten Ser Mod Clay Mod Qtz	St Jar-Lim wk Hem		St-Inten Alt; Mod Jar-Lim, wk-mod Hem; wk Sil'n; Tr CuO
52.7	8.3		2.37	95	.03			.03					1	Mod Hem Sp-wk Jar-Lim		St-Inten Alt; wk Hem, wk-mod Jar-Lim.
61.6	9.1		2.56	91	.02			.02					1	St Hem Sp Jar-Lim		St-Inten Alt, wk Sil'n; Mod Hem-Lim; Visible grains are v. small + irregular
70.5	8.9		2.18	100	.01			.01					/	/		St-Inten Alt; Tr-Sp Sil'n; wk Jar-Lim-Hem
83.8	12.5		2.10	73	.01			01					Inten Clay-Ser	St Hem Sp Jar	Pre Min Anda ? 75.2-80.0	St-Inten Alt; wk Lim-Hem, Sp Jar; Med grained Anda Tex 75.2-80.0'
93.0	10.0		2.25	95	.03			.03					1	St Lim wk Jar-Hem		St-Inten Alt; Mod Jar-Lim, wk Hem; Numerous qtz eyes + grnd mass carries many small feld grains
102.0	9.0		2.32	96	.01			.01					1	Mod-St Hem, Jar +		St-Inten Alt; wk-mod Jar-Lim, mod Hem; good sp tex @ 97.9; Numm Mod to large qtz eyes circa 100'; many hard void in centers + appear to have a rawn around felds; some show oxid skin fracturing
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
110.3	8.3		2.54	75	.01			.01					/	St Jar Tr Hem	Post Min Anda @ 109.8	St-Inten Alt, Mod-St Sil'n; wk-mod Jar.; Anda is Mod Alto.
121.7	11.4		2.16	73	.32	.12		.12			.20		Mod-Clay			Porphyritic; Supergene all of feld to clay, hem to chlor; grnd mass v. fine grained - contains mod Sp Gvp Vns Magnet
134.7	13.0		2.06	99	.10			.03			.07		/		Mz + Sulfs @ 134.7 Mostly Leached 148 — 161' Sulfs @ 161	Anda - Mz Pt 50'; Mod-St Alt + Sil'n; wk Py, Sp Cp; Sp Jar
146.3	11.6		2.57	97	.06			Tr	Mod	.01	.05		St Clay-Ser			St Alt + Sil'n; wk Jar, Sp Hem; Tr Sulfs, mod leached via box work
155.5	9.2		2.45	98	.01			Tr	Sp	.01			Mod Clay St Sil'n Sp Chlor	Tr Lim St Lim		Alt + Sil'n as above; Mod high angle Py-chlor vns 1/16 - 1/2" wide
164.0	8.5		2.55	98	.01			Tr	Mod	.01			1	Sp Lim		St Alt + Sil'n; wk-mod Py, dissim + assoc w/chlor in vns.
172.6	8.6		2.55	96	.03			Tr	/	.02	.01		Inten Ser-Clay, Sp Chlor	Tr Lim		As Above
180.8	8.2		2.60	85	.02				/	.02	Tr		Mod Qtz Mod Clay wk Ser St Sil'n Mod Chlor			St Alt + Sil'n; mod Py, St Chlor Assoc.
189.5	8.7		2.65	84	.02				Mod(+)	.02	Tr		St Ser-Clay Sp Chlor			Mod Alt, St Sil'n; wk-mod Py; 3-5% Biot
200.6	11.1		2.69	97	.03				/	.03						As Above
EOH			Avg. Rec's	90%												E.O.H

Final Depth 180.0
Collar Elevation 2501.93
Coordinates 26,511.99N, 36,477.85E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-21
Sheet No. 1 of 1
Date Completed 3-17-67
Logged By NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
													Clay Ser Biot	Hem JAR Lim		
0.0-11.0	11.0	Rock Bit-N.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27.5	16.5	NXWL	2.47	45	.10			.10					Wk-Mod Clay, Mod Sil'n	Mod Hem Sp JAR-Lim	QtzMz	Wk-Mod Alt, Sil'n wk to Mod with Pseudo Qtzite tex locally developed. Gg. zone 26.1' on Qtz. eyes are common, but are to color + hydromica.
36.0	8.5		2.51	63	.10			.10					Mod Ser-Clay	Mod-St Lim, wk Lich		St. Alt; St. Sil'n; Mod bon lim on fracs; Grnd mass is flooded w/ Qtzite appearing silica
47.0	11.0		2.36	39	.14			.10			.04		Mod-St Ser sp Clay	Mod Lim		Mod Alt; St Sil'n; Mod Yellow Lim; Rk quite Brkn + Crumbly
56.4	9.4		2.57	68	1.03	.13	28.1@ 0.75 0.88	.13	wk		.90		?	Tr Lim	Bulk Grea 47	Mod-St Alt; St. Sil'n, mod qtz. veining; Wk Py, Sp CPy, Sp CC as thin coatings Sp v.fine 2nd biot
66.6	10.2		2.52	64	.81	.08		.08	/		.73		Mod Ser	/		Mod Alt.; wk-Mod Sil'n + veining; Sp-wk Py, Sp CPy + C.C.; Tr. always wk-wk K-spar flooding of grnd-mass
75.1	8.5		2.60	81	.36				/		.20		wk-Mod Ser Clay	/		Mod Alt; St-Inten Sil'n; wk Py, Sp wk CPy, Tr C.C.; Tr Lim
83.5	8.4		2.58	86	.24				wk-Mod	.12	.12		Mod Ser 2nd Biot		Recognizable Mz to 77.2 then 2nd Biotized Mz.	Mz As above to 77.2 then there is either St 2nd biotization or intruded sp 2nd Biot is probably correct, but rock becomes unrecognizable as a Mz. The biot. is extremely fine grained + spread through a strongly silicified grnd mass w/ intermixed clay. Sp-wk Py + CPy in v.fine grains are nearly dissim.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
91.2	7.7		2.62	95	.27				wk-Mod	.12	.15		Inten Ser St Biot			Biotized Mz; Mod Sil'n, wk(+) v.fine Py + Sp-wk CPy; Decreased 1/8 fold x's remain.
100.0	8.8		2.69	85	.23				wk	.12	.11		St-Inten Cl.	veining		Inten Alt + Sil'n; Mod Py, Sp-wk CPy; silica gives pseudo Qtzite Tex
108.0	8.0		2.61	91	.28				wk-mod	.14	.14		St Ser Sp Clay			St Sil'n; V. fine Bnt is seemingly quite fresh, mod v.fine sulfs, wk-mod Py + Sp-wk CPy Rk then looks like Sp!
116.3	8.3		2.57	88	.36				Mod	.26	.10		/			Mod-St Alt; St Sil'n; wk to Mod Py, Sp CPy, Tr Mo Sr; Grnd Mz tex @ 115'
125.0	8.7		2.60	92	.15				wk	.12	.02		Mod Ser wk Clay		Mz 2nd Biotized Mz @ 116.7	Mod Alt, Mod-St Sil'n; wk-Mod Amorphous K-spar in grnd mass; wk-Mod Py, Sp-wk CPy
133.1	8.1		2.50	80	.26				Wk-Mod	.20	.06		/		2nd Biotized Mz or Sp Ph.	As above to 129.5' then Rk is quite high in v.fine fresh biot; wk-mod Sil'n; Mod Py, v-wk C
142.1	9.0		2.59	80	.25				Mod	.22	.03		Mod Ser St Biot			Fresh Biot; wk Sil'n; Mod. Py + Sp-wk CPy; sulfs v. f. grained + well dissim.
150.0	7.9		2.68	84	.25				wk-Mod	.22	.03		Mod-St Ser, wk Clay		Mz 2nd Biotized Mz.	Good Mz tex shown @ 140.7
158.1	8.1		2.50	91	.19				Mod	.18	.01		Mod-St Ser wk Clay, Mod Biot			Mod-St Alt; Mod Sil'n; wk Add 2nd Biot, 5% Biot Bands; Mod Py, Sp CPy. Rk is quite Brkn + gouged from 145.0' on
166.2	8.1		2.56	90	.20				Mod	.20			/			St Alt + Silified Mz local patches of Tex destruction accompanied by 2nd biot. Mod Py, Sp CPy
180.0	13.8		2.57	77	.20				wk-Mod	.20			wk Ser-Clay	Mod K-Spar in Grnd Mass	St. Biot. 166.7-170.8	St Speaking to 160', St-Inten Alt; Mod Sil'n; Patches of 2nd Biot; Mod Py, Sp CPy Toward end of run K-spar increases in grnd mass. Biot together w/ 2nd Biot St Alt + Sil'n; Progressive Biotization accom. w/ increase in CPy; Mod Py, Sp CPy
EOH			Avg. Rec'y	75%												E.O.H.

Final Depth 265.8
Collar Elevation 2526.02
Coordinates 26,888.70 N, 36,460.28 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-20
Sheet No. 1 of 1
Date Completed 3-15-67
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration ALTY SER CHLOR	HEM LIM JAR	Rock Type	Remarks
0.0 – 24.7	24.7	N.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	
31.4	6.7	NXWL	2.51	100	.04			.04					Mod-St Clay-Ser	St Hem; + orange lim	Mz (?)	St Weathering + Alt; Mod Hem + Lim; Locally wk Sil'n; Rk is quite Crumbly, No tex
40.9	9.5		2.25	88	.06			.06					St. Clay-Ser	St. Orange lim + Mod Hem		St-Inten Alt + weathering; St Hem + lim stain; Rk altd to soft Clay; Grp + a Soft milky Sub Tasting Clay Common
50.5	9.6		2.35	89	.03			.03					/	/		St Alt; wk-Mod silica flooding; wk Hem + mod yellow-orange lim; Rk quite friable + Locally Cr Mz Tex visible
59.2	8.7		2.13	100	.06			.02	sp		.04		St Qtz Ser, Mod Clay	Tr	Silic Cinn 51.2	St Alt; Sil'n as above; Sp lim 1055'; wk py, Sp C.C. as v. thin coatings
67.9	8.7		2.75	92	.07			.01	wk		.06		/			St Alt, St Sil'n; Mod Py, Tr C.C. + CPy; Sulfs in valets + dissim
79.4	11.5		2.83	92	.05			.01	wk-mod		.04		/			St Alt + Sil'n; wk-Mod Py, Tr CPy; Rk quite brkn into small angular frags
87.5	8.1		2.69	93	.04			.01	Mod		.03		/			Intense Alt, wk-Mod Sil'n locally; Mod Py, Tr CPy; Rk has no tex + is quite soft
96.6	9.1		2.73	91	.04			Tr	/	.01	.03		/			Inten Alt, St Sil'n; mod(+) well dissim Py, Tr CPy + CC; Rk brkn into angular frag
105.4	8.8		2.44	94	.08			Tr	Mod-St	.05	.03		/			Inten Alt; wk Sil'n; Mod(+) Py; Rk quite soft, no tex
114.8	9.4		2.43	100	.03			Tr	/	.03	Tr		/			As Above
123.2	8.4		2.43	87	.03			Tr	St	.03	Tr		Tr Chlor			Inten Alt; St Py well dissim; Rk is soft + crumbly
132.6	9.4		2.44	92	.01			.01	—	—	—		St-Inten Ser, Clay, Mod Chlor			Dark Andes w/ Approx 5% Fold + Pyroxene Phenos. Mod Alt; Tr Py
141.9	9.3		2.88	73	.01			Tr	St	.01			Sp Clay		Lato Min Andes 123.2	Inten Alt; St Py; Rk is extremely soft + crumbly
152.9	11.0		2.42	62	.01			.01	—	—	—		Inten Ser Mod Clay		Mz 132.6	5% fine grained Alto Plagio Phenos. Set in dark aphanetic matrix
160.4	7.5		2.50	99	.01			.01	—	—	—		Sp Clay		Lato Min Andes 153.7	As Above; Both runs Contain Tr Py + Mod Mag
171.0	10.6		2.70	78	.01			—	Mod	.01			/			St Alt + Mod-St Sil'n; wk-Mod Py well dissim, Tr CPy
177.1	6.1		2.28	100	.01			—	wk-Mod	.01			Mod-St Clay-Ser		Mz 160.4'	Inten Alt; St Cas Py; Rk extremely Crumbly, So Native Sulf
188.4	11.3		2.79	55	.01				Mod-St	.01			/			St-Inten Alt; wk Sil'n; Mod Py.
198.6	10.2		2.71	37	.01				/	.01			St-Inten Ser, wk Chlor			As above w/ Tr-Sp CPy. No Tex visible
216.9	18.3		2.74	39	Nil				/				/			St Alt + Sil'n, wk(+) fine Py; Tex is v. fine grained – Pseudo Arkosic (?)
226.7	9.8		2.81	66	.01				/	.01			/			St-Inten Alt; St Sil'n; Mod-St Py well dissim as v. fine grains; Tex As Above
236.4	9.7		2.65	.83	.02				/	.02			/			St-Inten Alt; St Sil'n; Mod Py dissim + in valets; Rk quite brkn; Tr MoS2
250.3	13.9		2.79	42	.02				/	.02			/			As Above; St g.g. last foot
263.7	13.4		2.80	25	.02				/	.02			/			Gouge to 252.5 Then strongly brkn rk; Alt + Min as Above
265.8	2.1			0												No recovery
E.O.H.			Avg Rec's	75%												E.O.H.

Final Depth 159.6
Collar Elevation 2,536.66
Coordinates 26,882.62 N, 35,374.37 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-19
Sheet No. 1 of 1
Date Completed 3-7-67
Logged By N.R.N. + J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration CLAY SER	LIM HEM JAR	Rock Type	Remarks
0.0-8.2	8.2	N.C.	—	—	—	—	—	—	—	—	—	—	—	—		—
18.5	10.3	NX wl	2.51	78	.02			.02					ST Ser Clay	Mod Brn Lim	Ke To 9' Thru Igneous	Igneous
27.6	9.1		2.48	93	.03			.03					/	wk Jar Mod Brn lim Sp Hem wk Jar	Ign (?) Sp (?)	Rk is strongly bleached, Mod Alt & Silicified; Mod Brn lim, Tr Py. IDENTIFICATION of Rk as Igneous is based on a v. small scale elongation of qtz blebs. These dip from vert to Approx 70°
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
37.0	9.4		2.52	84	.03			.03	Tr				/	/	Sulfs. 36.6 on	Mod Alt, Mod Sil'n; some v. fine qtz sheeting. Core 27.6'; Wk-Mod lim, Sp Hem; Sp v. fine well dissem Py w/ Tr C.C.
44.8	7.8		2.50	98	.04			.03	Sp		.01		Mod-ST Ser Qtz & Clay Tr Chlor	Wk JAR Sp Lim		Mod Alt, Mod-ST Sil'n; Wk yellow lim; Wk v. fine well dissem Py w/ Tr C.C. Rk is v. fine grain No Tex V. Visible.
53.8	9.0		2.72	90	.11			.62	Mod(+)		.09		ST Ser, Chlor wk Qtz Sp Clay	—		Mod Alt, Wk Sil'n; Wk Py, Tr C.C. Sp Py; A 1/2" Hydrangle Py-CPy Vn at 53.3' Tr Ro Qz Sulfs increase downward
66.5	12.7		2.70	83	.08			.01	Wk-Mod	.03	.05		ST Ser, Chlor	—		Mod-ST Alt; Wk Py, Tr CPy; Rk Tex Vague May be Sp
74.8	8.3		2.46	91	.02			.02	Tr (?)			Sp Magnet	Tr	—	Post Min AND G 66.5	Dark grey Aphanitic grnd mass w/about 25% fld laths 1/4" + 1/4"; Rk contains about 3% AMYGDOIDAL
83.4	8.6		2.71	92	.06			.01	Wk	.04	.01		ST Ser-Chlor	—	Sp (?) 84.8'	Mod-ST Alt; Sp-Wk Py, Tr CPy + MoSz; Rk quite Brkn to small frags
91.9	8.5		2.72	91	.06			Tr	Wk	.05	.01		/	—		Mod-ST Alt; Wk dissem Py; Vague fine grained tex; Rk brkn
96.6	4.7		2.70	83	.07			Tr	Wk	.06	.01		/	—		As Above
99.6	3.0		2.28	83	.04			.04	Tr				—	—	Post Min Anode 99.6-110.0	Dark grey-black w/ 5% med grained Feld. phenos set in dark matrix containing many v. fine folds + Sp Magnet.
110.0	10.4		2.42	100	.07			.01	Wk(+)	.06			ST-Int Ser.-Chlor	—	Sp 110.0'	ST Alt (Chlor-Ser-Clay); Mod Py, Sp CPy, Tr MoSz; Rk Quite brkn
123.2	13.2		2.63	94	.02				Wk(+)	.02			ST-Int Ser.-Qtz-Chlor	—		Mod-ST Alt, Wk Sil'n; Sp-Wk Py, Tr CPy + MoSz
137.4	14.2		2.37	99	.02			.02					—	—	Amygdoidal Post Min Anode 123.2' to 142.2	Rather than Fold laths this Rk is full of Calcite filled amygdoals from pin point to Pea size.
142.2	4.8		2.47	99	Nil			—	—	—	—	—	—	—		As Above to 142.2'
155.3	13.1		2.58	95	.06				Mod(+)	.06			ST Ser, Mod Chlor	Tr to Yellow Oxide	Sp (?)	Intem Alt; ST Py, Tr-Sp CPy; Rk is extremely brkn + Crumbly to Clay Wk Native Sulfur
159.6	4.5		2.66	73	.04				Wk-Mod	.04			/			ST Alt, Mod Sil'n, Wk-Mod Chlor; Wk Py
BOH			Avg. Rec'y	91%												

Final Depth 139.5
Collar Elevation 2,547.71
Coordinates 27,050.31 N. 35118.96 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-18
Sheet No. 1 of 1
Date Completed 3-3-67
Logged By N.R.N + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER	LIM, Hem JAR	Rock Type	Remarks
0.0-6.0	6.0	N.C.	—	—		—	—	—	—	—	—	—	—	—	—	N.C. Rock Bit
15.9	9.9	NX wl	2.49	46	.09			.09					Mod Ser-Clay	Mod-St Yellow & Brx Lim	~~St~~? Mz ~~Altered~~?	INTEN. ALTD; wk Sil'n; Mod JAR on Frac, wk Hem; wk Brx wall; Tr CuO; No Tex Visible
28.1	12.2		2.30	90	.11			.11					St Ser Clay	wk-Mod JAR-Lim	Mz	
37.5	9.4		2.47	86	.09			.08			.01		Mod-St Qtz. Ser	Mod JAR	~~Tr Altered~~ (?)	INTEN ALT; Mod Sil'n; Mod JAR-LIM; Sp Hem.
41.4	3.9		2.62	71					Sp				—	—		INTEN ALT; Mod Sil'n; Mod JAR; St PY Yellow OXIDE; Sp-wk CuO
47.9	6.5		2.56	70	.129			.04	Sp-wk	Tr	.25		Mod-St Clay, Ser-Qtz	Tr JAR	Sulfs @ 40.8	St-INTEN ALT; Mod Sil'n; Mod JAR-LIM; Mod PY STARTING @ 40.8
55.9	8.0		2.50	87	.11			Tr	Sp-wk	.04	.07		/	/		ALT As Above; Mod Sil'n; Sp JAR-LIM; wk PY, Sp CC; No Tex Visible
64.8	8.9		2.72	82	.21				/	.10	.11		St Ser Clay Qtz	/		ALT + Sil'n As above; wk-Mod v. fine PY well dissim; Tr CC
72.6	7.8		2.72	94	.08				wk	.07	.01	Tr MoS_2	/	/	Mz 62.0-62.5	ALT + Sil'n As above; Min as above; Slight Mz Tex appearing; Preceding probably was Inten Alt'd Mz
80.3	7.7		2.71	92	.13				Sp-wk	.09	.04	/	/			ALT + Sil'n St-Inten; Mod PY, Tr CPY; Tex non existent
89.1	8.8		2.58	70	.20				wk	.15	.05		St Ser, Clay Qtz, wk JAR			ALT + Sil'n as above; wk + S PY; Tr-Sp CPY
97.2	8.1		2.54	96	.17				wk	.16	.01	/	/		Mz 87.3-88.0	St-INTEN ALT + Sil'n; wk PY, Tr Sp CPY + MoS_2; Slight Mz Tex developed St PY 82.7-87.4
105.7	8.5		2.54	71	.19				/	.18	.01	/	/			St ALT + Sil'n; wk-Mod PY, Tr-Sp CPY, Tr MoS_2; RK is gray 72.0-95.4
115.8	10.1		2.56	75	.14				/	.14		/	/			St ALT + Sil'n; Mod v. fine and Bot non uniformly dtd; wk-Mod PY, Tr-Sp CPY
124.6	8.8		2.53	94	.21				/	.21		Tr MoS_2	/			St ALT, Mod-St Sil'n; wk PY, Sp CPY; No Tex v. fine grained + dark gray
133.6	9.0		2.58	78	.15				Mod	.15		/	St Qtz Ser-mod JAR			As Above; Mod and Bot; Sp and K-Spar visible; wk-Mod PY, Tr-Sp CPY, Tr Mo
139.5	5.9		2.54	92	.16				Mod	.16			/			As Above; RK is green-gray v. fine grained No Tex Vis.
																As Above; Mod PY, Tr-Sp CPY, Mod Chlor
E.O.H.			Avg Rec'y	81%												E.O.H

THE RK OF THIS HOLE IS POSSIBLY ALL MZ THAT HAS BEEN INTENSELY ALTERED

Final Depth 654.7
Collar Elevation 2,688.19
Coordinates 28,290.29N, 32,572.49E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-17
Sheet No. 1 of 2
Date Completed 2/28/67
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay SER	Hem Lim JAR	Rock Type	Remarks
0.0-7.0	7.0	N.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17.2	10.2		2.32	89	.05			.05	-	—	—	—	Inten Ser-Clay(?)	ST Hem Sp Lim	Mz ?	Mod-ST Alt; Mod sil'n; Mod Hem, Tr-Sp JAR-Lim
26.3	9.1		2.48	94	.03			.05	-	—	—	—	1	ST Hem Mod Lim		ST Alt; Mod(+) sil'n; Mod Hem, Sp JAR-Lim
35.6	9.3		2.37	76	.08			.08	-	-	—	—	1	Mod Lim		Inten Alt to soft Clay w/remanent tex. preserved; Mod pix Hem pervasive
42.6	7.0		2.25	100+9	.07			.07	—	—	—	—	1	Sp-wk Hem		Inten Alt As Above; ST Hem pervasive, Tr-Sp JAR-Lim; wk Qtz Veining
54.4	11.8		2.46	69	.06			.06	—	-	-	—	1	Mod-ST Hem, Sp Lim		Inten Alt, Mod sil'n; St, Box work gossan clay Mark and/or Qtz; ST Hem; Rk has been strongly shattered + R
64.5	10.1		2.37	80	.67	.05		.05	wk	-	.62	—	1	ST (+) Hem Sp Lim	Soft Ct. Green 54.4	Inten Alt, Mod(+) Py, Mod CC; Tr Lim; Rk brkn + Crumbly
74.2	9.7		2.80	72	.54	.04	37.2'@ 0.67	.04	wk	-	.50	—	1	—	No Tex. Visible May be min'd. Acknow.	Inten Alt; Mod-ST Py, Mod CC as thin coatings, Sulfs well dissimmed
83.5	9.3		2.54	94	.74	.03	0.07	.03	wk(+)		.71	—	1	—		Inten Alt; Mod Py, Thin Coat of CC on all Py; Rk is all Clay Ser. + Qtz
91.6	8.1		2.54	98	.75	.02		.02	wk(+)		.73	—	1	—		Inten Alt; Min As Above; Rk completely altd to soft grn Clay
99.5	7.9		2.55	93	.27				wk(+)	Tr	.27		1	—		Inten Alt; wk-Mod sil'n; wk Py, Sp CC; Rk has been shattered + Recealed
106.9	7.4		2.54	97	.32				wk	.02	.30		1	—		ST-Inten Alt.; wk(+) sil'n; Min as above; alt to Clay, ser, chlor + Qtz
114.4	7.5		2.64	93	.36	.02		.02	ST	.06	.28		1	—	Mz 1132 – 114.4 Sp or Intensely Altd. Mz	ST-Inten Alt; sp-wk sil'n; St Py, Tr-Sp CC
123.3	8.9		2.64	91	.18				Mod	.16	.22		1	—		ST-Inten Alt, sp sil'n, mod v.fine wd dissem. Py, Tr CPy + CC.
132.3	9.2		3.05	78	.53	.01		.01	ST	.30	.22		1	—		Alt As Above, wk sil'n; ST Py, Tr-Sp CPy, Tr CC;
142.2	11.7		2.61	70	.16	.01		.01	Mod-ST	.14	.01		1		Mz 137.9 – 142.6 Mz Tex @ 145.2' Tr Sp @ Acknow	ST-Inten Alt, sp-wk sil'n; Mod Py, Sp CPy, Tr CC.
152.0	7.8		2.63	89	.42	.01		.01	Mod	.35	.06		1			Alt As Above; wk Py, Tr-Sp CPy
161.1	9.1		2.62	93	.12				wk-Mod	.12	Tr				Sp	S-Inten Alt, Sp sil'n; wk-Mod Py; Tr-Sp CPy, Tr CC;
169.7	8.6		2.63	98	.23				Mod	.23	.02				Mz Circa 168.8' Sp circa 169.8	As above, Mod Py, Sp cpy tr CC, Mz - Mod Alt wk-Mod py - -
[illegible]	7.9		2.81	98	.21				V.ST.	.21	.01		1			Intense alteration, Mod-ST ser rk looks arkosic in places, Mod py tr cpy, cc
185.3	7.7		2.88	94	.44	.01			ST	.20	.23		1		Mz circa 183.7	Alt as above, py-St, tr cpy cc? Mz St Alt, Mod-St ser, Mod(-) py
193.8	8.5		2.66	93	.12				wk(+)	.11	.01		1			ST Alt, Mod(-) Py sp cpy
201.5	7.7		2.66	100	.40	.01			Mod	.20	.19		1		sp circa 194.9'	St Alt, Mod(-) py sp-wk cpy sp cc in Sp Mz as above
209.7	8.2		2.68	96	.27				Mod	.20	.07		1		Mz @ 208.7	As above, sp-wk cc
217.5	7.8		2.67	97	.16				wk-Mod	.15	.01		St Ser-Clay			Mod-St Alt, wk-Mod(+) py tr cpy sp + cc
225.5	8.0		2.58	98	.12				wk(+)	.12	—		1			Mod Alt wk-Mod(+) py, tr cpy, cc
224.3	8.8		2.59	99	.12				wk(+)	.10	.02		1			As above
242.6	8.3		2.58	100+4	.14				wk(+)	.08	.06		Inten Qtz Ser, some Clay		Sp @ 236.0'	Mz as above, Sp - Mod-St Alt, Sil'n, Mod(-) py tr cpy, cc
251.4	8.8		2.66	96	.14				wk	.10	.04		1			As above
259.3	7.9		2.69	95	.11				wk(+)	.05	.06		1			As above, No cc tr? cpy
268.5	9.2		2.67	91	.20				wk(+)	.12	.08		1		1' Mz dike circa 259.3	St Alt, Sil'n, Mod(-) py tr cpy, Mo?
276.6	8.1		2.52	91	.18				wk	.12	.06		St Clay Mod Ser			ST Alt; Mod sil'n; wk(+) Py, Tr CPy; Rk Quite qzy 269.9 - 275.3'
287.6	11.0		2.70	75	.10				wk	.10	Tr		ST Ser. Mod Qtz Mod Clay		Mz Circa 281.9'	ST Alt; Mod-ST sil'n, wk(+) Qtz veining; wk-Mod Py, Sp CPy
296.9	9.3		2.61	79	.12				wk(+)	.10	.02		Mod-St Ser-Clay			Mod-St Alt; wk sil'n; Mod chlor, Mod Py, Sp CPy
307.8	10.9		2.62	85	.18				Mod	.18	Tr		Mod Ser-Clay			Mod-ST Alt; Mod sil'n; Mod-St chlor; Mod(+) Py, Sp CPy
316.3	8.5		2.57	88	.07				wk	.06	.01		wk-Mod Ser-Clay + Qtz			Mod Alt, Mod sil'n; wk Py, Tr CPy; Some and K-Spar
325.8	9.5		2.65	83	.09				wk(+)	.09	Tr					Mod Alt, Mod Sil'n - wk Qtz Veining; wk(+) Py assoc w/Qtz. Tr-Sp CPy.
333.1	7.3		2.67	100+7	.17				wk	.13	.02		Mod(+) Ser clay	Mod Sil'n		Mod-ST Alt; Mod sil'n; wk-Mod Py; Tex slightly finer grained
342.0	8.9		2.62	95	.25				wk	.15	.10		St Ser -			
351.2																

Final Depth 654.7
Collar Elevation 2688.19
Coordinates 28,290.29 N, 32,572.49E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-17
Sheet No. 2 of 2
Date Completed 2/28/67
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	2nd K-spar	Rock Type	Remarks
369.3	8.1		2.69	99	.29				Mod	.17	.12		ST-INTEN Clay Ser			ST-Inten Alt, ST Sil'n; ST Py, Sp(+) CPy, Tr CC; RK gnite brkn
367.7	8.4		2.52	99	.28				wk-Mod	.15	.13		/			ST-Inten Alt, wk-mod sil'n; wk Py, Tr-sp CPy; RK gnite brkn; sp 2nd K-S
376.0	8.3		2.57	92	.14				/	.13	.01	Tr ZnS	/			ST Alt; WK(+) Sil'n; wk(+) Py, Tr-sp CPy; sp 2nd K-spar
384.3	8.3		2.66	98	.32				Mod	.21	.11	/	/	wk-mod sil'n		Mod-ST Alt; wk(+) Sil'n; wk(+) Py, Tr-sp CPy; sp 2nd K-spar
392.3	8.0		2.57	96	.15				/	.14	.01	/	/	/		Alt As Above; Sp-wk sil'n; wk 2nd K-spar floding + zl. development; sp-wk py
401.3	9.0		2.57	96	.14				wk	.14	Tr		ST-Inten Clay; Mod Ser + Dsz			ST-INTEN. ALT; Mod v.f.ne dissim Py; RK crumbles in hand
409.0	7.7		2.65	99	.07				Mod	.07	Tr	Tr ZnS Tr PbS	Sp Clay-Ser			Mod 2nd K-spar, wk ALBITIZATION give rk a fresh appearance. Biot alt to Chlor; wk v.f.ne well dissim Py, Tr CPy, Tr-sp MoS2
417.6	8.6		2.60	99	.04				wk(+)	.04	Tr	Tr ZnS	/			2nd K-spar becomes ST towards end of run; Plagios alld to grn. Clay, Sp 2nd ALBITE sp well dissim v. fine Py, Tr CPy + MoS2
426.6	9.0		2.61	98	.03				Sp-wk	.03	Tr		Sp-wk Clay	Mod K-spar sp Grnd Mass		ST 2nd K-spar, Tr 2nd ALBITE; Biot Alt to Chlor; sp-wk Py assoc. w/ Chlor.
435.0	8.4		2.62	98	.05				wk(+)	.05			wk(+) Clay	/		Mod 2nd K-spar, sp 2nd (?) ALBITE; Biot Cont. Approx 10% is Alt to Chlor; wk Py, Sp MoS2 minute diamond shaped xls alld to clay are equally distributed.
444.3	9.3		2.64	89	.03				Mod	.03		wk ZnS	Mod Clay wk Ser			Mod 2nd K-spar, Tr 2nd (?) ALBITE; Biot As Above; Original Plagio Felds are strongly altered to a green clay. From 444.3' to 444.3 the rock becomes strongly silicified and sericitized with mod Py + sp CPy assoc. Prob. min controlled.
—	—				—	—	—	—	—	—	—	—	—	—	—	
452.7	8.4		2.57	95	.15				wk Mod	.15	—	wk(+) Zn	ST Ser-Clay			Mod Qtz-Ser Alt; K-Spar Not obvious Appears to have been altered; wk(+) Py sp CPy, Tr CC, Tr MoS2; RK is sheared + ppy from 446.0-449'
459.5	68		2.67	94	.14				Mod	.14		wk(+) Zn ZN Mo	Mod-ST Clay-Ser			Mod Qtz-Ser Alt; wk Py, Tr-sp CPy + C.C., Tr MoS2; amorphous Yellow stains assoc. w/ high sulfide concentrations may be dimental Sulfur.
467.5	8.0		2.65	100+2	.09				wk	.09		.30 .0004	Intn a ser-clay			Mod-ST to Inten Alt to Ser-Clay; Mod Alt of Biot to Chlor + Ser; Mod Py, Sp CPy, Tr C. sp MoS2
476.0	8.5		2.63	95	.08				wk-mod	.08		.40 .0003	ST Ser-Clay			Mod-ST Alt to Ser + some Clay; Mod Py, Sp CPy, Sp MoS2
482.3	6.3		2.61	100+7	.10				Mod	.10		.30 .0003	/			ST Alt to Ser, Qtz + clay; Mod Py, Sp CPy, Sp MoS2, Sp ZnS. Apparently some of what has been called C.C. is act. ZnS.
490.7	8.4		2.56	93	.13				wk-mod	.13		.28 .0007	Mod-ST Clay Ser			Mod-ST Alt; Mod Py, Sp CPy, Sp ZnS; Sp MoS2; Tr NATIVE Sulf (?)
499.1	8.4		2.64	94	.13				/	.13		.23 .0005	/			Mod Alt; wk-Mod Py, Tr-sp CPy, ZnS + MoS2; Tr Native Sulf
507.7	8.6		2.58	100	.11				/	.11		.0004	/			Mod Alt; WK(+) Py, Tr-sp CPy, Tr CC; Tr sp MoS2; Tr NATIVE Sulf
516.3	8.6		2.17	100+12	.11				Mod	.11		.0005	/			Mod Alt; wk-Mod Py; Tr-sp CPy, Tr C.C., sp Py; Tr-sp MoS2; Rk is locally salt + Crumbly
525.4	9.1		2.58	84	.09				/	.09		.0005	/			wk-mod alt; wk Sil'n; wk Py, Tr CPy, Tr MoS2
534.1	8.7		2.58	100	.17				wk-Mod	.17		wk Zn .0010	Mod Ser-Clay			Mod Alt, wk Sil'n; wk Py, Tr CPy, Tr-sp MoS2; RK Developing a cataclastic tex
542.9	8.8		2.57	97	.30				Mod	.30		.18 .0007	/			Mod Alt; wk Sil'n; wk Py, Sp CPy, Tr-sp Sph + MoS2
552.8	9.9		2.54	99	.20				Mod	.20		.20 .0003	ST Ser-Clay			Mod-ST Alt; wk Sil'n; wk-mod Py, Tr-sp Sph, Sp CPy, Tr-Sp MoS2
561.5	8.7		2.60	95	.17				wk	.17		sp sph Tr MoS2	Mod Clay-Ser			Mod-ST Alt; wk(+) Sil'n; wk-Mod Py; Tr-sp CPy, Tr MoS2
570.4	8.4		2.58	90	.18				Mod	.18		sp sph	ST Ser-Clay			As Above; Tr-sp amts of a metallic gray min assoc. w/ CPy. May not be sph
579.1	8.7		2.55	98	.18				Mod	.10		/	/			Mod-ST Alt, Mod sil'n; RK has a Cataclastic Tex; wk-mod Py, Tr CPy, Tr sp Sph
588.1	9.0		2.59	95	.33				Mod to wk-Mod	.33		wk sph	Mod-ST Ser-Clay	wk-Mod 2nd K-spar		As Above; Sp 2nd K-spar present
596.6	8.5		2.57	98	.13				wk-Mod	.13			Mod Clay Ser	Sp 2nd K-spar		WK Alt; sp-wk sil'n; Mod-ST K-spar in grnd. mass; RK is composed of 20% non equigranular tetd euhedral to fragmented, set in an aphanetic high potash grnd mass. Sp-wk Py, Tr CPy + Sp R.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
606.5	9.9		2.67	59	.49	Nil			WK	.49(?)			Sp Clay-Ser	Mod CHLOR-K-Spar		As above to 603' Then RK becomes mod-ST silicied and Py mod, CPy wk, sph Tr.
615.7	9.2		2.71	88	.28				wk	.28		sp ZnS	Mod Clay-Ser-Chlor			WK-Mod Alt, Mod-ST Sil'n; wk Py, Sp CPy, Tr Sph
624.7	9.0		2.68	85	.42	Nil			WK(+)	.42		/	Mod Clay-Chlor			Mod Alt, ST Sil'n; Mod Py, Sp(+) CPy, Tr Sph + MoS2; wk Cataclastic Tex
632.9	8.2		2.64	97	.21				wk	.21			Mod Ser Clay-Chlor	Mod 2nd K-spar		WK-Mod Alt; Sil'n decreases downward; Min INTENSITY Corresponds to Sil'n
641.4	8.5		2.62	100+3	.28				WK(+)	.28		sp-wk Sph	/	wk 2nd K-Spar		Mod-ST Alt; Mod + Sil'n; wk-mod Py, Sp CPy, Tr Sph + MoS2; wk Cataclastic tex
650.6	9.2		2.60	84	.14				wk	.14		Tr sph	wk Clay Ser	Mod 2nd K-Spar		Mod Alt, Mod sil'n + veining; wk-Mod Py, Tr-sp CPy, Tr Sph + MoS2; Mod-ST 2nd K-Spar
654.7	4.1		2.61	82	.11				wk	.11		/	/	/		Mod Alt, sp Sil'n; Mod 2nd K-spar in Grnd Mass; Plag Alt to Grn Clay; Sp Py, Tr CPy
EOH																

Final Depth 191.0
Collar Elevation 2,644.95
Coordinates 28,128.90 N, 33,216.88 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-16
Sheet No. 1 of 1
Date Completed 2/13/67
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	HEM JAR LIM	Rock Type	Remarks
0.0 - 7.0	7.0	N.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	
16.5	9.5	NXWL	2.44	95	.07			.07	-	-	-	-	Mod-ST clay-ser	wk lim, hem	Mz	Mod-ST Alt, Mod sil'n. This Rx is composed of variously sized felds in a silicon matrix. The peripheries show resorption + corrosion; Mod Hem, wk Lim.
25.3	8.8		2.48	95	.03			.03	—	—		—	1	wk lim, jar Mod hem		Mod Alt, wk-Mod sil'n, tr 2nd k-spar, Mod hem stain on argillized felds wk lim
32.5	7.2		2.37	90	.03			.03					1	wk lim, sp jar Mod hem		As above
41.2	8.7		2.41	96	.03			.02	tr	?	.01	—	1	1		As above, some increase in jar - lim + wk alun. tr
49.9	8.7		2.51	96	.01			.01	—	—	—	—	1	1 sl hem		As above, Mod Sil'n
58.7	8.8		2.51	96	.03			.03		—	—	—	1	wk lim, jar wk-Mod hem		As above, tr grn CuOx on fracs toward end run
61.8	3.1		2.51	95	.05			.03	tr	? Nil	.02		1	wk lim, sp jar, wk-Mod hem		As above, no vis CuOx
67.1	5.3		2.58	95	.18			—	wk	.03	.15		Mod clay ser	— wk lim	Suls @ 66.8	Wk-Mod Alt, w/most bio bleached + Alt to hydrosericite, wk-Mod py, wk cc on fracs + dis
74.7	7.6		2.60	96	.33	.01		.01	1	.03	.30		1			As above, tr Cpy, tr grn CuOx. wk lim on some fracs
84.4	9.7		2.52	96	.15	.02		.02 grn CuOx	—		.15? No vis sulf		1	Mod lim	Capping @ 74.7' Suls @ 84.4	Wk-Mod Alt, Mod lim, sp hem
93.9	9.5		2.52	92	.94	.02		.02	sp-wk	.02	.90		1	sp-wk lim		Wk-Mod Alt, wk-Mod py, cc, tr Cpy, sp lim on fracs toward end run
101.6	7.7		2.52	98	.13	Nil		Nil	1	tr?	.13		1	sp lim		Mod Alt, wk-Mod(+) py sp cc tr Cpy sp lim @ list of run
109.0	7.4		2.62	84	.08				wk	.01	.07		wk-Mod clay ser wk chlor	—		Mod Alt, wk-Mod Py, Tr-Sp CC., Tr Cpy, Sp chlor. Tex. indistinct
115.3	6.3		2.62	100 +3	.21				1	.10	.11		1			Mod Alt, wk-Mod Py, Tr-Sp Cpy + CC " "
122.7	7.4		2.62	92	.08				wk-Mod	.08	tr		Sp clay-ser-chlor			St Alt. + Sil'n, Mod Py, Tr Cpy, Tr CC, Tr MoS2 " "
133.0	10.3		2.67	64	.16				1	.16	tr?		Sp clay ser wk chlor	—	St (?) 126.3' - 131.4 Mz	Mod-ST Alt, Mod v. fine Py, Tr. Cpy, Tr MoS2; ST Chlor after Biot.
142.3	9.3		2.59	93	.25				1	.05	.20		wk clay - ser	—		Mod Alt, wk(+) Py, sp Cpy, Sp CC; Good Mz Tex; PLAG. Feld Alt'd to Gra. Clay
150.5	8.2		2.58	96	.54	.01		.01	1	.05	.48		wk-Mod clay-ser	—		Mod Alt, wk-Mod Py, Sp Cpy, Sp CC; Increase in both Cpy + CC.
159.9	9.4		2.61	88	.13				1	.10	.03?	3% Sto 2nd K-spar	wk clay ser			Mod Alt, Sp Qtz Vning, wk Py, Tr Cpy + CC.
167.2	7.3		2.57	87	.11				Mod	.08	.03	"	wk Clay			wk Alt, sp sil'n; Mod 2nd K-spar; Sp - wk Py, sp Cpy, Tr-sp CC.
176.7	9.5		2.53	73	.15				wk-Mod	.11	.04	"	wk clay Tr CuOx			wk Alt; wk sil'n; sp 2nd K-spar; Sp-wk Py, Tr Cpy; Biot Alt'd to Chlor
183.9	7.2		2.57	100	.22				Mod	.20	.02	sp 2nd K-spar	wk-Mod clay wk Talc-chlor			Wk-Mod Alt, Biot Alt'd to Chlor + Hydromica; Sed tuff, clay; sp 2nd K-spar, Mod Py, Tr Cpy
191.0	7.1		2.59	90	.14				wk	.10	.04		1			Mod Alt, wk(+) sil'n, sp 2nd K-spar, Sp-wk Py, Tr Cpy, Tr-sp MoS2
EOH			Avg rec'y 91%													E.O.H.

Final Depth 215.7
Collar Elevation 2,689.50'
Coordinates 28,104.39N, 33,596.11E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-15
Sheet No. 1
Date Completed 2/8/67
Logged By NRN + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY, SER CHLR	HEM, JAR LIM, LLM	Rock Type	Remarks
0.0-5.0	5.0	STBL	—	—	—	—	—	—	—	—	—	—			Mz	NC Starting Bit
15.0	10.0	NXW'	2.60	94	.03			.03	—	—	—		Mod clay tr Ser	Mod hem wk-Mod lim tr Jar?	Mz	ST-Intsn Alt+Sil'n, grad. mass mostly silica w/some ser.. wk ut. Red Hem Sp lim - Jar
25.1	10.1		2.55	94	.03			.03					wk-Mod clay	Mod hem lim	Sp?	ST-Intsn Alt, Sil'n, Tex is fine grained porphyritic, wk-Mod Hem, Mod Jar. Rk has be[illegible] shattered and reh[illegible]
34.9	9.8		2.40	95	.01			.01					ST ser	tr-Hem wk lim Mod Jar	Mz Tex 31.5'-32.5'	Alt. ST, Sil'n Mod-ST; wk Jar, Sc Box work in 60° vn @ 31.3'. Mod Hem 32A trend of [illegible]
43.7	8.8		2.41	93	.02			.02					ST ser wk-Mod clay	wk hem Jar, lim	Mz. 36.6' on	ST Alt + Mod-ST Sil'n; Mod Hem Mod Jar, wk Alunite. Angular fold are cut in a v. [illegible] grained silica-sericite grad [illegible]
52.9	9.2		2.44	92	.02			.02					/	ST Hem Mod Jar	Mz	Alt + Sil'n as above; wk-Mod Jar on fracs ST Hema; Rk is strongly shattered, fracs high a[illegible]
63.1	10.2		2.55	87	.05			.05					ST STR-Ser Sp clay	Mod Jar		As above Rk shattered + rehealed by silica? + lim?, wk-Mod lim on fracs Sp-wk
73.6	10.5		2.46	85	.04			.04					/	Tr Hem Sp. Jar		As above, in shattered areas Most text is pave + Rk May be Sp or A[illegible]
82.0	8.4		2.28	100+5	.04			.04					/	Tr-Sp Hem-Lim Mod Jar	Sp? circa 74'	ST Alt+Sil'n, Rk broken as above, st hem 84.3' to 85.8' Sp lim
89.5	7.5		2.30	100+3	.03			.03					ST clay-Ser	wk Jar Sp Hem	Sulls ± 89.5	Mod-ST Alt wk(+) Silin, wk-Mod py sp-wk cc as thin coatings on [illegible]
101.0	11.5		2.47	63	.19			.03	Sp-wk		.16		/	Tr Hem-Jar		As Above Rk is strongly siliceous to 108.2 and contains only sp. sulfs + Tr-Sp Ja[illegible] @ 108.2 Rk becomes strongly altered and contains Mod cc on py
110.1	9.1		2.62	82	.15			tr	wk		.15		ST clay Sp-Ser	wk-Mod Jar		Intensely Alt'd; Mod cc. on Mod-ST py; Rk is quite brkn
119.5	9.4		2.22	81	.41	.03		.03	wk-Mod		.38		/	—		As Above. Rk is completely altered to a soft greasy clay min [illegible]
126.3	6.8		2.30	96	.31	.01	24.4' @ 0.40 / 0.03	.01	/		.30		/			Alt As Above; soft well dissim + at times quite fine. Mod(+) cc. on py
134.5	8.2		2.58	89	.46	.04		.04	/		.42		ST clay ser	—		Mod Alt, sp Sil'n; wk-Mod py, Sp-wk cc. Alt + min. much decreased intense Alt to a v. soft clay to 147.6 Then rk is wk-mod siliceous Mod py w/ sp-wk cc.
143.8	9.3		2.61	84	.18			tr	/	.03?	.15		/	—		ST Alt, wk sil'n, Mod py, Sp cc. vague tex. similar to Mz; Rk broken
151.9	8.1		2.61	87	.22			—	/	.03?	.19		Mod clay ser	—		ST. Alt, Mod py, Tr-Sp cc; Rk is strongly brkn; Tr MoS2
160.1	8.2		2.61	84	.05				/	.01	.04		wk-Mod clay-Ser	—		Mod Alt, wk py, Tr cc; Good Sp Tex. Rk is solid to 171.8 Then crumbly a Gouge [illegible]
168.9	8.8		2.67	76	.15				wk	.06	.09		Mod clay-Ser			Mod-ST Alt, wk-Mod sil'n; wk-mod py Tr cpy
179.6	10.7		2.62	66	.06				wk(+)	.03	.03		ST clay Ser-Talc			wk-Mod Alt, wk sil'n, Mod py, Tr cpy + cc, Tr MoS2
189.0	9.4		2.59	69	.05				/	.04	.01		Mod-ST clay Ser-Talc			Mod Alt, sp sil'n; mod py, Tr-Sp cpy, Sp(+) MoS2, Tr cc.
198.0	9.0		2.59	70	.06				/	.05	.01		/			Mod-ST Alt, Mod sil'n; Mod py, Tr cpy, MoS2
208.0	10.0		2.72	55	.08				/	.07	.01		/			E.O.H.
215.7	7.7		2.71	52	.07				/	.07	Tr		/			
EOH			Avg Rec'y 82%													

Final Depth 202.7
Collar Elevation 2615.43
Coordinates 27,769.03 N. 34,126.72
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-14
Sheet No. 1 of 1
Date Completed 2-1-67
Logged By JAB & NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay Ser	hem, lim	Rock Type	Remarks
0.0-8.0	8.0	N.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	Rock Bit
21.5	13.5	NXWL	2.33	66	.09			.09					Inten Ser-Clay	Sp lim Tr lim	Sp	ST Alt, Sp Silin along unkts, sp lim, wk hem, sp-wk turq
31.7	10.2		2.28	89	.11			.11					/	wk-Mod lim		ST Alt, patchy St silin, wk lim, tr-sp hem, tr grn CuOx
39.9	8.2		2.50	93	.10			.10					/	/		ST Alt, silin wk lim, sp hem, wk-Mod turq on fracs.
43.5	3.6		2.40	96	.05			.05					St-Inten Clay Ser	Mod dkR-lim	Patchy suls 43'	Mod Alt, wk-Mod silin sp lim, hem tr py, cc, No vis CuOx
48.9	5.4		2.54	95	.16			.13	Tr		.03		St Clay-Ser	/		Rk is blk except for patchy bleaching. wk-Mod Alt. wk py, cc, diss + along unkts, patchy leaching w/ lim
55.0	6.1		2.46	98	.37			.03	Sp-wk		.34		/	Sp-wk JAR-lim	Suls @ 48.8	Wk-Mod Alt, Rk is blk, wk-Mod py, cc, diss + along unkts sp lim on unkts
56.2	1.2		2.46	94	.19			.05	Sp		.14		/	Mod St lim of JAR Tr hem		Mod Alt, Mixed suls + cap. wk hem sp lim, sp-wk py + cc tr grn CuOx
61.9	5.7		2.53	95	.29			.03	wk		.26		/	wk lim-JAR		Wk-Mod Alt. Rk is blk. sp wk py wk cc tr grn CuOx sp lim on fracs
64.3	2.4		2.57	92	.10			.05	Tr-sp		.05		/	Mod lim JAR	Iron bed cap @ 61.9 Leached to 66.7 then faults.	Mod Alt, Mod Silin, tr suls Mod lim sp-wk hem on fracs, rk brecciated + healed
73.4	9.1		2.53	93	.16			.03	Sp-wk	.02	.11		/	Sp-wk JAR-lim		ST Alt, Mod Sil'n, Sp-wk Py, Tr-sp cc, Tr-sp CuOx, Sp bra lim, sp JAR rk brecciated + healed
82.5	9.1		2.48	88	.29		24.8 @ 0.37 0.01	.02	wk	.10	.17		/	/		ST Alt, Mod Sil'n, wk fine gr. Py, sp cc, Tr CuOx; sp bra lim to 80.3; rk quite br
90.6	8.1		2.56	89	.36	.01		.01	wk	.08	.26		/	—		Mod-St Alt, Mod Sil'n, wk(+) py, sp-wk cc, Tr cpy; Rk is quite brkn
98.2	7.6		2.59	83	.53	.01		.01	wk	.08	.44		/	—		Mod-St Alt, Mod Sil'n, wk(+) py, sp cc, Tr cpy, Rk is quite brkn
107.0	8.8		2.53	83	.11			—	wk(+)	.03	.08		/	—		St Alt, Mod Sil'n, wk(+) py, Tr cpy + cc. py is fine grained + well dissim. Rk quite b
108.0	1.0		2.45	83	.05			-	wk(+)	.02	.03		/	—	Prob. Mix. Andes 107.2-108.0'	Mod-St Alt, Mod v.f. py, Tr cpy. Rk is quite solid. small latin-lime veins v.c
115.5	7.5		2.55	91	.08			-	wk	.02	.06		/		Sp	St Alt, Mod Sil'n, wk(+) py, Tr-sp cpy, Tr MoS2, wk chlor. Assoc w/ sulfs.
124.5	9.0		2.57	74	.09			—	wk	.04	.05		St Clay Talc Ser Chlor	—		Mod-St Alt, wk Sil'n, wk(+) py, Tr cpy. Rk v. fine Chlo + Bio altering to Hydromica. Rk appears to have been fine grained.
132.0	7.5		2.61	81	.08			-	wk	.04	.04		/			Mod Alt, wk Sil'n, wk(+) py, Tr cpy, Tr MoS2. As Above
140.9	8.9		2.67	62	.17			-	wk	.04	.13		/	-		As Above. This rock may be a fine grained cretaceous arkose.
147.6	6.7		2.62	82	.14			-	wk(+)	.03	.11		/	—		Mod Alt, Min As Above, Au visible fields are rounded and angular, not elongated or cubic crystal.
155.9	8.3		2.58	93	.20			—	wk-Mod	.03	.17		/	—		Mod-St Alt, wk(+) Sil'n, wk(+) py, Tr-sp cpy; sp chlor. Rk is quite Brkn.
161.2	5.3		2.58	94	.21			—	Mod	.17	.04		/	—	Sp (?) Pro Min Andes	As Above. Sulfs are fine grained + well dissim.
170.8	9.6		2.57	70	.13			—	wk-Mod	.09	.04		St Clay-Ser-Talc Sp Chlor	-		Mod Alt; wk py, Tr cpy + cc. Original rk had small felds in a dense fine grained ground mass. Rk currently
180.0	9.2		2.56	63	.25			-	Mod	.07	.18		/			Mod Alt; wk(+) py, sp cpy + cc, Mod Biot-chlor. Rk appears to be an Andes.
188.5	8.5		2.66	62	.19			—	wk-Mod	.14	.05		/			Mod Alt; sp qtz veining + Sil'n, wk(+) py v. fine; Tr-sp cpy, Tr cc; Tr As Above.
198.1	9.6		2.66	70	.12			—	wk	.10	.02		St Talc Sp Chlor			Mod Alt; v. fine grained biot grad mass w/ num. small felds xls., wk(+) py, Tr-sp cpy
202.7	4.6		2.65	79	.13				wk	.10	.03		/			As Above; sp cpy, Tr-sp cc.
E.O.H.		Ave. Rec =		81												E.O.H.

Final Depth 222.2
Collar Elevation 2,560.87'
Coordinates 27,341.79 N, 34,568.87 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-13
Sheet No. 1 of 1
Date Completed 2-26-67
Logged By N.R.N. + J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
0.0-5.2	5.2	Rc Bit.	—													
18.1	12.9	NX wl	2.31	51	.10			.10	–	–	–	–	St Clay -Ser	St Hem wk JAR-Lim	Sp (?)	Mod-St Alt., Quite weathered; Mod Hem.; Tex possibly Sp.; Tr CuOx
27.0	8.9		2.36	93	.08			.08	–	–	–	–	/	Mod Hem sp JAR-Lim Tr Hem mod JAR-Lim		St Alt; Rk is weathered + crumbly to 23.7 then Brkn + Siliceous; Mod Hem, Tr CuOx
38.3	11.3		2.50	53	.08			.08	–	–	–	–	/			St Alt, Mod Sil'n; Sp Hem, Tr JAR-Lim, Tr Py + CC, Rk is brkn + Glsy
47.9	9.6		2.65	84	.39			.05	wk-Mod	Tr	.34	–	Mod-St clay-Ser	wk (+) orange Lim.	Sulf Ct. 38'	Mod-St Alt., Rk is quite brkn, wk sil'n, wk-Mod Py + wk CC; Tex indistinct; Sp cra Lim.
57.0	9.1		2.68	75	.33			.03	wk	Tr	.30	–	Mod-St grn clay sp chlor	—		St Alt, Mod Sil'n, wk py, Mod cc on fracs, Rk is stly fract & core very brn. Sp. Gyp
67.3	10.3		2.52	77	.37			.02	sp-wk	Tr	.35	–	Mod-St clay	Tr Lim		Alt as above, wk py, wk cc, tr MoS2. Rk fract as above
75.2	7.9		2.63	92	.23			Tr	wk	Tr	.23	–	Mod-St Clay, sp Ser	/	Mz @ 69.5-73.4' Sp	Sp as above. Mz - wk-Mod Alt. - sp-wk py in wk-Mod wk cc on fracs
84.2	9.0		2.64	92	.19			Tr	wk-Mod	.07	.12	–	Mod Clay sp Ser, chlor	—		Mod-St Alt, wk Sil'n, wk py, sp cc, Tr MoS2, Rk + Core Ver broken
91.2	7.0		2.74	97	.19			–	wk	.13	.06	–	Mod-St Talc-clay sp-wk chlor	—		As above,
99.9	8.7		2.70	94	.10			–	wk(+)	.09	.01	–	/	–		Alt as above, wk-Mod py, tr cc, tr MoS2
107.8	7.9		2.83	85	.16			–	wk-Mod	.14	.07	–	/	–		Mod-St Alt, wk Sil'n, wk(+) Py, Tr cc, Tr CPy, Tr MoS2
116.9	9.1		2.62	77	.24			–	wk	.10	.14	–	/	—		Mod-St Alt, wk Sil'n, wk Py, Tr-Sp CPy, Tr cc, Tr MoS2, Rk is quite brkn + crumbly + 113 where there is a 60° fit s.
125.4	8.5		2.64	82	.16			–	sp-wk	.10	.06	–	/	–		Mod-St Alt, wk(+) Sil'n, wk Py, Tr CPy, Tr MoS2
132.8	7.4		2.68	100	.12			–	/	.10	.07	–	/	–		As Above
143.0	10.2		2.68	67	.14			–	/	.10	.04	–	/	–		Mod-St Alt, wk(+) Sil'n, wk Py, Tr CPy, Tr MoS2,
150.9	7.9		2.67	87	.19			–	/	.10	.09	–	/	–		Alt + Sil'n as above, wk Py, Sp CPy, Tr cc, Tr MoS2
157.8	6.9		2.72	87	.21			–	wk-Mod	.19	.07	–	Mod-St clay, Talc wk chlor	—	Mz @ 150.9'-151.3' Sp(?)	As Above
165.6	7.8		2.61	99	.23			–	wk	.18	.05	–	Mod-St Clay, Sp chlor, Talc	–	Mz @ 157.8	Mod-St Alt, Mod Sil'n, wk(+) Qtz veining, Sp-wk Py, Sp CPy, Tr MoS2
174.2	8.6		2.59	83	.19			–	/	.17	.07	–	Mod-St clay	–		Mod-St. Alt, Mod Sil'n & grnd Mass, Sp-wk Py, Sp CPy, Tr MoS2
182.7	8.5		2.62	89	.22			–	wk(+)	.20	.02	–	Mod Clay Tr Ser	–		Mod Alt, Mod Sil'n; Sp Py, Sp(-) CPy, Tr MoS2
189.2	6.5		2.62	90	.29			–	wk	.27	.02	–	/	–		wk-Mod Alt; Mod Sil'n + Qtz. veining; Sp-wk Py, Sp CPy Adsk. w/ Qtz veins
198.6	9.4		2.51	79	.20			–	wk	.20	Tr	–	Mod Clay Tr Ser.	–		As Above
206.5	7.9		2.52	95	.20			–	sp-wk	.20	Tr.	–	Mod Clay -Ser	—		St. Alt, Mod(+) Sil'n; Sp Py, Tr-Sp CPy. No Tex visible
214.6	8.1		2.52	98	.22			–	wk	.22	Tr	–	Mod Clay sp Ser	—		Mod-St Alt, Mod Sil'n, Sp(+) Py, Tr-Sp CPy, Tr MoS2
222.2	7.6		2.52	95	.18			–	sp-wk	.18	—	—	/	-		Mod-St Alt, Mod-St Sil'n + Qtz veining, sp-wk Py, Tr-Sp CPy, Tr MoS2
EOH		Ave.	Rec. =	83												E.O.H.

Final Depth 210.4
Collar Elevation 2,540.39'
Coordinates 26,866.31 N 35,740.58 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-12
Sheet No. 1
Date Completed 1-19-69
Logged By N.R.N. + J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser Chlor	Lim Hem Jar	Rock Type	Remarks
0.0-6.0	6.0	Rk.Bit	—													ROCK BIT
16.2	10.2	NXWL	2.49	70	.14			.14	—	—	—	—	St Clay Ser	Mod Jar-Lim, Sp Hem	Mz	St Alt, Mod Qtz. vaing; Mod lim; sp CuO. Tex. Poor.
24.5	8.3		2.46	91	.08			.08	-	-	-	-	/	Mod-St Jar, Lim Wk Hem		St Alt, St Qtz. vaing 1/2" wide @ dip @ 75°; Mod-St Hem, Sp Jar-Lim. Good Tex
33.8	9.3		2.41	76	.10			.10	—	—	-	-	Mod Clay Ser	Mod L.T. Brn Lim		St Alt, wk(+) sil'n (vaing); Mod Lim-Jar; Sp CuOx, Poor Tex
42.4	8.6		2.45	74	.23			.23	-	—	—	—	Mod Clay Ser, wk Chlor	Mod-St L.T. Brn Lim	Sp circa 38.0'	St Alt, wk Qtz. vaing; Mod-St Lim; Tr CuOx. Rk is quite soil like
51.5	9.1		2.47	75	.15			.14	Tr	-	.01	-	Mod-St Clay-Chlor	St. L.T. Brn L.im	Sp (?) Mz(?)	except locally where solid and good tex is developed. Mod-St Alt.; Mod Hem-Lim; Tr CuOx; No Tex distinguishable
61.9	10.4		2.45	71	.50	.11		.11	mod	.02	.37	—	Mod-St Clay-Ser wk Chlor	wk Lim	Suit (4.6) 57.8' Mz	St Alt, wk Hem-Lim, Sp wk py w/CC. Coating. Fold of Mz Alt'd to green clay.
69.9	8.0		2.71	92	1.38	.06		.05	1	.02	1.31	—	St Clay, Ser, Mod Chlor	/	Mz	St Alt, wk-mod orange-brown lim.; Mod py, Tam CC. Coatings. wk Cpy
78.2	8.3		2.57	84	1.27	.06	51.9 @ 0.84 / 0.05	.05	1	.02	1.20	-	/	wk-Mod Orange Lim		As Above; Suit are well dissim w/ occasional seams. Rk is quite gouey between 70.5 and 74.0' and 75.8 and 78.2
86.4	8.2		2.65	92	1.01	.04		.04	1	.01	.96		St Montmor Clay-Ser Ser	Mod to wk Orange Lim		St Alt, mod py, wk CC coatings except @ 80.2-80.7 where CC is st. wk orange-brown lim on frans. Folds still alt'd. to green clay
94.9	8.5		2.72	86	.67	.03		.03	St	.01	.66		/	Sp Lim		Mod-St Alt, Mod Py, Sp CC as Coatings; sp lim.
103.4	8.5		2.66	77	.35	.01		.01	mod	.01	.33		/	Tr Lim		Mod Alt, wk silica in grd mass; Mod-St Py, Sp C.C., Tr-Sp Lim
113.2	9.8		2.59	83	.12	-		Tr	1	.01	.11		wk Clay Ser	—		Mod Alt; silica as above; wk-mod Py; Tr CC. Tr Lim
122.8	9.6		2.61	91	.10	-		Tr	Mod-St	.01	.09		/	Tr		As Above
130.8	8.0		2.62	88	.07			-	1	.07	Tr		/	—		WK-Mod Alt, wk silica, Mod(+) py No vis cpy or cc
138.1	7.3		2.67	87	.13			—	wk	.13	—		/	—		WK(+) Alt, wk-Mod py, tr cpy No vis cc
145.9	7.8		2.80	86	.13			—	wk-Mod	.13	—		wk Clay wk-Mod Qtz.-Ser	—		WK to WK-Mod Alt, core quite broken in center of run, wk py tr cpy
153.0	7.1		2.54	97	.10			—	1	.10	—		wk(+) Qtz, Ser, Clay	—		WK to Mod Alt, sp 2nd K spar wk py tr cpy
160.2	7.2		2.55	91	.10			-	Mod	.10	-		Mod Qtz. Ser, Clay	—		As above, tr-sp cpy, core very broken in center of run
170.0	9.8		2.57	87	.14			-	wk-Mod	.14	—		/	—		Alt as above, Mz has as 3% qtz eyes, Wk 2nd ? K spar wk py, tr cpy
178.5	8.5		2.54	94	.12			—	1	.12	-		1	—		WK-Mod clay-Ser Alt. Mod 2nd K spathization wk py sp cpy, to 5% Qtz blebs in Mz
188.1	9.6		2.55	90	.18			—	1	.18	—		/	—		Alt as above, Min as above,
196.6	8.5		2.57	90	.09				1	.09			wk Ser-Clay	—		WK(+) Alt; sp-wk sil'n, wk 2nd K-spar in ground mass; occasional Qtz cy sp-wk py, Tr-Sp cpy
204.7	8.1		2.54	82	.12				1	.12			/	—		Mod Alt; Sp Sil'n; wk-mod 2nd Biot-Chlor; 2n K-spar as above, Min as ab
210.4	5.7		2.58	94	.15				1	.15			1			wk-Mod Alt; wk-mod 2nd K-spar in ground mass, wk cpy sp py
EOH		Ave.	Rec. =	85												

Final Depth 223.5'
Collar Elevation 2,603.86'
Coordinates 27,185.16 N, 35,940.78
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-11
Sheet No. 1
Date Completed 1-14-66
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration PLAY SGR CHLOR ALUNITE	HEM JAR LIM	Rock Type	Remarks
0.0-6.6	6.6	Rk. BT			-										—	—
17.1	11.0	NXWL	2.37	78	.03			.03	–	–	–	–	ST PLAY SGR	ST LIM JAR		ST ALT.; Mod LIM, WK Hem-Jar; Numerous V. fine Cavities; Rk is quite
28.0	10.9		2.46	64	.03			.03	–	–	–	–	1	Mod-ST JAR SR HEM		fractured. Numerous 70° Lim seams. Rk is either Pyroclastic Sed or Volcanic
39.0	11.0		2.44	69	.03			.03	–	–	–	–	1	Mod HEM WK JAR-W	Sp (?) Sulvebell	ST ALT, WK-Mod Jar, WK Hem; Tex Ao sent
52.2	13.2		2.44	54	.03			.03	–	–	–	–	ST-INTEN PLAY-SOI	WK HEM WK LIM		ST ALT Mod LIM-Hem-Jar; Locally tex indicates Rk is igneous
61.0	8.8		2.50	89	.02			.02	–	–	–	–	1	ST HEM-JAR		Rk is strongly shattered & re healed w/ Lim
—	—				—			—	—	—	—	–	ST PLAY -SOI	ST-INTEN HEM		ST ALT; Mod-ST Hem, WK alunite
69.6	8.6		2.42	95	.02			.02	–	–	–	–	1	Mod-ST HEM		ST ALT; ST Hem, Mod Jar, WK alunite. Remnants of medium grained felsic
78.2	8.6		2.37	98	.03			.03	–	–	–	–	INTEN PLAY-SOI	ST HEM-LIM		rocks are preferentially stained by hematite and in a amorphous ground m
86.8	8.6		2.14	100	.02			.02	–	–	–	–	1	1		of what is probably v. fine grained quartz and sericite.
96.5	9.7		2.42	90	.04			.02	ST	–	.02	—	1	ST HEM	Sulf Ct 89.2-91.6' Sulf 97.3'	As above, except that alunit valets are numerous
106.7	10.2		2.50	77	.04			.02	ST	–	.02	–	1	—		ST ALT; mod hem, sp. Jar + Alunite, mod boxwork.
113.0	6.3		2.60	91	.03			Tr	ST	.01	.02	–	1	—		ST ALT; Mod hem, wk Alunite, mod boxwork along fracs.
129.6	16.6		2.50	75	.02			Tr	1	Tr	.02	—	1	—	Mz ? @ 113.0'	ST ALT; Mod hem, wk Alunite; Sulf from 89.2-91' then more oxidos. Mod C.C. on Mod Py-cPy.
137.2	7.6		2.52	98	.03			Tr	1	.01	.02	–	1	—		ST ALT; Mod-ST Py, Sp C.C., Tr cPy. Slightly more cc. Towards end of run
145.0	7.8		2.51	97	.02			—	1	.01	.01	–	1	—		ST ALT, Mod-ST Py, Tr-Sp C.C., No Tex evident.
152.5	7.5		2.64	97	.01			–	Mod	.01	Tr	—	ST PLAY -SOI	–	Silverbell	Intense Alt, V. St Py, Tr cc. Rk is altered to point of falling apart on touch
160.8	8.3		2.67	95	.01			–	1	.01	—	–	1	—		Intense Alt, 3-4% Py, Tr. cc. As Above. Due to Alt, Tex not distinguish
168.1	7.3		2.65	97	NO			–	Mod	—	—	–	ST QTZ -SOI	—		ST-Inten. Alt, 2-3% Py, No cc. Rk is more consolidated and good Mz
175.4	7.3		2.69	94	.02			–	1	.02	–	–	1	—		ST ALT; 3% Py (well dissim), Rk is solid and brkn to angular frag. Tex is visible probably silicified
185.4	8.9		2.53	94	.01			–	ST	.01	–	–	1	—		ST ALT; WK-Mod silica in grnd mass (Alteration Product(?)), 2% Py, brkn wk above
191.7	7.4		2.52	98	.01			–	1	.01	–	–	1			ST ALT; Mod silica in grnd mass; Rk quite brkn + somewhat gouge like, 2%
200.3	8.6		2.51	92	.01			–	1	.01	–	–	1	–		As Above; Rk is a mass of small angular fragments 1/8" to 1" diameter
209.6	7.3		2.53	100	.01			–	1	.01	–	–	ST QTZ SOI-PLAY	–		Rk is containing a higher percentage of soft crumbly material similar to what was called Mz. 2-3% Py
215.5	7.9		2.54	95	.02			–	1	.02	–	–	1	–		Rk becomes more solid @ 194.5', 2-3% Py
223.5	7.9		2.26	100	.01				Mod-St	.01	–	–	1			Rk is soft + crumbly. No Tex. 4% Py
EOH.		Ave.	Rec. =	87												As Above
																Rk is dense and angularly fragmented 204.3 on. 4% Py
																As Above
																E.O.H

Final Depth 180.3
Collar Elevation 2,609.54
Coordinates 27,182.23N, 35,606.30E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-10
Sheet No. 1
Date Completed 1-7-67
Logged By J.A.B. + N.R.N.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER CHLOR	HEM LIM JAR ALM	Rock Type	Remarks
0.0-4.7	4.7	N.C.	—	—	—	—	—	—	—	—	—	—	—	—	-	—
13.5	8.8	NX-WL	2.50	65	.10			.10	—	—	—		St clay -ser	St Hem wk JAR	S.P. or Pre-MIN. ANDE	Mod ALT., Mod JAR-HEM, Sp ALUNITE, wk-Mod CuOx. RK is a fine grained Porp. w/small lath-like feld in a dark' high mafic ground mass.
25.4	11.9		2.52	40	.11			.11	—	—	—		1	Sp-wk Hem		INT. ALT + GRANULATION.; ST. HEM, wk-Mod JAR-LIM; wk-Mod CuOx
33.3	7.9		2.30	88	.05			.05	—	—	—		1	1	Cretaceous Arkose(?)	ST-INT. ALT + BLEACHING; wk-Mod Hem-JAR; NEAR VERT. 1/2" wide QTZ-VN is EU parelleled by 48" GVP. VN. QTZ VN. is clear + Contains Sp PY-CPY.
42.4	9.1		2.52	88	.06			.06	—	—	—	-	1	Wk hem, JAR	Mz(?) @ 41.2	Arkose is fine grained, ST ALTD; St. Hem, wk-Mod JAR-ALUNITE, wk QTZ stringers, Sp
51.8	9.4		2.45	89	.06			.06	—	—	—	—	WK-Mod clay-Ser	Sp HEM Wk(+) JAR	Arkose 44.4-46.7 Mz 46.7	THE Mz is St.lt silit., wk-mod CuOx. Contact w/sed 15°
61.8	10.0		2.52	80.	.05			.05	—	—	—		Mod clay -ser	Tr HEM Mod JAR		ST ALT, Mod-ST HEM wk-mod JAR, wk-mod Sil'n
																RK is Apparently Mz which has invaded + Ass. malufed Arkose. Feld. Phen are Subhedral-anhedral + of Various sizes. Hydrothermal alter biot. occurs only locally. Grnd mass appears to be v.fine grained Qtz + feld. RK is
71.0	9.2		2.43	91	.03			.03			—	—	Mod-ser	Mod-ST JAR		Mod Silit + Veined (30°-60°). WK(+) HEM + JAR, wk ALUNITE
80.5	9.5		2.40	97	.03			.03	-	-	-	-	1	1		As Above., Sp hem, wk(+) JAR-ALUNITE
89.3	8.8		2.36	100	.08			.08					1	WK-Mod LIM + JAR Wk hem	Mz to Pirce BS ANDE THEN ~~ARKOSE~~(?)	ST ALT, Mod Sil'n + QTZ Vning; wk(+) HEM, JAR + Sp ALUNITE. Veinlets 40°-60° 60° VEN JAR-Alu-Ser VN @ 47.9
100.3	11.0		2.47	78	.38	.04	31.9 @ 0.35 0.04	.04	Sp	-	.34		Mod clay -ser	Mod lim	Silver Bell ANDE.	ST ALT, Mod Sil'n + Qtz Vning; Mod Hem, wk-Mod JAR-ALUNITE; Sp PY + PY
107.0	6.7		2.39	98	.26	.07		.07	Sp-wk	-	.19		1	Mod lim sp hem		Mod ALT, WK QTZ. Vning, wk PY, sp-CC; RK is a biot. ground mass + Angular frags are visible, SP CuOx
121.2	14.2		2.60	61	.38			.03	1		.35		1	sp lim	Mz (?) @ 107.8	Mod ALT, Sp QTZ. Vning; Sp-wk PY, Sp CC; Sp-wk Hem + M
129.3	8.1		2.59	77	.14	.		tr	1	tr	.14		Mod ser	—	Silver Bell ANDE (?)	Mod ALT, Sp Sil'n; wk PY, Tr-Sp CC + CPY. RK is somewhat Brkn.
140.9	11.6		2.61	56	.14				WK-Mod	.10	.04		1	—		Mod-ST ALT; wk(+) PY, Tr CC, Sp CPY. RK Brkn
148.9	8.0		2.80	96	.07				wk	.07	tr		Mod ser	—	Mz CIRCA 141' Silver Bell ANDE circa 140'	Mod-ST ALT; wk-Mod PY, Tr CC, Sp CPY. RK Brkn
161.8	12.9		2.80	69	.11				WK-Mod	.11		tr MoS2	1	—		ST Alt, Sp-wk Silin, wk py tr Cpy, MoS2 + UN ID grn yel. superg. Min
168.2	6.4		2.72	86	.10				1	10		1	1	—		As above, st qtz VN about 164.5' Noice of UN ID min above
175.6	7.4		2.72	95	.12				1	.12?		—	1	—		Mod Alt, wk-Mod Qtz vning wk py tr MoS2
180.3	4.7		2.71	94	.23				wk	.23		—	Mod clay -ser	—		As above
EOH		Ave.	Rec. =	79												

Final Depth 216.4
Collar Elevation 2457.3
Coordinates 26237.6 N. 38622.2 E
Inclination vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-9
Sheet No. 1 of 1
Date Completed 12-29-66
Logged By J.A.B. + N.R.N.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	lim, hem	Rock Type	Remarks
00-5.0	5.0	NC														Rock Bit
12.4	7.4	NXWI	2.59	87	.01			.01	—	—	—	—	tr-sp	wk hem, lim, tr jar	volc.? or arkose?	Extreme Alt & Sil. None to tr text sp-wk py sp-wk lim & hem
24.3	7.9		2.55	64	.01			.01					sp ser, clay			
33.7	9.3		2.52	93	.01			.01						sp hem, lim, (wk) jar	Andes. (?)	V. fine grained highly siliceous rk w/only a trace of any pre-existing fold wk. Jar-lim, tr-sp hem, sp py; numerous calc. crust. shattered zone 22.1' latching held visible circa 24.8'; st sil'n, wk jar-lim, wk alunite; shatter 32.0'-33.3' (clay cementing frags).
43.5	8.5		2.56	75	.02			.02					tr ser, clay	wk + lim		Extremely siliceous siltstone-like rk w/occasional remanent folds; wk lim
52.6	8.4		2.56	84	Nil			—						sp lim sp-wk hem	Qtzite? circa	As above, some remanent fold? Alt to sericite, may indicate the rk tr ash was an arkose or possibly a volcanic, sp limonite on frags
63.2	7.5		2.59	61	.01			.01	tr py	—	—	—	sp ser			
73.1	8.2		2.53	73	.02					.02?				tr-sp lim	Soils circa 60'	As above, poss. coarse grained bed from 52 to 54 feet
81.4	8.3		2.59	88	.04				sp py	.04?				—		As above, scattered grains of ser. may indicate felt frags of an ark or phenus of volc. rk
89.5	8.1		2.74	86	.03					.03?				—		As above
97.5	8.0		2.72	92	.02					.02?					Volcanic?, circa 84	Intense Alt, Sil'n, relect bio suggest is origin wk-mod finely diss py
105.6	8.1		2.73	91	.01				sp-wk	.01			st clay ser		bx?	As above, poss bx text w/ light bx frags in solif matrix
114.6	9.0		2.58	86	.01					.01					Qtzite circa 111'	As above, Core strongly broken & Alt to clay 100' to 110'
121.7	7.1		2.60	86	.02				sp	.02			sp ser			St-Intense Alt, Sil'n, 110-111 rk has arkosic text w/tr bio? Qtz. vfg
130.5	8.8		2.77	86	.02					.02						Alt as above, vfg qtzite no text only vis min is granular Qtz.
138.5	8.8		2.64	88	.01				WK	.01			sp-wk ser		WNW Porph dike rk circa 138'	St-Intense Alt, Qtzite as above to circa 138.5
145.7	7.2		2.63	96	.07					.07		tr MoS2			Qtzite? circa 138'	Alt as above, wk-Mod(+) py, tr Cpy. rk has same vfg. qtzitic text as Qtzite
154.4	8.7		2.79	91	.02					.02			sp-wk ser, wk-mod alunite, wk-mod clay-ser, wk tan-white			Alt as above, Mod finely diss py. tr MoS2, Cpy? Text may be due to si
163.7	9.3		2.59	85	.16				wk(+)	.16					Small Mz dikes @159 to 162'	St Clay-ser Alt, rk pred argillic Qtzite. Mod finely diss py.
172.9	9.2		2.74	81	.04					.04					Qtzite	Qtzite - Alt as above, sp-wk py sp Cpy Mz. wk-Mod Alt due to chlor sp-wk tr-Cpy
184.1	11.2		2.83	49	.03				WK	.03			wk clay-ser-chlor			As above, some argillic or poss. is rk intermixed w/st clay-ser Alt.
192.7	8.6		2.85	80	.01					.01			Mod clay sp ser		Alt? All Mudstone?	As above, wk-Mod(+) finely diss py
200.1	7.4		2.73	85	.03					.03			Mod-st clay sp ser			Mainly argillic Alt, some lamination in streaks, gradational c.t. w/ above
213.5	13.4		2.95	80	.04				WK-Mod(+)	.04						As above, Mod finely diss py rk grnish-gy in color
216.4	2.9		2.97	83	.05					.05						As above
E.O.H.			Avg rec	81%												As above

Final Depth 184.3
Collar Elevation 2507.68
Coordinates 26986.70 N, 37519.12 E
Inclination vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-8
Sheet No. 1 of 1
Date Completed 12-19-66
Logged By JAB + NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
													CLAY SER CHLOR	LIM HEM		
0.0-6.0	6.0	NC	—		—	—	—	—	—	—	—	—				
14.5	8.5	NX wl	2.62	82	.01			.01	Tr		Tr		Sp clay	wk-Mod Lim	Bx Tex Bp(?) (Sulfs)	INTEN Silicified, Bx Tex Circa 7.0', Tr PY + CP, wk Brn. Lim
23.0	8.5		2.65	97	.01			Tr	Sp		.01		wk-clay	Mod Lim		
31.5	8.5		3.05	79	.01			.01	Tr		Tr			wk Hem		Bx Tex. visi. to 16.5'; INTEN Sil'n, wk. fine PY (well dissim), Tr CP
40.9	9.4		2.44	98	.02			.02	—		—		Sp-wk Clay	Mod-St Lim Sp Hem	Bx Tex Circa 30.0	AS Above; Bx Tex Circa 30.0 some folds: of various size & shape visible circa 2-
54.3	13.4		2.42	70	.02			.02	—		—		wk-Mod Clay	Mod Lim Sp Jar Sp Hem	M x 32.7' Sulfs. treated	ST ALTD, wk Sil'n, wk Lim-JAR, sp-wk Hem, Sulfs treated; Fix zone 32'-
63.7	9.4		2.54	98	.02			.02	—		—		Mod Clay Sp Ser	Mod Lim-JAR Tr Hem	Increased Mt w/ Sp Bp(?) 53.7 Tr Bp(?)	ST Alt, wk Sil'n; wk Lim-JAR, sp-wk Hem; Sp Bp(?) is More dense + Hus.
72.8	9.1		2.53	97	Nil			—	—		—			Mod JAR wk Lim Tr Hem	Bx Tex @ 67 Post Sil'n (Tr Bp) @ 63' (Tr-Mt)	ST Alt SP wk Sil'n, wk Lim-Jar Sp Hem, Bx Tex Circa 57', Tr Bx @ 63'. Hum Su
83.4	10.6		2.17	81	.02			.02	—		—		INTEN CLAY-SER	ST JAR-LIM		Quartz: Irregular to lath like folds etc. ALTD + partially removed.
93.0	9.6		2.50	76	.02			.02	Tr		—			wk(?) Hem Sp Lim		Post Sil'n but Pre-min Bx + Frac Throughout run, Mod-St Gorhite in Frac. wk JAR. Rx is Quite dense + siliceous
105.1	12.1		2.70	52	Tr			Tr	Mod		—		ST-INT CLAY-SER	ST HEM	Sulf @ 92.1'	ST-INTEN. ALT, Sp. Sil'n, St. Post Sil'n + Pre Min shattering, Brecciation wk-mod JAR-Lim wk Hem, Tr Sulfs.
118.3	13.2		2.71	46	.01			—	wk-Mod		.01					ST ALT, ST BX, wk-Mod Hem, wk JAR-Hem, Sulf @ 92.1' sp PY.
127.3	9.0		2.58	82	.01			—	1	.01			ST CLAY-SER			ST ALT, Bx + GG to 101' Mon rx is only mod shattered – not GG. The Hum GG is ST ALTD, but shows a vague tept hum. v. fine folds. wk PY.
136.0	8.7		2.54	95	.01			—	wk	.01			1			ST-INT ALT, Mod Bx + SHATTERING, sp-mon GG; wk-Mod fine grained PY.
144.2	8.2		2.55	92	.01			—	wk	.01			Mod CLAY SER Sp CHLOR			Extremely ALTD, Brecciated + GG, Mod PY, Lead frags. seen few QTZ. eyes
159.2	15.0		2.54	80	.01			—	1	.01			ST CLAY SER			" " " " Mod PY
167.7	8.5		2.55	95	.01			—	wk	.01			ST CLAY-SER SP CHLOR			As Above, rx has become a bit darker in color; vague med. grained Tex
178.1	10.4		2.55	83	.01			—	Sp-wk	.01			INT ST CLAY-SER SP CHLOR			As Above, Mod-ST PY, slightly less Bx + GG Circa 158.
184.3	6.2		2.55	97	.01			—	1	.01			1			ST-INT ALT; Mod-ST PY (well dissim), Mod CHLOR. Rx is quite brkn + GG. Size of fra beginning to increase, Tex - v. fine grained irregular folds and occasional QTZ eyes
EOH			Avg rec	81%												INTEN ALTD + Highly Brkn; Tex + M is as above
																As Above
																E.O.H

Final Depth 223.1
Collar Elevation 2564.79
Coordinates 27181.28 N, 35,239.73 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-7
Sheet No. 1
Date Completed 12-14-66
Logged By NRN + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
													CLAY SER CHLOR	HEM LIM JAR ALUN		
0.0-5.6	5.6	NC	—	—	—	—	—	—	—	—	—	—	—	—	—	ROCK BIT
15.0	9.4	NX W)	2.33	86	.21			.21					ST CLAY-SER	Mod JAR sp LIM sp HEM	ANDESITE(?) Sp (?)	Mod-ST ALT, wk Sil'n; ST JAR, Sp HEM; sp Porfirinal(?) dite (?), sp-wk Pyc
24.5	9.5		2.40	85	.26			.26					ST SER-CLAY	Mod JAR wk LIM wk HEM		Mod-ST ALT, wk Sil'n + QTZ VNING; Mod Jar-Lim, sp HEM; mod yellow clay wk CuOx
34.1	9.6		2.39	89	.33			.33					ST-INT SER-CLAY	wk-Mod LIM-JAR sp wk HEM		Mod-ST ALT, wk-mod QTZ VNING; Mod Jar-Lim, sp HEM; wk mod CuOx
43.2	9.1		2.34	80	.38			.38					ST CLAY-SER	Mod LIM wk-Mod HEM	Sp (?) ANDESITE	Mod-ST ALT, wk QTZ. VNING; wk HEM, Sp Jar-LIM; wk CuOx; IN LOSS of alt portion the grnd mass is Brkn to be Lakeview v fine Brkr; Cg 55-56.6; 42-44
52.4	9.2		2.46	84	.18			.18					"	Mod LIM Mod HEM wk LIM		Mod ALT; sp-wk Sil'n along fracs, Mod JAR-Lim, wk(+) HEM; sp-wk CuO.
61.1	8.7		2.41	93	.38			.38					Mod CLAY-SER	Mod-ST LIM; sp-wk HEM	MZ (?) CHECK 60'	wk-Mod ALT, Mod Sil'n + QTZ VNING; Mod HEM-LIM; wk(+) CuO
69.6	8.5		2.45	88	.25			.23	.01	—	.02		Mod CLAY-SER	Sp HEM	SULF CH. 2 68'	Mod-ST ALT, Mod Sil'n, Mod HEM-LIM, wk(+) CuOx; FEW ALTD. PHENAS. IN a QTZ grnd-mass (Probably secondary). SULF CHECK 68' - PY + PO
79.2	9.6		2.43	82	1.48	.15		.15	wk	.01	.92		"	—		Mod-ST ALT, wk HEM; Mod PY, wk CC as Thin Coating on PY, wk-Mod CuOx
87.9	8.7		2.43	88	1.48	.11		.11	wk	.01	1.36		Mod SER	—		Mod-ST ALT; Mod PY, wk(+) CC, Sp CPY, wk(+) CuO. Sulfs well dissem
96.8	8.9		2.57	82	1.20	.01	59.6 @	.01	wk	.01	1.18		Mod-St SER-WEAKNE	—		Mod ALT; Mod PY, wk-mod CC, Sp CPY, Sp CuO; Rk is locally granulated crushed
106.6	9.8		2.60	87	1.45	.06	1.26 0.06	.06	wk	.01	1.38		Mod CLAY SER	wk LIM		Mod ALT; Mod PY, wk(+) CC, Sp CPY, Tr CuO; wk orange Lim, wk Grn. Clay
115.7	9.1		2.48	98	1.94	.03		.03	wk	.01	1.90		Mod CLAY-SER. Mod-ST CHLOR	wk LIM	Sp (?) 109.6' Pre Min. ANDE (?)	MZ is Mod ALTD. + QTZ VNING. Fkt Rk + gg 109.6 - 112.2' then Mod-ST ALTD
129.2	13.5		2.64	71	.37	tr		Tr	Mod	.28	.09		"	—	MZ 122.8' - 127.4' MZ @ 129.2	Sp (?). Both Rk types have wk orange lim + mod-ST chlor. Mod PY, wk + CC, Sp Mod ALT, wk-Mod Sil'n, wk-mod Chlor, Mod PY, Tr-Sp CC, Sp CPY. Rk is Brkn + gg 115.7 - 120.7
137.3	8.1		2.52	100	.30			Tr	Mod	.28	.02		wk-mod CLAY SER MOD CHLOR			Mod ALT, Sp-wk Sil'n + QTZ VN; Sp-wk PY, Sp CPY, Tr CC
151.1	13.8		2.62	87	.30				wk	.30	Tr		wk-mod CLAY SER MOD(+) CHLOR		Pre Min. ANDE @ 137.3	Mod ALT, Mod QTZ VNING, wk-mod chlor, Mod v. fine PY, Sp-wk CPY, Tr CC. This Rk is fine grained + generally non porphyritic. It looks much like some of the Post
159.5	8.4		2.66	95	.32				Sp-wk	.37			"		MZ Pkm 158.5 BK PSD 1.158	The ANDE is Mod-ST ALT, wk Silicified, wk(+) PY, Sp CPY. The MZ is Mod ALT + has wk PY, Tr-Sp PY
168.7	9.2		2.52	96	.33				wk	.33			Mod-St CLAY-SER MOD CHLOR			Mod-ST ALT, Sp Sil'n; wk PY, wk CPY (Tr), good Rk
176.6	7.9		2.51	96	.38				Sp-wk	.38			Mod CLAY SER MOD CHLOR		50° PLT. TOND 172 - 172.8'	Mod ALT, wk(+) Sil'n of grnd mass; wk-mod f-m. gr. dissem PY, Sp CPY + Tr M
185.2	8.6		2.57	97	.20				wk	.20			"			Mod ALT + Sil'n, wk CHLOR; wk PY, Sp CPY, Tr MoS2; whole core is Brk in 2" in diam + less
194.4	9.2		2.52	91	.39				wk	.39			wk-mod CLAY wk CHLOR			Mod ALT + Sil'n; wk QTZ VNING, wk(+) PY, Sp wk CPY, Tr MoS2; Rk Brkn as abo
202.9	8.5		2.52	96	.22				wk(+)	.22			"			As Above; The CPY - PY ratio is quite good
211.6	8.7		2.54	82	.31				Sp-wk	.31			"			As Above; Rock continues to be quite broken
223.1	11.5		2.53	60	.32				Sp-wk	.32			Mod Clay SER Sp CHLOR			Mod Alt'd, Mod Sil'n of Grnd MASS, wk CHLOR, Sp-wk CPY; SP PY, Tr MoS2
EOH																E.O.H.

Final Depth 168.7
Collar Elevation 2580.42
Coordinates 27321.66 N, 34,917.52 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. G-6
Sheet No. 1 of 1
Date Completed Dec. 7, 66
Logged By JAB & NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay sericite	lim hem	Rock Type	Remarks
0.0-5.0	5.0	RB	—	—	—	—	—	—	—	—	—	—	—	—	—	RB
18.2	13.2	NxW	1.96	57	.29			.29 gen	—	—	—	—	wk-Mod clay-Ser	Mod hem	Porf Min. Andes. Qtz. Mz @ 16.3	Andes. is st. alt'd. Fine grained w/ occasional bleached clumps of radiating hornblend. Contains CuO. Tho Qtz. Mz is st. alt'd. & Fe_2O_3 stained. Numerous hair stained veslets of Qtz + Metlb Biot.
27.0	8.8		2.37	95	.07			.07	—	—	—	—		wk-Mod hem wk lim	Qtz. Mz(?)	Mod-St. Alt., wk-Mod Sil'n; Mod-St lim-Hem; Rk has numerous Qtz Eyes. Felds. A irregular, shaped.
35.6	8.6		2.55	89	.10			.10						sp hem wk lim wk-Mod ser		Mod-St Alt, Mod Sil'n; Mod lim-hem; Rk becomes more strongly alt'd towards en of run
44.7	9.1		2.18	95	.13			.13					intense clay-ser	sp-wk lim		St-Int. Alt – Somewhat 66. Quite bleached, wk-Mod Sil'n; Tr-Sp CuO.
54.1	9.4		2.39	86	.07			.07				tr turq.	st clay -ser	tr hem wk lim/jar		As Above; Flt plane @ 52.9' dips 55°
65.6	11.5		2.53	80	.06			.06					St ser, - clay	wk lim sp jar		Int. Alt – Sil'n, Rk is locally gy; Tr CuO + Py
75.2	9.6		2.39	94	.14			.14					st clay -ser	Mod hem, lim, tr jar		St Alt, Mod-St Sil'n, Mod-St. Hem wk lim. Rk contains Num. Qtz. Eyes
84.4	9.2		2.49	94	.62	.05		.05	Wk-Mod	.07?	.50		Mod-st clay-ser	tr lim	Sulf St. @ 74.6	Mod-St Alt. + Sil'n; wk-Mod Py, Sp CPy, Tr CPy, Sp Hem
93.6	9.2		2.48	93	.54	.01		.01	1	.03	.50		1	1		St Alt, Mod Sil'n; Mod Py, Sp CPy & CC. Rk locally Brkn + gy.
102.7	9.1		2.47	77	.38	.01	52.4 @ 0.44 0.02	.01	wk	.03	.34	-	1	1		Mod-St Alt, wk-Sil'n, wk-Mod Py, Sp-wk CPy, Tr-Sp CC. Good CPy to Py Ratio
110.1	7.4		2.41	100	.31	.01		.01	Wk-Mod	.04	.26?		Mod clay ser	—		Mod Alt, Mod-St Sil'n; wk Py, Sp-wk CPy, Tr CC
118.7	8.6		2.56	90	.38			.01	Wk(-)	.02?	.30	tr MoS2 .05 CuO	wk-Mod clay-ser	—		Mod Alt, Mod-St Sil'n; wk Py, Sp CPy, Tr CC
127.6	8.9		2.52	89	.37			Tr	wk	.15	.22	Tr MoS2	Sp-Wk chlor Mod silicifier Mod talc-chlor			Mod Alt, Mod-St Sil'n; wk Py, Sp CPy, Tr-Sp CC, locally Mod Chlor.
138.6	11.0		2.51	68	.24			Tr	wk(-)	.20	.04	Tr MoS2	"			As Above; where distinguishable Feld have alt'd to a Montmorillonite Cla
147.4	8.8		2.58	85	.14			Tr	wk(-)	.14	Tr	Tr MoS2	"			Mod Alt, wk-Mod Sil'n; Mod Py, Sp CPy, Tr CC + MoS2
155.3	7.9		2.48	97	.25			Tr	wk+	.22	.02	Tr MoS2	wk-Mod clay -ser Mod chlor			wk-Mod Sil'n, Mod Alt; Min As Above; where Sil'n is wk the grnd. mass is dirt brown.
164.6	9.3		2.59	78	.23			Tr	wk-Mod	.23	Tr	Tr MoS2	wk clay wk chlor			As Above; Biot. fresh. Py occurs both Disem + in veinlets.
168.7	4.1		2.51	98	.11				wk	.11	—	Tr MoS2	"			As Above
E.O.H			Avg rec	85%												E.O.H.

Final Depth 234.5
Collar Elevation 2619.82
Coordinates 27562.16 N, 34,632.12 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-5
Sheet No. 1 of 1
Date Completed 12-1-66
Logged By J.A.B. + N.R.N.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
0.0-5.0	5.0	NC	—	—	—	—	—	—	—	—	—	—	—	—	MZ	Mod ALT, Sp-wk Sil'n along high angle fracs; Mod Hem stain, wk Jar, Tr Alunite
15.0	10.0	NX w/	2.34	89	.05			.05	—	—	—	—	Mod-St CLAY SP SER	wk HEM wk-mod JAR		Fgd. Med-Coarse GRAINED + QUITE BRKN. As Above, Hydrothermal QTZ veins present
23.9	8.9		2.53	94	.06			.06	—	—	—	—	Mod-St CLAY wk ALUNITE	wk HEM wk LIM-JAR		Mod. ALT, Mod-ST Sil'n, wk-mod Hem, wk LIM-JAR, wk ALUNITE
33.0	9.1		2.44	89	.06			.06	—	—	—	—	ST CLAY SP ALUNITE	wk-mod LIM-JAR		Numerous Fracs 40°-70°, Lined w/ Lim Bar-work, Qtz veinlets + ALUNITE
43.3	10.3		2.35	87	.13			.13	—		—	—	St-Int CLAY-SER	wk-mod JAR SP HEM SP LIM		Mod ALT; wk-mod Sil'n, Mod-ST HEM STAIN, Sp-wk LIM-JAR, wk DISSM PYRITE
52.0	8.7		2.38	96	.11			.11	—	—	—	—	ST-INT SER-CLAY	wk LIM-JAR SP HEM	Sulfide Porph. Mod. Pr. Sp. Pr. Mod. Pr. 383	Fr. Gouge Frag 29.8-30.3' Mod-ST ALT Mod Sil'n, wk HEM, wk JAR, Nom. fine diss Sulf (Pyrites). RK TYP is obscure but APPEARS much finer grained than MZ. RK TYPE not determined
61.0	9.0		2.59	88	.11			.11	—	—	—	—	ST CLAY SP-SER	ST LIM wk HEM SP JAR		Mod-ST ALT, Sp-wk Sil'n, wk Hem-Jar, numerous fine diss Sulf (Pyr) RK QUITE GOUGY 48-52'
69.6	8.6		2.57	92	.04			.04	—	—	—	—	INTENS CLAY wk SER	SP-wk LIM		Mod. ALT, Mod HEM, wk LIM-JAR, Tr CuO
78.7	9.1		2.57	90	.18			.18	Tr	—	Tr	—	wk-mod CLAY-SER	Mod LIM		Mod-ST ALT. + BLEACHING, wk-mod LIM-HEM, Sp CuO
88.0	9.3		2.36	98	.20	.04		.04	wk	Tr	.16	—	Mod CLAY -SER	wk-mod LIM	Sulfide Porph. 80.0	Mod-ST ALT, Mod Sil'n, RK has been smashered + now healed w/ Limonite. Good MGSS has most v. fine DIST.
97.3	9.3		2.57	88	.49	.07	38.4 @	.07	wk	Tr	.42	—	ST. CLAY SER	wk-mod LIM		Mod ALT + Bleaching, wk Sil'n, wk Lim-Hem; wk-mod CC, sp-wk PY
105.5	8.2		2.53	94	.80	.11	0.76 0.08	.11	wk	.02	.67	—	ST. SER-CLAY	sp-wk LIM		Mod-ST ALT, wk Lim-Hem, wk-mod CC, sp-wk PY, sp-wk CuO
114.0	8.5		2.70	93	1.46	.13		.13	wk	.02	1.31	—	Mod CLAY -TALC	wk LIM		INT. ALT + GOUGY TO 103', Remainder ST.; wk-mod CC, wk PY, Tr CuO, SP LIM
126.4	12.4		2.67	77	.46	.04		.04	wk	.02	.40	—	ST. INT GEN WAXY CLAY	SP LIM		ST ALT, ST GOUGE THROUGHOUT, wk CHLOR, wk-mod CC, wk PY, Sp-CPY, Sp LIM
137.8	11.4		2.65	59	.14			.02	Sp-wk	.02	.10	—	"	—		INT ALT, ST CHLOR, Much SHATTERING + SHEAR, wk CC, Mod PY, Tr CPY + MoSz, Tr
146.9	9.1		2.62	75	.16			Tr	wk	.06	.10		ST WAXY CLAY-CHLOR	—		ST. ALT. wk-ST Sil'n, wk Talc; wk-mod PY, Sp CPY, Sp CC. RK is QUITE BRKN.
156.9	10.0		2.65	68	.14			Tr	wk	.08	.06		"	—		ST. INT. ALT, ST. Sil'n, wk-mod Talc; Mod PY, Sp CPY, Tr CC. RK QUITE B
164.5	7.6		2.65	94	.12			Tr	wk	.08	.04		mod CLAY-CHLOR	—		ST. ALT, ST. Sil'n, wk Talc; Mod PY, Tr-Sp CPY, Tr CC, MoSz. RK QUITE BRKN + somewhat GOUGY
173.0	8.5		2.65	89	.12			Tr	wk	.09	.03		"	—		ST. - ALT, ST Sil'n, wk Talc. Mod PY, Sp-wk CPY, Tr-Sp MoSz, RK Could be Silicified ARKOSE
181.1	8.1		2.69	91	.09			Tr	wk-Mod	.09	Tr		wk-Mod CLAY	—		ST. ALT - Sil'n; wk talc; Mod PY, Sp CPY, Tr-sp MoSz. RK QUITE BKN
189.7	8.6		2.68	83	.09			Tr	"	.09	Tr		Mod-St WAXY CLAY-CHLOR	—		ST ALT-Sil'n; Mod PY, Tr-Sp CPY, Tr-Sp MoSz. The PY looks as if it might be Carrying Cu. The S is rather Jagged. Possibly some v. fine feld remnants
197.8	8.1		2.55	89	.20			—	wk-Mod (+)	.20	—					As Above EXTREMELY BRKN.
208.2	10.4		2.55	74	.11					.11	—					ST ALT, INTENS Sil'n; wk-mod PY, Tr-Sp CPY, CC, Tr MoSz. QUITE BRKN.
218.6	10.4		2.56	81	.08					.08	—					EXTREMELY BRKN + GOUGE. ST. ALT. ST Sil'n, wk-mod ST. TALC, Mod PY, Tr CPY
228.2	9.6		2.56	86	.10				wk	.10	—					As Above. W/ ST.-GEN TALC-LIKE CLAY
234.5	6.3		2.67	94	.11					.11						EXTREMELY BRKN + GOUGY. Mod Sil'n, ST TALC-CLAY, Mod ST. PY
E.O.H.			Avg Rec'y	86%												LESS BRKN + GOUGY, Mod-ST Sil'n, Mod TALC. MIN AS ABOVE. E.O.H.

Final Depth 162.7
Collar Elevation 2758.73
Coordinates 28900.46 N, 32969.34 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-4
Sheet No. 1 of 1
Date Completed 11-22-66
Logged By JAB + NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration CLAY, SER	LIM, HEM JAR	Rock Type	Remarks
0.0-4.6	4.6	N.C.														
13.8	9.2	HxW	2.44	96	.03			.03	–	–	–		MOD CLAY SER	ST HEM SP-WK LIM	Mz	Mod-St Alt.; St Hem, Sp Jar, Sp-wk LIM(?) ; Mod Sil'n Along near vert. fracs, Sil'n permeates 1/4" on each side of fracs. Box work along fracs, wk dissim hydrothermal qtz. eyes.
22.8	9.0		2.23	98	.03			.03	–	–	–		MOD CLAY SP SER	WK-MOD HEM+LIM		All as above st hem stain in ground mass, Mod vertical qtz-py veins
32.3	9.5		2.44	93	.03			.03	–	–	–		/	MOD-ST HEM, SP LIM.		As above sp-wk lim
42.7	10.4		2.37	85	.04			.04	–	–	–		MOD-ST CLAY WK-SER	MOD HEM SP LIM		As above " " "
52.1	9.4		2.37	95	.02			.02	–	–	–		MOD-ST CLAY-SER WK ALUNITE	/		As above " " sp Alunite
61.8	8.9		2.11	100	.02			.02	–	–	–		/	WK-MOD HEM SP-WK JAR		As above, last 2' of RUN, hem drops off + sp-wk lim. remains WK ALUN
69.7	8.7		2.46	95	.02			.02	–	–	–		ST CLAY-SER WK ALUNITE	MOD JAR TR-SP HEM		St Alt + Sil'n along NUM. vertical qtz-py vns, WK LIM, JAR, WK-MOD clay veins
78.1	8.4		2.46	100	.02			.02	–	–	–		/	WK JAR TR HEM		As above, sp hem
87.1	9.0		2.39	94	.03			.03	–	–	–		ST clay-ser	WK JAR, hem		Mod-ST Alt, Mod-ST HEM STAIN, WK-MOD ALUNITE, WK YELLOW LIM, WK-MOD CLAY VN Feld. frags are irregular in size + SHARP.
96.1	9.0		2.39	95	.03			.03	–	–	–		ST clay-ser	/		Mod-ST Alt, Mod-ST HEM-STAIN (super-ed), wk-mod sil'n Along fracs, wk Al RK is beginning to show a definite fragmental nature.
105.0	8.9		2.55	92	.02			–	WK-Mod	–	.02		/	–	SULFS. @ 96.4' ? Bx Circa 105'	ST Alt, Sp HEM, Tr LIM, WK-MOD PY, SP-WK CP, Tr CPY. RK IS ST. ALTD GRANULATED THROUGHOUT MOST OF RUN. HAS PROBABLY UNDERGONE FAULTING.
114.3	9.3		2.51	91	.03				/	–	.03		/			ST Alt; WK-Mod PY, SP CP, Tr CPY. RK is either a clastic or a low temp. intrusive BX. Contains numerous gray qtz or glass frags in a grd. of irregular feldspar grains.
123.2	8.9		2.49	92	.03			–	/		.03		/	–	POSSIBLE FLT 121.6-123.9	ST. ALT ; WK PY , Tr-SP CP, Tr CPY , FRAGS OF VARYING Comp., SIZE + SHAP
132.3	9.1		2.47	91	.03				/		.03		/			ST ALTD + GRANULATED ZONE 121.8 – 123.9
141.5	9.2		2.48	90	.04				/		.04		/			ST ALT , WK PY , SP CC , Tr CPY. WK SIL'N ALONG fracs . LARGE FRAGS ARE ROUNDED WHILE SMALL ARE ANGULAR
150.1	8.6		2.63	99	.02			–	WK		.02		/			Mod-ST ALT, Mod SIL'N, SILT PRIMARILY on fracs bounded by sil'n inclinations are variable but mostly high angled.
157.1	7.0		2.57	95	.02			–	WK-Mod	.01	.01		MOD CLAY-SER			ST. ALT, Mod SIL'N ASSOC. WK PY ALONG fracs, WK-Mod PY Tr CPY THERE IS ALSO A SHEY BRN MT ON THE GRND-MASS.
162.7	5.6		2.58	95	.02			–	WK-Mod	.01	.01		WK CLAY-SER			ST ALTD. TO DARK QTZ-CLAY, TOO DESTROYED BUT LOCALLY IT APPEARS THAT THIS RK MAY BOW PRIMARILY COMPOSED OF THE GRAY GLASSY MATERIAL NOTED AS FRAGS. ABO
E.O.H.			Ave. Rec'y = 94%													ST ALT, Mod Sil'n, mod CHLOR, WK-Mod PY, SP CPY + CC
																E.O.H.

Final Depth 236.3
Collar Elevation 2737.94
Coordinates 28164.66 N, 32202.96 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-3
Sheet No. 1 of 1
Date Completed 11-16-66
Logged By N.R.N. + J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay sericite	lim hem	Rock Type	Remarks
0.0-4.4	4.4	NC	2.42	81												
15.2	10.8	NX/W.	2.37	79	.02			.02	–	–	–	–	St ser	tr lim, sp hem; St jar	ARKOSE (?) Sp(?)	Mod-ST ALT, Mod-ST JAR, LOW ANGLE FLTS CIRCA 7.0, 8.9, 12.0. RK IS VUGGY CIRCA 14.0-15.2. RK IS MORE SILICEOUS FROM 13.5'-15.2
24.5	9.3		2.45	89	.02			.02					St clay-ser	tr lim, hem; St jar		Mod-ST ALT, HIGH SILICA CONTENT; Mod-ST JAR ON ALL FRACS + DISSIM. NUMEROUS CAVITIES (PORIS) LINED W/ JAR. Tr CuO
35.5	11.0		2.39	73	.02			.02					St ser	St jar		RK IS HIGHLY SILICEOUS TO CIRCA 31.5' THEN BECOMES MORE ARGILLACEOUS SILIC. PORTION CONTAINS NUM. JAR. CAVITIES. REMAINDER IS DENSE LOOKING AND STAINED THROUGHOUT W/ LT. YELLOW AND OCCASIONALLY HEMATITIC LIMONITE
46.1	10.6		2.46	71	.02			.02					St ser	St jar, hem		FLT. MATERIAL CIRCA 25 YELLOW STAINED ARGILLACEOUS RK W/INCREASING AMT. OF HEMATITE TO CIRCA 41.' WHERE THERE APPARENTLY A FLT (ATT. NOT DETERM) THEN THERE IS A STRIKING ABSENCE OF JAR AND ITS STAIN AND A SUDDEN ABUNDANCE OF HEMATITE OCCURING BOTH AS A STAIN AND IN CAVITY WALLS. THE POST RK IS NOT THE DENSE ARGILLITE, BUT STILL SIMILAR TO MORE SILICEOUS PORTIONS NOTED ABOVE.
55.9	9.8		2.29	84	.04			.04					St clay plus ser	Mod-ST JAR + HEM; WK-Mod HEM.	FLT. ZONE 54.1-60.9	Mod-ST ALT; ST. HEM. STAIN, SP-WK JAR + POSSIBLY AZURITE. TRX. INCLUSIONS RK IS INTENSELY ALTD. + BKN IN FLT. ZONE
65.3	9.4		2.19	100	.07			.07								ST. ENTON ALT; ABUN. RANDOM CLAY VNS. HAIRLINE - 3/4" W/OR. ST. HEM STAIN. + AS BOX WORK LINING
74.1	8.8		2.40	99	.18			.10	WK		.08			SP HEM	SULFS. @ 68.6'	AS ABOVE TO CIRCA 68' THEN SULFS BEGIN ABRUPTLY. RK APPEARS TO BE INCREASINGLY FRACTURED + BRECCIATED FROM 68.1-74.1'. ALT ST.; Mod PY, WK CC. AS V. THIN COATINGS ON PY, SP-WK CuO
83.1	9.0		2.50	99	.41			.10	WK-Mod		.31			Tr LIM; Tr HEM; Tr LIM		ST ALT; SP HEM + JAR, Mod PY BOTH AS V. FINE DISSIMS. & CONCENTRAT IN QTZ-PY VNS., ALL PY HAS THIN COAT OF CC. FLT MATERIAL 71.6-7 WK CuO.
92.0	8.9		2.62	99	.39			.06	Mod-ST		.33		Mod clay plus ser			Mod-ST. ALT, WK-Mod PY, SP-WK CC, Tr-SP MoS2, Tr CuO; Mod CHLOR
100.6	8.6		2.50	97	.21			.03	Mod-ST		.18		Mod clay ser, wk sericite-talc		Sp? or arkose	Mod-ST Alt, Mod py, finely diss + along num. random fracs, sp CC,
109.0	8.4		2.67	93	.06			.02	Mod-ST	.02	.02		wk clay, Mod chlor + talc			Alt + Min as above, Mod chlor develop. along py inlets wk epidote? and from chlor
118.2	9.2		2.66	92	.12			.03	Mod-ST	.02	.07		wk clay			As above, NO vis CC, Cpy, Ufg py assoc. w/ chlor PE may be arkosic sed
127.5	9.8		2.63	87	.09			.02	/	.02	.05		wk chlor			As above, text consists of very small broken feld xyls in Alt matr.
137.1	9.6		2.63	66	.03			.02	/		.01		wk-Mod clay, wk chlor; wk-Mod clay, wk chlor			As above, a few inches of sed? bx at start run. ONE frag May be DP
144.6	9.5		2.42	101	.03			.03?	–				St clay-chlor?	sp lim	AVIRITE BRECC. 137.1-143.5'	Mod-ST ALT, AVIRITE ALT. TO CHLOR + FURTHER TO A YELLOW CLAY. FLOW STRUCT dips 40°
153.8	9.2		2.78	84	.08			.02	WK-Mod+	.05?	.01?		Mod clay-chlor		Sp(?)-ARKOSE/ PEBBLE-BX 152'-CIRCA 158	Mod-ST ALT, wk-EPIDOTE; Mod-ST PY, Tr CPY, Tr CuO. FLTING CIRCA 149.4' + 151'. WELL DEFINED PEBBLE BX (COMPLETLY RECONSOLIDATED) FROM 152' ON
163.2	9.4		2.83	90	.07			.01	Mod	.05?	.01?		Mod clay sp chlor		PROBABLY SP	ALT Mod-ST; wk-Mod EPIDOTE, wk SIL'N; ST PY. NUMEROUS QTZ-PY FRACS W/ 50° OR GREATER DIPS. RK LOOKS MORE LIKE AN IGNEOUS RK
172.2	9.0		2.64	95	.05			tr	/	.04?	.01?		/	/		ALT Mod-ST, EPIDOTE + MIN AS ABOVE
181.1	8.9		2.83	94	.18			/	St	.16?	.02?		Mod clay-ser, chlor	/		Mod-ST ALT, Mod-ST SIL'N LOCALLY; ST-INTENSE PY, SP CPY, SP CC, SP TURQ. APPARENTLY A FOUND BX TYPE APPEARING. RK IS FLTD ALONG SEVERAL PLANES, A PY CEMENTED BX OCCURS CIRCA 180'
189.0	7.9		2.42	100	.14			tr	Mod	.06	.08		St clay-ser	tr lim		ST ALT, wk-Mod PY, SP-WK CPY, SP CC, SP TURQ, RK STILL BRKN. BX FLTS.
197.7	8.7		2.78	91	.06			tr	Mod	.05	.01		St clay-ser	/		Mod-ST ALT, Mod PY, Tr CPY, wk-Mod CHLOR-TALC. RK HAS VAGUE BX TEX.
206.4	8.7		2.75	95	.04			/	/	.04			St clay-talc	/		Mod. SHEARED + BRKN 193-195'. Mod ALT, wk SIL'N + QTZ VNING; Mod-SULFS DISSIM. PY, Tr CPY
214.0	9.6		2.66	95	.04			/	/	.04			/			Mod ALT; wk-Mod QTZ VNING; wk-Mod PY (SOME WHAT COARSER), SP CC. SP CC.; ST. CLAY GOUGE ZONE 209.2'-209.8'.
222.4	8.4		2.89	93	.05				/	.04	.01		Mod clay talc			Mod ALT, Mod SIL'N, NUMEROUS PY filled, silic-rounded fracs. AVE. DIA. Mod PY, Tr-SP CPY.
236.3	13.9		2.86	82	.04				/	.04			/			As Above. END OF HOLE
			Ave. Rec'y =	90												

Final Depth 256.0
Collar Elevation 2657.93
Coordinates 28357.39 N, 34243.52 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-2
Sheet No. 1
Date Completed
Logged By N.R.N. + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration	LIM, HEM JAR, ALUN	Rock Type	Remarks
0.0-4.7	4.7	RB + NO COREs													Mz	Mod Alt, Mod Sil'n, wk-Mod HEM, wk JAROSITIC ALUNITE, wk GOETHITE
16.9	12.2		2.47	58	.03			.03	—	—	—		Mod-ST-SY QTZ-SER CLAY WK	Mod-ST HEM WK LIM SP ALUNITE		Box work with Assoc. Lt. Red hematite staining. Run is cut by nbar 4e
25.8	8.9		2.53	90	.04			.04	—	—	—		ST. QTZ. SER WK CLAY	Mod-ST HEM SP-WK LIM		As Above
35.3	9.5		2.52	87	.03			.03	—	—	—		SP CLAY	WK-Mod HEM WK LIM WK-Mod JAR		Mod-ST Alt, wk Sil'n, Mod hematite staining on numerous fracs, and coating altered biot, and sericite. Tr Box work. Flt Mat 25.
																Mod-ST Alt, sp Sil'n, hematite decreasing + jarositic yellow lim. Tran
																over. There is evidence that the hem. is derived from continued oxi
																of the limonite. Murg Box work beginning evident. Flt Zone 25.4-28.
46.9	11.6		2.58	69	.04			.04	—	—	—		Mod QTZ-SER SP CLAY	Mod-ST HEM WK LIM-JAR		
59.5	12.6		2.51	66	.04			.04	—	—	—		Mod-ST CLAY-SER	WK-Mod HEM LIM-JAR		Mod-ST Alt, wk-Mod HEM, sp-wk Yellow Lim, wk Box work. Possible Fl
70.6	11.1		2.54	78	.03			.03	—	—	—			Mod HEM WK LIM-JAR		Alt Mod-ST + locally ST, HEM Mod-ST, Lim wk-Mod, sp LIM. Flting @ A 56.0-57.2', wk Box work
81.4	10.8		2.54	77	.02			.02	—	—	—		ST-INTEN CLAY-WK QTZ-SER	ST HEM (LIM) (?)		Alt As Above, Sh'n wk-Mod, Mod lt. Red Hem, ST-wk Yellow-Brn Lim. Loc-Las Highly Alto. + Granular Flt. Zone.
93.3	11.9		2.53	90	.02			.02	—	—	—		ST-CLAY-SER-QTZ	WK HEM WK-Mod LIM	SP(?) 81.4'	ST. Alto., wk-Mod lt. Iridescent Red Hematite on fracs, sp-wk Yello -Brn Lim. Shattering decreasing. Flt. Material 70.6-73.6
																Sp from 81.4-83.5' completely alto to a buttery clay, but tex. remains destr
																The remainder of the run may or may not be sp. It is less alto to
																clay, strongly flto + Bx 83.5'-88.7'. Also strongly flto + alto 91.9-93.3
103.9	10.6		2.49	83	.02			.02	—	—	—			SP-WK HEM WK LIM-JAR	SP(?)-Mz(?)	Mod hem on fracs, sp yellow brn lim
																St Alt, Rk is cut by numerous clay unless filling fracs, Mod Hem, sp
																Yellow-brn lim, local spots of green clay, Tex is vague w/ Med. sized
																Lath-like felds appearing. Rk on whole has a mottled purple-red appear
111.9	8.0		2.37	100	.02			.02	—	—	—		Mod CLAY-SER-QTZ	WK HEM Mod & LIM -JAR		Tr Py. - Mod-ST Sil'n
																Similar to above to 105.5 then rk becomes somewhat granular +
															Mz @ 108.3	Mod-ST Alto. A result of flting between 105.5-108.3 probably low angle
																from 108.3-111.9. Alt is Mod + Tex is distinct appearing to be M
																A 60° dipping 1/2" yellow clay zone is @ 108.4'. Mz contains Mod hem on frac
121.7	9.2		2.59	94	.02			.02	—	—	—		Mod CLAY Mod-ST QTZ	SP-WK HEM Mod JAR WK LIM		Mod-ST Alt, ground mass appears to be 2nd Qtz + ser, Feld. Phenos Rout
																Distinct. St. 60° fracturing w/ yellow lim on fracs. 1" spacing o
																Fracs. wk. hem, wk. Mod Box work, Tr Py, Mod-ST Sil
129.8	8.7		2.50	98	.03			.03	—	—	—		Mod CLAY-SER ST Sil'n	WK-ST JAR-LIM SP HEM		- ST Sil'n
																St-Mod-ST Alt. Grnd. Mass As Above; wk hem stain; wk-Mod Jar on fracs; sp
139.1	9.3		2.59	93	.05			.02	Mod	Tr	.03			WK-Mod JAR-LIM Tr HEM	SULFS. 136.2'	Mod-ST Alt, Mod-ST Sil'n to 133.1, wk lim + jar, sp hem, Flt Gouge 133.1-133.8'
146.2	7.1		2.56	100	.09			.01	Mod-ST	.01	.07		ST CLAY-SER-QTZ	—		Sp Py, Tr Cp.
154.1	7.9		2.52	100	.12			.01	1	.03	.08		1	—		Alt Appears Mod-ST. Matrix is now opaque, still has high silica content. Rk is quite blk. Mod-ST well dissm. Py, sp cc, Tr CPy. Py is lt. brouted
163.2	9.1		2.62	95	.08			.01	1	.03	.04		1	—		Mod-ST Alt, matrix opaque, Rk is quite blk.; Mod-ST Py, sp cc, Tr CPy
171.3	8.1		2.59	93	.11			.01	1	.04	.06		Mod-ST CLAY-SER	—		Highly Bkn + Gouey, Mod-ST. Alt, Mod-ST Py, Tr-sp Bo.+ CPy
																Mod-Alt, highly Bkn + Gouey; Mod fine grained well dissm. Py, Tr CPy + cc.
																ST. Gouge 169.5'-171.3'
															Flt Zone 169.5-184' 45° (?)	Run is 70% Gouge Material, some intermixed silic. Mz fracs.
179.5	8.2		2.63	100	.08			.01	1	.04	.03		Mod CLAY-SER-QTZ	—		St Alto Mz + Gouge material. Decreasing amt of Gouge + Alt., Flt. Plan
																45° (?)
188.5	9.0		2.69	91	.04			.01	1	.03	Tr		Mod CLAY-SER MUS QTZ	—		Alt + Gouge frequency decreases from 184' down. Mod Py. Some
197.4	8.9		2.71	91	.05			.01	1	.03	.01		Mod CLAY WK SER MOD QTZ	—		Silic. Along fracs.
																Wk-Mod Alt, sp Sil'n, Mod Py, Tr CPy; Two Feld apparent - a larger
																sub-hedral type which is alt to a lt. yellow-cream. The second
																variety is smaller, tends to euhedralism, only wk-Mod clouding
206.1	8.7		2.64	85	.04			Tr	Mod Py	.03	.01		1	—		wk Mod Alt, Biot is less alto., Mod Py; 60° thin gouge zone @ 199.
211.7	5.6		2.63	93	.05			Tr	1	.04	.01		Mod CLAY WK SER MOD QTZ-SPR	— K-SPAR		Appears but probably not
220.6	8.9		2.62	84	.03			Tr	1	.03	Tr		WK CLAY MOD-ST QTZ	— K-SPAR		Wk-Mod Alt, some silic along high angle fracs.; wk-Mod Py.
																Alt is probably St. Appears as though there has been late (time of
																hydrothermal alt.) growth of felds. It also appears that the grnd.
																mass may have been flooded w/ 2nd K-spar. Biots appear
229.4	8.8		2.65	95	.02			Tr	wk	.02	Tr		SP CLAY	—		Mod fresh. wk-Mod Py Dissm in matrix + on fracs. Some Epidote
																As Above, some of the secondarily enlarged felds. 3/8 diam.
238.0	8.6		2.67	96	.02			Tr	1	.02	Tr		SP-WK CLAY	—		wk-Mod Py. Silicification along Py veinlets.
																As Above, but seems to have been less growth of feldspars
246.4	8.4		2.61	89	.03			Tr	wk-Mod	.03	Tr		WK CLAY			Epidote wk. Mod Py on fracs. Assoc. w/ silicification
																Alt Mod. with development of clay in felds. Rk is quite
254.3	7.9		2.63	100	.02			Tr	Mod	.02	Tr		MOD CLAY WK SILICA			Bkn + slightly gouey. Mod-ST Py on fracs + somewhat Dissi
256.0	1.7		2.69	98	.02			Tr	Mod	.02	Tr		1			As Above, but more highly Bkn + gouey
													1			As Above
EOH			Avc. Rec'y = 88													
																END OF HOLE

Final Depth 231.6
Collar Elevation 2607.64
Coordinates 26716.30 N., 35003.64 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. G-1
Sheet No. 1 of 1
Date Completed
Logged By JAB, NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER	LIM HEM	Rock Type	Remarks
0.0 - 5.0	5.0	N.C.			–	–	–	–	–	–	–	–	–	–	–	
14.5	9.5	NXW	2.78	75	.03			.03	–	–	–	–	Mod ser, clay	Sp lim, jar wk-Mod hem, lim	?	St to Intense Ser. Sp Silin, Re vis. text RK type - Sp or Arkose Sp jar, Mod L
24.3	9.8		2.54	85	.02			.02				Wk-Mod Alun	Mod-St ser	Mod jar Sphen		Alt as above, wk-Mod Silin, wk(+) jar, wk(+) hem (py bleeded) on vns
33.4	9.1		2.57	97	.03			.03	–	–	–	–	Mod-St Ser-clay	/ /		Alt, as above, RK is composed of qtz+ser was prob on arkosic sed, wk lim jar
42.5	9.1		2.64	99	.03			.02	sp-wk	.01	–	–	/	wk jar sp hem	Suls @ 33.8'	Alt as above, wk Silin, wk clay, Alunite, laminated shear? bending dips - 80° Dis(+) v tiny diss. py
52.0	9.5		2.71	97	.03				/	.03	–	–	/	Sp jar		Alt, as above, wk-Mod py, diss + on vnlets tr lim, No vis cu sulfides
60.6	8.6		2.72	93	.02			tr	Wk-Mod	.02?	–	–	Wk-Mod ser-clay	Sp lim, jar wk hem		Alt as above, Mod(+) py, v. finely diss, + on vnlets, extremely fine laminated qtz vnlets, approx. vertical, wk Alun, lim
69.7	9.1		2.66	100	.02			tr	/	.02?	–	–	/	Wk lim, jar sp hem	Bx @ 162	Alt as above, shadows of bx frags May be arkose or v. fg Sp Mod(+) py
78.6	8.9		2.55	100	.01			/	sp-wk(+)	.01?			/	/ /		Alt, Intense, sp-wk py, wk lim-jar, wk hem-lim, bx frags may pass for Sp. Wk lim-Alun on Fr
88.1	9.5		2.68	81	.03			–	/	.03?			/	—		Intense Alt, No bx frags vis. wk py, leached along cleavages, No lim
100.7	12.6		2.68	56	.02				/	.02?			/	–	Lin + Gg zone @ 94 - 98' Sp? @ 98.2'	Alt as above, Mod bx text vis. wk-Mod(+) diss py leached as above no li
109.7	9.0		2.63	91	.02				/	.02?			/			As above, St silica flooding along py vns as above, prob. depl. of alunite + clay
119.4	9.7		2.65	89	.02				/	.02?			/ (+)		Arkose? 3' min bx @ 126.7'	As above, Some bx frags vis. Wk-Mod py, finely diss + on vnlets
128.3	8.9		2.43	99	.01				Wk	.01?			/ (+)			Intense Alt, wk-Mod silin, Mainly along qtz vns, wk-Mod py showing sign. of partial leac
136.5	8.2		2.69	93	.02				sp-wk	.02?			/			Alt as above, Mod-St Silin along py vns, wk t, sp RK is probably an An
144.4	7.9		2.53	98	.01				/	.01?		Poss some Alunite	/			As above
153.2	8.8		2.81	72	.01				/	.01?			Sp ser clay			As above, wk-Mod py
161.2	8.0		2.71	91	.01				Mod	.01?			Sp-wk ser, clay		Sparse Sp text @ 159'	As above
169.7	8.5		2.67	93	.06				/	.06			Sp clay + Alun		Sp clay circa 164.2'	161.2 - 164.2' RK is either a qtzite or St. Silicified Igneous RK. Sp is Mod-St. Alt
177.4	7.7		2.69	87	.03				Wk	.03?			Sp-wk clay-ser		Silicified Arkose (?) @ 170.1	Mod chlor., qtz. vning wk. Mod Dissim. fine grained py. RK is Quite Brk. Arkose (?) is St. Silicified w/v. Wispy Tex. locally qtz. - Feld-clay lineation well developed. Dips 60°. Local concentrations circa 175.5' of small clumps of radiating white crystals (?), vague possibility they are fossil
185.9	8.5		2.73	92	.03				/	.03?			Sp clay-ser			Mod. Dissim. py. As above. + Bx zone @ 178.6'. wk py
193.5	8.6		2.72	95	.03				sp-wk	.03?			/			As above, lineations seem to be somewhat variable in dip, ranging from 45° - 85°. Gouge zone circa 192.5'. py wk and occurs mostly in vn
202.4	8.9		2.70	93	.03				Wk	.03?			/			As above, lineation better developed, consistent dip of 45°
210.8	8.4		2.73	93	.03				/	.03?			/			Mineralization as above
216.4	5.6		2.63	75	.03				sp-wk	.03?			/			As above. Lineation apparently mechanically developed
226.6	10.2		2.56	67	.02				wk	.02			/			As above, 1' rehealed bx circa 220, gg zone 223.5 - 224.2' sp py. add star fish shaped textured? feld
231.6	5.0		2.51	80	.03				/	.03			/			St Alt, Mod-St Silin, wk diss py, RK vfg No vis text w/ bound lense, prob Alt o
E.O.H.			Ave. Rec'y = 88													

Final Depth 602.0
Collar Elevation 2905.12
Coordinates 30892.23 N, 23345.82 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-152
Sheet No. 1 of 2
Date Completed
Logged By JAB + NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: CLAY SER	LIM HEM	Rock Type	Remarks
0.0-5.7	5.7	NC														
11.9	6.2	NXWI	2.47	90	.04			.04					Mod-St SER SP CLAY	WK-Mod LIM, WK SP + HEM LIM	Dp	WK-Mod Alt, 1" to 3" bands of s-LIM along py wks, WK lim hem sp jar num. tr LLM
21.4	9.5		2.45	90	.05			.04	Tr-Sp	.01			Mod CLAY-SER	WK HEM SP-WK LIM Sp-Tr LLM		St Alt, St Qtz. Vning 50°-70° opposing directions; Sp-wk Jar + Aunite, wk hem
30.3	8.9		2.47	97	.13			.08	Sp-wk	.02	.03		Mod CLAY-SER	WK LIM + HEM SP-JAR		Tr-Sp LLM. Intermixed sulfs + leached from 16' down; Sp-wk disim Py, Cp, + Tr Cpy
38.6	8.3		2.62	92	.03			.02	Sp	Tr	.01		Mod SER SP CLAY	WK-Mod HEM, WK SP JAR, SP LLM	QTZITE @ 31.3'	As Above, Fine Siliceous Veinlets Give Away to Wide Bands of Silica; Cc occurring as Thin Coating on Py + Cpy; Sulfs well disim + v. fine grained
48.5	9.9		2.63	89	.02			.02	-	-	-		WK-Mod SER SP CLAY	WK-Mod HEM WK SP, LIM SP-LLM		St contact, Rk is still leached w/ fine Qtz veinlets; WK HEM, Sp Jar + lim, Tr-Sp LLM, No Sulfs
61.2	12.9		2.61	64	.04			.04	-	-	-		Mod CLAY-SER	Mod LLM SP-WK JAR Tr LIM		Rk Becoming Mod Fractured, High Angle Flt. Zone Between 53.4 + 58.4', WK HEM, Tr-Sp JAR + LIM
69.9	8.7		2.62	90	.06			.06	—	-	-		Mod SER SP CLAY	WK HEM WK LIM Sp JAR		Qtzite, WK HEM, Sp LIM, No Sulfs Evident (leached), Some Dp Circa 67.6'
79.5	9.6		2.63	88	.11			.09	Tr-Sp	Tr	.02		Mod CLAY-SER	WK-Mod LIM, WK Mod SP-WK JAR SP-LLM	INTERMIXED Dp + QTZITE	Mod-St SER, Mod-St Qtz Vning + Silicification, Sulfs Locally in Dp; WK-Mod HEM + LIM
88.4	8.9		2.53	94	.47	.03		.03	WK	.09	.35			Sp LIM	Sulfs 80.5' Dp (?)	Mod-St Alt, WK-Mod Silif, WK Py, WK-Cc Coatings; Flt. Zone 87-88'
97.6	9.2		2.51	93	.35	.07		.07	Sp	.02	.26			WK-Mod LIM Tr HEM, JAR	Mz 90.2'	Mylonitized Mz Recognizable Circa 90.2'; St Silica + Qtz Vning Down to 95.6 the Decreasing Apparently a Flt Contact. Sp-wk Py, Tr-Sp Cc, Mod LIM.
107.1	9.5		2.58	82	.20	.06		.06	WK	.03	.11		Mod CLAY WK SER	Mod LIM		Mod Alt Mz, Mod-St Brown Lim on Fracs, Sp Py, Felds Both Equidimensional + Lath Like, 20% Large Garnied Biot.
115.9	8.8		2.51	89	.52	.06		.06	WK	.20	.26			WK-Mod LIM		Mod Alt, Mainly grn clay alt of plag phenos, WK lim on fracs + vnlets wk py tr cp, Sp CC
123.1	7.2		2.60	89	.34	.04		.04	WK-Mod	.15	.16		WK-Mod CLAY-SER			WK Alt, Sp-WK py, tr CC, Cpy, leaching on fracs w/ WK lim
134.8	11.7		2.56	84	.20			.04	WK	.04	.12			WK-Mod LIM Sp LLM	Qtz. Ve, then Hf @ 123.1' CT slip Dp circa 134.8	Mod Alt, Lt gy, Qtzitic Hf to 126.3' w/ Hf becomes chlor, WK-mod diss Py in Qtz Mod, Sp py in felsic tr MoS2, Cc on fracs.
140.3	5.5		2.58	79	.11			.01	Sp	.03	.07		Sp Pr-WK SER	Sp-WK LIM		WK Alt WK? Silic Dp?, Sp py in felsic tr MoS2, Cc on fracs.
144.2	3.9		2.64	95	.19			.01	Sp	.03	.15			1	Dk grn chloritic Hf @ 140.3 CT Dip 40°	WK-Mod Py, Sp Cc, tr Cpy; Hf Hf Hf + Tan Hf, Sp WK py, tr Cc, Cpy on fracs + diss
153.2	9.0		2.69	95	.11			.01	WK-Mod	.07	.03			Tr LIM		Gy-br to gy sil Hf alternating w/ some grn chloritic Hf, Sp py tr Cpy, MoS2
158.4	5.2		2.79	81	.30	.02		.02	1	.20	.08		—	—		As above, More greenish Hf is predom. WK py on fracs tr Cpy, MoS2
163.8	5.4		2.43	91	.96	.03		.03	Mod	.75	.18		WK CHLOR	—		Greenish, soft, friable Hf, Mod Hf py Sp-WK Cpy, tr MoS2 Appears more favorable for Min.
167.7	3.9		2.83	95	.27	.02		.02	1	.20	.05		WK CLAY-CHLOR	—		Lt grn Hf, py-chlorite web-work thru core tr Cpy
177.6	9.9		2.63	92	.89	.02	48.3 @ 1.49 .02	.02	Sp-WK	.89	tr	Zn .12	Mod-St Act Wellington A	tr LIM		As Above, web-work increasing w/ Py + Cpy + calcite assoc.; WK Py, Sp Cpy
187.2	9.6		2.73	89	1.11	.01		.01	WK-Mod	1.10	tr			1		Lt Grn Hf cut by an increasing number of v. fine specularite vnlets. Garnetized zones between 181.7-183.0 + zones dip approx. 60° possibly represent bedding. Spec vnlets dip about the same. Py wk-mod, Cpy wk-mod. Sk @ 186.0 + 186.0 Flt. Zone 187.0-187.9, white-mod grn, less spec. vnlets, here chlor, wk-mod Cpy + Py
197.3	10.1		2.70	86	1.33	.02		.02		1.33	—		Mod chlor ser?	—		
206.7	9.4		2.69	95	3.47	.01		.01	WK	3.41	.05	Ag .06 Zn .02 Pb .149	Sp-WK SER	—		Siliceous zone 198.1-205.9, zone contains massive Cpy, local concentrations of Galena + Sphalerite (lt. orange-brown translucent) lt grn clay along fracs, some specularite vnlets.
216.0	9.3		2.73	95	.20			.0	1	.20	Tr		Mod SER WK-Mod Py	—		Clay while to lt olive grn. Hf (wkly lineg) cut by numerous calcite + chlorite vnlets. Garnetized zones circa 210 + 213'. WK-Mod floor. WK Py, Sp-WK Cpy.
224.5	8.5		2.69	99	.21			—	WK	.21	—		Mod, chlor ser	—		Slightly lineg. Lt. olive grn Hf cut by qtz + calcite vnlets. Local garnetized zones (zeroulite + pectin) Sp-WK Py, Tr-Sp Cpy, St specularite.
233.6	9.1		2.63	86	.31	tr		tr	WK	.31			Mod-St chlor, tr sp	—	Fault zone 227-230' Tactite circa 230.0	As above, local dense chloritic masses, oxidized specularite from 230 to 232. WK Py, Sp Cpy, Tr Galena
242.9	9.3		3.27	80	.51	.01		.01	1	.50			1	—		As above to 238.0' Then tactite, cut by numerous chlorite vnlets
252.1	9.2		2.68	100	.40	tr	27.9 @ .14 Pb	tr	WK-Mod	.38	.02		sp-wk chlor sp-wk gar	—	Bedding (?) Approx 70°	Calcite vnlets also. St-WK Py + Cpy
261.5	9.4		2.68	96	.42	tr		tr	1	.42	tr		1 tr gar	—		Rk becomes siliceous circa 246.3 w/ occasional garnetized spots. Silica becomes Mod. Narrow banding of chlorite + silicic zones may be bedding
270.6	9.1		2.49	96	.33	.04		.04	Sp	.29	—		sp-wk chlor sp gar	Sp LIM	Flt circa 268	Silicic zone apparently was originally a siltstone. Still chlorite bands, some garnetized blebs, Sp specs. Sp Py + Cpy
279.5	8.9		2.52	92	.38	.10		.10	WK	.28	—		1 tr gar	Sp-WK LIM		Rk as above except more chloritic. Rk is faulted + brk between 267 + 276.7 Sp Py, Cpy
287.6	8.1		2.44	99	.30	.19		.19	Sp	.11	—	Sp fluorite	Mod chlor	WK LIM	30° Flt. 284.1	Bands of siltstone Hf dipping 70°-75', Sp Py + Cpy, LIM on fracs. Rk is quite scrambled looking. Intermixed light qtzite, chloritic concentrations cut by irregular qtz-calcite vnlets. 30° Flt @ 284.1, on either side the rock is brk + altered. Limonite stained. Mod Mn0. Rk becomes chloritic
296.3	8.7		2.75	100	.49	.06		.06	WK-Mod	.43			WK-Mod chlor, sp gar	tr-Sp LIM	Flt 288.8 - 289.8	Flt @ 288.8-296.8', Lineg, Chlor Tactite + intermixed siltstone Hf.
305.5	9.2		3.02	96	.36	.02		.02	tr-Sp	.34			WK chlor Mod gar	Sp LIM	Flt @ 296.3 Chlor Hf @ 305.4'	WK specularite, Sp Py + Tr-Sp Cpy, Tr MnO + Epidote
314.8	9.3		3.04	90	.46	.02		.02	1	.44			Mod-St chlor	tr LIM		Chloritic Hf or Tactite, WK calcite vning, Sp specularite vnlets, Bedding 60° Rk becoming more garnetized
324.5	9.7		2.55	95	.49	.11		.11	Sp	.38			St chlor,	Sp-WK LIM	Flt - Qtz. zone 317.6 - 321.7 Dp - 319.7 - 324.5	Chlor Hf to 306.1, lineg Tactite to 308.9, Chlor siltstone Hf to 311.4, Chlor. Hf to end of Bon, WK-Mod Sk chlor on fracs. WK Qtz vning in Tact. + Silts. Mod chloric veinlets in chlor Hf. Sp Py, Tr-Sp Cpy. St Qtz. Flooding Vn @ 324.5. As zone 317.6-318.4 then Dp to 324.5 Tactite. Rk goes to Sk to 321.9, then Brk chlor Hf to end of run. Sp Py, Tr Cpy

Final Depth 602
Collar Elevation 2905.12
Coordinate 30892.23 N, 23346.82 E
Inclination VERTICAL

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-152
Sheet No. 2 of 2
Date Completed 10-22-66
Logged By NRN + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
332.4	7.9		2.74	98	.53	.01	112.3 @ .67/.04	.01	wk	.52			st chlor	sp-wk lim	LOW ANGLE, FLT (∠10°) @ 332.4	OLIVE GRN Hf. LIMBY + CHLORITIC. CUT BY NUMEROUS IRREGULAR CALCITE VNLETS RK IS BKN. AND FLTD. (HIGH ANGLE) BETWEEN 330.4 and 331.7' RK CONTAINS about 8% SPECULARITE, Sp-wk PY + CPY as V. FINE DISSIMINATIONS. SP LIM ON SOME
341.5	9.1		2.52	96	1.09	.03										
350.7	9.2		2.81	94	.62	.02		.02	WK	.60			St chlor wk-mod gar.	WK lim	GARNETIZED BAND 348.2 – 347'	AS ABOVE. RK BECOMES QUITE CHLORITIC, RK IS SOMEWHAT BKN FROM 340.0' TO END OF RUN. BEDDING APPROX 75°. WK PY, SP-WK CPY. LT TAN GARNETIZED SED (TACITE (?)) INTER MIXED W/ CHLOR. Hf. THIS RK HAS BEEN INTENSELY SHATTERED and REHEALED W/ CALCITE, CHLORITE, SPECULARITE. THIS DESCRIPTION CHARACTERIZES ALL THE SEDS. IN THIS HOLE. Sp-wk PY, Sp CPY
359.9	9.2		2.92	87	.81	.02		.02	Mod	.69	.10		St chlor	WK lim		
369.9	10.0		2.91	73	1.46	.07		.07	1	1.08	.39		1	1	FLT. ZONE 359.2 – 370.3	CHLOR. Hf w/ pods of Tactite HEALED FLT @ 355.9' 30° dip. RK is FLTD – BKN LAST 7' of RUN. WK PY w/ LOCAL CONCENTRATIONS. SP CPY, LIM ON SOME FRACS
378.9	9.0		2.55	99	.46	.03		.03	1	.43			1	Sp lim		CHLOR. Hf FLT MATERIAL. Mod PY, Sp CPY, Sp-wk LIM.
389.0	10.1		2.93	74	.63	.03		.03	Mod (–)	.60			Mod-st chlor, wk gar.	tr lim		DK GRN CHLOR. Hf. LOCALLY SILICEOUS + LOCALLY CALCAREOUS. WK-Mod PY, Tr-Sp CPY
399.9	10.9		2.51	73	.53	.04		.04	1 (–)	.49?			St chlor tr gar	WK lim		CHLOR Hf TO 384.0' THEN GARNETIZED Hf OF TT. FLT MAT @ 380.0' 381.7 – 384.0, 384.0 – 385.1 and CIRCA 388.7'. CHLOR Hf CONTAINS MOD PY, Tr-Sp CPY. Tr CONT. Sp-WK PY WK EPIDOTE.
409.4	9.5		2.63	89	.21			.04	WK	.17			Sp chlor	WK (+) lim WK MAGN		CHLOR Hf. FLT MATERIAL TO 392.0, CIRCA 394.6 AND 396.6'. Mod PY, Tr CPY, WK L
418.9	9.5		2.63	83	.29			.03	1	.18	.08		WK chlor	WK(+) lim		SILICEOUS CHLOR. Hf. and GARNET Hf., WK PY, Tr CPY, MAG and LIM on FRACS. SEDMENTED BK 407.8 to 410'
428.8	9.1		2.51	92	.20			.03	Sp-wk	.03	.14	tr MoS2 tr epidote	WK chlor, clay	WK-Mod lim, MAGN	SP 419.5' – 427.6'	RK ORIG. a SILICA RICH SILT STONE. RK is BKN + FLTD. FRACS COATED w/ LIM + a Yellow Fe SP PY, Tr CPY
437.5	9.5		2.24	100	.19			.01	Sp	.18	–		WK chlor	Sp-wk lim		WK. ALT. SP. INTRUDING QTZITE Hf., Sp-wk Hf, Tr-Sp CPY, Sp-wk LIM on FRACS
446.2	8.7		2.61	99	.18			.01	WK	.17	–		St chlor	tr lim		MIXTURE QTZITE + CHLOR Hf. NUM SPEC. VNLETS. Sp-PY, Tr-Sp CPY
455.6	9.4		2.48	99	.16			.01	1	.15			1	Sp lim		NUM. CHLOR + SPEC VNLETS on old FRACS, Sp PY, Tr-Sp CPY
465.3	9.7		2.35	93	.34			.01	Sp-wk	.33			1	WK lim		CHLOR Hf after SILTSTONE. CHLORITIZATION HAS PROGRESSED TO VARYING DEGREES. ALL of THESE SEDS HAVE BEEN SHATTERED AND REHEALED. CHLOR., HEMATITE, QUARTZ AND PY + CPY OCCURE ALONG THESE OLD FRAC LINES. Sp PY, Tr CPY, Sp LIM
475.0	9.7		2.73	88	.27			.01	WK	.26			Sp-wk chlor, gar.	1		ST. – INTENSELY CHLORITIC Hf; RUN is CUT BY SEVERAL SMALL SCALE FAULTS of APPROX 30° dips. THE ROCK BEYOND 469.0' and 464.5 is QUITE BKN AND GOUGY. SP PY,
484.4	9.4		2.73	99	.19			—	1	.19		Ag – Tr. Zn – .02 Mo – .004	—	—	Black bio Hf @ 477.3, s.l.	BANDED CHLORITIC ZONES IN A SILTSTONE Hf. BANDING DIPS 60°. RK ALTERED, GOUGY and LIMONITE STAINED TO 466.0'. Sp PY, Tr CPY
493.5	9.1		2.71	97	.16				WK(–)	.16			—	—	CHLOR. Hf @ 493.5'	AT 477.2 ROCK BECOMES V. SILICEOUS and BLACK IN COLOR. THE BLACK IS APPARENTLY V. FINE BIOT. ALONG FRACS THERE IS BLEACHING TO THE LIGHTER CHLORITIC GREEN. THERE IS A V. FINE STREAKING WHICH MAY INDICATE BEDDING DIPPING 60°–70°. V. FINE GRAINED SULFS OFF UNIFORMLY DISSIM. TOTAL APPROX. 4%, PY, Tr CPY, Tr MoS2. RK is NOT REACTIVE. *SOME MOD ON FRACS ASSOC. W/ BEDDING
502.5	9.0		2.83	89	.83	.05		.05	WK	.78			St chlor	WK(+) lim		AS ABOVE. SOME CALCITE VNLETS. TOWARDS END OF RUN BECOMING BANDED WITH THE LIGHTER COLORED Hf. SULFS AS ABOVE. SILICEOUS LT + DARK BANDED TO 495.6 THEN UNCLASSIFIED CHLOR Hf. CUT BY NUMEROUS CALCITE VNLETS. FLTS + BX ZONES @ 495.6 – 496.2, 497.8, LOCALLY SP-WK CPY, SP PY, POSSIBLY SOME CC. or COVELLITE
508.5	6.0		2.36	92	.34	.09		.09	Sp-wk	.25			St chlor wk ser	WK(+) lim		
523.6	15.1		2.56	77	.31			.09	1	.21		.01 COV	Mod chlor wk-mod ser	WK-Mod lim	MZ (?) – Sp(?)	CHLOR Hf TO 502.9 THEN BLEACHED TO 505.9, RK IS THEN CHLOR AND HAS IN NEW TO END OF RUN, SP PY, CPY.
532.7	9.1		2.60	92	.21			.08	Sp	.12		.01 COV	Sp chlor chlor, wk clay wk-mod ser	WK-mod lim		MOD ALT. INTENSELY SHATTERED and CUT BY NUMEROUS BC ZONES, WK PY Sp-WK CPY, SP BORNITE. RK HAS HIGH CHLOR CONT IN WISPS + SHEETS.
542.3	9.6		2.58	86	.19			.04	SP	.12		.03 COV	As Above	WK JAR.		MOD ALT, 1/2 TO DISSIM CHLOR, RK IS LESS SHATTERED. Sp PY + CPY ASSOC. W/ CHLOR.
551.2	8.9		2.59	92	.10			.01	Sp-wk	.06		.02 COV	1	Sp-wk lim		MOD GRAINED XALINE. Mod ALT. PLAGIOCLASE ALTD. BY GREEN CLAY. BIOT. NOW CHL Sp-WK PY, Tr-Sp CPY, Sp COVELLITE. RK HAS A VAGUE METAMORPHIC APPEARANCE
560.1	8.9		2.66	96	.10			.01	1	.07		.02 COV	Sp CLAY-SER Sp CHLOR	Sp lim	35° DIPPING LINEATION OF MOLDS + BIOT	AS ABOVE. FLT. GOUGE (6") CIRCA 545.8'. RK SHOWS SLIGHTLY LESS ALT. Sp PY, Tr CPY, Tr-Sp BORNITE, Tr-Sp LIM on FRACS
569.0	8.9		2.42	100	.30			.06	1	.20		.04 COV	Mod CHLOR wk-mod CLAY	Mod LIM	ALT. SED 563.9'	AS ABOVE, 1/2" QTZ VEIN (NEAR VERTICAL) CONTAINS Sp SPECULARITE(?). OVERALL Sp PY, Tr-Sp CPY, Tr BORNITE. ALIGNMENT OF EDGES + BIOT DIPS PARALLEL 3" BX ZONE NEAR TO CONTACT, THEN FOR ABOUT 1.5' RK is a CHLOR Hf. QTZITE or SILTSTONE. REMAINDER OF RUN IS AN ALTD MOD-XLINE GRAINED ARGOSE – FS. RK IS SOMEWHAT POROUS. Sp-wk PY, Tr-Sp CPY, Tr-Sp C.C. or COVELLITE, WK LIM ON FRACS. COVELLITE
577.5	8.5		2.63	97	.25			.08	WK	.15		.02 COV	WK-Mod CHLOR WK CLAY	Mod LIM		
587.5	10.0		2.51	75	.34			.04	Sp-wk	.18		.12 COV	Mod-St CHLOR MOD CLAY	WK LIM	CHLOR Hf 579.2	QTZITE TO CHLORITIC QTZITE. ORIGINAL RK APPARENTLY CONTAINED VARYING AMOUNTS of FELDSPAR and FE and CLAYS. Sp-WK DISSIM. PY, Tr-Sp CPY, Sp C.C. Sp MAG (?). RK CUT BY SPEC CALCITE VNLETS
597.9	10.4		2.54	70	.14			.02	1	.10		.02	Mod-St CHLOR MOD-STRONG SER	1		RK BECOMES a FINE GRAINED CHLOR Hf. WHICH is QUITE BKN, FLTING. OCCURS CIRCA 579.2 dips 45°, Sp PY, Sp CPY, Tr C.C., Tr COVELLITE
602.0	4.1		2.60	91	.16			.04	1	.09		.03	1	1		QUITE BKN. CHLOR. Hf. NON REACTIVE. WK LIM ON FRACS. Sp PY. V. FINE GRAINED, HAVE COATING of C.C. and Tr COVELLITE
E.O.H.																AS ABOVE, SOMEWHAT SILICEOUS IN PLACES. RK STILL BKN + GOUGY Sp PY, CPY W/ COATINGS OF COVELLITE or CC.

Final Depth 169.3
Collar Elevation 2830.38
Coordinates 30249.21 N, 23585.27 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F151
Sheet No. 1 of
Date Completed 10-6-66
Logged By JAB & NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay Sericite	Lim Hem	Rock Type	Remarks
0.0-5.2	5.2	R.B.														ROCK BIT
20.7	15.5		2.48	49	.12			.12					Mod clay	WK-Mod lim WK MnOx tr-HEM	Mz w/ patchy AK CIFER IBS	WK-Mod Alt, wk lim, hem sp MnOx
29.3	8.6		2.49	96	.14			.14					Mod clay ser	wk hem WK lim		Mainly Mz w/ patchy AK text, WK-Mod Alt, wk lim, sp hem grn clay Alt of feldsp
38.5	9.2		2.48	98	.06			.06						sp hem	Mz	Poss Qtz Mz w/ 3-4% rounded qtz eyes, Mod Alt Mod silin on qtz WK lim, hem stain
47.0	8.5		2.68	89	.06			.06					WK-Mod ser-clay	tr-sp jar WK-Mod lim		As Above, Rk becomes ST. Silt from Al' with only OCASIONAL Tex
55.9	8.9		2.53	97	.14			.07	sp	.02	.08			WK lim	GULFS SA 4	Mod Alt, local ST Silt, Rk Bkn & Gouge, Tr throughout FKM, St Fat zone, sp JAB-lim sp-wk Alt, sp-wk PC as coming on Alt, tr Alt
64.3	8.4		2.59	99	.17			.02		.03	.12			sp lim AN frags		Alt Darkens from wk Mod to dense, sp lim on frags, sp Alt, Tr-sp Alt, CC + Tr Cupriti 15% Biot in Bands up to 1/8"
76.2	11.9		2.63	74	.05			tr	WK-Mod	.04	.01?		WK-Mod ser/clay tr-WK chlor	—	Biot Mz	Sp Alt, 15-20% Biot, sp-wk Diss in Alt w/local ST vns & lin-vns - These Assoc w/ a vari dk chlorite, sp Cpy, Tr Cc, Locally and K-Spar
85.4	9.2		2.65	94	.07			—	wk	.07	tr			—		Sp-wk Alt, sp STR vning, wk-Mod Alt, Tr Cpy - 15' spacing on 45-60° chlor. lined frags, color material feels quite soapy
95.5	10.1		2.65	78	.10			—	1	.10	tr		WK chlor sp ch-ser	—		Sp-wk Alt, wk Alt, Tr-sp Cpy, chlor ser on frags up to 1" wide
104.6	9.1		2.64	100	.07				1	.07	—		sp chlor	—		Sp-wk Alt, wk Diss Alt w/local concentrations along 50' frags, sp Cpy, Tr CC, Tr
113.4	8.8		2.64	92	.06				sp-wk	.06	—			—		Sp-wk Alt, sp-wk Alt, Tr lim, Tr CC, Tr-sp Cpy, more frags, some minor filling Cpy
122.3	8.9		2.64	93	.08				wk	.08	—		sp-wk clay sp ser wk chlor	—		Sp Alt, Sp-wk Alt, Tr-sp Cpy, Tr MoS2, Tr dry GRN sp Alt on frags local wk silin
133.6	11.3		2.63	77	.06				wk	.06	—			—		Sp-wk Alt, locally some salmon pink K-spar unaltered or possibly secondary min
142.4	8.3		2.63	97	.04				sp-wk	.04	—		Mod clay wk ser tr-wk chlor	—		WK Alt, Rk has been bkn & recemented, feldsp Alt to clay & lt grn talcy matef
153.5	11.1		2.63	70	.06				wk	.06	—		wk Mod clay - ser wk chlor	—		WK-Mod Alt, Alt phenos. Alt to grn clay, in places along frags and K spa replaces the Alt clay phenos, sp Py, Cpy assoc. w/ Alt bio books. Mod py on vns up to 2" wide dk grn chlor? assoc w/ some py vns
162.2	8.7		2.65	92	.04				Mod	.04	—		Mod clay, on sp color	tr		As above, St silin along NUM. Qtz Py vns dip – 40°, up to 4" wide, Mod-S
167.3	7.1		2.71	100	.02				1	.02	—		1	sp		

Final Depth 222.0
Collar Elevation 2816.86
Coordinates 30008.72N 22948.42E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-150
Sheet No. 1
Date Completed 9-30-66
Logged By JAB + NRN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration CLAY / SER	LIM / HEM	Rock Type	Remarks
0.0-5.0	5.0	RB	—	—	—	—	—	—	—	—	—	—	—	—	—	ROCK BIT
13.6	8.6		2.48	86	1.53	1.43		1.43	–	–	—	.10 NATIVE	WK CLAY, TR-SP SER	WK LIM, TR LIM		
22.7	9.1		2.55	92	.52	.42		.42	–	–	—	.10 NATIVE	SP CLAY, TR SER	WK LIM ASTOT NATIVE, TR LIM	A.K	FLT BX. TO 10.4' Mod-ST ALT, Mod-ST CuOx IN BX + STAINING ALTD. FDD WK-Mod LIM ON FRACS
32.1	9.4		2.51	89	.48	.40		.40	–	–	–	NATIVE .08	SP-WK CLAY, TR SER	SP-WK LIM		WK Alt. Mod val stain on Alt Plag. :: WK LIM, MNOX, 2-3% Alt 8.0
41.9	9.8		2.60	75	1.88	1.69	(63.9')	1.69	–	–	.10(?)	NATIVE (?) .09	WK CLAY, SP MICA	SP LIM	P.M. And @ 33.1	As above
50.9	9.0		2.83	87	2.95	2.44	(63.9') 1.10	2.44	–	–	.10(?)	Copr tr .41	WK + Mod CLAY	SP-WK LIM		WK Supergene Alt
60.0	9.1		2.65	92	1.48	1.15		1.15	–	–	.06 (?)	(?) .27	WK-CLAY	SP-WK LIM		SP Fine ly porphyritic, plag xtls being replaced by mod chlor, tr Re or fra
68.9	8.9		2.39	81	.87	.62		.62	–	–	.08 (?)	(?) .17	WK CLAY, WK CHLOR	SP LIM		As above, Cu Ch drop off toward end run, tr-sp lim, MN ox on fr
80.1	11.2		2.55	87	.25	.17		.17	SP-WK	TR	.08	—	WK CLAY, SP-WK SER	WK LIM, SP-WK HEM	AK Dike @ 75° And @ 88.5 AK @ 68.9 Patchy Sulf, circa 1-7	Sp-WK Supergene Alt
89.5	9.4		2.53	93	.22			.14	'	'	.08	—	'	WK LIM		SP-WK Lim, Cu carbs, Mn ox on plag, hemas + fracs
100.9	11.4		2.53	57	.15			.08	SP	'	.07	—	'	WK-Mod LIM		And - SP Alt, tr-sp lim, tr Cu ox, And contains up to 5 plas 50% bio here and above, AK: WK Alt sp lim
109.9	9.0		2.55	91	.27			.03	'	.15	.08	tr MoS2	SP-Clay -SP	WK (+) LIM	Sulfs circa 100	WK Alt, slight cracketing adjacent to And dike tr Cu ox stain on fold tr py, cc, cpy
118.1	8.2		2.52	90	.17			.02	'	.05	.10	'	'	'		As above, still patchy sulfs, Nil to sp pyr wks. bio (new chlor) 3-5% as above
128.4	10.3		2.56	79	.23			.02	'	.05	.16	'	'	'		As above, w/patchy sulfs, poss. wks or zones of and K spar or alb.ite
137.6	9.2		2.56	93	.19			.02	WK	.05	.14	—	'	WK LIM		WK Alt, sp py, WK(+) cc, cpy on xtls, replacing bio + xtl boundaries WK lim on fracs
147.2	9.6		2.58	88	.13			.01	SP-WK	.03	.10	—	'	SP-WK LIM		As above, slight reduction in sulfs WK lim on fracs
158.4	11.2		2.56	67	.13			.01	'	.09	.04		WK Clay, WK chlor alt bio	SP LIM		Alt as above, tr-sp py, WK(+) cpy, cc as above, tr MoS2 WK lim tr HEM on fracs
168.6	10.2		2.58	66	.13			.01	SP	.09	.07		'	—		As above, some increase in sulfs along slightly brecciated zones (pres.)
177.6	9.0		2.58	90	.14			tr	tr-SP	.09	.05		SP Clay, WK-Mod chlor, tr-mod ser	SP		WK Alt, sp py, cpy cc, WK lim on fracs
186.2	8.6		2.60	96	.07			—	tr	.07	tr		SP Clay, SP-WK chlor, tr ser, tr Mod chlor			WK Alt, 6% Alt Bio? possibly 2nd, tr SP py, cc, cpy; Frts @ 152.4, 154.5 + 4" cavity @ 156.4-158.4.
201.5	15.3		2.60	51	.08				SP	.07	.01		SP Clay, Mod chlor, SP talc		P.M. Dike @ 186.2 - 188.1 then AK Mz circa 201'	WK ALT, WK QTZ VNS + SP Sil'n, tr-SP PY, CPY + CC
209.5	8.0		2.65	99	.05				1	.05	tr?		1			WK-Mod Alt @ 10% bio, poss. 2nd K spar tr py, SP cpy, cc, tr MoS2
218.1	8.6		2.65	99	.06				tr	.06	—		SP Clay, WK-Mod chlor, Mod talc			WK-Mod Alt, 4% bio, tr py, cpy, MoS2
222.0	3.9		2.66	94	.05				SP	.05		tr MoS2	1			Alt, Mod-St mainly chlorite + green talc or clay replacing plag tr-sp py & cpy cc? RK is generally dark in color
EOH																Mod chlorite Alt of bio, + sp on plag WK 2nd K spar along xtls sp py tr cpy
																As above, chlor + 2nd K spar are two Alt mins w/ K spar oldest sp py tr cpy
																As above

Final Depth 403.6
Collar Elevation 3074.48
Coordinates 31,000.64N, 22718.47E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F149
Sheet No. 1 of 2
Date Completed 9-15-66
Logged By N.R.N. + J.A.B

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration CLAY SER	HEM LIM	Rock Type	Remarks
0.0-5.0	5.0	RK. BIT	—	—	—	—	—	—	—	—	—	—	—	—	—	ROCK BIT
21.5	16.5				.05			.05					st Ser	Mod-St LLM, Arm sp lim	Dp	Mod-St ALT; WK HEM, LIM, Tr LLM
30.8	9.3				.03			.03					Mod-St SER-CLAY	/	8" Mz wide @ 25.3	Mod-St Alt, Silin along Qtz-py vns (1/4" vns dip @ ≈70°) Mod st hem + LLM
39.8	9.0				.03			.03					/	/		St Alt, Silin as above WK lim Mod hem Mod-st LLM mainly on vns
50.0	10.2				.02			.02					/	/		As above
61.7	11.7				.03			.03					Int Clay Mod-St Ser	WK-Mod HEM, LLM	Mz? CINA 56.9-57.3	As above, intense clay alteration toward end run
71.9	10.2				.04			.04					St Clay SER	WK HEM + LIM WK LLM	Slt Sp 66.3 -69.5?	St Alt, Silin, Mod-st 1/4" py-Qtz vns @ 70° WK-Mod Alun on fract-vns.
81.0	9.9				.04			.04					St Clay SER	WK-Mod HEM LLM	Slt St? 71.5 -72.5	St clay, core devoid of text -69.0' May be slt sp or ulg. Dp, Capping altered
90.0	9.0				.03			.03					Mod Clay SER	Mod HEM + LLM WK JAR + LLM	Dp	St Alt, Mod Silin, Sp WK Lim Mod hem, LLM, WK clay, Alun on fracs
102.0	12.0				.02			.02					/	Mod HEM + LLM		St Alt, WK-Silin on WK Qtz vns sp lim, Mod-st hem, LLM
110.9	8.9				.06			.06					WK SER + Clay	/	Qtzite? ≈ 107'	St Alt, st Silin along 1/4" + larger Qtz vns Mod-st hem + LLM sp lim, sp Alun
120.0	9.1				.10			.08	Tr		.02		/	WK LIM WK LLM	Sp diss Suls Qtzite	St Alt, st silin; Mod-st hem + LLM, sp lim; Fault @ ≈ 107', intense silic bel
129.4	9.4				.08			.03	tr-sp	.02	.03 COU?		tr clay-ser	WK lim, jar WK limonite		tr-sp clay-ser Alt, WK-Mod(-) Silin, sp cpy, cc, tr py sp-WK lim on fracs
139.6	10.2				.07			.05	Tr	.01	.01		/	Tr LLM		tr clay-ser WK Silin sp diss py, cpy, cc sp-WK lim on fracs. Good m
152.9	13.3				.04			.02	Tr	.01	.01		/	/		As above, tr-sp py, cpy, cc, WK lim on fracs prob. Scheeter grained-equigranular qtzite
161.7	8.8				.09			.05	Tr	.02	.02	CHRYSOCOLA	Sp-WK CLAY-SER	Tr LIM + JAR		As above tr tot suls, WK lim on fracs
171.5	9.8				3.54	3.46		3.46	Sp	.03	.05	30% MnO	Mod CLAY WK CHLOR	Tr. LIM	QTZITE w/ INTERMIXED HF	Qtzite as above, tr chlor. Core broken + RK shows intense fract WK-Mod cla (+ fine Ser?) on fracs, No vis suls, sp tag of Arps. sp MnOx
176.8	5.3				18.5	18.5	31.0 @	18.5	—	—	—	70% MnO	ST CHLOR	—	CHLORITIC HF	QTZITIC ZONES VUGGY, fracs lined w/ CaO, MnO; HF MOSTLY CHLOR w/ CT disim MnO + ST Malac Tr. of Azurite + sp Fluorite in vns, sp Arsenicla; Some QTZ veins VUGS.
184.1	7.3				4.06	3.84	5.37 / 5.28	3.84	Sp	.04	.18	10% MnO	Mod CLAY SER MOD CHLOR	Tr LIM	FINE GRAINED QTZ + FELD	ST MnO, ST MALACHITE throughout; RK HAS RATHER HIGH DENSITY, ZONE CONTAINS 6" silicious BRX
192.7	8.6				.46	.42		.42	Tr	.01	.03	29% MnO X	Mod CLAY Mod CHLOR	WK LIM	CHLORITIC HF	Siliceous (QTZITE); MnO + MALACHITE WK-Mod occur in VNLETS + FRACS; Tr FLUORITE
203.5	10.8				.16			.03	Sp-WK	.12	.01	X	Mod CLAY	WK LIM	HF + QTZITE	ST CHLOR, Acid Reactive; Sp CuOx, WK MnO + LIM Bitn. Other; Few Med Dipping 1/8" QTZ Jam
213.2	9.7				.14			.03	Sp	.09	.02	X	RK-MnO + MnO SP CLAY WK CHLOR	WK LIM SP JAR	/	ST. CHLOR, HF, W/ A LIGHT PINK DENSE CLAY (?) INVADING + BECOMING PERVASIVE BETWEEN 196.4 and 198.5', FELDSPATHIC QTZITE @ 201.8', WK FLOUR, Mod CPY + Sp CC = SP PY IN THE HF.
222.2	9.0				.29	.07		.07	Tr-Sp	.20	.02	Tr MnO	ST CHLOR	WK LIM	CHLOR. HF	QTZITE To 210', TRAN CHLOR. HF; MnO WK IN HF; SP Sulfs (V.FINE); QTZITE VUGGY
232.1	9.9				.45	.36		.36	/	.08	.01	X 20% MnO	MOD CLAY ST CHLOR	WK LIM Tr JAR	HF @ 221.7' SED @ 223.4'	CHLORITIC HF CONTAINS NUM. IRREG CALCITE VNS. SOME ZONES LESS CHLOR + Mod MnO + LIM After CONT Mod V.FINE DISSIM SULFS. PY, CPY, + C.P. + MX BLEACHED. SP SULFS.
241.3	9.2				.10			.05	Sp	.05	—	X 3% MnO	MOD CLAY MOD CHLOR	WK LIM		MZ Sp ALT, Sep from 223.4 to 227.9 @ 5% SPECKLED W/ MnO + CONTAINS NO EVIDENT SULFS. FROM 227.9 RK GRADES FROM CHLOR. HF TO QTZITE (?) - MOD SULFS IN HF. FLOUR. VNS IN QTZITE.
250.0	8.7				.53	.08		.08	Sp	.45	—	X 7% HEM	ST CHLOR		CALCITE - CHLORITE HF	QTZITE TO 237.7'. MOD HIGH DEG FELD CONTENT + CHLOR-CLAY HF GRADES INTO A BRIMMLY PYGMY PROT-CHLOR-CALCITE RK. WITH Mod OCT + CPY. LACED W/ CALCITE VNLETS.
259.3	9.3				.32	.06	36.7 @ 0.42 a07.	.06	Tr	.26	—	X WK MnO	ST CHLOR		QTZITE OR Dp @ 252.7	CHLOR-CALCITE INTERMIXED IN A FINE GRAINED GROUNDMASS. Rock irregularly laced w/ CALCITE VNLETS and cut BY INNUMERABLE HAIR LIKE VNLETS of PY + CPY
268.8	9.5				.45	.11		.11	Sp	.34	—	X /	SP CLAY SER-CLAY ST CHLOR		CHLOR HF @ 261.7'	CHLOR-HF W/ INTER MED SILICEOUS ZONE, WK PY, Mod CPY, SP HEM; FROM 252.7' RK is QUITE SILI WITH RARE FELD WISPS, SP QTZ CYES., SP MnO, Tr PY, SP FLOUR.
278.0	9.2				.39	.03		.03	Sp	.36	—	X WK HEM	ST CHLOR MOD CLAY			QTZITE AS ABOVE TO 261.7' TRAN CHLOR HF - MANY CALCITE VNLETS 262.7-263.7 (65°) High Soil Content V.FINE DISSIM. WK-Mod PY-CPY
287.7	9.7				.27	.05		.05	Sp	.22	—	X /	/			CHLOR HF W/ NUM. IRREG CALCITE VNLETS. SINTION OF CHLOR. MATRIX HAS LIKEY AN IRREG LARGE SCALE BRAWN PATTERN. WK PY + CPY.
296.3	8.6				.22			.04	Tr	.18	—	X 10% MnO	MOD CLAY			FINE GRAINED LIMEY GROUND MASS WITH SMALL RK FRAGS CONTAINED, 50% OF ON ZONE. REMAINING RK is INTENSELY LACED W/ V.FINE HEM.-PY.-CPY VNLETS. WK-Mod PY. WK CPY.
305.8	9.5				.23			.03	Sp	.17	.03	X	Mod CLAY Mod CHLOR	Tr LIM	SILT STONE CALCITE-CHLOR HF	HEALED BY ZONE 292.3' TO END OF RUN. FIRST PART OF ZONE SALMON PINK SILTY MATERIAL PROCEEDING THE RK ZONE IS THE FINELY LACED MATERIAL DESCRIBED ABOVE FRS MnO CALCITE-CHLOR HF 296.3'-297.1 SPOTTED BY MnOx. REST OF RUN IS LACED
314.9	9.1				.25	.05		.05	Sp	.19	.01	X Sp MnO	Mod CLAY Mod-St CHLOR	WK LIM		BY INUMERABLE V.fine HEMATITE VNLETS. Sp PY + CPY
324.1	9.2				.53	.07		.07	Sp	.43	.03	X Mod-St X SPECULARITE	/	WK LIM + ESTER MnO	CALCITE-CHLOR HF	AS ABOVE, ZONE OXIDIZED MnO BETWEEN 310.0 + 312.9'; WK PY, Sp-CPY Possibly Some COVE.
333.8	9.7				.29	.11		.11	Tr-Sp	.18	—	X Sp. SPEC	Mod CLAY -SERP			AS ABOVE TO 319.9' Then Rock becomes LACED w/ random Irregular CALCITE VNLETS. The HEMATITE REACHES APPROX 30%. Mod PY, WK CPY AND POSSIBLY WK CC. ALL SULFS V.fine
343.1	9.3				.45	.05		.05	Tr-Sp	.40	—		WK CHLOR		CHLOR HF	DENSE LT. GRN LIMEY RK, SOME CHLOR ZONES; SMALL PATCH OF MnOx @ 329.9', WK PY, SP CPY, RK somewhat Silic, SOME SERP

Final Depth 403.6
Collar Elevation 3074.48
Coordinates 31,000.64 N, 22718.47 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-149
Sheet No. 2 of 2
Date Completed 9-15-66
Logged By NRN + JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration CLAY SER	HEM LIM	Rock Type	Remarks
361.7	9.6				0.09										AK	MYLONITIZED CHLOR. AK. WK-Mod ALT, Mod Silif + QTZ VNING.
																HIGH CHLOR PROBABLY DERIVED FROM ASSIMILATED HF. 1" WIDE
					.06											QTZ. VNS Dip 40°-70° CARRY Mod PY, SP PbS + Sp CPY. MINOR DISSEM SULF
370.8	4.1														BIOT AK	Mod ALT, Mod Silif, Mod 2nd (?) BIOT OCCURING AS AN INTER-
																LOCKING NETWORK SURROUNDING QTZ + FELD GRAINS. ZENO
																INCLUS. OF SED 362.9'-363.5'. SP QTZ JVS, MINOR LIMON
379.6	8.8				.12											FRACS. Sp PY, Tr-Sp CPY, Tr PbS.
															BIOT. AK FLT @ 378.8	Mod ALT + LOCALLY St. Silif.; 1/4-1/2" QTZ PY VNS. 30°-60°, 1" SPACI.
																GENERALLY HIGH BIOT CONT. BUT LOCALLY ABSENT. 1" wide FLT ZONE
																@ 378.8 W/ C.C. CEMENTING. WK-Mod PY, CPY + Sp Cov. ASSOC
																W/ QTZ VNS.
389.2	9.6				.03										BIOT. AK	Mod ALT, Mod Silif, wk 2nd BIOT, Mod PY BOTH DISS + IN QTZ VNS
																Sp. CPY, Tr. CC, Tr MoS2
398.4	9.2				.06										BIOT. AK	Mod ALT, Mod Silif along old fracs - bands up to 5",
																Mod 2nd - BIOT; Mod-St PY ASSOC. w/ the Silif. and
																dissim. Silif BANDS + PY VNlets dip 40°, frequency 1 wide
																band + 2 1/4" vnlets per foot
403.6	5.2				.06										BIOT AK	AS ABOVE EXCEPT NONE OF THE wide PY-Silif BANDS
																E.O.H

Final Depth 411.1'
Collar Elevation 3005.32
Coordinates 29,065.01 N ; 25,001.86 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-140
Sheet No. 1 of 2
Date Completed 3-3-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Serict.	Lim	Rock Type	Remarks
5.0	5.0	R.B.	—	—									—	—	—	Rock bit
15.6	10.6	Nxwl	2.54	84	0.03			.03					St	WK Lim Mod LLM	AK	Mod alt, mod sil'n. St LLm, mod-st hem stain. Nom. alu.
24.5	8.9		2.37	96	.03			.03					Mod-St	WK lim Mod LLM		" " WK " Rest as above except aplitic in Sp
33.9	9.4		2.38	93	.04			.04								Poss. small dikit of Mz @ start.
44.8	10.9		2.39	82	.02			.02						Sp lim Mod-Sp LLm WK hem		" " , Mod sil'n, patch of sil'n w/ sp py. Alunite, LLm, hem as No sulfs.
53.9	9.1		2.39	98	.02			.02					Mod	Mod LLm WK-mod hem		AK, Mod-st alt, mod sil'n, poss. recalization. St LLm, etc as a
63.3	9.4		2.26	99	.02			.02						WK-mod LLm Mod hem		Mod alt, rest as above.
72.4	9.1		2.51	95	.02			.02	Tr		Tr		WK-mod	WK lim		Mod Alt, Mod hem stain on fold, WK lim, here sp-WK Alunite on
81.8	9.4		2.52	96	.02			.02					Mod	Sp LLm WK-mod	Patchy Suls	As above, near vertical 1" Alun vn in central part of run
90.7	8.9		2.51	100	.02			.02	Tr-Sp				WK-mod			Alt as above, WK-Mod hem stain on fold patchy Suls w/ Alun
99.9	9.2		2.27	100	.08			.02			.06					As above
109.4	9.5		2.54	97	.07			.03			.04		Mod	WK-mod LLm WK hem		Mod Alt, WK hem, lim, WK py, cov. cpy
118.6	9.2		2.47	99	.02			.02	Tr		Tr					As above
127.6	9.0		2.26	100	.02			.02								Alt as above, sp tot Suls
137.8	9.8		2.49	89	.12			.02	Sp		.10			Sp-WK LLm Sp-WK hem		WK-Mod Alt, WK hem, lim WK py, cov. Sp(+) cpy
146.5	9.1		2.39	97	.28	N.I		Nil	WK		.27			Sp lim Tr LLm Sp hem	Suls circa 140	WK-Mod Alt tr-Sp hem, lim stain Sp-WK py WK cov on Sp cpy
155.6	9.1		2.64	91	.55	N.I		N.I	Sp-WK		.55					Alt + Min as above, no hem or lim
165.0	9.4		2.48	94	.40	N.I	36.5' @ .43/N.I	N.I			.40					As above
174.2	9.2		2.47	94	.39	.01		.01		Tr	.38	Covellite			Mz @ 173.3	WK-Mod Alt, Sp-WK py WK-Mod(-) cov. Sp-WK cpy diss + on VN lets
183.0	8.8		2.44	98	.40	N.I	89.8' @ .47/.01	N.I			.40					Mod Alt, Sp-WK py Sp cc tr cpy Sp clay on fracs
193.5	10.5		2.33	82	.25	.03		.03	Sp		.22		St			St Alt, Sp-WK py, Sp cc
202.7	9.2		2.45	97	.26	.01		.01	Sp-WK	Tr	.25	Tr MoS2	Mod-St			Mod-St Alt WK(+) py, WK-Mod cc, Sp cpy diss + on small fr
211.3	8.6		2.46	95	.61	.02		.02		.01	.58		St		AK circa 206'	Mz as above AK-WK-Mod Alt, WK py WK cov on Sp-WK cpy
220.7	9.4		2.51	96	.74	.02	33.6' @ .65/.02	.02		.12	.60		Mod-St			WK Alt, Sp py, WK-Mod cov replacing WK cpy diss + on VN
226.7	6.0		2.49	82	.61	.02		.02	WK	.01	.58		WK-Mod			WK-Mod Alt, Sp py Sp cov, cpy
236.3	9.6		2.44	99	.61	.02		.02	Sp-WK	.01	.58					WK-Mod Alt, Silic, Sp-WK py, WK(+) cc, WK(+) cpy patchy
246.9	9.6		2.56	95	.12			tr	WK	.05	.07					Mod Alt, Sp py, cc, cpy ON VN lets
255.0	9.1		2.47	94	.14				Sp	.07	.07		Mod			As above
263.7	8.7		2.53	94	.12					.08	.04		WK-Mod			WK-Mod Alt Sp py, cpy tr cc on VN lets
272.8	9.1		245	99	.12					.04	.08					Alt As above, WK py, Sp-WK cpy, cc diss + on VN
281.4	8.6		253	100	.13					.04	.09					Alt as above, patchy Apl. WK py, cc, cpy as ab
286.6	5.2		2.50	87	.22				Sp-WK	.15	.07		Mod			WK Alt, Sp-WK py WK(+) diss cc on WK cpy
296.0	9.4		2.51	90	.10				Sp	.04	.04					WK Alt, Sp py Sp-WK cc Sp cpy
305.5	9.5		2.33	92	.08				Sp-WK	.08	Tr		Mod-St			WK Alt, Sp py cc, cpy WK clay on fracs
314.2	8.7		2.56	99	.16					.10	.06		WK-mod			As above
323.0	8.8		2.47	96	.25					.15	.10		Mod			WK Alt, Sp py Sp-WK cc, cpy grn clay replacing some plag
332.2	9.2		2.55	98	.18					.15	.03		WK-mod			WK Alt Sp py, cc, cpy
341.2	9.0		2.55	93	.11					.10	.01					WK-Mod Alt, Sp py tr-Sp cc, Sp cpy
349.7	8.5		2.53	95	.27	Tr					.17					

Final Depth 411.1'
Collar Elevation 3005.32
Coordinates 29,065.01 N ; 25,001.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-140
Sheet No. 2 of 2
Date Completed 3-3-66
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Sericite	Lim	Rock Type	Remarks
352.4	2.7	NXwl	2.50	99	0.68	Tr	}	Tr	Sp	.30	.38		Mod		AK	As above
362.3	9.9		2.39	85	.17				Sp-wk	.17	Tr?	Tr Mo Sz	1			WK-Mod Alt, wk py Sp cc, tr-Sp cpy
371.5	9.2		2.50	94	.08				Sp	.08	Tr		1			As above, tr cpy
378.7	7.2		2.52	100	.13				1	.11	.02		1			WK-Mod Alt Sp-wk py Sp cc tr cpy
388.0	9.3		2.53	87	.12				1	.10	.02		1			WK-Mod Alt, Sp py Sp-wk cpy Sp cc Sp-wk grn clay on fwl
396.8	8.8		2.52	100	.12				1	.10	.02		1			WK Alt, Sp py cc, Sp(w) cpy Sp grn clay
405.9	9.1		2.39	91	.18				1	.16	.02	Tr Mo Sz	1			WK-Mod Alt, Sp-wk py Sp cc Sp(w) cpy small bx dike @ end run
411.1	5.2		2.32	92	.10				1	.09	.01		1			WK-Mod Alt, Sp-wk py Sp cc, cpy
E.O.H.		Avg. Rec'y = 94%														

Final Depth 271.0'
Collar Elevation 2945.72
Coordinates 29,256.73 N ; 24,812.58 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-139
Sheet No. 1 of 1
Date Completed 3-1-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim	Rock Type	Remarks
30.0	30.0	R.B.	—	—	—								—	—	Dump	Rockbit thru mine waste dump
38.6	8.6	Nxwl	2.51	97	0.05			.05					Mod	Wk-Mod lim	AK	wk-mod alt, wk-mod sil'n, mod brn lim. Sp. alunite vnl
48.7	10.1		2.51	83	.12			.12				tr gsn cuox		Mod lim		As abo ove.
56.9	8.2		2.54	93	.24			.24					Mod clay sericite chlor		Mz@52.0	wk-mod alt, chlor (bio?) incr after 52.0. Last few frags of cor. may be Mz
66.7	9.8		2.52	88	.27			.27			Tr?		wk-mod	Tr Lim		Mod Alt, wk lim stain, tr hem stain
75.7	9.0		2.53	94	.13			.13								As above wk lim on fracs
84.6	8.9		2.50	98	.10			.10						Sp Lim		Mod Alt, wk lim on fracs tr hem stain, sp cuox on fracs
93.2	8.6		2.50	98	.08			.08					Mod Clay, ser			As above, sp chlor
102.5	9.3		2.52	91	.12			.06			.06					As above sp-wk 2nd K spar
111.5	9.0		2.49	93	.12			.04			.08		wk-mod			As above
120.0	8.5		2.51	100	.12			.04	Tr-Sp		.08				Patchy Sub	Alt as above, wk py cc on vnlets, wk cuox
129.2	9.2		2.53	89	.11			.11			tr?			Tr Lim	Cap	Mod Alt, wk lim, wk cuox on fracs wk chlor.
139.1	8.9		2.52	91	.11			.11								As above, tr cuox on fracs.
148.0	9.9		2.53	88	.12			.12								As above, tr 2nd K spar
159.9	11.9		2.54	68	.18			.12			.06?			wk-mod lim	scattered sulfs	As above, core badly broken
169.0	9.1		2.51	91	.18			.12	tr	.01	.05					Mod Alt, wk-mod chlor, w/ complete chlor of bio. wk lim tr Lim
175.5	6.5		2.58	95	.24			.06	tr-sp	.09	.09			wk lim		Mod Alt, wk 2nd K spar sp-wk lim on fracs, tr diss cpy cc
188.7	13.2		2.61	60	.24			.04	sp	.08	.12				Sulfs circa 175'	Mod Alt, wk-mod 2nd K spar tr bio. wk cpy + sp cc blebs ass w/ chloritized biotite, tr-sp
197.7	9.0		2.55	91	.10			.01	sp-wk	.08	.01	tr MoS2				Alt as above, sp cpy tr cc, MoS2, sp py as above
209.3	11.6		2.55	68	.10					.09	.01					As above
218.2	8.9		2.49	98	.11				Sp	.10	.01					Alt as above, tr-sp py, cpy sp-wk finely diss cc
226.7	8.5		2.65	97	.11					.10	.01					Mod Alt, wk-Mod 2nd K spar tr-sp py sp diss cpy
235.8	9.1		2.65	100	.10					.10	tr					Mod Alt Mod 2nd K spar sp-wk py, cpy specs tr MoS2
245.3	9.5		2.61	95	.12					.11	.01					Mod Alt, Mod 2nd K spar sp-wk py sp cpy trace, MoS2
254.3	9.0		2.60	98	.12					.12				Sp hem		Mod Alt wk-Mod 2nd K spar, Mod chlor, sp wk py tr cpy
263.5	9.2		2.53	95	.15					.15		tr MoS2				Mod Alt sp 2nd K spar wk-Mod chlor. sp py, tr cpy
271.0	7.5		2.59	83	.30				sp-wk	.30						Alt as above, tr py cpy MoS2
E.O.H.		Avg. Rec'y =		89%												

Final Depth 247.1
Collar Elevation 2952.77
Coordinates 29,410.41 N ; 24,754.93 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-138
Sheet No. 1 of 1
Date Completed 2-23-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Serict.	lim	Rock Type	Remarks
7.0	7.0	R.B.	—	—	—								—	—	—	Rock bit
18.1	11.1	NXW1	2.44	78	0.12			.12					Mod-St	Sp lim	Mz to 8.3, P.M. Mod to 13, Then Mz	And St alt, wk grn CuO_x, Mz mod alt, Tr 2nd K-spar, Mod lim st.
28.9	10.8		2.49	75	.08			.08					Mod	Sp-wk lim		Mod Alt, sp-wk 2nd K spar, wk lim on fracs
42.3	13.4		2.49	61	.14			.14					1	1		as above tr Cu ox core very broken & sandy
52.0	9.7		2.53	84	.13			.13					1	wk lim Sp hem		as above
61.7	9.7		2.51	86	.18	.05		.05			.13		Mod-St	Sp-wk lim Tr-sp hem		Mod-St Alt, in places complete clay Alt, wk lim
70.6	8.9		2.52	90	.58	.06	24.4'	.06			.52		St	1 Tr hem		St Alt w/chlor. Tr ser probable f/lt SB.6-68.9', rk in zone completely Alt to
79.4	8.8		2.49	97	.31	.03	@	.03			.31		Mod-St	Sp lim	Suls ≈ 70.5	Mixed Suls & leaching. Core in bits & pieces. St ser, mod 2nd K-spar, wk 2nd B.O.? wk cc & py
86.1	6.7		2.55	100	.55	.03	.47/.04	.03	Tr-Sp		.52		1	1		Alt & min as above.
94.2	8.1		2.58	97	.34	.02		.02	Sp		.32		Mod	1		As above, but core more solid. RK looks frsh, but st. hydrothermal alt
101.3	7.1		2.53	97	.33	.03		.03	1	Tr	.30		1	1		" " , core in bits & pieces. Last ¼ run shows stronger leach
113.7	12.4		2.51	72	.18	.06		.06	1	1	.12		1	wk lim		Mod ser, mod 2nd K-spar, wk-mod chlor, wk 2nd? B.O. Total Suls appear Mixed Suls & ca
126.1	12.4		2.50	68	.29	.03		.03	1		.26		1	Sp lim		As above
135.1	9.0		2.53	92	.35			.02	Sp-wk		.33		wk-mod	wk lim		As above
146.5	11.4		2.60	73	.16				1	.05	.11		Mod-St			Mod-St Alt, wk 2nd K-spar, wk-mod chlor & Mod bio. wk tot sulfs. core reduced to sand, poor
155.2	8.7		2.59	91	.08				1	.08	Tr?		1			As above
162.8	7.6		2.54	100	.07				1	.07	1		1			As above, core completely broken to sand
172.3	9.5		2.51	86	.08				1	.08	1		1			As above, sp-wk cpy wk? py
181.7	9.4		2.54	87	.08				Sp	.08			1			As above, core reduced to sand
187.3	5.6		2.61	87	.05				1	.05			Mod			Mod Alt, Mod chlor replacing bio wk py tr cc, cpy
196.5	9.2		2.64	90	.08				Sp-wk	.08	Tr		1			Mod Alt, Mod chlor, wk-Mod 2nd K spar, wk py sp cpy
205.8	9.3		2.64	90	.07				Sp	.07			wk-mod			As above
215.8	10.0		2.66	86	.07				1	.07			1			Mod Alt, wk-Mod chlor replacing bio, wk 2nd K spar wk py, cpy
224.4	8.6		2.61	95	.05				Sp-wk	.05			1			Alt as above, sp py, cpy
233.6	9.2		2.65	91	.05				1	.05			1			As above
242.3	8.7		2.46	100	.13				1	.13			1			Mod Alt, Mod chlor, wk-Mod(+) 2nd K spar, sp py, cpy
247.1	4.8		2.64	98	.18				1	.18			1			As above. RK shows re-xlization by hydrothermal act. io
E.O.H.		Avg. Rec'y =		86%												Very well. Felds intergrown w/ 2nd bio? (chlor) as matr.

Final Depth 350.6'
Collar Elevation 3010.65
Coordinates 29,241.09 N; 24,984.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-137
Sheet No. 1 of 1
Date Completed 2-21-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim hem	Rock Type	Remarks
6.0	6.0	RB	—	0	–	–	-	–	-	–	–	-	–	–	–	Rock Bit
14.3	9.3	Nxwl	2.37	91	0.03			0.03					WK-Mod	WK lim WK-Mod LLm	AK	wk alt, mod sil'd, sev. thin aplite dslts. Mod hem stai
23.7	9.4		2.21	98	.04			.04					Mod	wk LLm WK-Mod hem		Mod. alt, mod hem. stain. Sev. ½-1' Mz Dikes. Num. alun.
32.6	8.9		2.51	94	.03			.03					wk-mod			wk-mod alt, " " " , wk-mod sil'n, Num alun. vnlts
41.7	9.1		2.51	93	.03			.03						wk-mod lim		" " " , mod sil'n. Mz dike w 2nd K-spar, 37.4-38.0. Mo
51.1	9.4		2.52	91	.02			.02						WK Lim Sp LLm Mod hem		" " , mod hem; num. thin (1/16") alun. vn.
60.0	8.9		2.50	100	.02			.02						Sp-wk LLm		As above.
68.9	8.9		2.50	97	.03			.03						WK LLm		As preceeding but w some aplite intercepts last ½.
78.4	9.5		2.41	98	.03			.03						Sp-wk LLm		wk-mod alt, sil'n decr., hem stain incr to st.
87.8	9.4		2.49	97	.02			.02	Tr					Sp LLm WK hem		" " " , mod hem. stain. Mz dike fr. 85.8-87.7. Sp 2nd K-sp
97.0	9.2		2.49	96	.03			.03						WK-mod lim WK LLm WK-mod hem		" " " " " " , wk 2nd K-spar, wk-mod si
106.2	9.2		2.49	95	.03			.03					Mod	Sp LLm		" " " , mod sil'n, wk 2nd K-spar, Flt gg. 102.0-1
117.1	10.9		2.43	93	.04			.04			Tr			Mod lim Mod LLm Mod hem		As above w tr cc. Then mod-st hem & lim stain. Similar to mi-lodit
124.7	7.6		2.44	100	.18			.02	Sp	.02	.14			WK lim WK LLm Tr hem	Sul. CT @ 117.1	wk-mod alt, sp. cc, sp py, Sulf mixed w leached zones
134.3	9.6		2.55	95	.25			.02	Sp-wk	.02	.21			Sp lim Sp LLm Sp hem		Mod alt, mod sil'n, sp cc on py & cpy(?). Sulf mixed w lea
143.0	8.7		2.55	100	.13			.02	Sp	.03	.08		wk-mod	WK lim Tr LLm Tr hem		wk-mod alt, rest as above.
151.6	8.6		2.66	93	1.23	0.02		.02	Sp-wk	.10	1.11		Mod-st (Ser)	Sp lim		Wk-Mod Alt, Sp py wk-Mod cc, sp-wk cpy
160.0	8.4		2.65	96	.86	.01		.01		.05	.80		Mod			As above
169.0	9.0		2.65	93	1.05	.01		.01		.10	.94		wk-mod			Wk Alt, Sp py, WK BQ Sp cpy
177.7	8.7		2.52	100	.49	.01		.01		.05	.43					as above
186.7	9.0		2.55	98	.61	.01		.01		.15	.45					as above, cc replaces cpy, py unreplaced
195.8	9.1		2.53	96	1.10	.01		.01		.10	.99					Wk Alt, Sp py wk-Mod cc, wk cpy
205.2	9.4		2.56	91	.48	.01	135.5'	.01		.05	.42					Wk-Mod Alt, Sp py, wk cc sp cpy
214.3	9.1		2.56	97	1.02	.02	@	.02		.10	.90					wk-mod alt, wk py, wk cc, tr py (cc on cpy)
223.6	9.3		2.55	96	.94	.01	.85/.03	.01		.10	.83				Mz @ 220.9 CT bx. Alt @ 227.2 ct bx	AK as above, 1' Mz 216.7-217.7. Sp bio in Alt near ct. Min incr to mod cc in Mz. Mu.
232.6	9.0		2.55	97	1.33	.03		.03	WK	.10	1.20	Tr Barite	Mod			AK-Mz bx to CT. AK w sp bio. after ct for sev. ft. Mod cc,
242.0	9.4		2.61	95	1.50	.02		.02	Sp-wk	.25	1.23					wk-mod alt, mod cpy w cc coating = mod-st co. wk py.
251.0	9.0		2.51	100	.72	.03		.03	Sp	.05	.64				Mz @ 241.8 CT ≈ 75°	Mod alt, wk 2nd K-spar. Min as above. Tr Tourmaline
260.2	9.2		2.54	96	.50	.04		.04		.02	.44	Tr Tourmaline	wk-mod			" " mod " " , wk. chlor. Min decr? Sp " Tr Bo.
269.5	9.3		2.54	97	.46	.04		.04		.02	.40		Mod			As above except bio less alt, appears almost fresh.
278.5	9.0		2.62	96	.54	.13		Tem, Mal .13		.02	.39			Sp-wk lim		Mod Alt, wk-Mod chlor. wk-Mod py on vns. Sp cc
287.5	9.0		2.64	97	.26	Tr.		Tr	sp-wk	.20	.06			Tr lim		Mod Alt, wk-Mod chlor, wk py on vns sp cc tr cpy
297.6	10.1		2.65	88	.19				.1	.19	.02	Tr MoS_2		Sp Jar		Mod Alt, wk-Mod patchy silin, wk py tr-sp cc, cpy
305.9	8.3		2.64	100	.15					.15						Mod Alt, tr 2nd fld. sp py tr-sp cc, cpy. Sev. Barite vn
314.9	9.0		2.57	93	.17					.17						As above, sp-wk 2nd K spar.
323.9	9.0		2.61	93	.11					.11		Tr MoS_2		Tr Jar		Mod Alt, Mod 2nd K spar. wk py, sp-wk cc tr cpy
330.4	6.5		2.62	99	.17					.17						As above
339.7	9.3		2.63	100	.30					.30			wk-mod			Mod Alt wk-Mod 2nd K spar wk py tr cpy tr MoS_2
348.4	8.7		2.59	97	.20					.20						

Final Depth 328.2'
Collar Elevation 2888.20
Coordinates 28,771.75 N; 26,156.67 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-136
Sheet No. 1 of 1
Date Completed 2-15-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay ser	lim hem	Rock Type	Remarks
27.0	27.0	R.B.	–	0	–	–	–	–	–	–	–	–	–	–	–	ROCK Bit thru mine dump
36.3	9.3	NX(w)	2.52	96	0.03			0.03	Tr-sp		Tr		wk-mod	sp lim wk llm wk hem	Patchy AK Sils	Mod Alt, Sil'n tr 2nd K spar patchy silt w/ wk py, wk hem sp lim
45.1	8.8		2.46	100	.01			.01					Mod	Mod llm		as above, numerous Qtz vns. Mod hem wk lim sp jar
54.6	9.5		2.54	96	.02			.01	wk		.01		|	sp llm sp hem		wk-Mod Alt, wk-Mod py tr cc sp hem, tr lim, jar
63.9	9.3		2.58	94	.05			.02	|		.03		|	wk llm		wk-Mod Alt, wk-Mod py tr cc sp hem tr lim on fracs
73.0	9.1		2.53	96	.10			.01	|		.09		wk-mod	Tr llm		Mod Alt, Mod(-) py sp-wk cc tr cpy
81.9	8.9		2.55	98	.07				wk mod		.07		|			as above
90.3	8.4		2.54	100	.06				wk		.06		|			Mod Alt, Mod py wk cc, tr cpy wk clay veinlets
99.3	9.0		2.54	95	.10				|		.10		|			as above sp-wk cpy
108.7	9.4		2.51	95	.08				|		.08		Mod			Mod Alt, wk-Mod(+) py wk-Mod cc sp cpy
117.5	8.8		2.50	98	.05				|	Tr	.05		|			as above
126.6	9.1		2.50	95	.06				|	|	.06		|			as above, wk cc
135.6	9.0		2.44	100	.09				wk-Mod	|	.09		Mod-st			Mod Alt, wk-Mod(+) py, cc sp bar on vn
144.5	8.9		2.67	94	.09	.01		.01	|	|	.09		|			Mod-St Alt, wk-Mod py, cc
154.2	9.7		2.66	91	.73	.02	}	.02	Mod	.03	.68		|			Mod-St Alt, Mod py, cc, rk almost completely sericitized w/o some fold xils still showing on
164.7	10.5		2.60	85	.09	.02		.02	wk-Mod		.07		Mod			Mod Alt, Mod py diss + on veinlets Mod cc on py wk sil'n on vn.
173.9	9.2		2.51	94	.23				wk-Mod	.07	.16		wk-Mod			wk-Mod Alt, Sil'n, wk-Mod py, cc as above
182.8	8.9		2.59	94	.17				|		.17		Mod			wk-Mod Alt, Sil'n, Mod py wk-Mod cc on py
191.9	9.1		2.61	93	.29				|		.29		|			wk-Mod Alt, wk-Mod(+) Sil'n, wk-Mod (+) py wk(+) cc
196.9	5.0		2.77	100	.11				|	.03	.08		|			wk-Mod Alt, Sil'n Mod py, wk-Mod cc
205.3	8.4		2.48	100	.04				|	Tr.	.04		|			wk-Mod Alt, Sil'n, Mod py wk cc tr cpy
214.4	9.1		2.67	90	.09				|	|	.09		|			Mod Alt, wk-Mod Sil'n, wk-Mod py sp cc
223.2	8.8		2.71	92	.05				|	|	.05		|			Mod Alt, Sil'n, wk-Mod py, sp-wk cc
232.6	9.4		2.70	91	.19				Mod		.19		|			Mod Alt, Sil'n, st py mainly on 1.5' py vn @ end run, wk cc
242.0	9.4		2.83	89	.05				|		.05		Mod-st			st Alt, Sil'n, st py mainly on .6' py vn @ 1st of run tr cc
251.1	9.1		2.43	95	.12	.02		.02?	wk		.10		st.			Mod-St Alt, wk-Mod py, cc wk bar
260.3	9.2		2.45	94	.50	Tr.	}	Tr?	|	.05	.45		|			Mod Alt patchy Mod Sil'n, wk-Mod py, cc, sp-wk cpy, wk bar
267.1	6.8		2.63	98	.24	Tr		Tr?	|	.12	.12		Mod-st		Aplite @ 262.3	wk-Mod Alt, wk Sil'n, wk py cpy sp-wk cc
276.5	9.4		2.54	96	.36				|	.30	.06	tr gn	wk-Mod		AK @ 276.5	wk-Mod Alt, wk Sil'n, wk(+) py, cpy, wk cc on vns
286.0	9.5		2.53	100	.38				Mod	.32	.06	|	|		Apl @ 284.3	wk-Mod Alt, Mod Sil'n, wk py, cpy sp-wk cc
295.2	9.2		2.59	99	.10				wk-Mod	.10	tr		|			Alt as above, wk py, sp cpy cc
304.6	9.4		2.59	97	.16				wk	.16	tr		|		Mz @ 302.4 Dz @ 35°	wk Alt, sp py tr cpy, cc Mz - Mod Alt, wk py tr cpy cc
313.6	9.0		2.59	100	.21				|	.21			Mod			Mod Alt, wk Sil'n wk py, sp cpy tr cc, MoS2
322.5	8.9		2.59	94	.36				|	.36		tr MoS2 & Mgbar	|			as above, tr 2nd K spar growing in Mz ground mass
328.2	5.7		2.60	100	.20				|	.20		|	|			Mod Alt, wk Sil'n tr 2nd K spar as above, sp py tr cpy Qtz vn. Carry mainly MoS2
E.O.H.		Avg.	Rec'y =	95%												

Final Depth 387.1'
Collar Elevation 3001.06
Coordinates 29,376.99 N ; 24,929.64 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-135
Sheet No. 1 of 2
Date Completed 2-12-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim.	Rock Type	Remarks
5.0	5.0	RB	–	0	–	–	–	–	–	–	–	–	–	–	–	Rock Bit
17.6	12.6	NX	2.46	76	0.02			0.02					Mod	wk lim Tr LLm	AK	Mod Alt, Patchy Mod silin, wk lim,
26.9	9.3		2.45	98	.01			.01					wk-mod	sp LLm	Sil. AK bx	Mod Alt, st silin, run is sil bx sp-wk lim
35.8	8.9		2.42	98	.03			.03						Tr LLm		as above, bx grades out @ and run, cnts grad. sp lim tr
45.8	10.0		2.56	89	.02			.02	Tr		Tr		Mod	sp LLm	AK	Mod alt patchy Mod silin, wk lim, hem
55.0	9.2		2.58	97	.03			.03						wk-mod lim		as above, wk silin
64.4	9.4		2.49	96	.03			.03						wk lim wk LLm wk hem		Mod Alt, wk lim, hem
73.5	9.1		2.48	99	.02			.02			Tr			Tr		as above, tr LLm
82.4	8.9		2.46	98	.03			.03						sp LLm sp hem	Sp Patchy Suls Mz Circa 80	wk-Mod Alt, wk silin, sp patchy suls w/sp lim tr cc, Mz-Mo
87.2	4.8		2.46	97	.03			.02	Tr		.01			wk-mod lim	all cap	Mz Mod Alt. wk-Mod lim sp hem
94.3	7.1		2.45	96	.55	.04		.04	Sp-wk	.10	.41			Sp lim	Suls 6872	Mod (+) Alt wk 2nd K spar, wk py wk-Mod cc, tr-sp cpy tr CuOx
103.5	9.2		2.58	93	.49	.03		.03	wk	.20	.26		sp-wk			Mod Alt, wk-Mod 2nd K spar, wk py wk cc on fracs, wk CuOx
112.0	8.5		2.61	94	.66	.04		.04		.20	.42					Mod (+) Alt, Mod 2nd K spar, wk py, cc, cpy diss thru rk tr Mos on wk Mod
120.5	8.5		2.61	95	.47	.04		.04		.20	.23		Sp			Alt as above sp py sp-wk cc, cpy tr Mos, as above wk cuOx
129.9	9.4		2.62	88	.41	.04		.04		.25	.19		sp-wk	Tr lim		Alt as above, tr-sp py sp cc, cpy tr Mos wk CuOx sp lim @ and run
138.9	9.0		2.55	94	1.03	.06		.06	.1	.20	.77			wk		Alt as above, sp py sp-wk (+) cc sp cpy tr Mos, wk CuOx sp lim
148.0	9.1		2.59	92	.94	.08		.08		.10	.76		wk			Mod Alt sp 2nd K spar, sp py, wk (+) cc on fracs tr cpy Mos wk (+) CuOx tr Mo
156.9	8.9		2.56	96	.60	.03	163.8'	.03		.05	.52			sp-wk		as above, tr CuOx lim, no MnOx
166.2	9.3		2.42	91	.75	.04	@	.04		.10	.71		wk-mod			as above
175.3	9.1		2.54	91	.97	.24	.67/.07	.24?	sp-wk	.10	.63		Mod			Mod Alt, wk-Mod 2nd K spar. sp-wk py, wk cc on frac tr sp sp-wk lim
184.5	9.2		2.55	94	.86	.08		.08		.10	.66					Alt as above, wk py wk (+) cc sp cpy sp-wk lim
193.4	8.9		2.50	100	.81	.08		.08		.10	.63					Alt as above, sp-wk py, wk cc, sp Al cpy sp lim CuOx
202.6	9.2		2.55	96	.63	.05		.05		.10	.38	tr disp-tase				as above, wk bar on fracs
211.6	9.0		2.56	96	.71	.04		.04		.20	.47		Mod-st			Mod Alt, Mod 2nd K spar diss + on 1/8" Qtz vns sp py, wk-Mod cc on
225.1	13.5		2.55	74	.55	.04		.04		.18	.36		Mod	tr-sp		as above, no 2nd K spar vns, slightly less cc + cpy wk-Mod as diss cc & lab tr cu
233.8	8.7		2.49	89	.69	.08		.08		.10	.51			sp-wk		Mod Alt, Mod-st 2nd K spar, wk-Mod (+) py, wk-Mod cc, wk cpy
242.3	8.5		2.48	96	.48	.04		.04		.05	.39					Alt as above, wk-Mod py, cc wk cpy
251.0	8.7		2.65	90	.51	.18		.18?		.05	.28			sp		Mod Alt, wk-Mod 2nd K spar wk py cc, sp cpy wk grn cu on frac
260.8	9.8		2.63	91	.27	.01		.01		.06	.20			tr		Mod Alt, st silin on vns, wk-Mod 2nd K spar, Mod py wk cc, sp cpy
270.0	9.2		2.59	91	.23	.02		.02		.11	.10			–		Mod Alt, wk (+) 2nd K spar, silin on Qtz vns wk-Mod py diss + on vn and in some bio. sp-wk cc, cpy.
279.2	9.2		2.56	92	.13	.01		.01	wk	.13	–					Mod Alt, sp-wk 2nd K spar wk py sp cc, sp-wk cpy on vns + in bio & xls
288.0	8.8		2.59	95	.14	.01		.01	sp-wk	.14						Mod-st Alt, Mod 2nd K spar wk py sp cc, sp-wk diss cpy
297.4	9.4		2.63	89	.19	.01		.01	Mod	.19		Sp MoS2				Mod Alt, wk 2nd K spar wk silin, wk Qtz vns, Mod py on vns sp-wk cc wk cpy sp MoS2 on 6" Qtz-py vn
305.4	8.0		2.68	89	.14				wk	.14			wk-mod			Alt as above wk py, cpy tr cc
314.2	8.8		2.69	86	.14					.14						Mod Alt, wk-Mod 2nd K spar sp-wk py tr cpy wk chlor
323.6	9.4		2.53	83	.09					.09			Mod			Mod-st Alt, wk-Mod 2nd K spar, sp py tr cc, cpy "
333.9	10.3		2.56	84	.06				sp	.06			st			st Alt wk 2nd K spar sp-wk py tr? cc, cpy Mod "
343.9	10.0		2.51	86	.05					.05						st Alt, wk py tr cpy no 2nd K spar " "
347.8	3.9		2.59	79	.07				wk	.07			wk-,			

Final Depth 387.1'
Collar Elevation 3001.06
Coordinates 29,376.99 N; 24,929.64 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-135
Sheet No. 2 of 2
Date Completed 2-12-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay, Ser.	Lim.	Rock Type	Remarks
355.0	7.2	NXW	2.55	100	0.06				sp-wk	.06			Mod		Mz	Mod Alt, sp-wk py, cpy, sp cc wk. chlor
363.4	8.4		2.54	98	.04				wk	.04			1			Mod Alt, wk-Mod chlor, sp-wk py tr-sp cpy cc wk-m chlor
371.6	8.2		2.57	92	.06				sp-wk	.06			1			As above, sp cpy tr-sp cc wk chlor
380.2	6.6		2.65	93	.05				wk	.05			1			Mod Alt, Mod chlor, sp-wk py tr-sp cc, cpy wk-m chlor
387.1	6.9		2.61	100	.06				1	.06			1			As above "
E.O.H.		Avg.	Rec'y=	92%												

Final Depth 332.7'
Collar Elevation 2884.19
Coordinates 28,859.58 N; 25,780.45 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-134
Sheet No. 1 of 1
Date Completed 2-9-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	lim hem	Rock Type	Remarks
8.4	8.4	RB	–	0	—	—	–	—	—	—	–	—	—	–	—	Rock Bit.
21.8	13.4	NKW	2.41	62	0.01			0.01	–	–	–	–	Mod clay sp ser	sp lim Mod hem	Ak	Mod Alt, Mod hem stain on feld, sp lim, WK-Mod Alun
31.4	9.6		2.39	93	.02			.02								as above, sp Qtz vns.
40.6	9.2		2.38	98	.02			.02								as above Mod Alun vns
50.0	9.4		2.44	97	.01			.01					sp clay Mod ser	sp lim Mod hem sp-WK lim		as above
58.8	8.8		2.46	100	.02			.02							Patchy Sulf	as above, tr tot. Sulf
68.2	9.4		2.50	84	.01			.01						sp lim Mod hem	All Cap Mz @ 65.5	AK-WK-Mod Alt, patchy silin hem, Alun vns, sp lim, Mz-st Alt, Mod-st hem stain
77.1	8.9		2.45	96	.02			.02						sp lim sp-WK alun Mod hem	AK 67.4-68.2 Mz, AK 70.5	
86.4	9.3		2.50	98	.02			.02					sp clay WK-Mod ser	sp lim Mod hem	Ak	Mz as above, AK-Mod-st Alt, clay lim, WK-Mod Qtz vns Mod hem, sp lim, WK-Alun. Mod Alt, WK silin. Mod hem stain on feld, sp lim, Mod clay
95.6	9.2		2.53	98	.16			.02	WK	tr	.14				Sulf circa 93'	Mod Alt, WK silin, WK-Mod hem, W/patchy sulf, sp-WK py, cc on vns
104.8	9.2		2.62	93	.11			.01	WK-Mod	sp, .01	.09		sp clay WK-Mod ser	sp lim sp Mod ser		WK-mod alt, wk silin, sp hem (lim) WK py, sp-wk cc
113.5	8.7		2.54	99	.17				sp-WK	tr	.17		Mod clay, ser	—	Mz @ 111.5	Mod alt, " " , No lim, WK py, Sp cc in AK, WK in
122.1	8.6		2.40	93	.16			tr			.16	tr Allophane				" " , WK cc, sp-wk py.
131.2	9.1		2.63	100	.32				WK	.04	.28				AK @ 123.8	Mz as above. AK st. silid, tex. diff. to see. WK py, sp cc
140.8	9.6		2.62	93	.19					.02	.17		WK-Mod clay ser			AK, WK-mod alt, sp. silin., WK py, sp-wk cc
150.9	10.1		2.58	87	.06				sp-WK	.01	.05					As above
159.9	9.0		2.49	99	.23				WK	.01	.22	tr Cov.	Mod clay, ser			Mod alt, WK py, WK cc. .2' Mz @ 156.3
169.0	9.1		2.50	96	.15					.05	.10				Mz @ 164.2 AK @ 167.0	" " " " " . Incr in cc in Mz. Less py
177.7	8.7		2.48	89	.15					Tr	.15				Mz @ 169.0	Mod alt, WK py, WK or better cc, mainly diss. Less plag more qtz mass in M than AK
185.6	7.9		2.53	100	.19						.19	tr Torbernite				As above except cc appears mod as diss
196.0	10.4		2.56	86	.30	0.03		.03			.27	tr				Mod Alt, WK py cc, sp cpy, tr torb. on fracs
205.3	9.3		2.53	95	.18	.02		.02			.16	tr Dioptase?				As above, tr cpy no torb. only sp bio. remains
214.6	9.3		2.55	90	.62	.03	34.2' @ .69/.02	.03			.59		Mod-st			Mod Alt, WK py WK(+) cc tr cpy
222.5	7.9		2.67	87	.53	.01		.01		Tr	.52				AK @ 221.2	Mod Alt, WK-Mod (+) py, WK-Mod cc, tr cpy
231.3	8.8		2.50	90	1.00	.02		.02		.05	.93					As above, WK py, WK(+) cc
239.5	8.8		2.49	92	.60	.01		.01		.05	.54		Mod		Anc @ 239.5	WK-Mod Alt, patchy Mod silin, WK py, WK-Mod cc
246.8	7.3		2.33	98	.14				Tr		.14		WK			Sp-WK Alt, grn clay? in vessicles, tr native Cu
249.0	2.2		2.56	97	.21				sp-WK	.05	.16		WK-mod		AK @ 246.8	WK Alt, WK py sp-WK(+) cc sp cpy
257.1	8.1		2.32	93	.13				—		.13?		WK		Anc @ 2MD	Sp Alt, grn clay? in vessicles
265.9	8.8		2.30	96	.12						.12?					as above
275.5	9.6		2.77	89	.23			Dioptase? .02	WK	.02	.19		WK-mod.		Mz @ 265.9	Mod Alt, silin, Mod py, WK-Mod(+) cc
282.5	7.0		2.38	100	.04				—		.04?		Sp		Anc @ 275.5	sp Alt, grn clay? in vcas.
285.6	3.1		2.56	95	.12				WK	.06	.06		Mod		Mz @ 282.5	Mod Alt, WK py, sp-WK cc sp 2nd K spar
294.4	8.8		2.58	98	.14					.07	.07					Mod Alt, WK py, sp-WK cc, cpy sp-WK 2nd K spar
304.0	9.6		2.68	91	.18					.09	.09					Mod Alt, WK silin, WK py, sp-WK (+) cc, cpy, sp-WK 2nd K spar, bio
312.0	8.0		2.53	100	.30	.01		.01	WK-Mod	.10	.19	tr MoS_2				Mod Alt, WK-Mod silin, WK-Mod py WK cc, cpy 2nd K spar abio as above
321.0	9.0		2.71	92	.40	.01		.01		.30	.09					Mod Alt, Mod silin, WK-Mod py, sp cc Mod cpy sp 2nd K sp
326.0	5.0		2.55	93	.20	.01		.01		.10	.10					Mod Alt, WK py, sp cc, WK cpy
332.7	6.7		2.56	100	.08				sp-WK	.06	.02		WK-Mod		AK @ 326.1	WK Alt silin sp-WK py sp cc cpy

Note: WK silin, grn clay, sp-st mins against qtz in fol. Fill in qtz vns. Pos. zoning

Final Depth 209.0'
Collar Elevation 2953.44
Coordinates 30,642.07 N; 25,297.59 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-146
Sheet No. 1 of 1
Date Completed 3-28-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser.	lim hem	Rock Type	Remarks
5.5	5.5	RB	–	0	–	–	–	–	–	–	–	–	–	–	–	Rock Bit
15.6	10.1	NXWL	2.42	84	.21			.21					Mod-St	WK-Mod lim Sp LLM	Hf + patchy Qtzite	St Alt, WK-Mod finely diss. LLM WK lim
19.6	4.0		2.48	95	.35			.35					1	Mod-St lim Sp LLM	C Hf	St Alt, Mod LLM wk lim tr suls
25.0	5.4		2.58	89	.23			.23				sp Mal	Sp	WK lim	Qtzite @ 19.6	WK Alt, WK lim tr LLM on numerous fracs sp Mal
35.0	10.0		2.58	85	.23			Mal .23					Tr	Mod lim		WK Alt, WK br lim on fracs Sp Mal on fracs
43.6	8.6		2.58	100	.14			Mal, chrys .14					1	1 Tr LLM?		As above, sp clay + MN Ox also on fracs
52.8	9.2		2.57	90	.08			.08					1	1 Sp hem		As above
62.6	9.8		2.58	83	.13	.03		Mal .03			.10?		1	Mod lim		As above
72.0	9.4		2.60	89	.87	.64	}	.64			.23?		1	1 Tr LLM Mod-St lim	Mz - 63.9 67.3	Qtzite - WK Alt WK Mal WK(?) lim on fracs, Mz - Mod-St Alt
80.6	8.6		2.61	96	.10	.05		.05			.05?		1	1 Mod lim	Qtzite	As above, several "half inch wide fracs w/ lim & ft. sulfides" WK lim, Mal on fracs
90.1	9.5		2.61	89	.27	.14		.14			.13?		1	1		WK Alt, WK lim on fracs, Sp Mal on fracs
99.2	9.1		2.52	97	.73	.21	} 27.3' @ .64/.13	.21	Sp		.52		wk-mod	wk-Mod lim	Suls + Sp @ 90.7	WK-Mod Alt, St & black chlor. blo. WK py Sp cc
108.2	9.0		2.66	97	.57	.04		.04	WK		.53		1	1		WK-Mod Alt WK-Mod py on vns + assoc w/ bl bio.
117.4	9.2		2.64	94	.63	.15		.15	1		.48		wlS	1		As above, WK py, & WK 2nd Kspar? along vns
127.0	9.6		2.62	93	.36	.05		.05	NK-Mod	.05	.26		1	WK lim		Mod-St Alt WK py tr cc Sp-WK 2nd Kspar? flooding ground mass
136.7	9.7		2.57	87	.33	.06		.06	WK	.02	.25		1	1	Sp 127.0 – 132.9	WK-Mod Alt, Mod lim, WK py tr cc WK lim on fracs
145.9	9.2		2.58	93	.22	.02		.02	WK-Mod	tr	.20		WK-Mod Chlor	1	Hf @ 142	Mod Alt, Sp py tr cc Hf - WK chlor WK py
154.3	8.4		2.58	100	.36	.03		.03	WK	.02	.31		wk clay	1	Qtzite @ 150'	Qtzite - Sp py tr cc, Sp lim on fracs Hf - lt grn St Alt WK-MN WK cc py
163.3	9.0		2.57	92	.15			.01	Sp	.05	.09		Sp clay	WK-Mod lim	Hf @ 153, 70° Qtzite 154.4 Sil @ 162	Sp py tr cc Sp lim on fracs, contains wk chlor last 15' run
172.2	8.9		2.71	94	.21			.01	WK	.20	tr		1	WK lim	Mz @ 170.2	Qtzite - lt grn Sp-WK py Sp cpy tr Mo Sn Mz - Mod Alt rk about 90% groundmass w/10% phenos
181.3	9.1		2.70	96	.12			.01	1	.11			tr clay	Sp lim		Alt as above, WK py tr cpy, cc increase % phenos to 50% w/10% bio
190.1	8.8		2.69	98	.14				Sp-WK	.14			1			MN as above, interior of some plag alt to grn clay + 2nd bio
197.2	7.1		2.71	97	.16				1	.16			1		Qtzite @ 195.7	Alt + MN as above, WK 2nd Kspar? replacing plag @ Qtzite - WK cpy WK Sil'N
204.5	7.3		2.65	94	.08				tr-Sp	.04	.04			WK lim		lt grn Qtzite, sp py Sp-WK lim on fracs
209.0	4.5		2.64	85	.05				1	.03	.02			1		As above tr-sp py tr cpy, Mo Sn
E.O.H.		Avg.	Rec'y = 92%													

Final Depth 215.3'
Collar Elevation 2940.71
Coordinates 30,572.35 N; 25,615.16 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-145
Sheet No. 1 of 1
Date Completed 3-21-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim hem	Rock Type	Remarks
10.0	10.0	RB	-	0	-	-	-	-	-	-	-	-			—	Rock Bit
20.7	10.7	NXWL	2.59	77	0.12			.12	Tr		Tr?		wk	wk-mod lim	Dp	WK Alt, sp lim on fracs, sp qtz vns
30.2	9.5		2.56	92	.08			.08	1	Tr?	Tr		1	Tr hem	1	As above
42.5	12.3		2.62	73	.14			.02	sp		.12		1	wk-mod lim	Suls circa 36'	Sp-WK Alt, sp lim tr py, cc
52.0	9.5		2.58	91	.15			.04	Tr-Sp		.11		1	1		Alt as above, sp lim on fracs, sp py tr cc
61.1	9.1		2.60	95	.17			.10	Tr		.17		1	Tr LLm		Sp-WK Alt, silin, sp lim on fracs tr tot suls
70.2	9.1		2.58	99	.16			.06	Sp		.10		1	1		Alt as above, sp lim, tr jar on fracs tr py, cc
79.8	9.6		2.61	94	.08			.02	wk		.06	Tr MoS_2	1	wk lim		As above
87.9	8.1		2.75	98	.16			.02	1		.14	1	sp-wk	sp-wk lim		Sp-WK Alt, sp silin on py vns, sp py, tr-sp cc tr cpy
97.4	9.5		2.75	90	.18			.02	1		.16	1	1	wk lim Tr LLm		As above, sp lim on fracs. Numerous fracs visable in D
106.9	9.5		2.61	93	.11			.02	1		.09		1	sp-wk lim		As above, tr epidote
115.5	8.6		2.61	100	.06			.02	sp-wk	Tr	.04		1	1		Sp-WK Alt, silin, tr-sp py tr cc tr-sp epidote sp lim on fracs
124.5	9.0		2.62	98	.08			.01	wk	.02	.05		1	wk lim		As above
133.8	9.3		2.61	97	.09			.02	sp-wk	.03	.04		1	wk-mod lim		Dp, sp-wk alt, sp-wk py, tr cc, tr cpy, wk-mod lim, incr. towards
142.8	9.0		2.62	94	.14			.02	wk	.02	.10		wk-mod	Mod lim		Dp, nom. Xtno's, sp-wk alt, rare vert. post-min flt w/ asso. bx., vuggy, leached, lign. but tr-sp py.
150.8	8.0		2.63	100	.12			.01	1	.05	.06		wk	wk lim		Another near vert. bx zone, w/ st. "mal" grn, chlor? sp-wk py, wk l
163.9	13.1		2.63	67	.05			Tr	1	.05		Tr MoS_2	1	Tr lim		Num. Xtno's, sp. alt, wk py, tr chlor, cp. tr lim
172.4	8.5		2.63	94	.07				1	.07			1	sp lim		As above but streaks of wk alt. Most frac's steep (45-80
185.0	12.6		2.70	67	.02				1	.02		tr MoS_2	1	tr lim		WK-Mod Alt, silin, wk py tr cc tr lim on fracs
194.0	9.0		2.66	95	.05				1	.05		1	1	1		As above.
202.6	8.6		2.68	98	.05				WK-Mod	.05			1	1		WK Alt, silin along flat lying qtz sp vns, wk-mod py
211.7	9.1		2.66	94	.03				1	.03			1	1		As above color in dp is black except where bleached
215.3	3.6		2.67	100	.05				WK	.05			1	1		As above along qtz vns
E.O.H.		Avg.	Rec'y =	90%												

Final Depth 302.7'
Collar Elevation 3059.05
Coordinates 28,952.53 N ; 24,182.78 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-144
Sheet No. 1 of 1
Date Completed 3-21-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim	Rock Type	Remarks
5.0	5.0	R.B.	—	—	—										—	Rockbit
15.3	10.3	Nxw1	2.35	90	0.02			0.02					Mod	Tr lim WK-mod lim Med hem	AK	Mod alt, leached w hem stain, num. alunite vnlts. WK LLm
24.2	8.9		2.49	96	.02			.02						Sp lim wk LLm		As above, LLm mainly diss.
27.7	3.5		2.48	91	.01			.01					wk-mod	WK-Mod LLm		wk-mod. alt, sp-wk llm, hem stain, alunite vnlts
33.4	5.7		2.51	100	.05				wk		.05		Mod	Tr lim Tr hem	Sulfs @ 27.7	" " " , wk py, sp cc, tr hem & lim stain, alunite vnlts
42.7	9.3		2.35	98	.03			.02	Tr		.01			Sp-wk lim wk llm Med hem	Cap. @ 34.4	" " " , sp LLm, hem stain. st. alunite vning. No sulfs
51.9	9.2		2.49	96	.02			.02			Tr			Sp lim Sp LLm Mod hem	Sp sulfs. Nicked cap, sulfs.	As above except sp alunite vnlts, wk-mod sil'n. wk py, tr cc last 2'.
61.0	9.1		2.47	97	.04			.02	Tr-sp		.02			Sp-wk LLm wk hem		wk-mod alt, wk-mod sil'n, partly leached w hem stain. sp py, tr
70.1	9.1		2.44	98	.03			.02	Sp		.01			wk lim Tr LLm		Mod alt, mostly leached after 62.8. Num. alunite vnlts.
78.9	8.8		2.56	97	.09			.02	Sp-wk	.02	.05		wk-mod	Sp hem	Sulfs @ 74.2	" " , leached to ct. then wk py, sp cc.
88.3	9.4		2.59	91	.18				wk		.18					WK Alt, Sp-wk py, cc, sp cpy
97.0	8.7		2.59	96	.09				Sp-wk		.09					WK Alt, patchy Apl. Sp-wk py sp cc, cpy
106.0	9.0		2.56	95	.18					Tr	.18	Tr cov.				WK-Mod Alt, WK py WK cc, cpy
114.4	8.4		2.57	100	.23					.05	.18					WK Alt, Sp-wk py, cc, cpy on vnlets tr MoS_2
124.2	9.8		2.52	88	.33					.05	.28					WK-Mod Alt, WK py cc, cpy, tr MoS_2
132.9	8.7		2.51	98	.10					.02	.08					WK-Mod Alt, WK py, WK cc, cpy
142.2	9.3		2.54	96	.14					.05	.09					WK Alt, sp py sp-wk cc, cpy
151.1	8.9		2.52	95	.15					.05	.10		Mod			WK-Mod Alt. WK py sp-wk cc, cpy
160.1	9.0		2.49	96	.21					.05	.16	Tr MoS_2				Mod. alt, sp-wk py, sp cc, sp-wk cpy.
169.0	8.9		2.51	96	.07					.05	.02		wk-mod			wk-mod alt, wk py, tr cc, sp cpy, tr chlor.
177.8	8.8		2.54	94	.07					.05	.02					Patchy aplite; rest as above.
186.8	9.0		2.70	91	.15					.08	.07	Tr MoS_2				wk-mod. alt, wk py, sp cc, sp-wk cpy. Tr chlor
195.2	8.4		2.44	100	.16					.10	.06					" " " " " , tr cc, sp cpy, Tr MoS_2 " "
204.1	8.9		2.60	93	.12					.10	.02					As above plus spotty sil'n.
214.1	10.0		2.58	91	.05					.05	Tr					wk alt, wk py, Tr-sp cc, wk cpy. 1 alunite vnlt.
223.2	9.1		2.57	94	.09					.09						" " , wk-mod sil'n, wk py, sp-wk cpy w tr cov. No vis cc
232.1	8.9		2.56	96	.04					.04			wk			As above, but sp cpy.
241.3	9.2		2.56	96	.06				Sp	.06						WK Alt, WK chlor, Sp py tr cc, MoS_2
250.4	9.1		2.56	97	.12					.11	.01	tr MoS_2				WK Alt, WK-Mod chlor aft. bio Sp py NO vis cc
258.4	8.0		2.57	100	.24	.01		.01	Mod(-)	.20	.03		wk-Mod			WK Alt 2' patch bx in py sp last 2' st gneissic lineation Sp py
268.2	9.8		2.57	89	1.18	.01		.01	Mod	1.02	.15					WK Alt, St cpy from start run to 262.8' vert vnlets. rest-sp py
277.7	9.5		2.57	91	.16	tr		tr	Sp	.16	tr		WK			WK Alt Sp py tr cpy, cc wk chlor tr cpy tr cpy tr cpy on fm
286.3	8.6		2.57	100	.39	.01		.01		.39	.01					As above
295.3	9.0		2.54	95	.17					.17	tr			tr lim		WK Alt, WK chlor, tr-sp py tr MoS_2 cpy. tr lim, lar
302.7	7.4		2.55	97	.22					.15	.07			tr lim		Alt As above, Sp py tr cpy, MoS_2, cc
E.O.H.		Avg. Rec'y =		95%												

Final Depth 221.8'
Collar Elevation 2937.20
Coordinates 30,520.33 N ; 25,443.56 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bull

HOLE NO. F-143
Sheet No. 1 of 1
Date Completed 3-13-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay sericite	LIM	Rock Type	Remarks
11.8	11.8	RB	—	0	–	–	—	–	—	—	–	–	–	—	:	Rock Bit
22.5	10.7	NXWL	2.56	77	0.23			0.23					Mod	wk lim, sp hem	Qtzite. Sp circa, 1.84	Mainly Qtzite may be tr of st. Alt. ig rk - wk lim, hem, tr cu
31.8	9.3		2.47	92	.33	.10		.33?					Mod wk-Mod clay	wk lim wk hem sp jar		St Alt, Mod silin, wk-Mod lim on fracs sp cu ox
41.6	9.8		2.36	88	.50	.15		.50?					/	sp lim		St Alt, wk-Mod silin, wk-Mod lim, wk hem stain, on fracs
51.1	9.5		2.37	94	.17	.09		.17?					Sp	wk-Mod lim sp hem	Qtzite circa 50' Sp @ 256.3	sp as above Qtzite wk-Mod lim on fracs tr cu ox
60.4	9.3		2.42	96	.30	.02		.30?					Mod	/		Qtzite as above, Sp - Mod-st Alt, Mod patchy silin, Mod lim tr cu ox
68.5	8.1		2.37	100	.41	.15		.15	Sp	tr	.26		Mod clay, sr	/		Mod-st Alt, wk-Mod lim on fracs, sp cu ox (chrys, turquois)
77.2	8.8		2.59	91	.98	.18		.18	wk	.01	.79		wk-Mod clay	wk hem wk lim		
86.5	9.3		2.58	86	.74	.07		.07	wk-Mod	.05	.62		Mod clay, sr	/	Suls @ 72.5	Mod-st Alt, lim as above, wk-Mod py, cc sp cpy
95.8	9.3		2.66	85	.61	.02		.02	/	.49	.10		wk clay, sr	/		Alt as above, wk-Mod(?) py, wk-Mod cc sp cpy
105.7	9.9		2.64	84	.50	.02	91.0'	.02	/	.48	.05		/	/		Mod Alt, wk-Mod py sp-wk cc, cpy wk lim along uns
115.0	9.3		2.62	90	.63	.02	@	.02	/	.15	.46		wk-Mod clay, sr	/		Mod Alt, wk-Mod 2nd ksper along uns, wk-Mod py sp-wk cc, cpy sp lim on fracs
124.3	9.3		2.64	89	.43	.03	.59/.05	.03	/	.15	.25		Mod clay, sr	/		Alt as above, no ksper, wk(?) py sp cpy, cc sp cement cu @ end run
133.3	9.0		2.61	96	.60	.02		.02	/	.10	.48		/	/		Mod Alt, wk py, sp-wk cc, cpy wk lim on fracs
142.6	9.3		2.65	92	.55	.03		.03	Mod	.42	.10		wk-Mod clay, sr	/		Mod Alt, wk(?) py, sp cc, cpy sp-wk lim on fracs
151.4	8.8		2.72	92	.48	.01		.01	wk	.37	.10		/			Mod Alt, sp-wk py sp cc, cpy sp-wk lim on fracs
161.1	9.7		2.60	88	.14	—		.05	sp	.02	.07		tr clay	wk-Mod lim	Qtzite @ 152.9 Mainly leached cap	Sp-st Alt, Mod-st cc wk py, cpy Qtzite - wk Alt, silin sp py, tr cpy, wk lim
173.0	11.9		2.61	70	.05	—		.05	tr	tr	tr		tr-sp clay	wk-Mod lim		wk Alt, silin, tr tot suls, wk-Mod lim on fracs
189.1	16.1		2.53	17	.04			.04	—	—	—		wk clay	sp lim		Alt as above, tr tot suls, wk-Mod lim on fracs.
195.6	6.5		2.53	57	.03			.03	—	—	—		/	sp lim		As above, rk well broken, sp barite
203.0	7.4		2.50	57	.11			.11	—	—	—		wk-Mod clay	sp lim wk lim		Qtzite as above, leached HF + clay 196.2 - 200', tr tot suls
221.8	18.8		2.46	35	.06			.06					sp-wk clay	sp lim		Qtzite as above, wk lim sp py, tr cc
E.O.H.		Avg. Rec'y = 76%														

Note: No acid reactive rock was found.

Final Depth 265.0'
Collar Elevation 2873.02
Coordinates 30,083.96 N ; 26,093.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-142
Sheet No. 1 of 1
Date Completed 3-11-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
5.0	5.0	R.B.	—	0	–	–	–	–	–	–	–	–	–	–	—	Rock Bit
15.3	10.3	NXW	2.43	78	0.40	0.12	20.0' @ .50/.14	.12			.28		Mod	Mod lim, Jar	Mz?-Dp? Hf bx	bx frags of Hf+Tr in st Alt Mz (poss Dp) Mod lim on fracs
25.0	9.7		2.42	87	.61	.16		.16			.45		|	Mod-st lim, Jar	Hf circa 15'	chloritic to sil Hf Mod lim
34.4	9.4		2.47	90	.36	.11		.11			.15	Native Cu .10	|	Mod lim, Jar	Mz @ 35.3	As above Mod lim, Mz - St Alt, Silw
43.6	9.2		2.49	92	.09			.04	Tr		.05		wk-mod	|	Dp @ 43	Mz: St Alt, Silw wk chlor, sp-wk lim, 2-4 inch frags of Dp
46.6	3.0		2.60	96	.04			.01	Sp		.03		wk	wk lim, Jar	|	St Alt, Silw rk finely frac & intruded by qtz vns
55.4	8.8		2.50	92	.07			.02	Tr-Sp	.02	.03		wk-mod	|	Sp circa 52'	Sp as above tr py, cpy Sp Mod Alt wk lim on fracs
63.9	8.5		2.61	96	.19			.02	Sp-wk	Tr	.17		Mod		Mz circa 60'	Sp as above, Mz - Mod-St Alt, Silw wk diss py tr cc, cpy
73.0	9.1		2.58	92	.14			.02	wk		.12		wk-mod	mod lim	Suits @ 54'	Alt as above, sp-wk lim, sp-wk py, cc, cpy tr MoS2
81.2	8.2		2.58	100	.17			.02	|	.05	.10		|	wk		Alt as above, sp lim, sp py cc, cpy tr MoS2
90.3	9.1		2.56	93	.13			.02	|	.02	.09		|	wk-mod		As above, Mz ground mass is dk grn May be sp and K spar
99.1	8.8		2.61	97	.08			.02	Sp-wk	.04	.02	Tr MoS2	|	wk		Wk-Mod Alt, Silw, sp py tr cpy MoS2 sp bar in vn
107.4	8.3		2.59	96	.35	.01		.01	wk	.32	.02	|	|			Alt as above, wk py tr cpy MoS2
116.3	8.9		2.63	90	.42	.02		.02	wk-mod	.40	Tr		wk clay sericite chlor		Hf @ 107.9	Dk grn chlor Hf, Mod-st py tr cpy MoS2
125.2	8.9		2.81	100	.43	.02		.02	|	.41			|			As above, Mod py wk cpy ~~abun~~ in vns
134.3	9.1		2.70	96	.23	.01	68.0' @ .47/.02	.01	wk	.22		Tr Native Cu	sp clay mod chlor			Lt grn to tan slt st-like Hf wk py tr cpy
143.5	9.2		2.71	96	.46	.02		.02	|	.44		|	wk clay |			Dk grn chlor Hf, Mod py tr cpy Sp-wk native copper cement
153.3	9.8		2.49	87	.59	.02		.02	wk-mod	.47		.10	sp clay st chlor			As above, Mod py ~~Sp-wk cpy~~ Sp native Cu ~~as above~~ on frac
165.8	12.5		2.47	70	.57	.01		.01	|	.51		.05	|	Tr hem		Lt grn Hf wk bar wk-Mod py sp cpy, native Cu as above
175.4	9.6		2.64	83	.55	.01		.01	|	.49	Tr cov.	.05	wk clay Mod chlor		SP @ 173'	As above to 167.8 - Lt grn slt st like Hf, wk-Mod py sp cpy Tr Ba
184.3	8.9		2.43	95	.35	.02		.02	wk	.33	Tr cc	Tr MoS2	Mod clay, ser			Mod-St Alt, wk-Mod py tr cpy MoS2 SP-Mod-St Alt on qtz vns
193.3	9.0		2.49	97	.28			.02	|	.24	.02	|	Mod-st clay, ser			Mod-St Alt, wk-Mod qtz vning, wk py sp cpy tr cc, MoS2
201.7	8.4		2.48	100	.13	.02		.02	Sp-wk	.11	tr	|	Mod clay ser			Mod-St Alt, Silw, wk py sp cpy, tr cc, MoS2
210.7	9.0		2.58	94	.47	.02	27.2' @ .50/.02	.02	Mod	.45	–		–	wk-mod hem	Hf @ 105.6	Sp As above, Hf - lt grn Mod py, wk cpy Mod hem (poss cement Cu)
220.3	9.6		2.83	83	.41	.01		.01	wk-Mod	.40			wk clay	wk hem		Dk grn chloritic Hf, wk-Mod py sp-wk cpy, diss hem throughout
228.9	8.6		2.92	91	.62	.01		.01	Mod	.61			|	|		Hf as above, vn qtz + barite bx Mod py wk-Mod cpy, wk-Mod cement Cu.
236.8	7.9		2.96	98	.19	.01		.01	|	.18			wk chlor sp	wk-Mod hem	Qtzite 236	Hf w/ wk gar Mod py tr-sp cpy sp wk cement Cu, Qtzite ~~py~~
245.3	8.5		2.64	99	.04				Sp-wk	.04			clay, ser			Sp lim, tr Blue?, cu px wk bl material on fracs last foot RUN Sp py
255.0	9.7		2.56	84	.07				|	.07			|			As above
260.3	5.3		2.52	92	.10				|	.10			sp chlor			re sil qtzite bx. tr sp py tr cu? stain
265.0	4.7		2.66	88	.12				|	.12			|			Qtzite, Sp py, wk cpy on fracs tr MoS2
EOH		Avg. Rec'y = 91%														

Note: No acid reactive rock was found.

Final Depth 250.4'
Collar Elevation 2936.67
Coordinates 29,075.19 N ; 24,815.84 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-141
Sheet No. 1 of 1
Date Completed 3-8-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay sericite	lim	Rock Type	Remarks
42.7	42.7	RB	–	0	–	–	–	–	–	–	–	–	–	–	–	Rock Bit
51.4	8.7	NXW	2.42	91	0.05			.05					Mod	WK lim Tr LLM WK hem	Mz	Mod-St Alt, WK lim, WK-Mod hem tr LLM, wk Alex inlets
61.1	9.7		2.38	80	.04			.04					Mod-St	sp LLM		St Alt, WK lim, hem
72.9	11.8		2.44	68	.04			.04						WK LLM Sp hem mod. lim		As above
82.1	9.2		2.32	96	.09			.09					St.			St. alt, wk lim, Jar., sp hem.
95.4	13.3		2.20	68	.07			.07						Tr LLM	AK from 82.1-94.0	As above. Core in bits & pieces
105.9	10.5		2.12	94	.06			.06							AK inclusions?	St. alt, mod lim, wk hem. Some LLM Some Jar. Stain. Core as above
115.5	9.6		2.32	90	.10			.10							Mz	As above, poss. little more LLM. Core so brkn, hard to tell.
125.0	9.5		2.58	81	.06			.06					Mod	WK lim Sp LLM WK hem Mod lim		Core solid last ½. Poss bx 1'½. Mz. alt decr. to mod. Hem stain-stained glag.
135.3	10.3		2.47	98	.13	0.03		.03	Tr		.10					Mod alt, decr @ end. Hem stain. sp Jar. Tr. cc. in last ½ run.
142.6	7.1		2.57	94	.50	.02		.02	wk	Tr	.48	Tr Tarbornite		Sp lim Sp hem WK lim	AK @ 138.7 Sulf 136.0-141.3	leached @ start & end. wk-mod alt, wk sp-py, wk-mod cc, tr cpy. ct. irreg
152.1	9.5		2.49	94	.26	.11		.11	Tr		.15		wk-mod		Mz circa 144.5	AK leached. Alt as above, Mz - Mod Alt, wk-mod chlor sp-wk and Kspar, tr Sulfs
161.6	9.5		2.49	95	.27			.11	1		.16				Cap	Mod Alt wk chlor, wk lim, tr sulfs rk mainly leached
170.4	8.8		2.49	97	.30			.15	1		.15		Mod	Tr LLM Tr hem Mod lim Tr LLM	Sulf circa 170	As above tr tot sulfs
178.9	8.5		2.50	100	.19			.15			.04		wk-mod		AK circa 173.3	Mz - Mod Alt, chlor. tr tot sulfs. AK - wk Alt wk lim No sulf
191.4	12.5		2.56	79	.15			.14			.01		wk		Mz	hole runs parallel to cont. wk bio in AK wk-mod Al.
200.5	9.1		2.60	92	.16			.09	Sp	.02	.05				AK @ 191.8 Mz @ 198.6, AK @ 200	Mod Alt wk-mod silin ~~sp-wk lim~~ wk lim tr tot sulfs @ 2% bio
208.2	7.7		2.57	100	.15			.05	sp-wk	.05	.05					Mod Alt wk bio sp wk 2nd Kspar. Sp cpy cc, py
217.4	9.2		2.60	93	.17			.04	Sp	.03	.10			wk-mod lim.		Mod-St Alt, silin, wk text visable, Mz dk lat 213.9, tr py, cc, cp
226.1	8.7		2.57	95	.11			.02	Sp-wk	.03	.06			wk lim		wk-Mod Alt, silin, sp-wk cc, cpy, py, sp lim
235.0	8.9		2.59	95	.22	.01		.01	1	.16	.05					Mod Alt, silin, wk py sp cpy tr cc, vuggy or miralitic hem
244.0	9.0		2.56	96	1.06	.01		.01	1	1.03	.02	Tr MoS_2				St Alt, silin, mod miralitic cavities mod patchy cpy w/chlor in rk sp py tr cc
250.0	6.0		2.54	100	.26	.01		.01	1	.25						Alt as above, wk-mod py tr cpy, cc
250.4	0.4		2.56	100	.12				1	.12						Alt as above, wk py tr cpy
E.O.H.		Avg. Rec'y = 90%														

Final Depth 269.2'
Collar Elevation 2918.63
Coordinates 30,394.62 N; 25,364.26 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-133
Sheet No. 1 of 1
Date Completed 2-2-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	hem lim	Rock Type	Remarks
20.7	20.7	RB	–	0	–	–	–	–		–	–	–	–	–	–	Rock Bit
30.6	9.9	NXWl	3.13	65	0.31	0.25		.25			.06?		wk-mod ht	sp lim wk blk ox	Hf w/ patchy Tt	Mod-st Supergene alt. tr py sp-wk Mn ox lim nil
40.7	10.1		2.75	80	.25	.19		.19	Tr	.02	.04?		wk-Mod	sp Jar sp blk ox	Tt w/ patchy Hf @ 30.6	wk supergene alt, tr py sp limo on fracs, wk chlor, tr
53.6	12.9		2.72	57	.26	.14		.14		.09	.03?	tr Cu pitch		wk lim	Hf @ 40	Dk gy Hf patchy sil, wk sup alt, tr py sp-wk mal, Cu, wk qtz vns sp
64.0	10.4		2.66	74	.40	.21		.21		.04?	.15				Patchy Tt	Sil Hf & patchy Tt, wk-Mod patchy supergene alt. no vis sulf, sp
72.6	8.6		2.71	90	.35	.19	37.2' @ .48/23	.19	tr	–	.16?	sp-wk Mal		wk jar wk-Mod lim	Sil. Hf	wk supergene alt wk lim on fracs no vis sulf
81.7	9.1		2.46	100	.56	.24		.24			.32?			sp jar Mod lim	Hf	wk-Mod super. alt. wk-Mod lim sp cu ox
90.8	9.1		2.71	82	.62	.29		.29	sp	.10	.23	wk Mal tr bor			Dp? @ 87.7	Hf as above Dp? st sil tr tod. wk lim on f.
100.3	9.5		2.56	90	.06	.01		.01	tr	.01	.04			tr jar wk lim	Sulf @ 102'	as above
107.4	7.1		2.62	100	.33	.02		.02	wk	.11	.20		Mod	wk-Mod lim sp lim	Hf circa 105	Dp? st qtz vning, sil'n wk lim, wk-mod py tr MoS2, chlor. Hf wk py, lim on
112.3	4.9		2.64	96	.17			.05	sp-wk	tr	.12		wk-Mod	wk lim		Grn chlor Hf, sp-wk py, tr cpy, cc, wk lim on fracs tr
122.0	9.7		2.55	92	.32	.20		.20	sp	–	.12	wk Mal, Cu pitch sp Mal tr gyp		wk-Mod lim	Tr Mz 113.4+ 114' Dk Hf @ 120.0	1st 2/3 run lt grn Hf w/ tr Mz. last 1/3 is dk grn Hf sp py tr
131.9	9.9		2.62	100	4.55	.34	28.9' @ 5.06/a.34	.34	Mod-st	2.00	2.21		st talc? chlor?	sp-wk lim		dk grn Hf talc of chlor Mod py, wk cc sp-wk lim, tr Cu ox
141.1	9.2		3.28	87	6.44	.29		.29	Mod (-)	1.50	4.65			tr-sp lim		as above, Mod-st py, wk-Mod cpy, wk cc no lim
150.9	9.8		2.78	87	4.28	.10		.10	st	1.00	3.18			tr	tan Hf @ 148.4	dk grn chlor Hf as above – Tan Hf – wk py tr? cpy sp chlor on frac
162.1	11.2		2.59	77	.05			.05	tr			X	tr chlor	wk lim	Qtzite @ 160.7 Hf @ 162.2	Tan Hf as above, sp py, slightly qtzitic, Qtzite light grn, tr talc sp
170.7	8.6		2.75	92	.19			tr	sp-wk	.09	.10	X	wk clay wk chlor			Qtzite as above, Hf – lt grn. Mod sil or Qtzitic, wk-Mod chlor py vns, wk py
176.4	5.7		2.67	96	.19					.13	.06	X				as above
188.1	11.7		2.64	75	.49	.02	31.8' @ .57/.02	.02	WK (-)	.20	.27	tr MoS2 X	Mod talc chlor.		Dp? @ 179.6	Hf as above wk-Mod py, cpy, Dp – Mod Alt. wk sil'n, wk py sp cp tr Mo
199.0	10.9		2.82	72	.72	.02		.02	WK-Mod	.60	.10	X	WK-Mod chlor		Hf @ 190.5	Sil Hf wk-Mod py, cpy, tr MoS2 sp chlor.
208.2	9.2		2.63	93	.48	.01		.01		.47	tr?	X	wk chlor		Sp circa 199.0	Mod-st sil'n, wk py, sp-wk cpy, tr MoS2
216.9	8.7		2.67	100	.35	.01		.01		.35		X	sp clay chlor			Mod-st sil'n, wk-Mod Alt, wk-Mod py, cpy tr MoS2 wk qtz vns
226.2	9.3		2.66	93	.17			tr?	wk	.17		X				as above, patchy coarse text. sp-wk py sp cpy tr MoS2
235.0	8.3		2.68	100	.31	.01		.01		.30		X	sp clay wk chlor		Hf @ 232.1 bx	Sp-Mod Alt, sil'n, wk py cpy diss, tr MoS2 wk chlor along sul
243.1	8.1		2.74	100	.99	.02	18.4' @ .73/.02	.02	wk-mod	.97		X	Mod chlor			Hf-bx in dk grn soapstone matrix, wk-Mod py, sp cpy vns
253.4	10.3		2.65	82	.52	.02		.02	wk	.50		X	wk chlor			as above, Mod py wk cpy patchy sp @ 1st of run
262.6	9.2		2.69	99	.36	.02		.02		.34		X			Hf @ 248.9 bx @ 257 – 259.4	bx as above, Hf, dk grn to lt grn, wk py sp cpy
269.6	7.0		2.53	100	.11	.01		.01		.10		X	sp chlor			Hf as above, bx – Mod py, sp-wk cpy
E.O.H.		Avg. Rec'y = 87%														dk gy to tan sil Hf sp-wk py sp cpy

Note: X denotes acid reactive rock.

Final Depth 287.9'
Collar Elevation 2878.48
Coordinates 30,053.53 N ; 25,873.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-132
Sheet No. 1 of 1
Date Completed 2-2-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	hem lim	Rock Type	Remarks
5.0	5.0	RB	—	0	—	—	—	—		—	—	—	—	—	—	Rock Bit
14.8	9.8	NXW1	2.56	93	.49	.26	15.2' @ .54/.38	.26	tr		23?		wk-mod clay	Mod lim	Sp HF @ 8.1'	Sp-Mod AH, silin sp-wk lim on fracs Hf-Mod-st Sapro. AH wk-mod qtz wning, Mod lim sp
20.2	5.4		2.81	59	.64	.59		.59	Sp		.05		Mod clay wk chlor	wk-mod lim		Hf as above
29.4	9.2		2.41	47	.98	.25		.25	wk		.73?		wk-mod chlor mod chlor	Mod lim		Patchy mod AH, lim tr Hf is dk gy grn wk qtz wns
38.3	8.9		2.64	98	.58	.16		.16	wk-mod	.42	tr		wk clay mod chlor	wk-mod lim		as above 1st 1/2 run leached 2nd 1/2 - wk py tr cpy, cc?
47.0	8.7		2.54	97	.72	.06		.06		.30	.36		sp-wk clay mod-st chlor	wk-mod lim		No supergene AH wk py sp-wk cpy, tr MoS2 wk lim in leach cavities
55.9	8.9		2.54	99	.55	.08		.08		.17	.30					as above
66.1	10.2		2.87	51	.46	.04		.04	wk	.42			sp-wk chlor	wk lim	Tr circa 58.9	wk-mod qtz wning w sp py, cpy wk chlor
71.5	5.4		2.77	48	.46	.01		.01		.45		Tr Mo S2	sp chlor	sp lim		as above, wk py
80.2	8.7		2.65	100	.70	.02		.02	wk-mod +	.68			mod-st chlor	sp hem	Hf circa 73'	Mas. py 1st test run, sp-wk py, tr cpy? MoS2 in chlor Hf w/wk ox of py traces
89.2	9.0		2.60	90	.68	.01	180.0' @ .58/.04	.01	wk	.67			sp clay mod chlor	T- hem		Sil. + Chlor Hf sp cpi wk py, cpy on qtz veinlets
99.6	10.4		2.64	84	.59	.02		.02		.45	.12			—		wk py, tr cpy MoS2, wk qtz wning
111.1	11.5		2.83	72	.55	.02		.02		.27	tr	.25 Native cu	sp clay st chlor		Post Min bx circa 99.6	st chlor AH wk py tr sp cpy tr MoS2 sp cup Native cu hem on fracs
120.6	9.5		2.64	84	.71	.01		.01		.35		.35 Native cu		—	Hf circa 114	st chlor AH, wk-mod qtz wns, py wk cpy sp cup on fracs cement cu
130.1	9.5		2.66	87	.42	.01		.01		.15	.05	.21 cu		—		as above patchy qtzite? sp cpy sp-wk Native cu
140.9	10.8		3.05	90	.46	.02		.02		.15	.08	.21 cu	sp-wk clay wk-mod chlor	—		Mod chlor Hf wk-mod py sp cpy wk-mod cup? on fracs Native cu
150.3	9.4		3.02	86	.37	.02		.02	wk-mod	.35	tr	tr Native cu	sp clay wk-mod chlor	-		as above, tr cpy no cup tr hem sp epidote
160.4	10.1		2.83	86	.24	.01		.01	wk	.14	tr	.10 cu	wk clay mod chlor			as above, wk py no cpy sp cup? on fracs sp epi
170.6	10.2		2.08	94	1.30	.03		.03	wk	.15		.2[illegible] cu	wk-mod clay mod chlor			wk-mod chlor Hf wk-mod py, mod cpy sp-wk cup? on fracs
181.4	10.8		2.62	76	.33	.01		.01	mod	.31	tr	.01 cu				Mod chlor Hf patchy st silin, wk-mod py, sp-wk cpy tr cup
191.1	9.7		2.95	79	.49	.02		.02	wk-mod(c)	.34	.03	.10 cu				1st 1/2 run as above, 2nd 1/2 wk-mod chlor Hf wk py wk-mod cpy mod fine Native Cu mud on fracs, reffered to above as cup?
200.2	9.1		2.44	97	.43	.02		.02	wk	.15	.03	.23 cu				wk-mod chlor Hf as above, wk py, wk(c) cpy, mod Native Cu as above on fracs
209.4	9.2		2.93	94	.39	.02		.02	mod(c)	.31	tr	.06 cu				as above, wk py sp cpy wk Native cu mud on fracs
218.2	8.8		2.71	99	.26	.01		.01	sp	.25	tr?	tr MoS2	sp chlor sp clay		Mz 209.5 - 217.4	St AH silin Mod-large phenos almost appears to be 2nd gen of Hf
222.1	3.9		2.64	92	.64	tr		tr	wk	.50	.08	.06 cu tr MoS2	wk clay mod chlor		Hf	Hf w/ patchy gen @ 1st part run. Mod py wk cpy tr Native cu wk py, tr cpy, MoS2
231.1	9.0		2.74	91	.18	.01		.01	sp	.17	tr?	tr MoS2	sp clay		Mz ≈ 222.1 Dp ≈ 226.4	Mz-appears to be 2nd growth in Hgrn Hf Dp-Mod-st AH wk silin sp-wk py, tr cpy Mo
240.2	9.1		2.65	97	.09					.07	.02	tr MoS2	tr-sp clay			as above tr Mz @ 235.7, sp-wk py tr cpy, MoS2
249.1	8.9		2.52	100	.14				sp-wk	.08	.06		tr-sp clay wk-mod chlor		Hf @ 244.6 @ 25°	Dp as above, 8" qtz on cnt. Hf sp-wk py cpy st supergene AH last 2'
258.1	9.0		2.64	93	.13				sp	.10	.03		tr-sp clay mod chlor			Hf as above, patchy flt gg w/ some bk, sp py tr cpy
267.6	9.5		2.64	94	.25					.25			sp-wk chlor		Mz @ 265.3	Sil Hf sp py, tr cpy, MoS2 on qtz wns Mz - cnt gradational mod-st sil, mod AH
276.7	9.1		2.65	94	.22				wk	.22		tr MoS2	sp clay			Mz as above, sp py cpy, tr MoS2
285.2	8.5		2.63	100	.19				sp-wk	.19	tr					as above, sp py sp-wk cpy on fracs
287.9	2.7		2.58	100	.20					.18	.02	tr MoS2				as above
E.O.H.		Avg. Rec'y =		87%												

Note: X denotes acid reactive rocks.

Final Depth 270.3'
Collar Elevation 2881.84.
Coordinates 30,282.55 N ; 25,679.34 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-131
Sheet No. 1 of 1
Date Completed 1-26-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim hem	Rock Type	Remarks
18.0	18.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock Bit
28.3	10.3	NXW	2.52	76	0.56	0.35		Nat., Ten. 0.35	Tr		.21?		wk-mod	~~mod~~ lim sp pitch	Hf	S.l. Hf wk-mod qtz vns tr sulf wk lim, Mal. wk-mod supergene clay alt.
38.1	9.8		2.67	84	.41	.19		" as above .19	Sp		.22	Tr Gypsum	Mod-st	Mod. lim		As above Mod-st supergene clay
47.4	9.3		2.75	88	1.01	.38		" .38	1		.63	1	1	Mod lim wk pitch	Patchy Hf	Mod patchy py, Mag? wk-mod lim, cu ox Mod supergene alt.
57.2	9.8		2.56	88	.36	.24	73.8' @ .57/21	" .24	1		.12		Mod	1	Hf	Hf, wk-mod qtz vns mod lim, super. alt wk-mod py wk lim, calc
66.0	8.8		2.57	100	.69	.12		" .12	1		.57		wk	Tr pitch	patchy Qtzite	Wk supergene alt, wk qtz on vnlets wk-mod Mag? hf, py wk lim
75.0	9.0		2.46	97	.30	.14		" .14	Tr		.16		1	Nov. c.p.	Hf	Alt as above, wk qtz vning w/wk-mod vn-lets 2nd repair wk cu py
82.8	7.8		2.67	91	.78	.07		" .07	wk	.20	.51	Tr Gypsum	Mod	wk lim		Wk supergene alt, Mod (-) py on vns w/mod Mag sp cpy tr MoS2 wk lim
91.8	9.0		2.57	92	.47	.13		" .13	sp	.05	.29		wk	1	Qtzite 84.2 – 88.8 Qtzite 90.9	Hf as above, Qtzite - wk chrys in voids sp py
98.6	6.8		2.62	79	.10	.03		" .03	Tr		.07		Tr-sp	sp-wk	–	Clean? Finely xyline, sp sulf, sp lim on fracs w/ tr Mn ox tr cu s.
106.9	8.3		2.62	100	.22			" .10	1		.12		Tr	1		As above but only tr. py. Tr MoS2
116.4	9.5		2.58	91	.09			" .09					?	1		" " " no sulf. Sp grn Cu Ox, tenorite
124.4	8.0		2.61	98	.06			" .06						sp		As preceding. Lim. on fracs. No vis. sulf. Sp Cu
133.2	8.8		2.59	96	.11			Tenorite " .09	Tr		.02		Tr	sp-wk		As above tr py, tr garnet sp lim, Mn Ox on fracs tr cu
142.6	9.4		2.62	91	.09			" .09	1		Tr		1	1		As above, no cu ox
151.5	8.9		2.61	92	.09			" .09	1		Tr		1	sp		As above, tr cu ox - Tenorite, pitch, chrys
161.0	9.5		2.61	91	.12			Ten, Pitch, Nat. " .07	sp		.05	Tr MoS2	sp	sp-wk		tr-sp py, diss & on fracs, tr cu ox, sp lim on fracs
172.2	11.2		2.58	77	.09			" .09	Tr-sp		Tr		Tr	1		as above, patchy Hf well alt to clay, great part los in drilling
181.0	8.8		2.60	92	.09			" .09	Tr		Tr		sp	1		Qtzite as above, patchy Hf w/ wk clay alt.
190.0	9.0		2.62	95	.12			.12	Tr				–	1		wk lim on fracs tr Mn ox
199.0	9.0		3.22	93	.18			.18	Mod		Tr?	Tr MoS2 X Tr cov X	wk	mod lim	Tr @ 192.2	Qtzite as above, Tr-wk-mod py vns, wk-mod cc ox py sp epidote on py vns
208.4	9.4		3.20	99	.16			.03	1		.13		wk chlor	–		Wk-mod (-) py on vns, tr cc, sp-wk epi & chlor along py vns
217.6	9.2		3.25	92	.12			tr	wk-mod		.13	X	1	–		As above wk qtz vning
226.2	8.6		3.38	95	.17			1	Mod		.17		1	sp-wk lim		Mod py sp cc, wk qtz vning wk chlor sp epidote on py vns
235.5	9.3		2.89	89	.40	.17		.17	wk		.37	tr Cov	wk clay	wk-mod lim		wk-mod py, rest as above, no cu. sp-wk [illegible]
244.9	9.4		2.30	90	.39	.19		.19	Sp		.20?		st clay	mod-st lim	Mixed Hf Pd Tr? @ 236. Qtzite, 245.4	Mod-st supergene alt wk py, st lim abundant clay gouge
254.7	9.8		2.60	83	.09			.01	sp		.08		tr chlor clay	sp lim on fracs		Clean Hf py Qtzite sp-wk py tr cpy, cc sp lim on fracs
264.0	9.3		2.59	92	.06			tr	sp-wk		.06		1	sp-wk lim		As above
270.3	6.3		2.62	80	.04			Tenorite .04	Tr				Tr clay	1		As above No vis. sulf.
E.O.H.		Avg. Rec'y =		90%												

Note: X denotes acid reactive rock.

Final Depth 475.0'
Collar Elevation 3016.46
Coordinates 28,975.30 N ; 25,446.54 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-130
Sheet No. 1 of 2
Date Completed 1-24-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay str	lim hem	Rock Type	Remarks
5.0	5.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock B.T.
14.7	9.7	Nxwl	2.08	100	0.04			0.04					Mod.	wk lim, Jar w st Lim st hem	AK Mz @ 7.2'	@ collar. Then AK, Mod Alt, silic & Mz. st Alt hem, wk lim. stockwork of lim vnlets
24.9	10.2	-	2.11	90	.02			.02					Mod-st	st lim sp LLM st hem wk lim	Mz	st Alt, most text gone, st hem stain, Alun as above
34.3	9.4		2.11	96	.03			.03						Mod		Alt and capping as above
45.2	10.9		2.22	75	.03			.03					st			Alt + cap as above to 40' - st Alt, defin. to text wk lim + yellow Fe stain (hi py ratio)
53.6	8.4		2.36	94	.03			.03						Tr LLM sp hem		Mod-st Alt, wk lim wk-Mod yellow iron stain Mod Alun on vns
62.8	9.2		2.29	95	.02			.02					Mod-st	wk hem Mod lim		st Alt cap as above to 57' restrun. Mod hem, lim stain, Alun as above
72.7	9.9		2.24	89	.03			.03					Mod	sp hem sp lim		st Alt st hem, lim stain, sp LLM wk-Mod Alun, wk qtz vns.
81.9	9.2		2.23	100	.03			.03								Alt and cap as above to 79' to end run Mod yellow lim stain
91.5	9.6		2.25	95	.03			.03					Mod-st	sp hem wk lim wk-Mod lim Mod hem		Mod-st Alt, wk qtz vns, Mod yellow to tan lim stain
100.7	9.2		2.34	93	.02			.02						mod lim sp LLM		st Alt, Mod lim + hem stain sp LLM, Mod Alun vns wk qtz vns
110.4	9.7		2.42	93	.02			.02						mod hem	AK @ 106.1	Mz alt as above, AK Mod Alt, wk silic Alun wk hem, lim
119.5	9.1		2.47	93	.02			.02					Mod	Tr lim Tr hem sp Jar		Mod Alt, silic, wk yellow lim on fracs, sp hem stain, Alun
128.2	8.7		2.51	99	.03			.03						sp lim st LLM Mod hem		Mod Alt wk silic, wk hem sp lim, wk Alun vns
137.3	9.1		2.47	96	.10			.01	sp-wk		.09			Tr lim Tr hem	Suls @ 128.7	Mod Alt, wk-Mod py sp-wk cc on py
145.9	8.6		2.40	100	.16						.16					Mod Alt wk diss py sp cc tr? cpy
155.6	9.6		2.38	97	.16						.16		Mod-st			Mod Alt, wk-Mod diss py, sp-wk cc tr cpy
164.5	9.0		2.43	100	.19				wk +		.19		Mod		Mz @ 158.0'	AK as above, Mz-Mod Alt, wk-Mod diss py, wk cc sp qtz vns
173.7	9.2		2.56	95	.11						.11				AK @ 169.0'	Mz as above w/sp cc, AK Mod Alt, patchy wk silic sp-wk py, sp cc
183.1	9.4		2.52	99	.05						.05					Mod Alt, wk silic, sp-wk py, sp cc, cpy sp Alun on vns
192.2	9.1		2.72	96	.19					.02	.17		Mod-st.			Alt as above wk-Mod py along qtz vns wk ac. sp cpy
200.7	8.5		2.54	98	.17				wk-mod	.01	.16					wk-Mod Alt, wk-Mod py along vns, sp cc tr cpy
209.7	9.0		2.51	98	.17				wk +	.05	.12		Mod			Mod Alt, patchy wk silic, wk py, sp cpy cc.
219.7	10.0		2.55	100	.16					.08	.08					wk-Mod Alt, patchy st silic, sp Apl text. wk-Mod py sp cc tr-sp cc
229.2	9.5		2.53	100	.11				wk-Mod	.04	.07					wk-Mod Alt, patchy Mod silic wk-Mod py sp cc, cpy
238.8	9.6		2.50	100	.12					.07	.05				Mz 230.6 – 234.5	Mod Alt, Mod py tr cc
247.8	9.0		2.60	95	.13					.12	.01				AK	wk-Mod Alt silic, wk-Mod py tr-sp cc tr cpy
257.3	9.5		2.52	96	.14				wk	.14					Mz @ 256.0 @ 60°	AK as above, Mz-Mod Alt wk-Mod py tr cc, cpy wk-Mod clay vnlets
266.8	9.5		2.35	96	.06					.06						as above
276.2	9.4		2.45	100	.16				sp-wk	.16	tr					Mod Alt wk silic, wk py tr-sp cc, cpy tr MoS2
285.5	9.3		2.50	100	.06				wk	.06						Alt as above, wk-Mod py tr-sp cc, cpy tr MoS2 wk-Mod clay vns
295.1	9.6		2.51	96	.13					.13						Mod Alt, sp-wk qtz vning wk py, sp-wk cpy tr cc
304.6	9.5		2.50	93	.10				wk + Mo	.10						Mod Alt, sp-wk silic wk py sp-wk cpy tr cc wk clay vn tr 2nd? b/o
313.9	9.3		2.44	100	.22					.18	.02					Mod Alt, patchy wk silic Mod py, sp-wk cpy tr cc clay as above
323.2	9.3		2.51	86	.08				wk	.07	.01					Mod Alt, wk silic wk py tr cpy, cc clay as above
332.2	9.0		2.49	100	.07				wk	.07	tr					As above
342.6	10.4		2.58	85	.11					.11						as above
349.8	7.2		2.55	100	.09					.09						Mod Alt wk py tr cc
359.0	9.2		2.47	99	.07					.07						

Final Depth 475.0'
Collar Elevation 3016.46
Coordinates 28,975.30 N ; 25,446.54 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-130
Sheet No. 2 of 2
Date Completed 1-24-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim hem	Rock Type	Remarks
368.3	9.3	NXWl	2.46	100	.08				wk	.08		Tr cov.	Mod.		Mz	Mod Alt, wk py tr cpy wk-Mod clay on vnlets.
377.0	8.7		2.47	100	.05				1	.05			1			Qs above, sp-wk 2nd K spar
385.8	8.8		2.51	100	.32				1	.32			1	Tr lim		Qs above, patchy silin
394.8	9.0		2.65	96	.08				1	.08			1			Mod Alt, wk py, tr cpy, Mo Sz wk clay on vnlets
403.7	8.9		2.79	93	.08				wk+	.08			1			Mod Alt, patchy st silin, Mod py tr cpy, Mo Sz
411.1	7.4		2.58	87	.18				1	.18	tr		1			Mod Alt, wk silin, 2nd K spar on vns. wk py tr cpy, Mo Sz
420.2	9.1		2.51	97	.12				1	.12	tr		1			Mod Alt, patchy st silin. wk-Mod clay on vnlets wk py, tr cpy
428.9	8.7		2.56	95	.05				wk	.05			1			Mod Alt, tr 2nd K spar wk py tr? cpy
438.1	9.2		2.57	97	.05				1	.05			1			Mod Alt, wk silin, tr 2nd K spar bio? wk py tr? cpy
447.4	9.3		2.55	100	.30				wk-Mod	.30			wk-Mod		AK circa 438'	Mz as above AK sp-wk Alt, wk silin. wk-Mod py. ~~tr cpy~~
456.5	9.1		2.60	96	.08				wk	.08			1			1st 2 st. Sil'd, then wk. alt, sp. min, sev. vuggy vnlts.
465.5	9.0		2.59	98	.12				wk	.12			wk			wk alt, sp. min'd, tr Mo Sz. Alunite? or clay vnlt.
475.0	9.5		2.58	58	.12				sp-wk	.12			1			As above w mod. silin. stronger py @ end
E.O.H.		Avg. Rec'y =		96%												

Final Depth 354.0'
Collar Elevation 2969.47
Coordinates 28,615.89 N ; 25,589.33 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-129
Sheet No. 1 of 1
Date Completed 1-18-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim, hem	Rock Type	Remarks
5.0	5.0	R.B.	—	⊖	-	—	—	—	—	-	—	—	—	—	—	Rock Bit
29.1	24.1	NXWL	2.37	32	0.02			0.02					Mod	Sp lim Mod hem	AK	Mod Alt, Mod hem, wk Llm sp lim
39.0	9.9		2.18	90	0.02			.02					Mod-st ser.	Spark lim Mod hem sp Llm		Mod supergene Alt wk hem, sp-wk lim wk clay on f.
50.3	11.3		2.52	75	0.01			.01					Mod-st	Mod-st hem wk Llm tr Llm		Mod-st Alt, wk qtz vns Mod hem, Alunite vns
58.4	8.1		2.37	99	.02			.02					Mod clay	Mod hem tr Llm		Mod-st Alt Mod hem, wk-Mod Alun vns, patchy Apl to circa 53'
68.2	9.8		2.37	92	.02			.02					)	Mod hem tr Llm		Mod-st Alt, Mod-st Alun, Mod hem sp Llm, lim
77.3	9.1		2.29	97	.02			.02					St clay Mod ser.	Sp-wk hem stain		St Alt, all Apl.? text. Mod Alun on fracs, wk-Mod hem
85.9	8.6		2.32	98	.02			.02					Mod	Mod hem Sp lim Sp-wk Llm	Sp or Mz @ 83.2'	Mod-st Alt, Mod hem wk Alun on fracs only tr text vis in Sp? - Mz
95.6	9.7		2.44	95	.02			.02					)	Mod hem Sp lim wk Llm	AK circa 94'	St Alt, Mod hem, Alun, sp Llm on fracs
104.6	9.0		2.42	91	.03			.03					Mod-st	wk lim Sp Llm	Mz circa 98.6'	St Alt, st chy + Alun on fracs, Mod hem stain sp-wk Llm
113.5	8.9		2.31	100	.03			.03					Mod	Mod hem Sp lim wk Llm St. hem	AK circa 109'	Mz as above, Cnt strongly broken, Mod-st Alt in AK Mod hem, wk Llm
122.9	9.4		2.52	93	.03			.03					)	)	AK	St Alt, Mod hem, sp-wk Llm wk-Qtz, wk-Mod Alun vns
131.9	9.0		2.44	95	.02			.02					)	wk lim Sp Llm Mod hem		Mod Alt, Mod hem stain on fld, wk Qtz, Alun vning
141.2	9.3		2.47	96	.02			.02					wk-mod	)		Alt as above, Mod hem stain on fld tr Llm, patchy sil'n wk A
150.4	9.2		2.45	100	.05			.02	Sp		.03		Mod	Sp lim wk hem	Patchy sulfs circa 142.6	Capping Alt as above, Sul - Mod Alt, sp-wk py sp cpy, cc, s
159.7	9.3		2.60	93	.02			.01	Tr		.01		)	Tr Llm	Sulfs circa 156'	Mod Alt, wk Alun vns, patchy hem on fld wk py tr-sp cc tr cpy
168.9	9.2		2.47	97	.05			.01	WK		.04		wk-mod	Tr lim		WK-Mod Alt, sp-wk py wk cc tr cpy sp lim
177.9	9.0		2.50	99	.04				)		.04		)			As above sp cc tr cpy cov.
186.9	9.0		2.52	99	.05				)		.05		)			WK-Mod Alt, 1" bx circa 181' @ 80° wk py sp cc
196.1	9.2		2.51	98	.07				)		.07		)			Alt As above, wk-Mod py sp cc patchy Apl 1st ½ ran
206.5	10.4		2.53	83	.10				)		.10		)			WK-Mod Alt, wk py sp cc-cov.
216.1	8.6		2.58	96	.04				)	tr	.04		WK			WK Alt, Alun vns wk-Mod diss py tr-sp cc, cpy
224.3	9.2		2.56	96	.07				)		.07		)			WK Alt, wk-Mod diss py tr-sp cc, cpy sp-wk Alun
232.7	8.4		2.53	99	.04				)	tr	.04		)			As above
241.9	9.2		2.54	98	.16				Wk-Mod	.04	.12		WK-Mod			WK-Mod Alt wk-Mod py sp-wk cpy wk cc
250.9	9.0		2.40	100	.05				WK	tr	.05		WK			WK Alt, wk py sp cc, cpy Alun
259.5	8.6		2.48	100	.03				sp-wk		.03?		Mod-St			Mod Alt, sp-wk py cc, cpy both x + plag fold grp'll.
268.7	9.2		2.52	96	.05				)	.02	.03		WK-Mod			WK-Mod Alt, sp py, cc, cpy
277.7	9.0		2.52	98	.04				)	tr	.04		Mod			Mod Alt, sp-wk py, sp cc, cpy Mainly on qtz veinlets
286.6	8.9		2.50	98	.05				)	.02	.03		Mod			WK-Mod Alt, sp-wk py, sp cc, cpy
295.7	9.1		2.50	100	.11				)	.04	.07		WK-Mod			Mod Alt, sp-wk py, cc, cpy
304.6	8.9		2.49	99	.06				)	.01	.05		)			WK-Mod Alt, sp py, cc, cpy
313.2	8.6		2.50	99	.14				)	.05	.09		)			WK-Mod Alt, patchy Mod sil'n wk py, sp cc, cpy
319.9	6.7		2.74	100	.03				tr	-	.03		Mod		Sp @ 313.6	Mod Alt, wk-Mod white clay on veinlets sp py, cc on veinlets tr grn clay
328.6	8.7		2.49	98	.05				-		.05?		WK-Mod			Mod Alt to ser, hydromica, + grn clay or chlor. sp sulf
337.1	8.5		2.56	87	.01						.01?		)			WK Alt, No vis sulfides, Mainly chlor? + grn clay alt.
346.0	8.9		2.62	100	.01						.01?		WK			WK Alt tr finely diss. py?
354.0	8.0		2.63	98	.01						.01?		)			As above No vis sulfs
E.O.H.		Alun	[illegible]	[illegible]												

Final Depth 410.0'
Collar Elevation 2960.30
Coordinates 28,783.36 N ; 25,625.67 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-12B
Sheet No. 1 of 2
Date Completed 1-11-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
5.0	5.0	RB.	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock B.T
14.4	9.4	NXWL	2.40	93	0.02			0.02					wk-mod	wk lim, Mod LLm, Mod hem	AK	Mod Alt patchy st s.i/n Mod hem stain wk-Mod LLm
22.5	8.1		2.49	97	.03			.03					Mod	Tr lim, Tr LLm		Mod-st Alt, wk-Mod hem stain patchy Apl circa 8' sp-wk Alun Tr
31.9	9.4		2.36	94	.03			.03					|	wk LLm		Alt as above mod patchy s.i/n, wk-Mod clay-Alun vns
41.1	9.2		2.28	94	.02			.02					|	Tr lim, Mod LLm		Mod Alt, Mod hem stain tr LLm st cap on vn @ 39.6'
51.0	9.9		2.27	93	.02			.02					|	Sp lim, Tr LLm, wk hem		Mod Alt, wk-Mod hem stain wk Alun on vns
60.6	9.6		2.48	89	.01			.01					wk-mod	Tr lim, Tr hem		Mod-st Argill Alt wk hem stain
69.5	8.9		2.39	96	.02			.02					|	wk lim, Sp Mod hem		Mod-st Alt Mod hem & lim stain sp-wk LLm wk py cp
79.1	9.6		2.49	87	.02			.02					Mod	Sp lim, Sp LLm		Mod-st Alt wk-Mod hem stain tr LLm wk clay, Alun vn lay
88.2	9.1		2.55	91	.03			.03					|	Tr lim, Tr LLm		Mod Alt, Mod hem stain, wk py & ox wk wk-Mod Alun vns
97.7	9.6		2.54	88	.02			.02	Tr				|	Sp lim, Sp LLm, wk hem	Sils circ 9 Rb?	Mod Alt, Patchy st s.i/n wk-Mod hem stain, wk Mod Alun vns
106.9	9.2		2.68	89	.03				wk+		.03		|	Sp lim		Mod-st Alt, st s.i/n wk-Mod py sp cc tr cpy, wk Alun
116.5	9.6		2.82	83	.17				|		.17		|	Tr lim	sp lim on	wk-Mod Alt, patchy st s.i/n wk-Mod py sp wk cc, tr cpy
125.8	9.3		2.55	92	.07				|	Tr	.07		wk-mod			wk-Mod Alt, s.i/n, wk-Mod py sp cc tr cpy sp-wk bar.
135.2	9.4		2.50	90	.06				|		.06		|			wk-Mod Alt, wk-Mod py sp-wk cc, sp cpy
144.1	8.9		2.56	92	.13				|	.05	.08		|			wk-Mod Alt patchy Mod s.i/n, wk-Mod py, wk cc sp-wk c. wk Alun
153.0	8.9		2.55	95	.06				|		.06		Mod			Mod Alt, wk-Mod py, tr cc, cpy
162.1	9.1		2.54	98	.05				|		.05		|			wk-Mod Alt, wk py sp-wk cc wk Alun on vns
171.5	9.4		2.51	92	.03				wk		.03		|			Mod Alt, sp-wk py sp cc tr cpy, MoS2
181.1	9.6		2.45	91	.05				|		.05		|			wk-Mod Alt sp-wk py, cc on fracs tr MoS2
190.3	9.2		2.54	97	.04				|		.04		wk-mod			wk-Mod Alt, wk py sp-wk cc
199.1	8.8		2.54	95	.07				|	.02	.05	Tr MoS2	Mod			Mod Alt, wk-Mod py wk cc sp-wk cpy tr MoS2
208.1	9.0		2.55	95	.04				|		.04	Tr MoS2?	|			wk-Mod Alt, wk py wk cc, tr cpy MoS2
217.5	9.4		2.56	90	.10				|	.08	.02		wk-Mod			Mod alt, wk-mod py, mainly dis. sp-wk cc. Akm aplitic facies.
226.7	9.2		2.63	90	.08				|		.08		Mod			As above Cu values low. A.2' Mz dikelt @ 223.6
235.8	9.1		2.56	91	.11				|	.03	.08		wk-Mod			Mostly aplite w/ a few AK intercepts. Mod. alt, wk-mod py, s,
244.7	8.9		2.75	91	.18				|	.04	.14		Mod			As above
253.8	9.1		2.56	94	.13				|	.02	.11		|		Mz @ 60° @ 251.1	As above to ct. Mz also mod. alt. Py dsem to wk. Cc sl. in
262.8	9.0		2.66	94	.05				wk-Mod	tr	.05		|		AK 254.4 to 261.1	Mz mod alt, f.g. matrix. wk s.i/n, wk py.
271.8	9.0		2.65	93	.16				wk-Mod	|	.16		|			Mz in scv. AK incl. Mz f.g. matrix, wk-mod s.i/n. wk py sp cc
280.4	8.6		2.49	98	.16				wk	.07	.09		wk-Mod		AK @ 274.4	Ct. Chilled (Mz). wk-mod alt, wk py, sp-wk cc.
289.4	9.0		2.60	97	.07				|	.07			|			wk-Mod Alt, wk-Mod py tr? cc
298.6	9.2		2.52	95	.14				wk+	.07	.07	Tr MoS2	|			wk-Mod Alt, massive py on vn. 294'-295' st s.i/n on vn tr cc, cpy
308.1	9.5		2.61	93	.36				|	.30	.06		|			wk-Mod Alt, wk-Mod py, wk diss cpy, cc, wk Apl rcd
317.7	9.6		2.56	90	.16				wk	.08	.08		|			wk-Mod Alt, wk-Mod py. sp cc, cpy, tr MoS2
326.6	8.9		2.65	95	.14				wk+	.10	.04		|			wk-Mod Alt, patchy wk-Mod s.i/n sp cc, cpy wk-Mod py
336.7	10.1		2.57	92	.25				wk	.23	.02		|			Mod Alt s.i/n, Mod py sp cpy, cc in diss xyls on vns
346.2	9.5		2.58	88	.12				|	.12	Tr		|			Mod Alt, Mod diss py sp chlor. tr? cpy

Final Depth 410.0'
Collar Elevation 2960.30
Coordinates 28,783.36 N ; 25,625.67 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-128
Sheet No. 2 of 2
Date Completed 1-11-66
Logged By V.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Clay Ser.	Lim		
364.6	9.2	Nxw	2.54	94	0.09				wk	.09	Tr		wk to Mod		AK	wk-Mod Alt, wk-Mod diss py tr-sp cpy sp cb
373.8	9.2		2.58	91	.09				1	.09						As above, sp-wk cpy patchy Apl text w/ mod di
382.9	9.1		2.65	92	.16				1	.16			wk			Alt as above, wk-Mod diss py sp-wk cpy patchy Apl tex as above
392.0	9.1		2.54	95	.13				1	.13			1			wk Alt, wk diss py, patchy Apl text w/ Mod diss py sp-wk cpy
400.8	8.8		2.54	96	.18				1	.18			1			wk Alt, sil'n, wk py, tr cpy
410.0	9.2		2.57	94	.05				1	.05			1			wk Alt, patchy wk sil'n, wk py, sp-wk cpy, sp patch Apl tx
E.O.H.		Avg	Rec'y =	93%												

Final Depth 356.1'
Collar Elevation 2990.92
Coordinates 29,676.41 N; 25,371.48 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-127
Sheet No. 1 of 1
Date Completed 1-8-66
Logged By JAB., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay Ser	lim	Rock Type	Remarks
5.0	5.0	RB	-	-0	-	-	-	-	-	-	-	-	-	-	-	Rock Bit
14.5	9.5	NXW	2.52	91	0.37			0.37?					wk-mod	wk lim	Mz	Wk-Mod Alt, argill of plag. sp cuox stain on plag sp
23.7	9.2		2.51	92	.11			.11					|	|		As above no cu stain sp jar. on fracs
33.1	9.4		2.50	93	.04			.04	Tr-sp		Tr		Mod	Mod lim		Mod Alt st patchy silin on sh zone, some rk bx Mod. tr lim, tr py
42.7	9.6		2.51	91	.05			.05	Tr		1		|	|		Mod Alt st patchy silin, mod hem tr lim, Mod brown
52.2	9.5		2.64	90	.04			.04					|	|		Mod Alt Mod-st silin wk-mod hem stain tr tot sulf. after py tr py.
61.0	8.8		2.66	97	.04			.04	Tr-sp				|	wk lim	Patchy Suls	Mod Alt, wk-mod silin wk py tr cpy wk patchy lim
72.4	11.4		2.52	79	.06			.06					wk-mod	Tr lim sp hem wk-mod lim	Cpp	wk-Mod Alt, wk lim-hem stain sp-wk qtz inlets wk Alon
81.2	8.8		2.55	94	.12			.12					|	Tr hem wk-mod lim		Wk-Mod Alt, argill of plag by grn mont? wk lim hem tr
90.2	9.0		2.56	91	.14			.14			tr		|			wk Alt tr 2nd k spar? sp qtz inlets, sp lim stain
99.5	9.3		2.58	89	.38	0.11		.11	tr-sp	.06	.21		|	wk lim	Suls circa 92'	wk Alt, tr-sp py, cpy, cc on fracs & diss sp lim stain tr jar on fr
108.4	8.9		2.56	93	.66	.08		.08	tr-sp	.20	.38		|	sp lim wk jar		wk Alt sp suls, diss & on inlets tr cuox, lim stain
117.6	9.2		2.59	91	.59	.06		.06	tr	.25	.28		|	tr jar		wk Alt, tr 2nd k spar on sp qtz inlets, tr py, cpy, cc, cuox jar
125.6	8.0		2.62	95	.49	.11		.11	|	.20	.18		|	|		As above
134.0	8.4		2.63	95	.59	.07	78.7'	.07	tr-sp	.25	.27		|	sp lim tr jar		wk Alt, wk-mod patchy 2nd k spar along inlets tr tot sulf sp lim
142.8	8.8		2.61	92	.61	.08	@	.08	sp	.25	.28		|	sp lim tr jar		As above wk 2nd k spar on margins of inlets
151.7	8.9		2.60	94	1.16	.14	.67/.08	.14	sp-wk	.45	.57		|	sp-wk lim sp jar		wk Alt, tr 2nd k spar tr tot suls tr bar cuox sp lim
160.7	9.0		2.63	94	.78	.11		.11	|	.20	.47		|	sp-wk lim sp jar		wk Alt, wk 2nd k spar tr tot suls, sp lim on frac.
169.1	8.4		2.58	98	.62	.06		Tr bornite .06	|	.02	.54		wk	wk lim	recemented bx @ 165.8	wk Alt, wk-mod 2nd k spar sp-wk py, cc, mod-st sul pp in
178.2	9.1		2.61	91	.48	.02		.02	wk	.20	.46		|	sp-wk lim	Mz @ 169.1	wk-Mod Alt, + 2nd k spar. wk py cc on fracs
187.1	8.9		2.64	93	.27	.01		.01	|	.15	.11	Tr MoS_2	|	sp lim sp jar		Mod Alt, silin, wk py sp cc
196.3	9.2		2.64	90	.24			Tr	|	.10	.14	|	|	Tr jar	bx @ 192.3	Mod Alt, Mod-st silin, wk-Mod py, sp cc tr cpy Mod-st py in w/sp sul pp, c
205.8	9.5		2.75	86	.19				|	.15	.04	|	|	|	Mz @ 198.3	Mod Alt, silin on qtz vns, bx as above, Mz-wk-Mod py
216.1	10.3		2.71	85	.14				|	.14	Tr?	|	|	|		wk-Mod Alt, silin on qtz vns wk-Mod py wk? cc sp-wk cc, cpy, tr
224.8	8.7		2.54	100	.14				|	.14		|	|	|		wk-Mod Alt, silin, wk-Mod py wk? cc sp cpy tr MoS_2 Mod sul pp wk
233.5	8.7		2.71	91	.11				|	.11		?	|			Mod Alt, wk-Mod Alt along qtz vns, wk-Mod py, sp? cc tr cpy
242.7	9.2		2.61	90	.22				|	.22	Tr?	?	|			Mz-wk-Mod Alt, wk py sp cc, cpy tr MoS_2 wk-Mod sul pp
251.5	8.8		2.60	92	.22				|	.22		Tr MoS_2	|		AK @ 239.1	AK-wk Alt, sp-wk py cc, cpy, tr MoS_2
260.8	9.3		2.58	89	.37				|	.36	.01		|			wk Alt, sp-wk py wk cpy, sp-wk cc tr MoS_2
270.4	9.6		2.59	88	.32				|	.32			|			wk Alt, patchy st silin sp py, cc, wk cpy tr MoS_2
281.2	10.8		2.58	84	.26				|	.26			|			wk Alt, silin, Mod qtz vns sp py, cc, wk cpy tr MoS_2
289.9	8.7		2.60	94	.16				|	.16		Tr MoS_2	|		Mz @ 282.3	Mod Alt, wk 2nd k spar. sp py
299.4	9.5		2.60	88	.16				|	.16		|	|		AK @ 288.9	wk Alt, sp py, tr-sp cc, sp-wk cpy tr MoS_2
308.3	8.9		2.58	93	.22				|	.22		|	|		Sil. bx 301.3 305.0	wk Alt, st silin sp py, tr cc, MoS_2
317.4	9.1		2.58	93	.27	.01		.01	|	.27		|	|			wk alt, wk-mod silin, wk+ py, diss & in vnlts sp cpy Tr MoS_2?
326.9	9.5		2.57	91	.41	.01	15.8' @	.01	|	.41		|	|			As above.
333.2	6.3		2.57	95	.50	.01	.45/.01	.01	|	.50		|	|			sev. tin qtz – MoS_2 – chlor? vnlts. wk alt, wk-mod silin, wk py, sp-wk cpy, diss & in vnlts
342.8	9.6		2.58	89	.29	.01		.01	|	.29		|	|			As above

Final Depth 526.3'
Collar Elevation 2945.83
Coordinates 28,938.10 N ; 25,613.02 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-126
Sheet No. 1 of 2
Date Completed 1-3-66
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay, Sericite	Lim	Rock Type	Remarks
5.4	5.4	R.B.	—	—	—								—	—	—	Rock bit
15.5	10.1	NX	2.43	89	0.03			0.03					Mod	Sp lim Sp Llm Mod hem	AK	Alaskite, wk-mod alt, K-spar cloudy; hem. stained, Alum. Unlt
26.1	10.6		2.45	83	.07			.07					|	|		Mod. alt, rest as above
32.0	5.9		2.44	95	.03			.03					|	Mod-st. Llm		" " in st spotty ser. & sil'n. Ser. sol'n cavities.
40.8	8.8		2.38	98	.01			.01					|	|		Mod Alt, Mod-st Silin, Mod hem, sp lim tr Llm wk Alun uns
49.9	9.1		2.47	94	.03			.03	Tr-Sp				wk-mod	wk-mod Llm wk lim	Sulfs circa 46	Alt + cap as above, wk Silin, wk-Mod Alun on uns, wk py tr cc
58.8	8.9		2.44	94	.03			.03	Tr				|	Mod Llm Sp lim Sp Llm Sp hem wk hem	Cap + Sulfs	Mod Alt, wk lim, wk Llm on fracs, wk Alun on uns, wk py, sp cc
68.0	9.2		2.44	93	.04			.04	|				|	Tr hem wk-mod lim wk Llm	J	Mod Alt, wk lim, sp-wk hem, wk Alun, sp tot sulfs
76.3	8.3		2.40	97	.05			.05	—				Mod	Mod hem wk lim	Cap 72' Mz @ 68.5	AK as above. Mz - Mod Alt, wk-Mod hem lim tr Llm
85.3	9.0		2.47	94	.01			.01					|	wk lim wk hem wk Llm	AK @ 84.6	Mod Alt, lim stain, Alun. on fracs spotty tr Llm
95.1	9.8		2.49	88	.01			.01	Sp		Tr		|	Mod hem Sp lim Sp Llm	Patchy Sulfs circa 93'	Mod Alt, wk-Mod hem, sp-wk lim, patchy Mod-st py, wk-mod cc
103.9	8.8		2.50	95	.02			.02	Tr		Tr		|	Sp lim wk-mod Llm Mod hem	|	alt + patchy sulfs as above wk-Mod Alun uns
113.1	9.2		2.48	95	.01			.01	Sp		Tr		|	wk Llm	Sulfs @ 112.3	Mod Alt, wk silin, Mod hem, lim, patchy Sulfs, Mod py sp cc
122.4	9.3		2.54	93	.01				WK		.01		|			Mod-st Alt, Mod py Mod-st cc, Sulfs mainly diss
131.7	9.3		2.32	100	.02				|	Tr	.02		Mod-st			Alt as above Mod-st py, cc as above wk Alun uns
141.5	9.8		2.38	91	.05				|		.05		Mod			Mod-st Alt, wk py, cc wk Alun
150.4	8.9		2.32	99	.04				|		.04		wk-mod			Mod Alt, wk py cc mainly on uns
159.1	8.7		2.34	99	.05				|		.05		|			Mod-st Alt, wk-Mod diss py, Mod(w) cc sp Alun on uns
168.0	8.9		2.52	93	.10				|		.10		|			wk-Mod Alt, sp py sp-wk cc wk Alun on unlets
178.2	10.2		2.58	83	.07				|		.07		wk			wk Alt, wk-Mod py sp-wk cc Alun as above
186.4	8.2		2.52	100	.09				|	.01	.08		wk-mod			wk-Mod Alt wk silin on unlets wk-Mod py, sp-wk cc
196.9	9.5		2.49	94	.07				|	.01	.06		Mod-st		Mz @ 187.7	AK as above, Mz - st Alt, Mod-st py sp cc
205.4	9.5		2.54	89	.04				|		.04		|			Mod-st Alt, Mod py sp wk cc Mod Alun on uns
214.5	9.1		2.57	92	.03				|	Tr	.03		|			Mod-st Alt, Mod py, sp cc, wk Alun, qtz veining
223.4	8.9		2.55	96	.07				|		.07		|		AK @ 223.1	Mod Alt, wk py, sp cc wk qtz veining, Mod Alun on uns
232.9	9.5		2.62	84	.05				WK-Mod	tr	.05		Mod		Mz circa 232'	Mod Alt, wk-Mod py sp cc
241.9	9.0		2.63	93	.20				WK	.14	.06		WK-Mod		AK circa 232.9	WK-Mod Alt, wk silin, wk py on unlets, sp cap tr cc
252.3	10.4		2.64	81	.14				|	.08	.06		|			WK-Mod Alt, wk silin, wk py on uns sp-wk cap tr cc
260.0	7.7		2.50	100	.10				|	.05	.05		Mod-st		Mz @ 263.1	Mod Alt, wk-Mod diss py, tr cc
268.7	8.7		2.57	93	.13				|	tr	.13		|			Mod Alt, sp py, tr cc
277.7	9.0		2.57	91	.08				Sp-WK		.08		Mod			Mod Alt, wk py tr-sp cc
282.8	5.1		2.53	98	.07				|		.07		|			Mod Alt, sp-wk py tr cc
291.7	8.9		2.59	93	.15				Mod	.09	.06		Mod-st			Mod Alt, wk py on unlets, tr cpy, tr cc
300.7	9.0		2.60	94	.11				WK	.07	.04		Mod			As above
309.3	8.6		2.55	97	.08				WK	.07	.01		Mod			Mod Alt, sp-wk py, tr cc wk clay on fracs
317.6	8.3		2.72	96	.14				WK	.09	.05		Mod			Mod Alt, wk patchy silin, wk py tr cc
326.2	8.6		2.56	95	.12				WK	.08	.04		|			Mod Alt, wk py tr cc
334.6	8.4		2.58	95	.56	.02		.02	WK	tr	.56		St			Mod-st Alt, wk py sp-wk cc
345.4	10.8		2.57	82	.41	.02		.02	|		[illegible]		|			

Final Depth 526.3'
Collar Elevation 2945.83
Coordinates 28,938.10 N ; 25,613.02 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-126
Sheet No. 2 of 2
Date Completed 1-3-66
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, ser	lim, hem	Rock Type	Remarks
348.1	2.7	NXW	2.29	100	.45	.02		.02	—	—	.43?				Aplite @ 345.4 to 348.1 AK @ 348.1	trace of alt probably supergene
353.4	5.3		2.48	96	1.61	.02	71.0' @ .63/.02	.02	sp	.30	1.29		WK-Mod			WK Alt, patchy Mod silic on vn, WK py, WK-Mod cc, tr Malc
361.9	8.5		2.54	96	.38	.01		.01	sp-WK	.09	.34		WK			WK Alt, sp-WK py WK cc, tr cpy
370.7	8.8		2.55	93	.61	.02		.02	sp	—	.59		WK			WK Alt, sp py, WK cc patchy aplite texture
379.7	9.0		2.52	92	.45	.01		.01	"	.07	.37		"			WK Alt, sp py - sp-WK cc tr cpy
388.7	9.0		2.47	96	.86	.01		.01	sp-WK	.15	.70		WK-Mod			WK Alt, patchy Mod-sp Alt WK py WK cc w/patchy Mod cc tr cpy
397.2	8.5		2.55	96	.68	.02		.02	WK	.05	.61		"			WK Alt, WK py, WK-Mod(+) cc tr cpy
401.9	4.7		2.58	97	.30	.01		.01	"	tr	.29		WK			WK Alt, sp-WK py, cc tr Cu ox
410.4	8.5		2.52	98	.22	.02		.02	sp	.01	.19		"			WK Alt, WK diss py, WK-Mod(-) cc tr Cu ox
420.1	9.7		2.50	89	.28	.02		.02	WK	tr	.26		"			WK Alt, WK diss py w/ WK cc tr Cu Ox
428.9	8.8		2.55	95	.42	.02		.02	"	.08	.32		"			WK-Mod Alt, WK py, diss + on veinlets, WK-Mod cc
437.7	8.8		2.50	98	.28	.02		.02	sp-WK	.02	.24		WK-Mod			WK-Mod Alt, WK py WK-Mod cc tr Cu ox
443.8	6.1		2.56	94	.30	.01		.01	sp	tr	.29		"			WK-Mod Alt, WK py WK-Mod cc sp chrys? on fracs
453.4	9.6		2.54	87	.14			T-	sp-WK	.02	.12	T- Tochernite	"	T- lim sp		WK-Mod Alt sp py sp-WK cc on fracs
462.3	8.9		2.56	92	.81	.02		.02	"	.05	.74		"	lim		WK-Mod Alt ~~WK-Mod~~ py WK cpy, ~~Mod~~ cc
472.1	9.8		2.55	92	.20			.01	"	.02	.17		"	"		WK-Mod Alt, WK pyn clay on fracs, ~~sp py~~, WK(+) cc fracs
481.6	9.5		2.55	87	.27			.01	"	.05	.21		WK	"		WK Alt, sp py sp-WK cc on fracs tr Cu ox MoS2
489.6	8.0		2.53	98	.32	.01		.01	"	.05	.26		"	"		WK Alt, sp py, WK(+) cc on fracs, tr Cu ox on fr.
498.4	8.8		2.51	91	.42	.01	18.3' @ .41/.01	.01	"	.02	.39		"	"		WK Alt sp py WK-Mod cc mainly on fracs, WK chl
507.9	9.5		2.56	87	.41	.01		.01	"	.05	.35		"	"		WK Alt, sp py cpy, WK-Mod cc diss + on fracs "
516.6	8.7		2.56	94	.32	.01		.01	"	.10	.21		"	T-lim sp Jar		WK Alt, WK Silic, WK py, sp-WK cc tr cpy "
526.3	9.7		2.54	92	.19			.01	WK	.13	.05		"	WK Jar.		WK Alt WK py sp-WK cpy, WK cc "
E.O.H.		Avg. Rec'y = 93%														

Final Depth 335.2'
Collar Elevation 2998.17
Coordinates 29,188.23 N ; 25,393.50 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-125
Sheet No. 1 of 1
Date Completed 12-29-
Logged By J.A.B., CW

Depth	Interval	Core Size	Sp Grav.	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim, hem	Rock Type	Remarks
5.0	5.0	RB	-	0	-	-	-	-	-	-	-	-	-	-	—	Rock Bit
14.4	9.4	NXWL	2.41	92	0.02			0.02						Sp lim Mod hem WK lim		
23.4	9.0		2.40	95	.03			.03					Mod		M2	St Alt, st hem stain sp lim, stockwork of Alun
32.6	9.2		2.45	92	.03			.03					|	Mod lim	sp tot. suls	as above sp tot suls in 1st 2' of run (unkts)
41.6	9.0		2.32	100	.04			.04					|	WK lim WK lim WK-mod lim		Mod-St Alt, mod-st hem + lim stain Mod Alun as ab
50.5	8.9		2.29	99	.03			.03					|			St Alt, st hem + lim stain st Alun stockwork
59.4	8.9		2.21	100	.03			.03					|			Mod-St Alt st lim stain, Mod Alun on network of unk
69.0	9.6		2.27	95	.05			.05					Mod-St	Mod lim Sp lim WK lim		Mod-St Alt, Mod-St yellow lim, WK lim, Sp hem, WK Alun
80.4	11.4		2.41	79	.02			.02					|	WK hem Mod lim		Alt as above st yellow lim to 163.7, to end run, st hem. sp lim
89.9	9.5		2.40	93	.02			.02					St	WK lim Mod hem St lim	Ak circa 75	St Alt, Mod-St lim, hem (core st broken.)
98.6	8.7		2.29	100	.04			.04					Mod Mod-St	Sp lim Mod lim		Mod Alt, hem, lim, WK Alun,
107.9	9.3		2.66	88	1.09	0.03 }		.03	St		1.06		St+	WK-mod lim Sp lim WK hem WK lim	Suls. 101.2'	Mod-St Alt, Mod hem, sp lim, tr lim
115.1	7.2		2.65	92	.07			.03	WK		.04		Mod-St	Mod hem Mod silic Mod lim	Cap. circa 115	Cap. as above, Sul.-St Alt, st diss py, V St cc
126.3	11.2		2.48	87	.03			.03					|	WK hem Mod lim		Suls as above w/ patchy cap. WK-Mod lim hem
135.4	9.1		2.49	93	.04			.04					Mod	Sp lim		Mod Alt WK Alun, WK-Mod lim, WK hem
144.3	8.9		2.52	93	.10			.03	Sp-WK		.07		|	WK lim WK lim	Sul @ 137.2 Cap @ 142.7 Suls @ 145.5	Mod Alt, WK-Mod hem stain on plag WK Alun on un
152.7	8.4		2.51	96	.20			.03	|				WK-mod	Sp hem Sp lim		Cap as above, Mod Alt, WK-Mod py, cc sp jar on
162.3	9.6		2.33	95	.47	.01 }		.01	Sp		.46		Mod-St			WK-Mod Alt WK-Mod py, WK cc, diss + on traces, sp hem,
171.3	9.0		2.42	95	.26	.01		.01	|	Tr	.25		Mod	Tr Jar		Mod-St Alt, sp py, WK-Mod cc, core soft + broken
180.4	9.1		2.60	96	.15			.01	WK	|	.14	Tr MoS_2	WK-mod	|		Mod Alt, WK-Mod diss py, cc, tr jar on traces
189.5	9.1		2.58	95	.15			.01	|	.05	.09		|	|		WK-Mod Alt, WK-Mod py + cc diss con traces, WK jar on traces
198.6	9.1		2.62	95	.28			.01	|	.15	.12		Mod	|		Mod Alt WK-Mod(+) py Mainly on traces, WK cc, jar
206.5	7.9		2.52	100	.12			.01	|	.09	.02		WK-mod	|		WK-Mod Alt, Mod py, WK (+) cc sp jar on traces
208.4	1.9		2.46	93	.03				Tr		.03?	D. o. Mag?	Sp	|	YSp @ 206.6	Mod-St Alt WK-Mod py, Sp, WK cc tr cpy sp jar on traces
219.1	10.7		2.59	86	.02				|	Tr	.02?	|	|	|		WK apparent alt, WK Nodules of gen clay (Mont?) no wis suls
226.7	7.6		2.68	100	.10				WK	.10	Tr?		WK		AK @ 219.1	WK Alt, gen clay on vnlets, tr diss py, V fine diss Mag?
235.5	8.8		2.77	89	.16				|	.16	|		|			Mod Alt, WK-Mod Silic, WK-Mod py tr-sp cc
244.3	8.8		2.59	92	.07				|	.07	|	Tr MoS_2	WK-mod		Inlet of YSp @ 244.2	Mod Alt, Mod-St Silic, WK-Mod py tr cc
253.6	9.3		2.54	91	.15				|	.15	|	|	|			Mod Alt, Sp-WK py tr cc tr jar WK Chlor.
262.7	9.1		2.54	94	.15				|	.15	Tr		WK			WK-Mod Alt, Sp py, tr cc MoS_2 on vnlets " "
274.2	11.5		2.54	86	.08				|	.08			WK-mod			WK-Mod Alt, WK Silic, Sp py tr cc
283.9	9.7		2.57	85	.16				|	.16	Tr?	Tr MoS_2	|			Mod Alt, Sp py tr? cc tr jar
293.0	9.1		2.57	91	.17				|	.17	|	|	|			WK-Mod Alt, WK Silic, Sp py tr cpy, cc, MoS_2
302.1	9.1		2.58	93	.11				|	.11	Tr	|	WK			WK-Mod Alt, WK Silic WK py Sp cpy tr cc, MoS_2
310.6	8.5		2.55	97	.13				|	.13	|	|	|			WK Alt, Sp py tr cpy MoS_2
320.1	9.5		2.56	87	.29				|	.29	|	|	|			WK Alt, Sp py tr cpy, MoS_2
328.5	8.4		2.61	97	.25				|	.25	Tr?	|	|			WK Alt, Sp py tr cpy MoS_2
335.2	6.7		2.60	96	.25				|	.25		|	|			WK Alt, WK Silic Sp py tr cpy cc?, MoS_2
E.O.H.		Avg.	Rec'y =	93%												WK Alt, WK-Mod Silic, tr-Sp py tr cpy, cc, MoS_2

Final Depth 377.6'
Collar Elevation 2927.49
Coordinates 29,121.95 N ; 25,562.39 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-124
Sheet No. 1 of 2
Date Completed 12-19-68
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay/sericite	lim	Rock Type	Remarks
6.0	6.0	RB	—	0	—								—	—	—	RB (Rock bit)
11.3	5.3	NXW	2.47	70	0.03			0.03					Mod	Mod lim, Mod Lim, wk lim, Sp lim	AK	Mod Alt, mainly supergene, Mod hem, wk lim Lim
21.1	9.8		2.53	90	.05			.05						Mod hem, wk Lim		Mod Alt, hem, wk-Mod lim on Frac, wk Alun on vns
31.6	10.5		2.44	86	.06			.06						wk lim, Sp hem		as above, wk-Mod hem
40.9	9.3		2.43	93	.07			.07					wk-mod	Sp lim, wk lim, wk Lim		as above
50.1	9.2		2.51	97	.04			.04						wk, lim		Mod Alt, wk-Mod hem, wk lim wk-Mod Alun on vns
60.5	10.4		2.59	84	1.00	0.02	}	.02	wk		.98			wk-mod lim, Sp lim, wk-mod hem	Sulfs 56.7-56.5	Mod-st Alt, Mod-st py, cc, sp cpy Sulfs diss Capping as above
70.0	9.5		2.53	90	.03			.03					wk-Mod clay	wk lim, hem, jar	Cap.	Mod Alt, wk-Mod silin wk lim hem tr Lim, bar
80.4	10.4		2.43	86	.03			.03					Mod clay	wk lim, hem, tr Lim		Mod Alt, wk silin, wk-Mod hem (on fold) wk lim
89.5	9.1		2.44	98	.02			.02						wk lim, Lim, Sp jar		as above tr Lim in cavities
98.0	8.5		2.43	100	.03			.03						wk lim, hem Sp jar		as above wk qtz vning
107.2	9.2		2.48	96	.03	–		.03						wk lim Sp hem		as above. No sil or Qtz vns
116.6	9.4		2.46	96	.03			.03						wk hem, lim, sp lim		Mod Alt, wk silin, wk-Mod hem, sp lim, wk Alun on vn
125.9	9.3		2.49	93	.04			.04						Mod hem wk lim, Lim		Qtz as above, Mod hem, sp lim on Qtz vn w/ vug. test cities 120.4, 8'6
135.1	9.2		2.50	98	.45	.04	19.2' @ .47/.04	.04	st		.41	tr Cap?		Mod hem Lim, wk lim, Sp jar	Mixed cap & sil.	Mod Alt, wk silin, wk-Mod hem, sp lim wk-Mod cc st py last 2' of run
145.1	10.0		2.53	90	.48	.04		.04	Mod		.44			wk hem, lim, tr Lim		Alt as above, st py, Mod-st cc 137.5-139.5, wk-Mod hem
154.3	9.2		2.50	95	.10			.05	Sp		.05			Sp hem, wk lim		Mod Alt, wk silin wk lim, hem, patchy Sulfs showing st cc
163.6	9.3		2.56	92	.35	.01		.01	Mod		.34			tr tot ox	Sulfs @ 154.3	Mod to st Alt, Mod py, wk-Mod cc mainly diss.
172.9	9.3		2.54	96	.30	tr		tr	wk-Mod		.30		wk-Mod			wk-Mod Alt, wk py wk-Mod cc, sp cpy diss + on vns
182.2	9.3		2.55	100	.78	.02		.02	Mod	tr	.76		Mod			st Alt wk silin, Mod 2nd wk spar Aplite 174.7-176.4
191.4	9.2		2.49	99	.22			–	wk-Mod		.22		wk-Mod			Mod Alt, pervasive pink hem stain wk-Mod py, cc sp cpy Mod-st py, cc, tr cpy diss on v.
201.0	9.6		2.53	92	.93	.01		.01	1	.02	.90		Mod			Mod Alt, wk-Mod py, cc, tr cpy rk is pink from vk pervasive Alt stain
210.6	9.6		2.52	96	.83	=.01		.01	wk	.02	.80		wk-mod			as above, Mod cc, sp cpy
219.8	9.2		2.56	100	.17	tr		Tr	1	Tr	.17					wk-Mod Alt, wk py, cc on vns, No hem, stain, sp grn mnt on
232.7	12.9		2.56	68	.41	Nil		Nil	1	.05	.36					Alt as above, sp-wk py, cc on frac wk clay chlor Aplite
241.6	8.9		2.51	100	.60	.02		.02	1	.05	.53					wk-Mod Alt, wk silin, wk-Mod py on vns, wk cc
250.5	8.9		2.58	98	.77	.01		.01	1	.06	.60					wk-Mod Alt wk-Mod py on vns, wk cc
259.3	8.8		2.57	96	1.33	.02	185.9' @ .80/.01	.02	1	.15	1.16					wk-Mod Alt, wk py, wk-Mod cc, tr cpy, Mos2 tr Aplite in vn
268.6	9.3		2.58	89	2.31	.02		.02	Mod	.30	1.99		Mod			wk-Mod Alt, patchy st silin, Mod-st py, cc on vns + wk diss
277.8	9.2		2.52	92	.66	.01		.01	wk-Mod	–	.65		wk-Mod			wk-Mod Alt Mod-st Alt Mod silin on vns, cont green, wk chlor Mod py, cc
287.0	9.2		2.55	94	.60	.01		.01	1		.59					wk Alt, patchy silin wk-Mod cc, sp py wk cpy on vns
295.9	8.9		2.56	98	.86	.01		.01	wk	.02	.83					wk Alt patchy Mod silin, wk cc sp py tr cpy on vns
304.6	8.7		2.59	96	.81	.02		.02	1	tr	.79					Mod Alt, silin w/ patchy wk-Mod Alt wk py, cc, cpy on vns
314.2	9.6		2.57	95	.54	Tr		Tr	1		.54					wk-Mod Alt, patchy Mod-st Alt, silin on vns, wk-Mod py wk cc, tr cpy
322.9	8.7		2.55	100	.19	Tr		Tr	Sp		.19		wk			wk Alt, sp py cc tr cpy
332.5	9.6		2.56	91	.23	.01		.01	sp		.23					wk Alt, sp py cc, Mos2
341.3	8.8		2.48	97	1.56	.04		.04	wk	.70	.82		Mod			Mod Alt, wk silin, wk py, Mod cc, cpy sp Mos2
349.4	8.1		2.56	98	1.76	.02		.02	wk-Mod	.70	1.04	tr bar Mos2				st Alt silin to 346.3 w/ wk-Mod cc, py, wk cpy tr Mos2
358.8	9.4		2.56	94	.75	.01		.01	wk	.09						wk-Mod Alt silin, wk py cc, tr cpy

Final Depth 377.6'
Collar Elevation 2927.49
Coordinates 29,121.95 N ; 25,562.39 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-124
Sheet No. 2 of 2
Date Completed 12-19-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	lim, hem	Rock Type	Remarks
368.6	9.8	NXWL	2.42	95	0.49	0.13*	18.8' @	—	Sp		tr	Native Cu 0.49	tr-Sp clay	wk lim	Andc. 361.2	AK alt as above, Andc-fr, Mod native cu w/ lim as fr and finely disem. chalc. PR
377.6	9.0		2.43	100	.68	.26*	.58/19	tr	–			.68	)	)	)	Fr alt. rk aphanetic, wk mod vesicles. Mod Native cu as above.
E.O.H.		Avg. Rec'y =		94%												

* Note: Cu mineral was native copper. No non-sulfide. N.S. assay due to assay method.

Final Depth 280.0'
Collar Elevation 2986.27
Coordinates 29,347.56 N ; 25,363.00 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-123
Sheet No. 1 of 1
Date Completed 12-18-6
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser, Clay	Hem Lim	Rock Type	Remarks
5.0	5.0	RB	—	0	—								—	—	—	Rock Bit
14.5	9.5	NxW1	2.54	94	0.08			0.08					WK	SP lim WK hem	Alk	Med Alt, Wk-Med hem, wk lim, tr LGM wk clay on fra
23.9	9.4		2.51	96	.03			.03					WK-mod	mod hem WK LGM		Med-st Alt patchy st Silin, Med hem, wk-Mod lim wk lim
32.9	9.0		2.51	94	.03			.03					Mod	SP LGM		Alt as above, patchy Mod silin, Sp patchy aplite
42.1	9.2		2.53	93	.03			.03					WK-mod(-)			Med-st Alt, Silin, wk-Mod hem sp LGM, wk lim sp Ali
53.3	11.2		2.54	82	.03			.03					WK	wk-mod hem		As above
62.3	9.0		2.53	98	.04			.04						wk lim		Mod Alt, wk-Mod silin, wk-Mod hem sp lim
71.3	9.0		2.48	96	.06			.06					Mod	sp-wk LGM		Mod Alt, patchy st silin, wk-Mod hem wk lim on fracs
80.3	9.0		2.49	98	.04			.04						wk hem wk-mod LGM		Mod Alt, wk-Mod hem, lim
89.9	9.6		2.48	93	.07			.04			.03			wk hem, lim, jar	Alt cap + tr suls	As above tr tot suls
99.2	9.3		2.50	93	.04			[illegible]						wk hem wk-mod lim		Mod Alt wk lim, hem, tr suls
108.7	9.5		2.53	91	.17			.04	wk	.01	.12		WK-Mod	wk hem, lim, jar	Suls circa 106'	WK-Mod Alt, wk cc sp-wk py, cc
117.9	9.2		2.58	93	.45	0.01	17.71 @ .46/.01	0.01	sp	.01	.43					WK-Mod Alt, wk-Mod cc sp py tr? cpy
126.4	8.5		2.60	95	.48	.01		.01	wk	tr	.47		WK			As above wk-Mod py sp cpy wk-Mod cc on fracs
136.0	9.6		2.57	89	.20			.01	sp	.05	.14		WK	wk jar		WK-Mod Alt, wk jar? stain on slick, wk py, cc
144.6	8.6		2.57	100	.16			.01	sp	.02	.13					As above, tr Mo Sn
154.1	9.5		2.59	87	.13			tr		.08	.05	tr bar				As above tr tot suls. appears to be leached as above?
163.5	9.4		2.58	89	.14				wk	.11	tr					As above sp tot suls
172.8	9.3		2.54	93	.16				wk	.08	.08					As above sp tot suls
182.3	9.5		2.46	97	.17				wk	.07	.10					As above micaceous text circa 180'
191.9	9.6		2.47	92	.33				wk-Mod	.10	.23		WK-Mod clay			As above, " " to 186, st Alt circa 188 wk-Mod py, cc?
200.3	8.4		2.54	94	.28				wk	.18	.10		WK clay	sp jar		WK-Mod Alt, wk py, cc. tr cpy on vns
209.5	9.2		2.53	97	.17				sp	.10	.07					As above
218.9	9.4		2.47	97	.17				sp	.10	.07					WK-Mod Alt, sp py, sp wk cc on fracs wk vuggy text along
228.6	9.7		2.58	87	.15					.07	.08					As above, no vugs
240.0	11.4		2.58	72	.17				Mod	.07	.11			tr jar	Mz @ 238.2	Mod Alt, Silin, Mod py wk-Mod cc tr cpy
245.3	5.3		2.57	96	.03			.03	—	—	—	—	tr clay		Post Min Fault 240.0 - 243.3	Black, fresh two hairline seams of white mineral
255.0	9.7		2.65	92	.13			tr	sp	tr	.13		WK-M		Mz @ 246.3	Wk-Mod Alt, Wk-Mod py cc on vns + fracs
263.8	8.8		2.52	96	.11						.11		WK			Alt as above, sp py tr cc Mo Sn
271.6	7.8		2.66	100	.15						.15					Mod Alt, wk-Mod Silin wk 2nd R space along unlets sp py, tr c
280.0	8.4		2.77	94	.11				sp-wk		.11					As above wk py tr cc, Mo Sn
E.O.H.		Avg. Rec %		93%												

Final Depth 361.3'
Collar Elevation 2915.49
Coordinates 29,300.61 N ; 25,531.80 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-122
Sheet No. 1 of 1
Date Completed 12-11-6
Logged By J.A.B., C.W.H

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	Lim	Rock Type	Remarks
5.0	5.0	RB	–	0	–	–	–	–	–	–	–	–	–	–	–	–
16.0	11.0	NXWL	2.42	85	0.03			0.03					Mod	Mod lim, sp hem	AK	Mod Alt, wk hem + lim stain wk Alun ? clay unkts
26.0	10.0		2.55	89	.01			.01					wk-mod	wk lim tr hem sp hem		Wk-Mod Alt, wk hem on fracs wk Alun sp lim on unkts
35.4	9.4		2.54	93	.02			.02					wk			As above
45.9	10.5		2.56	81	.03			.03					wk-mod			Mod Alt, wk silin, wk hem, lim, sp Alun on fracs
54.8	8.9		2.53	97	.03			.03					wk	mod hem		Mod Alt, wk-Mod hem sp lim
63.7	8.9		2.52	95	.05			.05					wk-mod	wk lim		As above, sp Alun
72.4	8.7		2.51	100	.02			.02						mod lim		As above
82.1	9.7		2.52	84	.14			.14					Mod-st.	sp hem mod lim	P.M. Mod. 94.9-98.0	As above to ct. Mod. mod. alt. AK after ct. st. alt, st. hem, s
91.6	9.5		2.64	86	.10			.08	Tr		.02			sp hem sp lim		st. alt. w patchy silin in middle. Tr py & cc near end.
100.6	9.0		2.55	95	2.86	0.39		Mal. .39	Sp		2.47			st. alk	Sul. Ct ≈ 98.7	1st mixed leached sap & suls. 1st of suls mixed w Mal & sp/a
109.8	9.2		2.50	95	.26	.01		.01	1	.05	.20					Mod-st alt, patchy silin. wk cc, wk py.
119.1	9.3		2.54	90	.40	.01	66.4 @ .96/.06	.01	wk	.05	.34					As above
128.1	9.0		2.54	95	1.20	.01		.01	1		1.19					Mod. alt, cc incr towards end to mod or better
137.3	9.2		2.60	95	1.35	.02		.02	1		1.33					Mod-st Alt, silin, Mod(+) cc, wk-Mod cpy, wk py
147.1	9.8		2.50	96	.46	.02		.02	1	.05	.39		Mod			Mod Alt wk-Mod patchy silin, wk-Mod cc, wk py
158.0	10.9		2.48	85	.41	.01		.01	wk-Mod	.02	.38		wk-Mod			Mod Alt, wk-Mod cc wk py
167.1	9.1		2.57	99	.25	Tr		tr	1	tr	.25		wk			Mod Alt, patchy Mod silin, wk cc, wk-Mod cpy sp-wk ? (last 3" of run is ≈ 5% bio alt, tap to py, c
176.8	9.7		2.51	92	.14				sp-wk	.10	.04		tr			Wk-Mod Alt approx 5% bio to 168' sp tot. suls
186.4	9.6		2.64	90	.56	.01		.01	wk-Mod	.30	.25		1			Wk Alt, sp-wk tot suls except on circa 182.5 where st cpy sp
195.8	9.4		2.61	93	.13				wk on bio	.05	.08		1			Wk Alt, 4% bio, sp tot suls. Fill rings in sil AK. gives appear. of syn. Mag origin
204.8	9.0		2.57	100	.33				wk-Mod	.20	.13		1			As above 199.0-201.0 Mod Alt silin wk-Mod py, tr cc
213.4	8.6		2.54	97	.13				wk	.10	.03		1			Wk-Mod Alt wk silin tr tot suls. wk gen mant replacing a/s, tr
222.7	9.3		2.54	100	.09				1	.09	Tr		wk-mod			Wk Alt silin, tr-sp py, cc, tr cpy MoS2 on wk qtz vns
231.4	8.7		2.31	100	.36				1	.15	.21		1		vuggy AK circa 223.	Mod Alt, mirolite? text cavities may have contained suls. wk-Mod py, cc, cpy tr MoS2?
240.5	9.1		2.50	97	.33				—	tr?	.33	wk bio	1			Alt & text as above, cavities compose 30% of rk wk-Mod py cc, wk cpy
249.6	9.1		2.56	95	.31				sp	.21	.10		wk		Normal AK 242.5'	As above Normal AK – wk Alt, wk gen mant on plag sp py tr cc cpy MoS2
258.8	9.2		2.57	97	.13				1	.13	tr		1			Wk Alt, Mod silin, sp-wk py spec tr cpy, MoS2
267.6	8.8		2.59	97	.26				wk-Mod	.20	.06		1			Wk Alt patchy st silin, wk-Mod py tr cpy, cc, wk gen mant on plag
276.8	9.2		2.58	94	.18				sp	.18	tr		1			Wk Alt, wk py sp cc wk-Mod gen mant on plag
286.1	9.3		2.60	100	.25				1	.18	.07		wk-Mod			Wk-Mod Alt, patchy st silin bx w/ bk sul sp Circa 299' wk-Mod py, wk cc sp + py
295.4	9.3		2.58	91	.18				tr	.18	tr	tr MoS2	wk			Wk Alt, silin, sp tot suls tr MoS2 on vn
302.3	6.9		2.57	100	.14				1	.14	1		1			Wk Alt, sp tot suls, tr MoS2
311.0	8.7		2.55	98	.15				1	.15	1		1			Rk contains sp-wk matic content.
320.2	9.2		2.54	94	.16				1	.16	1	tr MoS2	1			Sp clt, wk py, sp cpy. Chlor. on frac's. sc. thin qtz v.
329.3	9.1		2.57	94	.55	N:1			1	.55	1	1	1			As above + py vnlts ¼"-½" thick. Tr. MoS2
338.4	9.1		2.58	92	.25	N:1			sp	.25	1		1			" " . One zone of diss. cpy w qtz ≈ 3" deep wk
345.6	7.1		2.54	96	.33	.01			tr	.33	tr		1			Sp alt. RX vuggy in part (solution cavities?) wk chlor. sp cp
354.2	8.7		2.57	98	.16				sp	.11	1	tr MoS2	sp-wk			As above but only tr. chlor

Final Depth 364.8'
Collar Elevation 3082.61
Coordinates 29,301.37 N ; 25,188.41 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-121
Sheet No. 1 of 2
Date Completed 12-10-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	Lim.	Rock Type	Remarks
5.0	5.0	RB	—	0	—	—	—	—	—	—	—	—	—	—	—	Rock bit
14.7	9.7	NXWL	2.47	88	0.01			.01	Sp				wk-mod	Sp lim wk lim wk hem	AK	Mod Alt, wk sil'n, patchy wk py w/sp cc, wk-mod hem, Alun vns
23.8	9.1		2.48	95	.02			Tr	1		.02		1	1	Suls 18.7 -23.8	Mod Alt, wk-mod py, wk(1) cc, tr cpy, Cap - wk-mod hem Alun
32.5	8.7		2.46	96	.01			.01					1	wk lim Mod hem		Mod Alt, hem mainly ppt on Alt feld, wk-mod Alun veining
42.1	9.6		2.46	89	.01			.01	Sp		Tr		1	Mod. lim wk hem	Suls circa 40	Qs above Suls - Mod py sp-wk cc
51.3	9.2		2.53	94	.05			Tr	1		.05		1	Sp lim wk hem wk hem		Mod-st Alt, Mod py sp-wk cc patchy hem, wk Alun vn
60.6	9.3		2.52	92	.01			.01	Tr		Tr		1	wk lim sp lim	Cap circa 52.6	Suls as above, Cap - Mod Alt, Mod hem on feld wk-mod Alu
68.9	8.3		2.43	100	.02			.02					wk	Mod lim 1		Mod alt, leached, numm alunite veins, Hem staining. Tr cc, p
77.8	8.9		2.39	96	.02			.02	Tr		Tr		1	wk lim mod hem		wk-mod alt, hem stained, leached, sev alunite veins. 1" cc
86.7	8.9		2.41	97	.02			.02	Sp		.04		1	wk lim wk hem	Aplitic 80-81 Mixed Suls, Cap	1st ½ mainly suls. wk py, sp-wk cc. Last ½ as above.
96.1	9.4		2.43	100	.08			.02	wk-mod		.06		1	Sp lim wk hem wk hem		wk-mod alt, mod sil'n. wk py, sp-wk cc. Mixed w Cap
105.4	9.3		2.39	92	.02			.01	Sp		.01		wk-mod	Sp lim		As above but w mostly cap.
114.9	9.5		2.50	92	.04			Tr	wk		.04	covellite	1	Sp lim Sp hem wk lim		" " " " " Suls (wk py, sp-wk cc)
124.4	9.5		2.47	95	.07			.01	1	.01		.05	Mod	Sp lim wk hem	Sul. c.t. ≈ 118'	As preceding
133.6	9.2		2.49	92	.13			Tr	1	.01		.12	1	Tr lim Tr hem		wk-mod alt, tr leaching. wk py, wk cc. Sp Mont.
142.1	8.5		2.47	99	.34	0.01		.01	1	.05		.28	1			Mod alt, wk py, wk cc, Suls ≈ ½ diss, ½ on frac's
150.8	8.7		2.51	100	.62	.01	27.5' @ .47/.01	.01	1	.10		.51	1			As above w poss incr in cc. Tr Cpy. Some py "blebs
160.1	9.3		2.46	92	.40	.01		.01	1	.10	Tr	.29	1			Wk-Mod Alt, wk-mod cc on wk diss cpy, tr py
169.6	9.5		2.46	95	.40	.01		.01	1	.05		.34	1			Mod (-) Alt. Min as above
178.9	9.3		2.56	87	.24	.01		.01	1	.05		.18	1			Mod Alt, sp-wk cc on sp cpy, py
188.4	9.5		2.57	87	.18			Tr	1	.02	.03	.13	wk-mod			Wk-Mod (+) Alt, wk cc on fracs, sp py, cpy.
198.0	9.6		2.46	100	.18			1	1	.05	.05	.08	1			Wk-Mod Alt, sp-wk cc on fracs sp py, tr cpy
206.6	8.6		2.41	98	.16			1	1	.05	.03	.08	1			Alt as above wk diss cc in sp-wk cpy, py
214.6	8.0		2.46	100	.87	Tr	16.5' @ .63/.01	1	1	.05	.72	.10	1			Wk-Mod Alt, wk cc on wk py sp cpy
223.1	8.5		2.40	99	.41	.01		.01	1	.05	.05	.30	1			As above
231.3	8.2		2.40	90	.18	.01		.01	1	.10	Tr	.07	1			Wk-Mod. Alt, wk-mod cc on wk py sp-wk cpy
240.8	9.5		2.51	91	.15				1	.10	.02	.03	1			Mod Alt wk-mod cc on py wk clay on seams
250.1	9.3		2.49	95	.15				1	.08	.02	.05	Mod			Wk-Mod Alt, wk-mod cc sp py wk-mod clay on seam
258.7	8.6		2.50	98	.13				1	.08	.05	Tr	1			Mod Alt, wk cc, py
268.0	9.3		2.57	92	.16				1	.13	.03		1			Mod Alt, wk cc, py wk cpy mainly on veinlet circa 266'
277.5	9.5		2.50	93	.42	.01	18.5' @ .41/.01	.01	1	.35	.07		1			alt as above wk-mod cc sp-wk py wk cpy on vns
286.5	9.0		2.50	95	.40	.01		.01	1	.35	.04	Tr MoS2	1			Mod Alt, wk cc py cpy mainly on vns
296.6	10.1		2.80	83	.12				wk to Mod	.10	.02		1			Alt as above, wk-mod cc mod py mainly on vn circa 288 sp
305.9	9.3		2.54	90	.24				wk	.20	.02		1			Wk to Mod Alt, wk-mod cc sp py tr cpy
317.4	11.5		2.56	76	.19				1	.19	Tr		wk-mod			Wk Alt, sil'n, wk py sp-wk cc tr MoS2 on wk qtz vn
326.4	9.0		2.55	96	.15				1	.15	Tr		wk.	Sp Jar		Alt as above, sp py cc, vuggy text wk qtz vns tr
336.1	9.7		2.55	92	.14				1	.14	1		1	1		As above sp py, cc wk chlor on fracs
344.7	8.6		2.55	99	.38				1	.38?	1		1	1		Alt as above, sp py, cc, wk chlor on fracs wk cpy on fracs circa 344.7

Final Depth 364.8'
Collar Elevation 3082.61
Coordinates 29,301.37 N ; 25,188.41 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F 141
Sheet No. 2 of 2
Date Completed 12-10-65
Logged By JAB., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	limonite	Rock Type	Remarks
364.8	2.5	NX	2.56	100	0.08				tr	0.08	tr?		sp-wk		AK	Wk AH, wk-Mod silic, sp tot sulf
E.O.H.		Avg. Rec'y = 94%														

Final Depth 435.4'
Collar Elevation 2878.27
Coordinates 29,037.67 N; 25,719.18 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-120
Sheet No. 1 of 2
Date Completed 12-1-63
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Serichite	Lim	Rock Type	Remarks
5.6	5.6	R.B	—	—	–	–		–	–	–	–	–	–	–	–	Rock bit
13.6	8.0	NXW	2.24	96	0.03			.03					Mod	Mod LLm wk lim	Aplite to 9.2 9.2 on, Mz	Mod Alt, Mod hem stain, WK lim stain, WK-Mod bar tr Alun
22.7	9.1		2.59	91	.04			.04						wk lim sp LLm	Mz	Mod Alt, Silin, wk-mod lim stain, patchy AK
31.5	8.8		2.31	99	.01			.01						Mod lim wk LLm		As above, WK finely diss LLm WK-Mod Alun, on vns
40.5	9.0		2.32	100	.03			.03						wk-mod lim sp LLm		As above
49.0	8.5		2.41	99	.05			.05						Mod lim wk LLm		Mod-st Alt Mod lim, hem stain, WK-Mod Alun on vn
58.9	9.9		2.46	85	.04			.04						Mod LLm		Mod-st Alt, Silin, Mod hem stain, WK-Mod Alun on vns
67.9	9.0		2.45	92	.09			.09								As above
76.9	9.0		2.35	96	.13			.13						wk lim wk LLm Mod hem		Mod-st Alt, Mod lim, hem stain, WK Alun on frac
85.9	9.0		2.35	97	.09			.09						Mod LLm		Mod Alt, patchy Mod Silin, Mod lim, hem stain, WK Alun on fracs
95.0	9.1		2.65	89	.27			.02	wk		.25			Sp lim wk LLm wk hem	Suls circa 88.5'	Mod Alt, patchy st Silin, capping as above WK-Mod py, Cu WK Alun on fracs
104.2	9.2		2.38	93	.37	0.02		.02	1		.35		Mod-st			Mod clay Alt, Mod cc sp py sp Alun? on fracs
113.1	8.9		2.70	85	.60	.01		.01	Sp-wk		.59				AK circa 117'	As above, WK-Mod py, sp cpy, Mod cc
123.0	9.9		2.55	88	1.30	.02		.02	wk	Tr	1.28		Mod			Mod Alt, WK-Mod py sp cpy, Mod(c) cc
131.7	8.7		2.55	94	1.55	.02		.02	1	.05	1.47		Mod-st		Patchy Mz	Mod-st Alt, Mod cc, WK-Mod py tr cpy
138.2	6.5		2.89	98	2.89	.04		.04	1	.05	2.80				AK	st Alt, st cc Mod-st py tr cpy
147.2	9.0		2.50	93	2.24	.01		.01	1	.02	2.21					st Alt, patchy Aplite, Mod-st py, Mod cc sp cpy
156.1	8.9		2.50	100	1.34	.01		.01	1	.10	1.23					As above, Mod py, cc, tr-sp cpy
164.2	8.1		2.60	98	1.09	.01	120.4' @ 1.09/0.01	.01	1	.05	1.03					Alt as above, Mod-st py, cc, WK cpy
173.6	9.4		2.50	90	1.05	.01		.01	1	.02	1.02		Mod			WK-Mod Alt, WK-Mod py, cc
182.7	9.1		2.54	92	.99	.01		.01	1	Tr.?	.98					WK-Mod Alt, WK py WK-Mod cc, tr Alun?
191.7	9.0		2.54	95	.27	.01		.01	Sp-wk	.05	.21					WK-Mod Alt, sp py mainly diss. Few vnlts WK cc
197.5	5.8		2.54	99	.34	.01		.01	1	.03	.30					Alt as above tr py, sp-wk cc sp Mont
206.5	9.0		2.77	98	.61	.02		.02	wk	.02	.57					WK-mod alt, mostly as ser. WK py, wk cc, mainly diss
215.5	9.0		2.75	94	.59	.01		.01	1	.05	.53		wk-mod			As above, but min. becoming spotty & uneven in quantity
224.6	9.1		2.77	96	.60	.01		.01	1	.10	.49					As preceding but cc now sp-wk.
233.6	9.0		2.57	95	.34	.01		.01	1	.10	.23		WK			WK alt, sp-wk cc, wk py Sev. qtz-py valets.
242.5	8.9		2.53	100	.15	N:1		N:1	1	Tr	.15					" " sp cc, wk py, 1 qtz-moly valt, Sev 2nd K-spar vnlts
251.7	9.2		2.56	98	.18	N:1		N:1	1	.05	.13					" " sp-wk cc, WK py
260.7	9.0		2.53	94	.24	.01		.01	1	.08	.15					WK Alt, sp py, sp-tr cc tr Alun? vning
269.4	8.7		2.54	95	.15	.01		.01	1	.07	.12					" " WK py on vns, sp-wk cc on vns + fracs sp qtz Mont
279.1	9.7		2.57	89	.36	.01		.01	1	.10	.25					As above sp cpy on fracs
288.7	9.6		2.57	88	.42	.01	24.8' @ .44/.01	.01	sp	.10	.31					WK Alt, sp diss py sp-wk cc tr cpy tr qtz Mont
297.6	8.9		2.54	100	.34	.02		.02	1	.05	.27					" " sp diss py, sp-wk cpy, WK cc tr Mos, on vnlts
303.9	6.3		2.56	99	.61	.01		.01	1	.07	.53					" " " " sp cpy cc on vnlets
313.1	9.2		2.56	94	.27	.01		.01	1	.07	.19					WK Alt, sp py, cc patchy aplite circa 309'
322.5	9.4		2.46	95	.26	.01		.01	1	.05	.20					As above WK qtz Mont alt on feld.
331.3	8.8		2.57	95	.45	.01		.01	WK	.10	.34					Alt as above, WK py, cc, sp cpy diss + on fracs
340.0	8.7		2.56	97												

Final Depth 435.4'
Collar Elevation 2878.27
Coordinates 29,037.67 N ; 25,719.18 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-120
Sheet No. 2 of 2
Date Completed 12-1-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Ser	hem, lim	Rock Type	Remarks
346.8	6.8	NXW	2.55	88	.18				Sp	.02	.16		wk	—	HK	WK Alt consisting of chlor + clay on fmas, clay on albite, sp-wk py, cc, tr cpy
355.7	8.9		2.54	93	.27				Sp-wk	.02	.25		1			WK Alt, as above, sp py cc, cpy wk vuggy text
363.2	7.5		2.56	100	.33				wk	.05	.28		1			Alt as above, wk py sp cc, cpy
372.1	8.9		2.52	94	.24				Sp	.10	.14		1			As above
380.6	8.5		2.57	93	.27				Sp-wk	.05	.22		1			WK Alt sp py cc, tr cpy
387.2	6.6		2.57	95	.18				1	.07	.11		1			WK Alt sp-wk py, cc, cpy
395.8	8.6		2.59	91	.27				wk	tr	.27		1			WK Alt patchy of silic, wk py cpy, cc
405.0	9.2		2.58	88	.21				tr-sp	.04	.17		1			WK Alt tr-sp py cpy tr cc
411.3	6.3		2.58	93	.13				wk	.02	.11		1			As above
420.7	9.4		2.59	89	.22				wk py	tr	.22		1			WK Alt w/ patchy Mod-st Alt, wk py sp cc tr? cpy core broken
430.1	9.4		2.61	91	.31	.01		.01	wk(o)	.08	.22		wk-Mod			WK-Mod Alt wk(o) py, tr cpy cc
435.4	5.3		2.71	90	.74	Nil		Nil	1	.20	.54		1			WK-Mod Alt, wk silic, wk(o) py sp-wk cpy sp cc
E.O.H.		Avg.	Rec'y=	94%												

Final Depth 421.6'
Collar Elevation 3095.81
Coordinates 29,432.08 N ; 25,087.83 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-119
Sheet No. 1 of 2
Date Completed 11-30-63
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
4.0	4.0	R.B.		-	-	-	-	-	-		-	-	-	-	-	Rockbit
10.7	6.7	NKW1	2.46	91	0.03			.03					wk-Mod	Mod lim, wk LLim	AK	Wk-Mod Alt, wk hem stain sp lim stain K-spar altered
20.2	9.5		2.48	90	.05			.05					Mod-st.	wk lim		Wk-Mod Alt. sp-wk lim + hem stain wk silin
29.9	9.7		2.48	90	.03			.03					wk-mod	sp-LLim, wk-mod lim		As above wk qtz vning
39.6	9.7		2.61	89	.02			.02						sp LLim		Mod Alt, Silin, wk-Mod hem stain on feld. and fracs
48.4	8.8		2.59	96	.03			.03						wk LLim		
56.7	8.3		2.50	100	.06			.06					Mod	wk lim, sp LLim, wk-mod lim		Mod Alt, wk silin, wk-Mod hem, lim, tr LLm
64.8	8.1		2.45	85	.01			.01								Mod-St Alt, wk hem, lim, tr jar sp LLm, wk Alun, clay on fracs
70.7	5.9		2.55	98	.26			.02	Mod		.24			Mod LLim		Mod Alt, wk-Mod hem stain tr LLm
75.2	4.5		2.55	99	.05			.02	Sp		.03		St + wk-mod	Mod hem, wk lim	Sulf @ 84.7 Mixed cap + sulf circa 70	St Alt, Silin, St py. Mod-St cc pat on Bld? patchy patchy reach w/ Mod hem sp lim on fold
85.4	10.2		2.43	84	.02			.02						sp lim		Mod-st Alt, Silin patchy Mod-st. py, cc & capping as 66
94.9	9.5		2.51	95	.02			.02					Mod	Mod LLim, Mod hem	Cap	wk-mod alt, sil'n. No disc sulf. Hem stained.
104.1	9.2		2.52	94	.02			.02						wk lim, wk LLim		As above. Fit bx ⊥ to core @ 93'
113.5	9.4		2.53	94	.07			.02	Sp		.05		wk-mod	Mod. hem, sp lim, Mod LLim, wk hem	Mixed cap & sulf	1st 4' st silid, pass. bx, rest as preceding. sulf (py?)
123.2	9.7		2.56	86	.14			.02		.05	.07			wk LLim, wk hem		Wk alt, wk-Mod sil'n, spotty aplitic areas. Hem stained. Sp. sp. clots
132.6	9.4		2.55	100	.04			.04						wk lim, wk hem		As above but more sulf. Poss. adsorbed xenon or Mn
141.8	9.2		2.56	91	.04			.04						wk LLim	Cap	wk alt, hem stained, no visc. sulf. Normal AK.
151.2	9.4		2.56	89	.04			.03	Tr		.01					" " wk-Mod sil'n, hem stained
160.7	9.5		2.49	97	.15	0.01		.01		.04	.10			wk-Mod lim, sp LLim	Mixed cap + sulf, sulf @ 159.6	As above. Aplitic @ start for ≈ 6".
169.9	9.2		2.52	92	.77	.01		.01	Sp	.10	.66		Mod			Mod Alt, St Silin, wk-Mod py. wk cc wk lim on fracs
179.3	9.4		2.54	89	.77	.01		.01		.10	.66					Mod Alt, Mod patchy Silin, wk py, Mod cc. Mainly on fracs
188.7	9.4		2.53	89	1.48	.02		.02	wk	1.00	.46		WR			wk Alt, wk-Mod diss py, cc, sp cpy
198.4	9.7		2.52	91	.65	.01		.01	sp	.10	.54		wk-Mod			wk Alt, wk py, Mod cc, wk-Mod cpy on fracs + diss.
208.5	10.1		2.51	88	1.73	.01	103.2' @	.01	wk-Mod	.15	1.57		Mod-st			wk-Mod Alt, tr py wk-Mod (+) cc, wk cpy
218.0	9.5		2.53	91	1.22	.01		.01		.20	1.01		Mod			Mod-St Alt, wk-Mod py, Mod to St cc in stAlt zones sp cpy. sulf mainly diss st qtz-py on circa 208.0
228.3	10.3		2.54	86	.89	.02	.91/.02	.02	sp	.25	.62					Mod Alt, Silin, AK slightly bx + some Alun sp py, wk-Mod cc wk-Mod cpy replacing? bio.
237.0	8.7		2.53	98	.77	.01		.01	Sp	.15	.61					Alt as above, Sp-wk py. wk-Mod(+) cc on fracs sp cpy
246.0	9.0		2.55	95	.62	.02		.02		.10	.50	sp chrys? tr fracs			M2 @ 236.0	wk-Mod alt, wk-Mod cc & cpy. M2 contact @ 60° true
254.6	8.6		2.54	99	.63	.03		.03	wk sp	.09	.51		Wk-Mod			Mod alt plus wk diss. 2nd K-spar. wk cc, no vis. cpy. wk, CuOx (Mal?)
263.9	9.3		2.61	90	.41	.02		.02		.05	.34	tr chrys	Wk-sp			Sudden sharp drop to sp-wk alt. Pro. fresh bio. Sp cc. Sp sulf. RK bx in spots
272.9	9.0		2.60	95	.30	.01		.01	wk	.04	.25		sp-wk			Sp-wk alt, wk-mod 2nd K-spar. sp cu sul. min. sp gra min. wk py
282.4	9.5		2.61	95	.35	.01		.01		tr	.34					As above, but without gra min. sp cu min.
291.7	9.3		2.63	96	.13	.01		.01	tr-sp		.13					Sp-wk alt, wk-Mod K-Spar. Mod-st bio. Mod chlorite bx areas.
301.4	9.7		2.63	93	.14			.01	wk	.05	.08		wk-Mod			As above but more chlor. bx areas, now running ⊥ to core.
310.9	9.5		2.62	94	.12			.01	sp-wk	.06	.05		Mod			wk-Mod Alt, Mod chlor bio. Sp 2nd K-spar vugs sp py
319.7	8.8		2.62	100	.11				wk	.10	.01		wk-Mod			Mod Alt, Silin, Mod py + bk sul ep in bx tr Cpy, cc? Mos.
329.4	9.7		2.59	93	.13				Mod	.11	.02		St		sil bx circa 320'	wk-Mod Alt, sp-wk py sp bk sul ep wk-Mod Mon? w/ sp 2nd wk-Mod and K-spar
338.4	9.5		2.64	97	.16				wk-Mod	.15	.01	tr Mos?	Mod		M2 circa 333	St Alt, Mod Silin, Mod chlor Mod-st py bx recemented w/ silica
349.1	10.2		2.62	89	.11											bx as above Mod-St Alt, Mod Silin, wk py diss + on vugs

Final Depth 421.6'
Collar Elevation 3095.81
Coordinates 29,432.08 N ; 25,087.83 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-119
Sheet No. 2 of 2
Date Completed 11-30-6
Logged By JAB., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	hem lim	Rock Type	Remarks
361.8	9.6		2.79	86	.25				WK	.10	.15	tr MoS2	WK-Mod		AK D353'	WK-Mod Alt Mod-St Silin. St py WK 352.4-352.7 rest-sp py. cc tr MoS2
371.2	9.4		2.82	90	.20				1	.15	.05	1	1			Alt as above, petly st Silin, Mod chlor, wk py tr cpy cc, M
380.4	9.2		2.76	92	.20	.01		.01	1	.10	.09		1			Alt as above, sp tot Suls.
389.2	8.8		2.56	100	.86	.08	}	.08	1	.25	.35	Native Cu .16 tr MoS2	1			WK-Mod Alt w/chlor, Mod Silin, qtz vns, sp py wk cpy, cc
399.2	10.0		2.56	91	.30	.01		.01	tr-Sp	.25	.05	tr MoS2	1			Alt as above, wk py, tr cpy, cc, MoS2
408.3	9.1		2.59	94	.15				1	.11	.04	1	1			WK-Mod Alt Mod-St Silin, tr-sp py wk Alj cpy tr cc,
417.0	8.7		2.59	93	.20				sp-wk	.16	.04	1	1			As above, wk cpy
421.6	4.6		2.58	99	.19				tr-sp	.16	.03	1	WK			WK Alt, Mod Silin, tr-sp py, cpy tr cc, MoS2
	E.O.H.	Avg. Rec'y = 93%														

Final Depth 317.0'
Collar Elevation 2857.98
Coordinates 29,236.63 N ; 25,690.49 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-118
Sheet No. 1 of 1
Date Completed 11-20-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay Ser	lim, hem	Rock Type	Remarks
5.0	5.0	RB	-	-	–	·	–	–	–	-	–	–	-	–	–	–
14.6	9.6	NXWL	2.57	85	0.25			.25	-	–	–	–	Mod Clay Ser	Mod lim, hem tr LLM	AK	Mod Alt, WK hem + lim stain tr LLM, tr CuOx ppt on clay infracts
24.7	10.1		2.44	48	.16			.16					WK Clay Mod Ser	WK-Mod hem, lim tr LLM		As above
36.4	11.7		2.48	75	.11			.11					Mod clay, ser	WK-Mod lim, hem		Mod(c) Alt, WK lim hem, sp jar. tr LLM, grn CuOx on clay
45.8	9.4		2.47	90	.12			.12					WK-Mod clay, Ser	)		As above w/ patchy Mod silin
54.1	8.3		2.46	100	.03			.03					)	)		WK-Mod Alt, WK Qtz VNS W/fine diss MoS2 gives dk color, WK lim
61.9	7.8		2.46	79	.03			.03					WK-Mod Ser, Sp Clay	WK lim tr LLM		WK-Mod Alt, patchy WK-Mod silin, WK lim & hem stain tr grn clay
69.2	7.3		2.54	88	.04			.04	tr		tr		)	WK-Mod lim, Sp-WK LLM		As above
74.7	5.5		2.59	95	.23			tr	Sp-WK	.03	.20		)	tr lim	Sul @ 69.2'	WK-Mod Alt, WK diss CC on Sp-WK py
83.2	8.5		2.57	89	.34			.24	)	.03	.07	tr MoS2	)	WK-Mod lim, hem	Cap @ 76.4	WK-Mod Alt, WK lim + hem, sp sulfs, st spec, CC vn 3" thick @ 80
92.1	8.9		2.49	91	.38	.21		.21	)	.03	.14	)	)	)	Mixed Sulfs @ Cap Circa 86'	WK-Mod Alt, WK lim + hem stain, WK CC on Sp CPY, PY, Sp MoS2 WK Qtz VNS
101.5	9.4		2.55	91	1.05	.04		.04	WK	.10	.91	)	)	—	Sul circa 92'	WK-Mod Alt, WK CC on Sp CPY, tr PY, Sp CuOx CWC, tr lim on fracs
111.1	9.6		2.63	89	1.25	.05		.05	WK	.15	1.05		)			WK-Mod Alt, WK-Mod CC on WK py, tr lim
119.5	8.4		2.67	100	.89	.04		.04	)	.08	.80		)			WK-Mod Alt, WK-Mod CC on WK py, tr MoS2 Cpy
129.4	8.9		2.51	95	.79	.04	82.3' @ 1.01/0.03	.04	)	.08	.67		WK-Mod Ser.			WK Alt, WK CC on py sulfs mainly diss.
137.3	8.9		2.51	95	1.14	.05		.05	Sp	.05	1.04		WK-Mod Ser, clay			Mod Alt, WK-Mod CC, sp py core broken to gravel
147.0	9.7		2.54	92	.69	.01		.01	)	.05	.63		)			WK-Mod Alt, patchy Aplite 139.2-145.0 WK CC on WK py
154.7	7.7		2.52	100	.93	.01		.01	)	.10	.82	tr MoS2	WK-Mod Ser			Alt as above, WK-Mod CC on Sp py + Cpy, tr MoS2
165.0	10.3		2.66	78	1.37	.01		.01	)	.40	.96	)	)			WK-Mod Alt, patchy Mod Silin, Mod Cpy, WK-Mod CC on Cpy, WK py
174.4	9.4		2.55	94	.96	.01		.01	WK	.15	.80	)	)		Aplite @ 172.9-174.4	Mod Alt, Silin Mod(c) CC, Cpy py tr MoS2 Sulfs mainly in ins
183.1	8.7		2.58	93	.24				tr	.01	.23		WK-Mod clay			WK(c) Alt, patchy Aplite (bak parallels? dike) Sp tot sulfs (cc on cpy + py)
193.6	10.5		2.53	81	.24				WK	–	.24		WK Clay			WK Alt, patchy st silin, WK py w/silica tr CC, Cpy
204.3	10.7		2.56	81	.19				Sp		.19		)			Alt as above sp py tr CC, Cpy, MoS2
213.3	9.0		2.57	96	.27	.01		.01	Sp-WK	.07	.19		)			WK Alt, Sp CC on Sp Cpy, Py,
222.2	8.9		2.54	94	.29	.01		.01	)	.05	.23		)			as above
231.6	9.4		2.57	98	.43	.01		.01	)	.10	.32		)			WK Alt, patchy st silin, Sp-WK CC on WK py, Sp Cpy
240.5	8.9		2.56	99	.29	.01		.01	)	.06	.22		)			Alt + Min. as above 1" py in circa 232.5'
249.7	9.2		2.56	94	.41	.02		.02	)	.08	.31		)			WK Alt, Sp-WK CC on Sp CPY, py
258.5	8.8		2.55	93	.28	N:1	80.0' @ 42/.01	N:1	)	.08	.20		)			WK Alt, Sp-WK CC on WK py Cpy
267.5	9.0		2.54	92	.59	.01		.01	WK	.30	.28		)			Alt as above, Sp-WK CC on WK Cpy, py, large Mod Cpy on Qtz on circa 260'
277.5	10.0		2.57	86	.15	N:1		N:1	Sp-WK	.10	.05		Sp-WK Mod-St Mostly Ser			WK Alt, Sp CC on Sp py, Cpy
286.5	9.0		2.57	92	.51	N:1		N:1	WK	.05	.46					Alt + Min as above to 283.0' Complete py + secondary mineralization w/WK CC? to 285.2' rest run WK Alt Sp CC, Cpy, Py
292.7	6.2		2.73	90	.38	.01		.01	)	.17	.20					Sta Alt, py WK-Mod CC? WK Cpy on Sp 294 to 296.5 - 298.5 WK-Mod Alt, diss CC, cpy, py, very AK last foot.
302.2	9.5		2.59	90	.75	.02		.02	)	.30	.43		Mod. Mostly Ser			WK-Mod Alt, chlor, Mod py Sp-WK Cpy, WK CC, patchy wug. tex
309.1	6.9		2.56	100	.21	.01		.01	)	.15	.05					Mod Alt, WK-Mod py, tr cpy, Sp CC
317.0	7.9		2.61	96	.12			N:1	)	.10	.02	tr MoS2				WK Alt, st silin circa 315' end run, Mod py tr-sp cpy tr CC
E. O. H.		Avg. Rec'y = 89%														

Note: A weighted composite gave the following results:

	oz Ag	T. Cu	N.S. Cu	% MoS2	% Sulfid. Fe	Insol.
97.1-174.4	0.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Final Depth 430.1'
Collar Elevation 3092.33
Coordinates 29,601.33 N ; 24,950.27 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-117
Sheet No. 1 of 2
Date Completed Nov. 13, 1962
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
5.0	5.0	RR	–	–	—	–	–	–	–	–	–	–	–	–	–	Rockbit
14.7	9.7	NXWL	2.53	80	0.03			.03	Tr?	Tr?	Tr?	Tr? MoS2	WK-Mod	Sp LLim WK lim	AK	WK Alt patchy WK-Mod sil'n, tr cpy, cc, py MoS2 in sil areas WK hem stain
23.4	8.7		2.52	100	.03			.03						Tr LLim WK lim		WK Alt, sil'n, WK hem stain on alt plag
32.4	9.0		2.48	100	.03			.03								As above
41.9	9.5		2.52	90	.03			.03						WK LLim WK lim		WK Alt, patchy Mod sil'n last ½ run, sp lim, hem
50.9	9.0		2.53	96	.02			.02								As above
60.4	9.5		2.51	89	.02			.02					WK	Sp LLim WK lim	bx @ 53.8	WK Alt AK frags in qtz matrix sp hem stain
68.8	8.4		2.53	91	.01			.01					Mod	Sp lim	AK circa 67'	bx as above last 3½ feet show st clay, AK - WK-Mod Alt WK hem
78.3	9.5		2.52	89	.02			.02					WK-Mod	WK-mod LLim & lim	bx @ 77.0'	WK-Mod Alt, sil'n Aplite text 68-72' sp lim on fracs
86.8	8.5		2.50	96	.01			.01					WK	WK lim		St sil'n sp lim on fracs
96.4	9.6		2.42	92	.02			.02							AK circa 86.8	WK Alt, sil'n, sp lim on fracs
104.6	8.2		2.45	98	.01			.01					WK-Mod			WK-Mod Alt, patchy Mod sil'n, sp lim on fracs
114.0	9.4		2.44	100	.74	0.08		.08	Tr	.05	.61		Mod	Tr LLim Sp lim	Sulf @ 116.4	WK Alt, WK-Mod diss cc on cpy, tr py tr-sp lim on fracs
123.3	9.3		2.53	93	.89	.08		.08		.03	.77			Tr lim		WK Alt, WK-Mod cc on cpy, diss & on fracs, tr py, MoS2 Alun
132.5	9.2		2.50	95	.98	.03		.03		.03	.92			Sp. lim		WK Alt, patchy WK-Mod sil'n MIN as above, no alun
141.9	9.4		2.54	89	1.05	.04		.04		.01	1.00					WK-Mod Alt, sp-wk cc tr cpy, py
151.5	9.6		2.68	91	1.37	.03		.03		.05	1.29					Mod alt, (st. ser) mod-st cc, sp cpy, py
160.7	9.2		2.67	92	.76	.02		.02		.03	.71					1st 3' st. sil'd, poss. bx. Then wk-mod alt, wk-mod cc, partly on py (st. ser.) sp cpy
169.7	9.0		2.47	100	1.26	.03		.03		.03	1.20					Mod alt, (st ser) some grnish plag. Mod or better cu sulf.
179.1	9.4		2.51	95	.63	.02		.02		.05	.56			Tr lim		As above
188.3	9.2		2.47	96	1.12	.01	167.0' @ .77/.03	.01		.08	1.03					WK-Mod alt, depending on spotty sil'n Mod-st cc, cpy. sp py.
197.1	8.8		2.44	100	.65	.01		.01		.05	.59					WK-mod alt, grn-stained plag., WK to mod cc, partly on py & cpy
206.1	9.0		2.45	95	.83	.02		.02		.05	.76					As above, tr py.
215.4	9.3		2.54	97	.62	.02		.02		.10	.50		WK-mod			WK-Mod Alt, WK qtz vns, WK cc, cpy, tr MoS2, py, grn clay
225.1	9.7		2.52	93	.82	.03		.03		.10	.69	Tr MoS2	Mod			WK-Mod Alt, WK-Mod cc on WK cpy, tr py, MoS2
234.4	9.3		2.53	100	.51	.02		.02		.05	.44		WK-mod			WK Alt, WK-Mod cc, cpy tr MoS2, py, sp chlor.
244.2	9.8		2.57	96	.23	.01		.01		.10	.12	Tr MoS2		Sp Jar.		WK-Mod Alt, WK-Mod cpy, cc, sp py tr MoS2
253.7	9.5		2.54	92	.33	.01		.01		.20	.12					WK Alt, WK-Mod cpy, sp cc, py tr MoS2
262.4	8.7		2.59	96	.53	.04		.04		.35	.14					WK-Mod Alt, WK-Mod (-) cpy, WK (+) cc, py tr MoS2
271.6	9.2		2.58	95	.64	.02		.02		.35	.27					WK-Mod Alt, patchy Mod-st sil'n, WK-Mod cc, WK cpy, sp py Tr MoS2
276.7	5.1		2.54	99	.35	.01		.01		.24	.10					As above
285.9	9.2		2.59	90	.26	.01		.01		.20	.05	Tr MoS2	WK clay			WK Alt, sp sil'n, WK cpy, sp diss cc, tr py
295.0	9.1		2.59	90	.32	.01		.01		.25	.06					WK Alt, WK diss cc on WK cl cpy tr py tr qtz vns
304.0	9.0		2.53	100	.34	.01		.01	Sp	.25	.08					WK Alt, sp sil'n, sp-wk cc, cpy mainly diss tr py, MoS2
312.5	8.5		2.54	100	.42	.01		.01	tr-sp	.30	.11					WK Alt, WK cc on WK diss cpy, WK qtz vns w/ tr MoS2, tr py
321.7	9.2		2.73	85	.33	.01		.01	Sp	.20	.12					WK Alt, sil'n, cc & cpy as above & qtz vn @ 320.2 w/ sp-WK MoS2 WK-Mod py
330.7	9.0		2.55	96	.30	.01		.01	tr py	.25	.04					WK Alt, sil'n, WK cc on WK diss. cpy tr-sp py
340.0	9.3		2.53	90	.27	.01		.01	tr py	.10	.10					WK alt, WK-mod sil'n WK cpy, tr-sp cc, tr py.
349.3	9.3		2.55	92	.40	.01		.01		.20						

Final Depth 430.1'
Collar Elevation 3092.33
Coordinates 29,601.33 N; 24,950.27 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-117
Sheet No. 2 of 2
Date Completed 11/22/65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	lim, hem	Rock Type	Remarks
357.8	8.5	NXWL	2.74	92	.24	.01		.01	sp	.19	.04	tr MoS_2	wk		AK	wk alt, wk silin. wk total suls. Poss. tr MoS_2
367.0	9.2		2.57	95	.51	.01		.01	tr-sp	.40	.10					wk-mod alt, some qtz veining, wk-mod total suls.
376.2	9.2		2.55	95	.23	.01	74.0 @ 45/.01	.01		.20	.02	tr MoS_2				wk alt, silin. wk total suls. (wk cpy, tr py, tr MoS_2, c
385.7	9.5		2.56	92	.34	.01		.01	wk	.05	.28					WK AH sp-wk cc on sp-wk diss cpy cpy tr bar. sp qtz vnlin,
395.2	9.5		2.60	88	.46	.01		.01	sp-wk	.15	.30					WK AH, silin Min. as above, no bar.
404.9	9.7		2.55	92	.91	.01		.01	sp	.25	.65					AH as above wk cc on wk cpy tr py.
414.0	9.1		2.58	100	.45	.01		.01		.15	.30	tr MoS_2				wk AH, wk-Mod silin, wk cc on wk diss cpy, tr py
423.2	9.2		2.59	96	.31	.01		.01	sp-wk	.03	.27					wk AH, wk-Mod silin, sp cc on sp cpy tr MoS_2 py
430.1	6.9		2.63	96	.20					tr	.20	sp MoS_2				AH as above, tr-sp cpy, sp py tr MoS_2
E.O.H.		Avg. Rec'y = 94%														

Note: A weighted composite was run on the interval 104.6 - 271.6 with the following results:

Total Cu	N.S.Cu	Sulfide Fe	Insol	MoS_2
0.818	0.029	0.85	96.3	0.0480

(All in %)

Final Depth 290.4'
Collar Elevation 2872.30
Coordinates 29,433.43 N ; 25,637.63 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-116
Sheet No. 1 of 1
Date Completed 11-13-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim.	Rock Type	Remarks
6.5	6.5	RB	–	0	–	–	–	–	–	–	–	–	–	–	–	Rock bit
16.2	9.7	NXW	2.56	81	0.02			.02					wk-mod	Sp. LLim Mod lim	AK	WK Alt, (argillization of plag) wk qtz vn, sp-wk lim,
26.2	10.0		2.48	79	.07			.07					|	|		Alt as above, wk hem ppt on Alt plag, wk Alun
35.6	9.4		2.46	87	.24			.24 (Cu-Pb-Mn)	ox's				|	Tr LLim Mod lim		WK-Mod Alt, wk hem to 30', sp Mnox on fracs, tr CuOx on fracs, tr Aplite dike at 30.5-30.8
49.8	14.2		2.54	52	.10			.10					|	Mod lim		Alt, As above, sp lim, wk hem, core badly ground up
62.2	12.4		2.34	75	.08			.08					Mod	sp LLim Mod lim		Mod Alt, St clay Alt @ 53.6-62.2 wk-Mod lim
72.0	9.8		2.34	89	.03			.03					Mod-St	Mod hem (crushed lim?) WK lim		Mod-St Alt, wk-Mod lim, hem core badly broken
81.1	9.1		2.34	91	.06			.06					|	Mod LLim WK lim		Mod Alt, wk-Mod lim, hem. core badly broken
84.5	3.4		2.34	92	.08			.08					Mod	WK LLim Mod lim		WK-Mod Alt, wk-Mod hem on AH plag
90.4	5.9		2.71	86	.69	0.02		.02	Sp		.67		Mod-St		Sulfs @ 90.4	St Alt, Mod py, wk-Mod cc, tr Cpy, MoS2
99.9	9.5		2.60	82	.50	.02	41.9'	.02	wk		.48		|			St Alt, Mod py, cc diss & on vns
108.7	8.8		2.60	88	.59	.02	@	.02	Sp		.57		|		M2 @ 102.0	Alt as above in AK, M2: Mod Clay Alt (grn Mont?) tr tot sulfs
117.7	9.0		2.65	88	.62	.02	.60/.02	.02	|	.01	.59		|			M2-AK contact dips approx 70° Alt as above, wk bar, no vis. sulfs
126.4	8.7		2.55	91	.66	.03		.03	Tr		.63		Mod	Tr lim		Alt as above, wk chlor.
135.9	9.5		2.64	84	.30	.01		.01	tr	tr	.29		\)	\)		Mod Alt, feld alt to grn clay, bio to chlor, wk pink 2nd k spar on vn.
144.6	8.7		2.63	100	.20			.01	Sp	.02	.17		\)	\)		Alt as above, wk qtz vning, sp py, tr Cpy, cc, MoS2 on fra
154.2	9.6		2.61	88	.13			tr	Sp-WK	tr	.13	tr MoS2	WK-Mod	\)		WK-Mod Alt, 2nd k spar, wk clay, wk py tr Cpy, cc, MoS2 on vns
163.4	9.2		2.59	94	.12				WK	.10	tr .02	\)	\)	–		WK-Mod Alt, sp 2nd k spar, py tr Cpy cc, MoS2 on fracs
172.6	9.2		2.62	95	.12				Sp-WK	.12	tr	\)	\)			WK-Mod Alt, w/ WK-Mod 2nd k spar, sp py, tr cc, on fracs
181.8	9.2		2.63	92	.17				WK-Mod	.16	.01	\)	\)	tr lim		WK-Mod Alt, sp 2nd k spar patchy st s/in, wk py on vns
190.1	8.3		2.57	100	.12				Sp-WK	.12	tr	\)	\)	\)		Alt as above, sp-wk py sp diss cc, tr bar
197.9	7.8		2.60	100	.11				Sp-WK	.11	tr	\)	\)	\)		Alt as above, sp-wk py, sp cc, tr Cpy
207.1	9.2		2.64	96	.12				\)	.12	tr	\)	\)	\)		2nd k-spar & bio. wk s/in & bte vning. wk py, sp Cpy.
216.2	9.1		2.63	98	.09				WK	.09		\)	\)	\)		RK appears wk-mod alt, but actually stronger Plag & grass Mont., from alt. plag.
225.9	9.7		2.62	93	.06				\)	.06			WK			As above w/ stronger qtz vning, K-spar appar. "growing"
235.0	9.1		2.59	100	.10				\)	.09	.01		\)			As preceding
243.9	8.9		2.63	96	.11				\)	.11	tr		WK-Mod			" " , Var. st. in spots.
253.1	9.2		2.63	97	.10				\)	.10	tr	% MoS2	WK-Mod			Alt & min as above. Sp qtz vning. Grain size varying, mostly f.g. last ½ run
262.5	9.4		2.58	91	.14				Sp-WK	.14		0.006	Mod	Sp Jar.		Grain size back to m.g. Min & alt as above.
271.5	9.0		2.56	97	.09				WK	.09		0.019	|	|		Mod Alt, Mainly Mont. replacing feld, wk 2nd K spar near qtz vns, sp py
281.1	9.6		2.54	92	.07				Sp	.07		0.017	WK-mod	|		Mod-St Alt Mainly 2nd K spar wk qtz vns, sp-wk py tr MoS2, cc
290.4	9.3		2.57	93	.07				WK-Mod	.05	.02	0.008	|	|		Mod Alt, Clay replacing feld wk lim stain wk py, tr cc, MoS2
E.O.H.		Avg. Rec'y =		89%												AH as above, wk 2nd K spar. WK-Mod py patchy s/in 286' to end run, tr MoS2

Final Depth 328.7'
Collar Elevation 2964.94
Coordinates 29,538.55 N ; 25,381.26 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-115
Sheet No. 1 of 1
Date Completed 11-8-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, Sericit.	Lim	Rock Type	Remarks
7.0	7.0	RB	—	—	-	-		-	-	-	—	—		-	-	Rock bit
16.6	9.6	Nxw	2.55	86	0.18			Gra. Cu ox .16			.02		Mod	Mod SP LIM	AK	WK Alt, WK Lim
25.6	9.0		2.54	94	.09			.09					wk-mod	WK-Mod lim		as above also wk hem stain on Alt plag. feld (grn. stain als
34.7	9.1		2.54	95	.22			.20			.02			WK-mod lim		WK Alt, sp lim Felds grn-stained
44.7	10.0		2.53	88	.35			.33			02					as above " " "
54.1	9.4		2.53	95	.36			.34			.02					as above wk grn Cu ox stain on Alt plag. wk grn ox sp lim
63.8	9.7		2.54	93	.17			.12			.05					as above sp grn cu ox on plag.
73.5	9.7		2.50	87	.12			.12			tr		wk		>als @ 73'	WK Alt, wk lim sp hem stain on plag, tr Cu Ox stain on plag
79.3	5.8		2.50	99	.30	.22		.22	wk		.08					as above, no hem
91.5	12.2		2.53	91	1.44	.07		.07		.37	1.00			wk lim		WK Alt WK-Mod cc on WK-Mod cpy on fracs tr py
101.2	9.7		2.51	88	1.21	.03		.03		.25	.93			—		as above, slightly stronger Alt, less >als
110.5	9.3		2.52	94	1.15	.05		.05		.15	95					as above, cc on cpy is more diss.
119.9	9.4		2.50	95	1.01	.03	95.4'	.03		.15	83					WK Alt, WK-Mod cc on wk py, cpy wk qtz veining
129.4	9.5		2.74	91	.85	.01	@	.01	wk-mod	.10	.74		wk-mod			WK Alt, WK-Mod cc on py, tr cpy, WK-Mod qtz veining
138.3	8.9		2.70	97	1.25	.02	1.08	.02	sp-wk	.10	1.13					WK Alt, silin, WK-Mod (+) cc on py & WK cpy
147.4	9.1		2.55	94	.89	.01	0.05	.01	sp	.23	.65					WK Alt, WK cc, cpy sp-WK py
156.6	9.2		2.55	97	1.00	.03		.03	wk	.15	8.2		Mod clay		M2 @ 147.5	WK-Mod Alt, WK Montmorillinite? WK cc sp cpy, wk py
165.9	9.3		2.57	93	1.04	.10		.10	sp	.15	.89		wk-mod	wk lim	leached circa 163'	WK-Mod Alt, WK-Mod (-) cc on sp cpy, py sp lim
174.7	8.8		2.65	100	.82	.18		.18	sp	.50	.14	tr torb	wk			WK-Mod Alt, WK py in veinlets w/silin, rest is leached sp.
183.9	9.2		2.67	95	.27	.01		.01	wk	.26	tr?				Sals circa 174	WK-Mod Alt, chlor, WK-Mod py sp cc, cpy, tr MoS2
193.2	9.3		2.62	96	.13				wk	.13	tr		wk			WK Alt, silin, wk cc, sp py tr cpy, MoS2
202.2	9.0		2.60	95	.16				wk-mod	.16		tr MoS2	wk			as above
211.4	9.2		2.61	100	.19					.19			sp-wk			WK Alt, silin WK cc cpy sp py, tr cc, MoS2
220.3	8.9		2.60	93	.23				wk	.23						as above, sp cpy, py tr cc, MoS2
229.6	9.3		2.56	91	.28					.28		tr MoS2				WK-Mod Alt, silin, WK cpy, py, tr MoS2 WK pink k spar veinlets
238.7	9.1		2.59	93	.30					.30			wk			WK-Mod Alt, silin, sp cpy, py tr MoS2 feld as above
247.1	8.4		2.63	98	.12				sp	.12			wk			as above
256.7	9.6		2.63	91	.09				tr	.09			sp			as above, tr cc on bx @ 252.5'
265.2	8.5		2.59	98	.26				sp	.26		tr MoS2	sp-wk			WK-Mod Alt, silin, WK pink k spar on veinlets, sp cpy, py tr Mo
274.7	9.5		2.59	96	.12				wk	.12			sp			as above
283.5	8.8		2.61	93	.15				sp	.15		tr MoS2	sp			WK-Mod Alt, WK pink k spar, tr bk bio (2nd?) sp cpy, py
293.2	9.7		2.58	90	.23					.18	.05				Qtz VN 292.0 - 293.0'	WK-Mod Alt, (chlor, Mont.) WK silin on veinlets, sp cpy, py tr cc, Mo
302.8	9.6		2.57	92	.20					.18	.02					WK-Mod Alt, WK silin, pink 2nd? k spar on veinlets, sp cpy, py tr
311.5	8.7		2.59	100	.17					.17	tr					as above
320.2	8.7		2.62	100	.12					.12						as above, WK-Mod silin, WK py sp cpy, tr MoS2, WK bar on fracs
328.7	8.5		2.60	95	.17					.17	tr					as above, no bar, plag alt to grn clay (Mont?)
E.O.H.		Avg. Rec'y = 94%														

Final Depth 420.9'
Collar Elevation 3092.72
Coordinates 29,656.78 N; 25,163.06 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-114
Sheet No. 1 of 2
Date Completed 11-8-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim.	Rock Type	Remarks
5.0	5.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rockbit
14.4	9.4	NKW	2.54	88	0.05			.05					WK	WK-mod.	Sil'd bx	Sil'd bx, w/sp bar in fracs, frags may be AK sp lim
24.0	9.6		2.52	88	.02			.02					WK-mod	WK lim Sp Lim		as above w/increasing AK frags
33.4	9.4		2.47	94	.02			.02					Mod	WK lim	AK @ 24'	WK Alt, Sil'n, WK lim
42.7	9.3		2.45	94	.03			.03					WK-mod	WK-mod		as above
51.7	9.0		2.44	97	.02			.02								as above
61.1	9.4		2.55	85	.05			.05					WK	WK		WK Alt, WK lim on fracs only the plagioclase feld is alt
70.6	9.5		2.60	90	.04			.04								WK Alt, Sil'n, patchy sul in sil. rx, WK py, cc. hem stain on plag, below suls
79.7	9.1		2.52	97	.01			.01								WK Alt, WK lim on fracs patchy hem stain
88.8	9.1		2.50	96	.08			.08								as above, no hem stain
98.1	9.3		2.52	97	.20	Tr		tr	tr	.70 WK-Mod	.10 WK-Mod					as above tr patchy diss cc
107.0	8.9		2.53	93	1.05	0.02		.02	tr-Sp	.32 WK-Mod	.68 WK-Mod			SP	Suls @ 98.2	WK Alt, WK-Mod cc, cpy, tr py mainly diss, sp-wk lim on fracs
115.4	8.4		2.53	100	.16			tr		.05	.11			WK-Mod lim		WK Alt, patchy St Sil'n, WK cc, cpy, tr py diss in partly leached rx, WK lim on
124.7	9.3		2.52	96	.09			.09							leach @ 115	WK Alt, Sil'n, sp tot suls, WK lim. on fracs + Alt plag & suls
134.2	9.5		2.55	95	.11			.11								WK alt, mod. sil'n, leached, Grn-stained plags. Sev. Granite unit
143.4	9.2		2.54	97	.12			.12						WK		As above but no Bar. Some aplite near end
152.1	8.7		2.45	100	.08			.08	Tr		Tr					WK alt, mod-st. sil'n, leached. 1/4" pod of py-cc. Recrystallized bx, poss. pre-min. Fault
161.2	9.1		2.45	94	.18			.06	Tr-Sp		.12		WK-mod		Sp. suls	WK-mod. alt, mod. sil'n. Mostly leached, vuggy in part. " "
170.4	9.2		2.48	95	.05			.05	Tr		Tr			WK-mod		As above. Tr's sc. diss. cc-py.
179.4	9.0		2.55	98	.06			.05			.01		WK	WK		WK alt, mod(+) sil'n. WK lim. Tr cc-py
188.2	8.8		2.47	98	.27	.06		.06	Sp		.21			WK-mod		" " , mod. sil'n, " " Sp. " " . Partly re-xlized
196.7	8.5		2.54	97	.46	.05	27.4' @ .51/.04	.05		.10	.31			SP		As above except sp-wk suls.
206.2	9.5		2.52	88	.26	.05		.05	tr-Sp	.04	.17			WK		WK Alt, Sil'n, WK cc, sp cpy, py lim on fracs
215.6	9.4		2.49	92	.80	.03		.03		.10	.67					WK Alt, Sil'n, WK alt cc, diss + on fracs, sp py, tr cpy
224.6	9.0		2.53	93	.26	.02		.02		.04	.20					WK-Mod Alt, Sil'n, WK diss cc tr py, cpy
233.4	8.8		2.55	93	.17			tr		tr	.17			SP	Sil. bx @ 225.0	AK bx (WK Alt) in silica matrix WK cc, tr cpy py WK lim on fracs
242.9	9.5		2.54	100	.16			tr		tr	.16	tr MoS2	WK-Mod	WK		bx as above, more frags of AK tr-sp cc. WK lim
254.5	11.6		2.51	93	.05			tr	Sp		.05				leach 251.3	as above, end of run leached w/ WK lim & hem on fracs
263.4	8.9		2.64	90	.16			tr	tr-Sp	.08	.08			WK lim	Sil @ 257.3 AK @ 259.1 bx @ 268 AK @ 277.2	WK Alt, St Sil'n WK diss cc, tr-sp py, tr MoS2 WK lim
272.6	9.2		2.63	100	.23					.08	.5					WK Alt, St Sil'n, WK cc, cpy sp py tr MoS2 bx AK in WK matrix
281.7	9.1		2.53	93	.35				Sp	.15	.20		Wk ser			WK Alt, St Sil'n, WK cc, cpy, sp py, tr MoS2
291.1	9.4		2.52	94	.24					.06	.18					WK Alt, St Sil'n, sp-wk cc, tr cpy, MoS2, py WK-Mod bx'iation thru out WK
300.5	9.4		2.48	97	.55	.01		.01		.20	.34		WK-mod clay, ser	Tr		WK Alt, Sil'n, patchy St bx'iation, Sil'n, WK cc on cpy tr py
308.6	8.1		2.58	100	.49	.01		.01		.20	.29	Tr MoS2				WK-Mod Alt, patchy St Sil'n, bx'iation, WK cc, cpy tr py MoS2
318.7	10.1		2.58	88	.32	.01		.01	Tr-Sp	.15	.16					as above
328.1	9.4		2.61	92	.81	.01	75.9' @ .65/.01	.01		.20	.60					WK Alt, patchy Mod-St Sil'n, WK-Mod cc on cpy tr py
337.1	9.0		2.53	94	1.01	.01		.01	Tr	.15	.85					WK-Mod Alt, WK Sil'n, WK-Mod cc on cpy tr py, MoS2
346.1	9.0		2.58	92	.74	.02		.02		.15	.57					WK Alt, patchy Mod-St Sil'n, WK cc on cpy tr py MoS2
349.5	3.4		2.57	100	.51	.01		.01		.10	.40	Tr Tr [illegible]				

Final Depth 420.9'
Collar Elevation 3092.72
Coordinates 29,656.78 N; 25,163.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-114
Sheet No. 2 of 2
Date Completed 11-8-6.
Logged By J. A. B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim hem	Rock Type	Remarks
358.6	9.1	NXwl	2.54	93	.85	.02		.02	sp-wk	.13	.60	tr MoS2	wk clay	tr lim	AK	wk Alt, Mod-St Silin, wk cc on sp cpy, py, tr MoS2
367.0	8.4		2.55	100	.52	.02		.02	)	.10	.40	)	)	wk lim		Alt as above, wk cc on sp cpy, py, patch aplite text
383.2	16.2		2.43	86	1.38	.79		.79			.59?		sp clay	)	P.M. Ande @ 367.0'	Post Min. Andesite wk lim @ 1st part run tr lim. wk cap to: May be tr ruby silver
394.6	11.4		2.53	91	.23	.01		.01	wk	.22	tr	sp MoS2	wk	tr lim	AK @ 383.2	wk Alt, silin, wk cpy, py, tr MoS2, cc patch aplite text
403.9	9.3		2.53	95	.21			.01	)	.14	.06	tr MoS2	)	tr lim		wk Alt, silin, tr-sp cpy tr py, MoS2 patchy aplite text
413.0	9.1		2.63	94	.17				sp-wk	.17		tr MoS2	sp wk			Sp-Absent Alt Mod-St Silin, sp cpy, py tr MoS2
420.9	7.9		2.56	97	.10				)	.10		)	)			wk Alt, Mod-St Alt, sp py, cpy tr MoS2
E.O.H.		Avg. Rec'y =		94%												

Final Depth 406.0'
Collar Elevation 3107.84
Coordinates 29,717.93 N ; 24,320.29 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-113
Sheet No. 1 of 2
Date Completed 10/30/6
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser.	lim	Rock Type	Remarks
6.0	6.0	R.B.	—	—	—								—	—	—	Rock bit
14.9	8.9	NXW	2.55	97	0.13			.13				Wk bk ox	tr clay	wk	Mz	Sp-wk superpose alt, Mod 2nd K-spar + bio. Leached, wk
23.1	8.2		2.56	92	.15			.15				wk-mod bk ox	)	)		wk Alt, wk-Mod 2nd K spar, Mod (12%) bio. 1 rounded frag of pink
31.9	8.8		2.57	93	.08			.08				)	wk	)		wk Alt, wk-Mod 2nd K spar streaking sp-wk lim
41.5	9.6		2.54	93	.11			.11				Sp)	)			as above
49.8	8.3		2.57	98	.19			.19				)	)	)		as above, wk 2nd K spar wk-Mod weathering on fracs
59.2	9.4		2.52	87	.10			.10				)	)	)		as above wk lim
68.0	8.8		2.52	100	.14			.14				tr	)	wk lim tr jar		as above
77.0	9.0		2.49	97	.08			.08					Sp-wk	wk lim		as above sp qtz veining
86.2	9.2		2.55	90	.08			.08					wk	wk-mod		wk Alt, wk-Mod 2nd K spar wk lim on fracs
94.7	8.5		2.56	96	.14			.14					mod	Tr lim	AK @ 91.3	wk-Mod Alt, 1st 1/2, w/ wk-Mod chlor, Mod silin 2nd 1/2 run in AK
103.6	8.9		2.52	97	.18			.06	Sp	Tr	.12?		wk	)	Suls @ 98.6	wk Alt wk py, cc sp silin
112.8	9.2		2.53	95	.12			.06	)	)	.06		)	)	leach @ 103.6 Mz @ 107'	Mz @ 107' wk-Mod Alt, wk lim, Mod cc+py on fract @ 111.7'
120.0	7.2		2.58	100	.08			.08					)	wk-mod lim		wk Alt, sp 2nd K spar, wk lim on fracs, 1 py veinlet 1/4" wide @ 117.
129.2	9.2		2.58	94	.08			.08	Tr	Tr	Tr		)	)	Suls @ 126.7	alt as above, sp-wk py in sul zone 8/1/ cuox
138.5	9.3		2.56	95	.15			.08	Sp	.04	.03		Sp-wk	Mod lim.	leach @ 129.2	alt as above, wk lim on fracs suls @ 136.7' tr-sp py
147.5	9.0		2.59	97	.09			Tr	wk	.09	Tr		)		Sul @ 136.7	alt as above No vis suls sp lim on fracs
157.0	9.5		2.60	94	.16			.02	)	.14	)		)	Sp. lim	AK @ 155.1 leach @ 155.1	wk-Mod Alt, chlor, sp py AK leached w/wk hem stain patch Aplite text.
165.9	8.9		2.54	94	.06			.06					wk	Mod lim		wk Alt, wk lim, sp cuox bk MnOx
175.6	9.7		2.56	87	.24			.02	Sp	.12	.12		wk-mod	Sp lim	Suls @ 168.5	wk Alt, wk py, cc, tr cpy, sp-wk lim in leached area
184.1	8.5		2.54	100	.26			.03	)	.05	.18		wk	wk	leach 178.7	wk-Mod Alt wk (+) cc, sp py, wk lim
192.6	8.5		2.55	99	.13			.04	Tr	.03	.06		)	)		alt as above, wk silin, patchy suls w/wk cc
201.7	9.1		2.50	93	.29			.04	)	.02	.23		)	)		wk Alt, wk lim on fracs, tr cuox wk patchy diss cc
211.1	9.4		2.50	91	.17			.15	)	Tr	.02		wk-mod	mod		as above (lim after cpy?)
220.1	9.0		2.48	98	.09			.09					)	)		as above, no cc or suls
229.3	9.2		2.54	94	.06			.06					)	)		as above
238.6	9.3		2.52	92	.20			.20			?		wk	wk-mod		as above, sp patchy cc
248.0	9.4		2.48	89	.10			.10					)	)		wk-Mod Alt, sp lim, jar tr bk MnOx
256.8	8.8		2.31	100	.04			.04					wk-mod	)	PMK @ 252.6	Ank-AK contact dips approx 70° AK Alt as above ox near Ank contact.
267.8	11.0		2.39	80	.17			.17					mod	mod	AK @ 257.5	Mod clay alt in AK sp lim, jar
282.7	14.9		2.46	54	.09			.09					)	)		wk-Mod Alt, oxiation @ 1st part run wk lim
292.3	9.6		2.42	89	.08			.08					)	)		alt as above, wk lim on fracs
301.8	9.5		2.56	90	.51	0.07	22.4' @ .45/.04	.07	Tr		.44		wk-mod	)		wk-Mod Alt, wk lim, sp patchy cc
310.1	8.3		2.46	97	.16	.02		.02	Tr	.01	.13		)	)	Suls @ 307.8	wk-Mod Alt, wk lim, wk-Mod diss cc on py
314.7	4.6		2.63	98	.83	.02		.02	Sp	.20	.61		)	sp		wk-Mod Alt, wk silin wk diss cc on py
323.9	8.5		2.55	91	.29			.02	Sp-wk	.05	.22	Tr Mo S_2	wk	wk		wk-Mod Alt, sp py, wk (-) cc sp cpy tr MoS_2 wk lim on f
333.2	8.9		2.56	90	.15	.02		.02	Sp	.04	09		)	wk-mod		wk-Mod Alt, wk cc sp cpy py tr MoS_2 wk lim on fr
342.0	8.8		2.55	98	.40	.02	17.6' @ .46/.02	.02	Sp-wk	.08	.30		wk-mod	Tr		wk-Mod Alt, wk(+) cc, tr-sp cpy, py, tr MoS_2 sp lim
350.8	8.8		2.58	100	.52	.01		.01	Sp	.25	.26		)	)		

Final Depth 406.0'
Collar Elevation 3107.84
Coordinates 29,717.93 N ; 24,320.29 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-163
Sheet No. 2 of 2
Date Completed 10/30/6
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim.	Rock Type	Remarks
355.0	4.2	NXW	2.58	98	0.20	0.02		.02	Sp	.05	.13		Wk.	Wk lim Bwk after Cpy	AK	Wk Alt, sp py, cc, tr MoS2 sp-wk limon fracs. Some Calc.
367.4	12.4		2.58	81	.22			.02	Sp Sp tr	.10	.10		Wk-mod ~~Sp~~	Sp lim		Wk Alt, sp-wk cc, py tr cpy, MoS2 wk lim "
380.9	13.5		2.45	82	.03						.03		Sp	Tr	PMA@367.4 AK@380.9	biotite andesite, post mineral. tr cc in vesicles
390.1	9.2		2.57	94	.20				tr	.20	tr	tr MoS2	Wk-Mod		PMA@388.3	Wk-Mod Alt, sp py, cpy, cc tr MoS2
399.3	9.2		2.56	91	.25				Wk	.20	.05	1	1		AK@389.7	Wk-Mod Alt, wk silin, wk cpy, cc, sp py tr MoS2
406.0	6.7		2.59	88	.12				Sp	.12	tr	1	1			Wk Alt, silin, tr cpy, cc, MoS2, py
E.O.H.		Avg. Rec'y =		92%												

Final Depth 368.2'
Collar Elevation 3069.80
Coordinates 29,792.75 N ; 25,242.84 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-112
Sheet No. 1 of 2
Date Completed 10-28-6
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, sericite	lim.	Rock Type	Remarks
5.0	5.0	R.B	—	—	—								—	—	—	Rock bit
14.4	9.4	NXW	2.36	93	0.10			Chrys. 0.10					wK	wK lim	Mz AK@12.0	Mz, wK alt, leached. AK & the same
23.0	8.6		2.49	94	.08			.08					1	1		AK up aplite & mod. sil'n 1st 2' then wK alt, leached, Sp Grn Cu
32.1	9.1		2.48	93	.09			.09			Tr		wK-mod	1		wK-mod alt, spotty wk. sil'n, leached. Grnish min. montmor.
41.0	8.9		2.50	100	.12			.12			1		1	1		" " ", leached, becoming siliceous @ end
51.4	10.4		2.51	88	.06			.06					1	1		As above but sil'n @ start. Sil'd fth. one or xeno from 47.0-5
61.5	10.1		2.61	86	.06			.06					wK	1		st. sil'd w/ only frag's of AK showing. leached
70.2	8.7		2.50	95	.35	0.30		.30			.05?		wK-mod	wK-mod lim		st Sil'n, wk mal. Az, lim
79.3	9.1		2.54	91	.54	.49		.49			.05?		Mod	wK		as above wK(?) Az
91.1	11.8		2.53	76	.31	.27		.27			.03		wK-mod	1		st sil'n, wk bx text. in places, tr mal, wK Az, lim
100.4	9.3		2.61	100	.20			.20					1	1		as above
109.1	8.7		2.55	95	.07			.07	Tr		Tr		wK	wK-mod		st to complete sil'n, patches of sulf (cpy) wK lim
118.6	9.5		2.59	97	.31	.10		.10	1	.04	.27	Tr MoS2	1	wK	Suls Circa III	st sil'n, tr-sp cc. on tr-sp py, tr mal sp lim 2nd Bio. o. vult
125.7	7.1		2.54	90	.87	.20		.20	sp	.05	.62	1	Mod	Sp		Mod Alt, sil'n, sp py tr cpy, sp cc, grn CuAk
135.3	9.6		2.53	91	.54	.06		.06	1	.05	.43		wK-mod	Tr		wK-mod alt, sil'n, wK py, wK cc, mainly diss & on sp
144.3	9.0		2.55	97	.57	.05		.05	1	.05	.47		1			wK-mod alt, mod sil'n. Min. as above. No leaching.
152.8	8.5		2.45	100	1.06	.03		.03	1	.05	.98	Tr MoS2	Mod			" " " " wK-mod cc, diss & on vults. wK py. sp cp
160.8	8.0		2.53	100	.86	.02		.02	1	.05	.79		1			As above.
170.2	9.4		2.53	96	.41	.03		.03	1	.05	.33		1			wK-mod alt, mod sil'n. 2' aplite in middle of run. Min. wK Tr biotite
179.8	9.6		2.52	95	.69	.01	135.4' @ .68/.03	.01	1	.05	.63		1			" " " " wK cc, wK py, sp cpy. Tr. bio. w/ loss
188.8	9.0		2.55	99	.54	.01		.01	Tr	.10	.43		1			wK alt, mod sil'n, sp-wk cc, sp cpy. Mainly diss. Tr mal.
198.1	9.3		2.56	96	.83	.01		.01	1	.05	.77	Tr MoS2	wK-mod			As above but w Tr MoS2, wK cc diss & on qtz vults.
207.1	9.0		2.56	97	.59	.01		.01	sp	.10	.48		1			wK alt, st. sil'n, sp-wk cc & cpy (vult) to core @ en
217.4	10.3		2.61	88	.31	.01		.01	1	.10	.20		wK			" ", mod. sil'n, sp-wk cc & cpy, wK py. 2nd bio? v
226.5	9.1		2.57	98	.80	.01		.01	1	.10	.69		1			As above w more ¼" qtz vults
235.8	9.3		2.55	98	.81	.01		.01	1	.20	.60		1			Pleg. wK alt. st sil'n. 2/4 run bx, recemented by sil'n. sp-wk s wK suls, vugs
244.9	9.1		2.49	100	.83	.02		.02	1	.11	.70		1			wK-mod. alt, mod sil'n 1st ½, above w 2' aplite, st. diss cc, cpy; 2nd ½ st. s
254.0	9.1		2.56	96	.70	.02		.02	1	.08	.60		1			wK alt, mod sil'n w qtz vu's (Charcoal). wK diss. cc, cpy. sp p
263.3	9.3		2.55	97	.27	.01		.01	Sp-wk	.13	.13	tr MoS2	1			as above cpy incr., cc decr. Py sp-wk AK sometimes a wK.
272.2	8.9		2.54	99	.15	.01		.01	sp	.05	.09		1			wK alt, mod-st sil'n. 1" pebble dike @ 46.5 @ 75°, 2nd dike @ 46.8 @ P.P.K's have trace of AK, sp, Mz. Tr MoS2 Tr MoS2
281.6	9.4		2.56	94	.29	.01		.01	1	.23	.05	Tr MoS2	1			" " " " ", bx, poss. pebble dike. wK suls (cpy, cc,
290.1	8.5		2.57	100	.85	.03		.03	sp-wk	.20	.62	1	wK-mod	wK lim		wK-mod alt & sil'n. wK-mod cpy, cc, py. Tr MoS2 wK-mod s
298.9	8.8		2.59	99	.59	.02	34.9' @ .76/.05	.02	1	.20	.37		wK	Sp. lim wK-mod		Mod-st sil'n, mod 2nd K-spar, scv. patches Aplite. Last ft. bx(
308.2	9.3		2.58	92	.72	.07		.07	Tr-sp	.05	.60		1		HF@300.6	st. bx, silica to ct. sp-wk suls. Ht bx, qtz vu/ts. leached. No vis. su
316.5	8.3		2.60	99	.91	.08		.08	Tr	.10	.73	Tr Torbernite	1	1	Mz@310.2	Ht, bx as above. Mz, bx, xeno's of Hf, wK alt, wh 2nd K-spar & bio. Grn. leached. Sp su
325.5	9.0		2.65	93	.22	.03		.03	sp-wk	.05	.14		1	sp		wk-mod. alt, sp 2nd K-spar, wK 2nd Bio. No leach. Sp suls. Grnish fo
334.5	9.0		2.51	94	.03				wK	.03			1			As above, except wK 2nd K-spar. Grn-felds may be Mon & mon illon
343.6	9.1		2.61	93	.05				1	.05			wK-mod			WK-Mod Alt mainly grn clay replacing feld. sp-wk suls mainly py, tr
352.9	9.3		2.60	97	.04				1	.01			"			

Final Depth 368.2'
Collar Elevation 3069.80
Coordinates 29,792.75 N ; 25,242.84 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-112
Sheet No. 2 of 2
Date Completed 10/23/65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Clay, Sericite	Lim		
362.1	9.2	Nxwl	2.57	100	0.03				wk	.03			wk		Mz	WKAlt, wk-Mod 2nd K spar flooding, wk qtz veining, sp py
368.2	6.1		2.63	100	.03				1	.03			sp-wk			as above
E.O.H.		Avg. Rec'y =		95%												

Final Depth 381.0'
Collar Elevation 3135.77
Coordinates 30,062.92 N; 24,363.20 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-111
Sheet No. 1 of 1
Date Completed 10-19-6
Logged By CWH, JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, sericite	lim	Rock Type	Remarks
5.0	5.0	RB														Rock bit
16.7	11.7	NXwl	2.55	72	0.32			0.32 Mal, chrys					wk-mod	wk lim Tr LLm	AK	Mal, chrys, chalcanthite. WK-Mod Alt, Mod sil'n, wk Mal? stain on plag xyls, wk-Mo lim on fr
26.7	9.0		2.54	92	.35			.35 Mal, chrys								As above, wk lim on fracs. Mal & Chrys.
35.5	9.8		2.48	87	.24			.24					Mod	wk-mod lim		WK Alt, Sil'n, Sp Mal on plag xyls, wk lim, tr hem sta
45.6	10.1		2.49	83	.23			.23					wk-mod	Mod lim		as above, core well broken
54.5	8.9		2.42	98	.27			.27 Mal			Tr?			wk lim		as above, core not broken
63.3	8.8		2.51	97	.29			.29*						Mod. lim Tr LLm		as above sp MnOx *Tr. diaptase.
72.1	8.8		2.50	95	.22			.22*								Ak, wk alt, wk sil'n, leached, " "
81.3	9.2		2.54	91	.45	0.26		.26*	Tr		.19		wk			wk alt, spotty sil'n, leached. 2, ¼" vnlts py & cc @ end.
90.2	8.9		2.54	93	.21	.16		.16			.05		wk-mod	Mod lim		wk-Mod. alt, gen. leached, Sp mal. Felds gen. stained.
100.0	9.8		2.46	87	.21			.21			Tr?		Mod	wk lim Tr LLm		Mod alt, gen leached, but a few sc. areas may have diss.
109.3	9.3		2.50	92	.25			.10	Tr		.15				Suls @ 105.2	wk-mod alt, cap. as above. suls mainly diss, 1 vnlt.
118.2	8.9		2.56	93	.28			.13			.15			Mod lim Tr LLm	Mixed Cap & suls.	" " " , now mixed suls & cap. Tr-Sp Mal
128.1	9.9		2.53	90	.20			.15			.05?		wk	Mod. lim		wk alt, sil'n, mixed leach & suls, felds gen. stained. Fr 120.0-120.6 leach Fl
137.1	9.0		2.53	97	.38			.15	sp		.23		wk-mod			wk. alt, gen. leached, but "pockets" of cc & py, one py-cc vnlt.
146.8	9.7		2.53	90	.09			.09								" , wk-mod sil'n, leached, sp mal on fracs
155.8	9.0		2.53	95	.04			.04						Mod-st lim		As above, no visible mal.
164.6	8.8		2.54	100	.11			.11						Mod lim		as preceding
175.9	11.3		2.54	87	.36			.19	Sp	.02	.15		wk			wk. alt, wk-mod sil'n, gen. leached w/ sp mal, but one pod of cc-cpy.
185.2	9.3		2.56	95	.18			.18								" " " " " " , No vis. suls.
194.9	9.7		2.55	91	.23			.23								As above, cons. grn-stain. plug.
203.5	8.6		2.54	97	.20			.18	Tr		.02		wk-mod	wk-mod		wk alt, wk sil'n, leached, sc. sp grn CuOx
212.8	9.3		2.52	92	.18			.18					wk			As above (Diaptase)
221.4	8.6		2.54	94	.13			.13					wk-mod			" " "
229.9	8.5		2.54	100	.15			.04	Sp		.11	Tr MoS_2		Mod		wk alt, wk sil'n, gen. leached but suls (cc, py) 225.4-227 as most fr's leached
239.3	9.4		2.56	89	.31			.03		.05	.23			wk	Suls @ 232.2	" " " " some leach. thru-out. sp-wk cc, py mainly dis
247.8	8.5		2.54	100	.10			.04		.01	.05		wk	Mod	Cap 239.8	" " " " . suls to at then gen. leach. w/ grn CuOx. Tr su
257.0	9.2		2.56	100	.18			.04	Tr	Tr	.14				Mz @ 257.0	As above to 256.0 where st sil'd post-min bx, wk cc, sp cpy, sp py. wk and ks spar & bio.
265.9	8.9		2.53	94	.07			.03			.04		Sp	wk-mod		Mz, wk. alt, mod. sil'd. Partly leached. MoS_2 vnlts. sp cc.
275.1	9.2		2.52	96	.06			.02			.04	Tr MoS_2	wk			As above
284.5	9.4		2.51	93	.12			.02	Sp		.10		Sp-wk			wk alt, wk sil'd, Mod 2nd K-spar & bio. 3 qtz-Moly vnlts. Cu leach
293.5	9.0		2.52	95	.03			.01			.02					Sp alt, mod-sil'n, wk " " " " Leached.
302.2	8.7		2.51	98	.02			.01			.01		Sp			As above. 1, ½" cc, py, cpy vnlt
311.3	9.1		2.56	100	.06			.01			.05		wk-mod	Mod		wk alt, sil'n, iron tank. st. leached. sp. cc on sev. fracs
324.5	13.2		2.45	76	.04			.01			.04					" " , wk sil'n. Mod-st. leached, sp. sc. suls. wk 2nd K-spar.
333.0	8.5		2.57	94	.08			.01	wk		.07		Mod	wk		Mod Alt, st sil to 334.9, no sil and can. wk py, tr cp, Mod lim Partly leach
343.2	10.2		2.48	88	.04						.04			Sp Jar		Mod-st Alt, Mod Sil'n, Mod py, tr cc, lim
353.2	10.0		2.49	84	.03					.01	.02					Mod Alt, wk sil'n no fracs, wk-mod 2nd K spar, py
362.2	9.0		2.48	95	.04									Sp. lim		

Final Depth 354.6'
Collar Elevation 3005.57
Coordinates 29,812.25 N; 25,403.73 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-110
Sheet No. 1 of 2
Date Completed 10-12-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser.	Lim.	Rock Type	Remarks
5.0	0.0	R.B.	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
14.9	9.9	NXW	2.48	88	0.03			0.03					Mod.	Mod. LLm wk lim	AK	wk-Mod Alt, Sil'n, wk hem stain on feldspars sp LLm @ 5'
24.2	9.3		2.50	92	.03			.03						sp. LLm wk lim		as above. Mod (-) Sil'n
34.2	10.0		2.51	95	.05			.05						wk LLm wk lim		as above " " "
44.4	10.2		2.49	90	.06			.06						sp LLm wk-mod lim		wk-Mod Alt, sil'n sp-wk lim, tr LLm on a fract.
53.3	8.9		2.49	99	.04			.04	Tr		Tr ?			Tr LLm wk lim		wk-Mod Alt, Mod-st Sil'n, tr tot sul in sil areas, sp-wk lim
60.6	7.3		2.49	100	.06			.06						wk lim		as above no vis. sulf sp-wk lim on fracs
71.7	11.1		2.47	80	.02			.02					wk-mod	sp-wk lim.		wk-Mod Alt, Sil'n, sp chlor, sp lim on fracs. no vis. sul
80.6	8.9		2.55	98	.02			.02						sp LLm		as above st leach w/ wk-Mod (-) lim, sp LLm @ 91'
90.4	9.8		2.56	90	.02			.02						wk lim sp LLm		as above wk-mod lim, tr LLm + hem stain
99.1	8.7		2.64	99	.05			.05						sp lim wk LLm		wk-Mod Alt, wk Sil'n, patchy sulf (py, cc) flt zone circa 90.8 Mod p
108.9	9.8		2.61	90	.04			.03	Tr		.01		wk	sp lim wk-mod LLm		as above, wk cc, sp py, sp-wk cpy
118.0	9.1		2.59	93	.20	0.01		.01	sp		.19	sp Barite	wk-mod		Sulf circa 113'	Mod Alt, Sil'n, Mod py, cc, sp Mo S2, wk lim sp LLm (patchy)
126.9	8.9		2.59	92	.61	.01		.01	1	.20	.40		Mod-st			Mod-St Alt, Sil'n, Mod cc, replacing wk-mod cpy, py, tr Mo S2
137.5	10.6		2.56	83	.43	.01		.01	1	.10	.32	sp Mo S2		Tr lim	bx circa 139	Mod-st Alt, Sil'n as stockwork in AK bx, Mod cc? tr cpy, py, Mo
142.1	4.6		2.65	100	.76	.03		.03	1	.20	.53		Mod			wk-Mod Alt, st silica cements bx frags, st cc, wk py, cpy tr?
151.7	9.6		2.53	97	.81	.03		.03	sp-wk	.20	.58					wk-mod Alt, st silica vning as above, st py, Mod cc, wk-Mod cpy
160.9	9.2		2.57	94	.59	.02		.02	1	.25	.32					as above, wk py, Mod (-) cc, tr-sp cpy, Mo S2
170.3	9.4		2.55	92	.58	.02		.02	1	.20	.36	tr Mo S2			solid AK circa 167'	wk-Mod Alt, Sil'n, Mod silica vning, wk-Mod cc, sp cpy, py
179.2	8.9		2.73	90	.62	.01		.01	1	.20	.42					wk-mod alt, mod-st. sil'n + qtz vning. Recemented. wk c
188.4	9.2		2.55	96	.46	.01	137.6'	.01	1	.20	.25	tr Mo S2				As above. Total silica content st.
197.9	9.5		2.62	91	.43	.01	@	.01	1	.20	.22		wk-mod			" " except for last 2' which are comp. sil'n shadows
207.1	9.2		2.60	93	.76	.02	.65/.02	.02	wk	.10	.64		Mod			1st ft. comp. sil'd, then mod-st + qtz vning. wk-mod clay-ser
215.0	7.9		2.58	94	.70	.02		.02	sp	.10	.58		wk			wk alt of plag. st sil'n + qtz vning. sp-wk cc & cpy
224.3	9.3		2.61	93	.77	.02		.02	tr-sp	.40	.38	tr Mo S2	wk ser			" " " " , mod sil'n + " " sp cc coating wk cpy
233.4	9.1		2.61	96	.84	.02		.02	1	.64	.18	1	wk(+)			As above except stronger cpy
240.2	6.8		2.54	53	.99	.02		.02	1	.40	.59	1	wk-Mod			Plag mod alt, sil'n wk-mod, Cu values sp-wk
245.8	5.6		2.52	87	.66	.02		.02	tr		.64	Mod bar	Mod-st			Soft, gg 1st 2' then mod alt, wk sil'n, barite, wk total sul.
255.6	9.8		2.60	96	.59	.02		.02	1		.57	1	1			Plag mod alt & stained (Jar & Mont?), Barite, some leaching
264.0	8.4		2.56	100	.25	.03		.03	wk-Mod	tr	.22		wk-Mod			1st 1/2 as above then sil'n incr to st. Chlor begin to appear
273.0	9.0		2.58	94	.24				sp	tr	.24		wk		Re-xtl'd bx 271.8	Re-worked bx starts @ 268.8. RX change approach to a
282.5	9.5		2.59	91	.20				Sp	15	.05		1			AK, plag mod alt & stained (Jar) wk-mod silica, sp-wk cu val.
292.0	9.5		2.61	87	.21				tr	.21	tr		1		Norm. AK @ 288.8	Recrystallized AK bx. Frags of AK in f.g. matrix. Pass. pre
301.3	9.3		2.60	88	.25				tr	.25	tr		sp-wk			As above to ct. ct. grad AK wk alt, mod sil'n, wk chlor
310.7	9.4		2.60	89	.24				tr	.24	1		1			wk plag. alt, mod sil'n, spotty wk chlor. sp cpy. sul gg
314.3	3.6		2.64	95	.19				1	tr	.19?		wk			RX as above. Sev. flts // to core w/ sul. gg. last 2' st. sil'n
323.7	9.4		2.62	88	.21				1	.16	.05?		1			st. sil'n w/ mod. blk sul & chlor. gg's.
333.8	10.1		2.58	88	.23				1	.13	.10	Tr Mo S2	wk-mod			wk-Mod Alt, Mod Sil'n, sp py, cpy, blk sul gg on fracs
343.8	10.0		2.57	87	.21				"	"	–	1	1			as above, wk sil'n, bx zone 331-331.5

Final Depth 354.6'
Collar Elevation 3005.57
Coordinates 29,812.25 N; 25,403.73 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-110
Sheet No. 2 of 2
Date Completed 10-12-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
351.8	8.0	NXW	2.62	98	0.17	0.01		.01	Tr	.14	.02	Tr MoSe	wk		AK.	AH As above, wk py, cpy, tr MoSe?
354.6	2.8		2.62	85	.51	.01	}	.01	wk	.10	.40		Mod.			Wk-Mod Alt, Mod Silm bx @ 352.6-353.3, w/ tr py Mod cp
E.O.H.		Avg. Rec'y =		92%												Note: Higher cu values comes from a py. vn w/ cc. coatings as listed under bx above. Rest of run similar to preceding runs.

Final Depth 308.5'
Collar Elevation 3066.46
Coordinates 29,635.66 N; 24,499.30 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-109
Sheet No. 1 of 1
Date Completed 10-7-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, sericite	Lim.	Rock Type	Remarks
6.9	6.9	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
15.7	8.8	NXW	2.61	86	0.09			0.09					Sp–WK	Sp	Mz	WK Alt, lim sp cuox bio. wkly chloritized
25.1	9.4		2.56	83	.10			.10					1	Sp-WK		as above tr hem stain
35.0	9.9		2.57	83	.08			.08					1	Sp		WK-Mod Alt sp 2nd ? Kspar wk lim sp bk ox
44.1	9.1		2.57	91	.20			Mal/azurite .20					1	1		as above sp-wk cuox some small qtz filled cavities
53.7	9.6		2.55	90	.18	0.13		Mal, blk ox's .13			.05?		WK	1		WK-Mod(-) Alt sp 2nd Kspar WK-Mod chlor wk Mal sp bk.
62.6	9.9		2.54	97	.76	.64		as above .64			.12?		1	WK		As above some qtz xls on cavities, broken zone at 61.9' st lim
71.8	9.2		2.55	98	.15	.13		as above .13			.02?		1+	Sp		WK-Mod Alt mainly chlor. Mod pink 2nd Kspar WK Mal bk
81.0	9.2		2.56	94	.25			as above & chrys .23			.02?		WK-Mod	1		as above
89.9	8.9		2.55	96	.07			.07					WK	1		as above
98.8	8.9		2.51	97	.09			.09					1	Sp-WK		as above
107.5	8.7		2.61	94	.22			.04	Tr	.01	.17		WK-Mod	WK	Sals Circa 104	WK-Mod Alt, mainly chlor. WK-Mod Pink and Kspar sp cc, py
117.1	9.6		2.60	89	.27			.04	1	.02	.21	Tr MoS2	1	1		as above no visable sals. sp cuox on fracs
126.4	9.3		2.61	94	.26			.10	Sp	.02	.14	1	1	Sp-WK		as above tr py sp-wk cuox on fracs
135.4	9.0		2.64	92	.32	.10		.10	1	.02	.20	1	Mod chlor W-M ser W-M chlor	1	Ak @ 135.4	Mod chlor. Alt WK Mal on fracs, sp-wk cpy, tr py
144.9	9.5		2.65	91	.30	.07		.07	1	.06	.17	1	Ser	WK lim	Mz @ 138.2	Ak-WK Alt, silin, sp lim, Mz – as above, apparently a bx w/ 2nd K sp tr cpy No vis p
154.0	9.1		2.55	92	.24	.06		.06	1	.04	.20	1	WK Ser	WK-Mod lim bk ox	Ak @ 147.9	Mz as above, Ak-WK Alt, sp diss cpy Mod bk MnOx on fracs + catch
163.2	9.2		2.59	91	.66	.04		.04	1	.32	.30		1	1	Patchy Mz	Ak WK Alt, silin, WK diss cpy w/ wk cc,
172.3	9.1		2.52	92	.28	.02		.02	1	.14	.08		1	tr lim		WK-Mod (+) Alt, Mod Silin, WK-Mod cpy, cc, patchy leach 164-1
181.4	9.1		2.55	94	.20	.02		.02	1	.10	.08		1	WK-Mod lim		WK-Mod Alt, silin, patchy leach sp-wk cpy wk cc, tr py MoS2
190.2	8.8		2.58	98	.34	.01		.01	sp-wk	.18	.15	tr MoS2	1	Sp-WK lim		Mod Alt, silin, Mod (-) cpy, cc, WK py tr MoS2 sp-wk lim on fracs
201.6	11.4		2.58	92	.52	.01		.01	1	.21	.30	1	Mod Ser			WK-Mod Alt, Mod silin, WK-Mod (+) cpy, Mod cc, sp py tr MoS2 lim
211.1	9.5		2.58	89	.26	.01		.01	1	.20	.05	1	Mod. Ser WK Clay	Tr lim		WK Alt, wk chlor, WK py, WK cpy on fracs sp-wk MoS2 on fracs
220.3	9.2		2.58	92	.17	.01		.01	1	.16	Tr	1	WK ser WK Clay			WK Alt, sp-wk py sp cpy, MoS2 on fracs tr lim
228.4	8.1		2.58	100	.47	.01		.01	1	.26	.20	1	WK-Mod Clay, Sp WK Clay, Ser	Tr lim		WK Alt, Mod silin, WK py, cc, sp-wk cpy, MoS2 tr lim
237.0	8.6		2.52	98	.33	.02		.02	Sp	.26	.05	1				WK Alt, WK-Mod silin, WK cpy, cc, sp MoS2, tr py
246.1	9.1		2.61	96	.20				1	.20	Tr	1	WK-Mod			WK Alt, silin, sp cpy, cc, tr py MoS2
254.9	8.8		2.52	98	.28				1	.26	.02	1	1			as above
264.0	9.1		2.58	89	.30				1	.30	Tr	1	1			WK Alt, sp py, cpy, tr cc, sp chlor
273.2	9.2		2.52	100	.31				1	.26	.05	1	1			WK (+) Alt, WK-Mod cpy, cc, sp py sp chlor
281.2	8.0		2.47	80	.19				1	.17	.02	1	1			WK Alt, WK (+) py, sp py cc, tr? MoS2 sp chlor
289.2	8.0		2.52	100	.20				1	.18	.02	1	1			WK Alt, WK cpy, sp py, cc, sp-wk chlor
298.5	9.3		2.52	96	.22				1	.20	.02	1	1			as above, WK (+) cpy tr-sp py, cc, MoS2
308.5	10.0		2.56	93	.30				1	.28	.02	1	1			WK (+) Alt, WK-Mod cpy, (on pg EH @ 301.2') sp-wk cc tr-sp tr MoS2
E.O.H.		Avg. Rec'y =		93%												

Final Depth 328.1'
Collar Elevation 3045.19
Coordinates 29,598.81 N ; 24,739.92 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. E-108
Sheet No. 1 of 1
Date Completed 9-29-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	Lim	Rock Type	Remarks
5.0	6.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
23.7	18.7	NXW	2.51	42	0.30			Cu-43, Mal .30					Mod	Mod lim sp Lim	AK	WK-Mod Alt wk cuox stain on plag. wk lim sp Mal
32.8	9.1		2.56	89	.11			.11					|	Mod lim		as above no Mal
42.5	9.7		2.51	88	.10			.10	Tr		Tr		|	|		as above
51.7	9.2		2.51	93	.27			.04	|		.23	Tr Tr bornite	|	Mod lim & Jar.		as above patch py circa 61'
60.9	9.2		2.54	93	.43	0.04	26.9'	.04	Sp	.10	.29		|	wk lim & Jar sp Lim	Sulf circa 61'	Mixed sul + leach wk-mod (A) Alt Mod cc tr cpy tr cpy sp Cu
69.9	9.0		2.51	92	.80	.06	@	.06	|	.10	.64		|	sp lim & Jar		WK-Mod Alt all sul. wk-mod cc replacing cpy tr py
78.6	8.7		2.50	99	1.12	.05	.78/.05	.05	Tr	.05	1.02		8+.		leach circa 76'	as above, patchy leach w/ sp-wk hem stain
89.3	10.7		2.42	85	.32	.08		.08	|		.24		|	wk-mod lim	Mz circa 87' Sul circa 87'	Mod Alt leach to circa 87' wk-mod cc
98.7	9.4		2.50	93	.37	.11		.11	—		.26		Mod	Mod lim Jar. Tr Lim	leach circa 93'	wk-mod (A) Alt wk 2nd? Kspar wk cc wk lim tr chlor jar
107.5	8.8		2.53	94	.10			.08			.02		wk-mod	Mod lim sp Lim		as above tr tot sul
116.4	8.9		2.53	97	.13			.08			.05		|	|		as above sp patchy cc
124.9	8.5		2.51	98	.14			.08		.02	.04		|	wk-mod lim, Jar		wk-Mod Alt, 2nd? Kspar wk lim, sp jar no visable su
133.3	8.4		2.50	96	.24	.07		.07			.14		|	sp lim, Jar		as above
142.3	9.0		2.56	89	.53	.11	18.3'	.11	Tr		.42		|	|		as above wk-mod jar
151.6	9.3		2.56	91	.79	.12	@	.12	|		.67	Tr pyrite	Mod	|	Sulf circa 151	wk-mod Alt, sp-wk py wk-mod cc patchy leach wk
160.4	8.8		2.54	95	.34	.01	.66/.12	.01	wk		.33		|			as above, patchy leach (Mod ser.)
168.8	8.4		2.42	99	.12			.01	|	.02	.09		Mod-st ser, wk clay	Mod Jar.		wk-mod (A) Alt wk py assoc w/biotite-mafic tr cc, wk jar
177.5	8.7		2.49	87	.21				|	.05	.16		Mod ser, clay	|		Mod Alt, wk py + sul pouse, wk jar wk bar
186.5	9.0		2.49	93	.10				|	.10	Tr		|	|		Mod Alt mod py, wk jar
195.2	8.7		2.56	92	.03				|	.02	.01		Mod ser wk clay	Sp Jar		wk-mod Alt, wk py sp jar
204.9	9.7		2.60	85	.06				Sp	.06			|			wk-Mod Alt, wk 2nd? Kspar sp py
213.4	8.5		2.60	95	.03				|	.03			|			as above
223.0	9.6		2.62	88	.04				|	.04			|			as above
231.5	8.5		2.62	94	.05				tr-sp	.05			wk-mod ser			wk-mod Alt sp-wk 2nd? Kspar chloritization of bio sp
240.5	9.0		2.61	91	.04				|	.04			wk-mod chlor, ser			as above
249.3	8.8		2.60	96	.06				)	.06			|			as above
258.2	8.9		2.62	97	.06				)	.06			)			as above
267.0	8.8		2.64	95	.11				)	.11			)			as above
275.8	8.8		2.65	97	.14				|	.14			|			as above
288.5	12.7		2.60	86	.12				|	.12			wk-Mod ser		AK circa 278.3	Mz as above AK - wk-Mod (A) Alt sp chlor, Kspar tr. sp tot sul
297.9	9.4		2.53	89	.28				|	.18	.10					wk Alt, tr-sp py tr cc, cpy chloritized bio NO vis. cc
307.3	9.4		2.54	90	.33	.01		.01	|	.25	.07		|			as above sp py
316.8	9.5		2.51	89	.44	.01		.01	|	.33	.10		|			wk-Mod Alt Mod cpy 307-309' wk (A) py wk-mod cc cpy
328.1	11.3		2.53	92	.26	.01		.01	|	.20	.07		|			wk-Mod Alt wk-mod cpy, wk cc sp-wk py
E.O.H.		Avg. Rec'y =		89%									|			

Final Depth 311.3'
Collar Elevation 2934.35
Coordinates 30,106.34 N; 25,542.86 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-107
Sheet No. 1 of 1
Date Completed 9-30-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	lim	Rock Type	Remarks
5.0	5.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	– Rock bit
16.1	10.1	NXWL	2.56	89	1.04	0.89		Mal .89	-	-	.15?	Mal	Mod-st chlor, ser	wk-mod lim	Hf	St Alt Silin, tr py wk Cu ox (Mal) on fracs sp-wk lim wk qtzite?
24.6	9.5		2.62	85	1.01	.95		Mal, Chrys .95	-	-	.06?		wk ser	wk lim		Silica rx may be qtzite st S.I. wk mal on fracs wk lim
34.0	9.4		2.64	89	1.30	1.08		Mal, tr Az 1.08			.22?		wk-mod ser	wk-mod lim		as above patchy massive py tr cc, wk lim
43.1	9.1		2.55	96	.47	.32	74.1' @ 0.95/0.74	.32	wk		.05		wk ser	1		as above wk Dp text
52.7	9.6		2.55	92	.34	.20		.20	sp		.14		1	wk-mod lim		as above py mainly on unbots rx appears to be st. silicified Dp
61.7	9.0		2.59	93	1.29	.87		.87			.42?		sp ser chlor	wk-mod lim	Mz @ 59.6	Dp? as above wk-mod mal, wk Az on fracs, Mz St Alt Silin wk c
70.9	9.2		2.67	89	.63	.37		.37	wk		.26?		1	wk-mod lim		Mod-st Alt St Silin, wk py, cc, wk mal on fracs wk lim
79.1	8.2		2.65	98	1.56	1.28		1.28			.28?		1	mod lim		Mod-st Alt St Silin, wk patchy Dp text tr hf sul, wk-mod Mal Az st qtz unit wk lim
88.2	9.0		2.68	89	.24	.13		.13	wk		.11		wk-mod ser	wk-mod lim		alt as above, sp py, cc, wk lim sp jar
96.0	7.8		2.66	100	.38	.09		.09	1		.29		1	1		alt as above wk patchy Dp text patchy st py sp-wk cc wk lim, sp bar
105.6	9.5		2.62	89	.27	.05		.05	1		.22		Mod clay, ser	wk lim		Mod-st Alt, st Silin, wk py wk-mod (c) cc on fracs sp-wk lim tr jar
114.4	8.9		2.60	99	.63	.04	27.6' @ .47/.04	.04	1		.59		wk ser, clay	1		st Alt, Silin, wk-mod py Mod (c) cc sp-wk lim on fracs
123.6	9.2		2.59	96	.39	.05		.05	1		.34		1	wk-mod lim		Mod-st Alt, Silin, patchy Hf in walls, wk-mod dies py cc
133.1	9.5		2.64	89	.41	.02		.02	sp-wk		.39		1	1	Hf? @ 127	st Alt, Silin, Mod py wk-mod cc tr lim on fracs
141.6	8.5		2.65	97	.33	.02		.02	1	.02	.29		sp clay	wk lim		as above wk-mod Silin shearing bx w/patchy Mz text mod cc
150.9	9.3		2.63	87	.15	.01		.01	wk	.05	.09		sp-wk clay		Qtz Ser Hf	st Alt, Silin wk py, cc bar (drill hole parallels the Hf zone cent circa 140
158.5	7.6		2.68	98	.17			Tr	1	.10	.07		wk clay			alt as above, sp py, cc, tr MoS_2 cpy on qtz vns
168.0	9.5		2.64	89	.13				1	.13		Tr MoS_2	sp clay			Qtz ser chlor Hf mod-st Silin, wk py tr cpy
177.0	9.0		2.69	95	.13				1	.13			1			as above in other holes and appears so here this rock type has been unfavorable for mineralization
186.3	9.3		2.67	90	.11				1	.11		Tr MoS_2	1			as above
194.7	8.4		2.69	100	.09				sp-wk	.09		1	1			as above dk grn-black sp py
204.5	9.8		2.68	87	.13				wk	.11	.02		1			as above patch Mz text circa 199'
214.9	10.4		2.65	84	.13				sp-wk	.13	Tr		1			as above mod grn
223.8	8.9		2.63	95	.08				1	.05	.03		1			St Alt, Silin, sp py tr cpy mainly on qtz vns light grn is rx c
232.5	8.7		2.69	94	.11				1	.07	.04		sp clay Tr ser		Mz @ 230.	Mod-st Alt st Silin, wk py
241.6	9.1		2.69	94	.24				wk	Pyr Bar .24 cpy	Tr	Tr Galena	sp clay & ser			Mod-st Alt, Mod chlor, st Silin wk (c) py tr cpy
250.6	9.0		2.59	94	.10				sp	.10			Tr		st qtz? Dp @ 243	Mz as above St Silin, sp py tr cpy, cc sp bar on fracs
259.2	8.6		2.61	95	.09				1	.09		Tr MoS_2	Tr?			Mod-st Alt st Silin, wk (c) py on qtz vns tr cpy cc
263.3	4.1		2.64	100	.06				1	.06		1	1			as above
272.2	8.9		2.70	94	.10				wk-mod	.10	tr	1	1			Dp as above wk-mod py on vns patch of sp circa 268
280.4	8.2		2.65	98	.09				1	.09	tr	1	1			as above tr MoS_2
289.0	8.6		2.67	93	.07				wk	.07	1	1	1			as above
298.3	9.3		2.69	89	.09				1	.09	1	1	1			Complete Silin, no usable text wk-mod py on vns bk sul pa
306.8	8.5		2.68	96	.03				1	.03	1	1	1			as above
311.3	4.5		2.68	99	.02				tr-sp	.02			1			as above
E.O.H.		Avg.	Rec'y =	93%												

Final Depth 268.0'
Collar Elevation 3040.75
Coordinates 30,159.62 N; 24,217.61 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-106
Sheet No. 1 of 1
Date Completed 9-23-63
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	Lim Hem	Rock Type	Remarks
7.3	7.3	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	– Rockbit thru mantle
16.3	9.0	NXW	2.55	92	0.02			.02	no	–	–		Fr-Sp	sp-wk lim tr jar	Mz	WK-Mod Alt WK lim stain on fracs
25.3	9.0		2.56	93	.06			.06					'	'		as above
35.1	9.8		2.52	83	.05			.05					'	'		WK Alt, WK lim stain mainly on fracs
44.3	9.2		2.56	88	.06			.06					Sp ser	WK lim		as above
53.6	9.3		2.57	93	.05			.05					'	'		as above vuggy qtz vn (.2") @ 47'
62.5	8.9		2.53	94	.06			.06					'	'		as above
71.1	8.6		2.53	96	.09			.09					Wk Ser	'		as above
80.2	9.1		2.53	95	.07			.07					WK-Mod	'		as above WK-Mod sil'n on fracs WK-Mod lim aft py starts @ 78.6'
89.2	9.0		2.53	94	.05			.05					'	'		WK-Mod (-) Alt sp sil'n on unbets WK lim stain tr blk ox
97.6	8.4		2.58	96	.06			.06				tr grn cu ox	'	'		as above
106.4	8.8		2.53	94	.05			.05					WK ser	'		WK-Mod Alt WK lim patch seals w/ wk py
116.5	10.1		2.53	87	.07			.07	WK				WK-Mod	Sp WK	Sal @ 109	WK-Mod Alt WK 2nd K spar on fracs, WK lim on fracs sp
125.1	8.6		2.51	94	.04			.04	'				'	'		as above
133.9	8.8		2.62	92	.05				'		.05?		'	'		as above
142.9	9.0		2.61	92	.08				WK-Mod		.08?		'	'		as above
151.5	8.6		2.63	95	.06				WK		.06?		'	'		as above WK sil'n
160.2	8.7		2.63	95	.07				'		.07?		'	'		Gouey sh zone 152.3 – 152.6 WK-Mod alt WK sil'n 3" massive py in 152.3 WK-Mod py rest of run
169.2	9.0		2.58	91	.08				'	.05	.03	Tr Mo S2	WK	Tr lim		WK-Mod Alt, 2nd K spar on fracs WK sil'n py
177.9	8.7		2.55	96	.10			.01	sp-WK	.05	.04		Mod	WK lim		as above patchy lim mainly on fracs Tr cc
187.2	9.3		2.59	95	.07				WK	.02	.05	Tr Mo S2	WK-Mod			WK-Mod Alt, WK 2nd K spar WK-Mod py Tr cc
199.0	11.8		2.49	74	.14				'	.05	.09		'	Sp-WK lim		Mod Alt WK 2nd K spar Mod (-) py WK lim
208.5	9.5		2.60	87	.13				'	.05	.08		Mod	Sp lim		as above
220.5	12.0		2.59	81	.05				'	.05	Tr		WK			as above WK py
229.3	8.8		2.60	94	.07				'	.07			'	tr jar		WK-Mod Alt WK sil'n, WK 2nd K spar sp chlor, py
239.6	10.3		2.64	83	.05				'	.05			'			as above alt mainly on unbets
248.4	8.8		2.65	95	.06				'	.06			'			as above WK py
257.5	9.1		2.64	93	.04				'	.04			'			as above WK (-) sil'n WK py
268.0	10.5		2.66	85	.04				'	.04			'			as above WK fracturing w/ wk chlor on fracs
EOH		Avg. Rec'y =		91%												

Final Depth 319.9'
Collar Elevation 2983.88
Coordinates 29,931.49 N; 25,481.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-105
Sheet No. 1 of 1
Date Completed 9-18-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay/Ser	lim	Rock Type	Remarks
7.0	7.0	R.B.	—	—	—								—	—		Rock pit thru mantle
14.2	7.2	NXW	2.37	100	0.09			0.09					Mod	mod lim sp hem	Mz	Mz, mod alt, leached, tr grn CuOx (chrys?), hem. st
22.2	8.0		2.41	98	.10			.10					|	mod lim wk hem		Mod. alt, leached, wk grn-stained felds, " "
33.5	11.3		2.37	84	.11			.11					Mod-st	mod lim mod hem wk hem		Mod-st. alt, st leaching w/ hem stain.
43.2	9.7		2.43	92	.09			.09					|	mod lim wk hem sp hem		st alt decr to mod @ end last 2' shows 2nd K-spar & qtz
52.8	9.6		2.40	94	.08			.08					|	wk lim sp hem		Mod alt w/ wk-mod 2nd K-spar 2nd? qtz phenos also. Qtz-ser. v. Leached
58.4	5.6		2.39	92	.12			.12					Mod	|		As above but qtz phenos sp. spotty sil'n (WK) sp chrys on
68.5	10.1		2.37	91	.07			.07					Mod-st	wk lim Mod hem		Mod ser Alt. wk lim, hem stain wk turquois on fracs some bxi
76.0	7.5		2.40	100	.05			.05					|	wk lim sp hem		Mod. ser Alt. wk lim, hem stain, tr cc
85.0	9.0		2.41	98	.06			.06					Mod	Mod lim sp hem		As above
94.3	9.3		2.49	95	.06			.06					|	|		Mod Alt wk silin, tr py sp cc?, wk hem stain tr CuOx
104.3	10.0		2.43	92	.30			.02	Tr		.28		Mod-st	sp lim	Suls @ 95.4	Mod Alt wk-mod 2nd K spar, Py mod cc sp lim hem
117.1	12.8		2.60	87	.42	0.05		.05	Tr-sp		.37		|			St Alt. wk py wk-mod? cc core badly broken
127.2	10.1		2.58	94	2.94	.10	59.0'	.10?	|		2.84		|			As above. mod fine spotty cc ppt on ser. wk? py
135.5	8.3		2.34	100	.29		@	.01	sp	.02	.26		|			Mod Alt, mod 2nd K spar wk-mod clay, wk cc sp py
144.7	9.2		2.49	97	.37	.04	.86/.06	.04	|		.33		wk-mod			as above, grn stain on argill fold. wk-mod clay cc sp-wk CuOx
157.7	10.0		2.58	85	.37	.04		.04	|		.33		|	sp lim		as above mod chlor in plan of bio sp cc
163.3	8.6		2.57	100	.72	.08		.08	sp-wk		.64		WK	|		Mod Alt. mod 2nd K spar chlor on bio. sp tot sul
171.9	8.6		2.61	99	.03				WK	.01	.02		|	sp var	Mod Alt mod 2nd K spar, chlor wk-mod py tr cc
181.1	9.2		2.65	95	.03				wk-mod	.03	T-		fresh-wk	|		Alt as above wk silin, wk-mod py wk cc wk chlor.
189.6	8.5		2.61	98	.02				|		.02?		wk-mod	tr jar		Mod Alt mod 2nd K spar wk py tr cc st gtz un
199.1	9.5		2.61	100	.03				WK		.03?	wk-mod chlor	WK	|		alt as above wk-mod chlor. gtz vnt bx zone to 204.6' wk-m last 14 inches py tr cc
208.1	9.0		2.63	94	.04				wk-mod		.04?	|	|	—		Mod Alt wk silin on vnlets wk-mod py tr cc
216.8	8.7		2.63	96	.04				WK		.04?	wk-mod chlor 2nd K spar	|			Mod Alt wk silin wk-mod py tr cc
226.1	9.3		2.58	94	.04				|		.04?	|	|		as above
234.8	8.7		2.60	97	.03				|		.03	wk chlor	|		as above sp py
243.8	9.1		2.58	95	.05				wk-mod		.05	|	|		Mod 2nd K spar Alt wk chlor sp py tr cc
253.3	9.4		2.59	93	.05				WK		.05	|	|		as above
262.2	8.9		2.61	93	.03				|			|	WK		Mod Alt, wk-mod silin sp py tr mas. cc, wk 2nd K sp
271.5	9.3		2.63	90	.05				|		.05	|	|		Mod Alt silin wk-mod py sh zone @ 268.2 sp cc
280.8	9.3		2.60	91	.06				wk-mod		.06	|	wk-mod			alt as above mod py sp cc
289.9	9.1		2.63	91	.08				|		.08		|			wk-mod Alt, silin wk-mod py tr cc
299.0	9.1		2.61	94	.07				|		.07		|			as above
308.2	9.2		2.61	95	.05				|	tr	.05		|			as above
312.2	5.0		2.61	100	.05				|	|	.05		T			Mod Alt. st silin w/ massive py was
319.9	6.7		2.67	98	.05				Mod		.05		|			Mod Alt. mod 2nd K spar wk silin wk chlor wk py
E.O.H.		Avg. Rec'y =		94%												

Final Depth 379.5'
Collar Elevation 3056.82
Coordinates 29,994.55 N ; 24,103.18 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-104
Sheet No. 1 of 2
Date Completed 9-17-65
Logged By J.A.B., CW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser.	lim	Rock Type	Remarks
5	5	RB	-	-	-	-	-	-	-	-	-	-	-	-	-	Rock bit
14.2	9.2	NXW	2.63	88	0.07			0.07				Tr Turquoise	wk	wk lim Jar	Ak	wk Alt, Sil'n sp-wk lim on fracs sp turquoise on fracs
23.1	8.9		2.53	96	.15	-		.15	Tr?		Tr?	Tr MoS2?	|	wk-mod lim, sp Jar, sp lim		wk Alt wk-mod sil'n, wk lim on fracs, wk patchy py, cc, tr m
32.7	9.6		2.50	94	.02			.02					wk-mod	Mod lim wk lim		wk-mod Alt, mod-st sil'n, wk lim, tr lim tr py
40.7	8.0		2.48	98	.04			.04					|	Mod lim Sp lim wk hem		as above wk hem, mod lim
49.4	8.7		2.50	97	.02			.02			Tr?		|	Mod lim		as above wk lim sp CuOx, tr tot sul lim
58.7	9.3		2.49	95	.27			.04	Tr		.23		|	|		Mod Alt, Mod-st sil'n, patchy mod cc, wk lim tr py
68.7	10.0		2.54	90	.11			.04	|		.07		Mod wk-mod	wk-mod lim sp Jar		as above sp py tr CuOx
77.2	8.5		2.57	95	.06			.06						mod lim sp Jar		wk-mod Alt wk sil'n sp-wk lim, tr jar sp bar on fra
87.2	10.0		2.59	93	.09			.09					wk	wk lim, Jar		wk Alt, st sil'n sp-wk lim, bar on fracs sp jar Tr cu
97.0	9.8		2.53	90	.24			.24	Tr?		Tr?		|	|		wk alt, mod sil'n, Tr bio, grn-stain. felds, tr Mal., bar, sp
105.8	8.8		2.55	98	.33			.33			|	Tr Dioptase	|	wk-mod lim, Jar		" " , mod-st sil'n , " " " Sp, bar, vuggs, sp
115.2	9.4		2.57	93	.20			.18			.02		|	Mod lim Mod hem	Bx @ 111.3	" " " " " Bx, composed of ang. frags of sil'd Ak w soft clay matrix, mostly leache
123.5	8.3		2.52	100	.53	0.05		.05	Tr-sp		.48		Mod wk-mod	|	Mz @ 116.9	Mz partly leached w wk cc. Bx as above. cc @ 116.2. Ct. marked by P.M. flt., but Mz f.g. @ c
132.4	8.9		2.53	96	.25			.03	|		.22	Tr Turbermaite		mod lim, Jar, tr hem		Mz wk alt, mod 2nd K-spar. Poss. 2nd bio. wk cc, wk lim.
138.9	6.5		2.56	100	.36			.04	Tr		.32	|	wk	mod lim, Jar		As above.
148.0	9.1		2.60	94	.43	.03		.03	Sp		.40		| +	Sp lim, Jar		Mod Alt st dk pink 2nd Kspar along inlets, wk py sp.
156.7	8.7		2.60	97	.39			.04	Sp-wk	.04	.31		wk-mod	|		as above wk 2nd? bio adjacent to 2nd Kspar.
165.7	9.0		2.60	92	.35			.04	Sp	Tr	.31		wk	+ lim, Jar		as above sp CuOx, lim sp-wk cc 2nd bio appears outside of 2nd K spar zone
173.2	7.5		2.67	100	.61	.04		.04	Sp-wk		.57		|	Sp lim, Jar		wk-Mod Alt st patchy sil'n, wk py cc
182.1	8.9		2.58	95	.34		138.6'	.03	Sp		.31		|	wk lim, sp Jar		Mod Alt sp 2nd Kspar, tr 2nd? bio wk py cc on wk qtz v
191.2	9.1		2.58	92	.40	.06	@	.06	|		.34		|	Sp lim wk Jar		as above mod apple grn stain on Kaolinized feld
200.4	9.2		2.59	89	.40	.05	.44/.10	.05	Sp-wk		.35		Sp-wk	Tr lim sp-wk Jar		as above weak stain as above
208.7	8.3		2.58	98	.43	.07		.07	|		.36		wk-mod	sp lim sp Jar		St Argill Alt wk py, cc sp lim
218.0	9.3		2.56	92	.26	.05		.05	|	Tr	.21		wk	Mod lim		Mod Alt wk 2nd K spar, wk-mod chlor sp-wk py, cc
226.3	8.3		2.60	99	.44	.07		.07	|	.02	.35		|	|		mod Alt, wk sil'n, wk py sp cc
236.0	9.7		2.61	88	.38	.05		.05	wk	Tr	.33		|	|		Mod Alt wk 2nd K spar wk-mod py tr CuOx cc
244.5	8.5		2.61	94	1.02	.56		.56	|	—	.46		wk-mod	|		as above patchy lim w/tr prousite?
253.8	9.3		2.57	88	.55	.10		.10	|		.45		|	|		Mod Alt mod chlor 2nd Kspar wk tot sul sp cc?
263.4	9.6		2.52	89	.34	.04		.04	|		.30	Tr MoS2	|	wk Jar		as above sp jar patchy st Alt w/ black ground ap sub
272.3	8.9		2.53	92	.03			—	Sp-wk	.01	.02		|	|		as above
281.0	8.7		2.45	100	.10			.02	|	.04	.04	tr MoS2	|	wk-mod lim		Mod Alt sp-wk py tr? cc lim
290.4	9.4		2.66	86	.08				|	.05	.03		|	wk lim		wk-mod Alt wk py mainly on qtz vns tr cc
299.8	9.4		2.61	90	.09				|	.05	.03		|	Sp-wk lim		wk-mod Alt wk-mod 2nd Kspar wk py, tr cc
308.5	8.7		2.61	96	.05				sp	.05	tr		|	|		as above, wk sil'n, tr 2nd? bio
316.9	8.4		2.65	97	.07				|	.07			|	|		as above sp py tr cc?
325.6	8.7		2.63	95	.08				|	.08			|	Sp lim		wk-mod Alt wk sil'n sp 2nd Kspar sp py on fracs, sp chlo
334.2	8.6		2.62	94	.06				wk	.06			wk	wk lim		as above
343.4	9.2		2.62	88	.04				|	.04			|	|		

Final Depth 379.5'
Collar Elevation 3056.82
Coordinates 29,994.55 N ; 24,103.18 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. E-104
Sheet No. 2 of 2
Date Completed 9-17-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	lim	Rock Type	Remarks
351.7	8.3	NXWL	2.56	100	0.05				WK	.05			wk-mod	wk lim	Mz	as above sp lim
360.4	8.7		2.53	95	.64	0.04 }		.04	Mod	.30	.30		1	sp-wk lim		Mod Alt wk-mod Sil'N mod py sp lim
369.2	8.8		2.58	96	.06				1	.06			wk			wk-mod Alt. wk-mod py tr cc
379.5	9.7		2.57	89	.06				wk-mod	.06			1			wk-mod Alt Sil'N wk-mod py tr cc
E.O.H.		Avg. Rec'y =		94%												

Final Depth 448.4'
Collar Elevation 3143.85
Coordinates 29,782.77 N ; 24,499.22 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F103
Sheet No. 1 of 2
Date Completed 9-8-65
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim.	Rock Type	Remarks –
5.0	5.0	RB	–	–		–	–	–	–	–	–	–	–	–	–	–
16.2	11.2	NXW	2.52	70	0.02			0.02			Tr		wk-mod	wk lim wk tem	Ak	wk-mod Alt wk lim sp talc on fracs.
25.0	8.8		2.51	92	.03			.03					|	|		wk Alt, wk lim, sp talc
34.1	9.1		2.49	92	.03			.03			Tr		|	wk-mod lim, sp tem		as above
43.2	9.2		2.54	94	.13			.03	Tr	.02	.08		|	wk-mod lim, wk tem	Sul @ 38.1	wk (+) Alt mainly on plag. mod silin w/suls. wk-mod cpy
52.5	9.3		2.58	89	.08			.03	|	Tr	.05		|	wk lim Mod. lim		wk cc, wk-mod wk-mod Alt, patchy sul wk-mod cc, sp cpy tr cpy mod-st lim
60.9	8.4		2.58	89	.67	.03	38.9'	.03	Sp	.10	.54		|	wk lim wk-mod lim		on 6x3 zone 48.9'-60.6 wk-mod Alt, wk silin, wk-mod cc, sp-wk cpy tr py patchy wk lim
70.1	9.2		2.55	95	1.41	.04	@	.04	|	.10	1.27		Mod	Tr lim		as above, no lim, wk light grn talc on fracs
82.5	12.4		2.53	81	1.03	.02	.90/.05	.02 (Mal)	|	.15	.86		|			as above patches of core reduced to gravel
91.4	8.9		2.47	98	.41	.12		.12			.29		|	wk lim	PM Ando 82.2	sp chrys. on fracs, tr. ferbermite, turquoise? diss
98.7	7.3		2.50	96	.13			.09			.02?		wk-mod	wk-mod lim	AK @ 91.4	wk Alt, tr lim sp CuOx no sul
103.6	4.9		2.50	100	.16			.16 (Mal)					|	Mod lim.		as above wk silin, tr suls
112.5	8.9		2.53	97	.12			.10			.02		|	|	M2 @ 109	Ak as above M2 wk-mod Alt. wk chrys. on fracs no s. wk lim
121.4	8.9		2.58	96	.10			.05?			.05?		wk	wk lim	AK @ 112	wk Alt. sp talc, CuOx wk lim no suls.
131.0	9.6		2.57	92	.08			.02			.06		|	|		as above no CuOx tr tot. sul. sp lim
140.5	9.5		2.51	100	.37			.02	Tr?	.01	.34		|	wk lim & Jar	Suls 131.0 - 133.7	wk Alt. wk-mod (-) cc sp-wk cpy 133.7 end of run as ab.
149.5	9.0		2.55	100	.16			.02	|	.01	.13		|	|		wk Alt sp chlor, silin sp lim - no suls
158.9	9.4		2.55	89	.12			.03			.09		wk-mod	wk-mod lim, Jar		as above mod silin circa 151'
167.5	8.6		2.55	97	.27			.18			.09		wk	wk lim Jar.		wk alt, leached. sp CuOx (chrys & mal) No. vis. su
176.6	9.1		2.55	93	.24			.15			.09		|	|		As above
185.9	9.3		2.55	99	.18			.15			.03?		|	|		wk Alt wk-mod silin, tr tot. sul? CuOx sp lim
194.9	9.0		2.48	99	.09			.09					|	wk-mod lim, Jar		as above tr brOx + jar on fracs no suls
204.4	9.5		2.48	94	.10			.10					|	|		wk Alt, wk silin, tr bk mals, jar lim. no sul.
214.0	9.6		2.49	91	.31			.05		.01	.25		wk-mod	wk lim, Jar	Suls 208 - 211.8	wk Alt wk-mod cc sp-wk cpy, tr lim, jar
223.3	9.2		2.60	95	.66	.05		.05			.61		|	|	Suls 218.5 - 218.1	wk-mod Alt, silin mod cc, wk-mod cpy, py wk lim tr, jar br
232.2	9.0		2.53	100	.15			.05			.10		wk	|		wk Alt mod silin sp grn CuOx tr lim, brOx, jar
241.3	9.1		2.60	94	.55	.06	73.2'	.06	Tr	.03	.46		wk-mod	|		wk Alt sp-wk lim tr cc, jar
249.1	7.8		2.57	100	.72	.04	@	.04	Tr-Sp		.68		|	|	Sul @ 243.6 248.6	wk-mod Alt. wk-mod cc, tr cpy, py, sp lim tr jar
259.0	9.9		2.56	89	.09		.41/.05	.07			.02		wk	wk-mod lim, Jar		wk-mod Alt silin sp lim
268.7	9.7		2.55	92	.13			.02	Tr	.01	.10		|	wk lim, Jar	leached	wk alt, mod silin, mostly leached, tr. suls.
277.8	9.1		2.56	98	.40	.09		.09?	|	.02	.29		wk-mod	wk-mod lim		wk-mod alt, " " , sp suls (ca
287.2	9.4		2.54	97	.62	.02		.02	|	.10	.50		|		suls	" " " , wk cc, no leaching. Sp chlor.
296.5	9.3		2.52	96	.12			.05		.01	.06	wk Barite	wk	wk-mod lim	leached	wk alt, mostly leached, sp suls. Sev. barite veins
305.4	8.9		2.56	100	.15			.04	Tr	.01	.10		|	wk lim, Jar		" " " " " " , wk-mod silin
315.3	9.9		2.60	91	.22			.04		.02	.16		wk-mod	wk-mod lim		As above but wk mod silin.
324.6	9.3		2.56	100	.24			.04	Tr?	.01	.19		wk	wk lim, Jar		wk alt, wk-mod silin, mostly leached, sp suls.
333.9	9.3		2.53	97	.05			.04			.01		wk-mod	wk-mod lim, Jar		" " , mod silin, " " " " , sev. bar.
341.9	8.0		2.57	100	.09			.03	tr	.02	.04		|	|		wk Alt wk lim, one patch of mod cc @ 336.7'
350.9	9.0		2.56	100	.45	.01			wk	.15	.30		wk ser	[illegible]	[illegible]	[illegible]

Final Depth 448.4'
Collar Elevation 3143.85
Coordinates 29,782.77 N ; 24,499.22 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F 10.3
Sheet No. 2 of 2
Date Completed 9-8-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Ser	lim Lim	Rock Type	Remarks
360.9	10.0	NXWL	2.53	92	.46	.01	44.9' @ .42/.01	.01	wk-mod	.10	.35	tr MoS2	wk ser	wk	AK	WK Alt, wk cc on sp py, cpy wk lim on fracs
370.1	9.2		2.53	98	.16			.01	sp-wk	.15	.10		wk clay, Ser	wk-mod lim		as above, mod bar on uns
377.8	7.7		2.53	100	.43	.01		.01	"	.16	.26	tr MoS2	"	wk lim		WK Alt, silin, wk cc, wk-mod cpy sp py
386.8	9.0		2.56	96	.59	.01		.01	sp	.40	.18	"	wk ser	"		as above
395.4	8.6		2.57	95	.19			tr	wk-mod	tr	.19	"	"	"		WK Alt wk cpy, spcc, py tr lim
407.1	11.7		2.58	89	.29			"	sp	.26	.03		"	—		as above w/ wk silin
417.5	10.4		2.59	88	.31			-	tr	.31	tr		wk ser	—		WK Alt, Mod silin, wk-mod cpy, sp-wk py tr cc
427.2	9.7		2.59	92	.34			-	sp	.34	tr		"	—		WK Alt, Mod-st silin, wk-mod cpy sp py tr MoS2, cc wk c
435.7	8.5		2.54	95	.25				"	.20	.05		"	"		WK Alt, wk silin, wk cpy, spcc, chlor
444.3	8.6		2.56	100	.22				"	.22	tr		sp-wk ser			as above sp cpy, py tr MoS2 cc
448.4	4.1		2.56	94	.17				"	.17	"		"			As above.
E.O.H.		Avg. Rec'y =		94%												

Final Depth 300.0'
Collar Elevation 3007.02
Coordinates 30,051.45 N ; 25,268.34 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-102
Sheet No. 1 of 1
Date Completed 9-8-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser clay	Lim.hem	Rock Type	Remarks
5.0	5.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14.2	9.2	NXW	2.52	92	0.07			0.07					wk clay ser	wk-mod lim	Mz	wk Alt wk lim sp jar
24.2	10.0		2.54	87	.09			.09					'	'		as above sp sil'n on unlets
33.0	8.8		2.52	93	.11			.11					'	'		as above
41.8	8.8		2.54	94	.07			.07					wk-mod Ser, Stay	mod lim sp Lim mod lim		wk-mod Alt wk sil'n, wk pervasive lim stain
51.2	9.4		2.57	92	.08			.08					'	wk Lim		as above, sp tot sul near sil unlets sp hem stain
60.3	9.1		2.57	100	.11			.11					wk	'		as above sp tot. sul. in patches.
70.1	9.8		2.55	93	.07			.03	Tr		.04		wk-mod	mod lim sp Lim wk hem		as above
79.2	9.1		2.54	96	.12			.06	'		.06		'	mod lim		wk-mod Alt? wk sil'n on gtz was mod pervasive hem stain
88.1	8.9		2.58	98	.49	.08		.08 (Mal?)	'		.41		'	mod lim mod hem wk-mod lim & hem	Sul 79' to 85.1	wk-mod Alt wk sil'n, sp py sp-wk patchy sulfs on unlets sp-wk cc, grn CuOx
96.5	8.4		2.53	100	.27			.17 (Cup-rite)			.10?		'	mod hem jar stain on leach mod lim mod Lim		alt as above all leach tr bk + grn ox on fracs
105.3	8.8		2.50	97	.43	.17	52.4' @ .41/.14	.17			.26		'	wk sil'n mod-st lim.		wk-mod (+) Alt wk sil'n wk lim tr jar bar grn CuOx
113.9	8.6		2.58	98	.56	.17		.17 (Mal?)			.39		'	'	Sul @ 110	leach as above, wk-mod Alt, 2nd kspar near gtz unlets wk cc wk-mod py
122.9	9.0		2.58	92	.29			.02	Tr		.27		wk	wk lim		wk-mod Alt wk py sp cc on fracs wk-mod 2nd kspar on gtz unlets
131.6	8.7		2.56	94	.43	.13		.13 (Mal?)	'		.30		'	'		as above, patchy sulfs, sp-wk jar CuOx 2nd bio?
140.3	8.7		2.59	94	.68	.14		.14 (Mal?)	'		.54		wk-mod	sp lim		as above
150.7	10.4		2.61	80	.69	.19	45.4' @ .56/.10	.19?	Sp		.50		'	'		as above some gtz blebs in Mz
159.0	8.3		2.60	97	.55	.09		.09	'		.46		wk	wk lim		wk-mod Alt wk-mod Al 2nd kspar & bio sp-wk py tr cc wk lim
168.0	9.0		2.61	96	.43	.04		.04	'		.39		wk-mod	sp lim		Alt as above mod ser Alt @ 164 w/ wk-mod cc py
177.0	9.0		2.80	92	.41	.05		.05	'		.36		wk	wk lim		wk-mod Alt, 2nd kspar bio? wk cc, py
186.1	9.1		2.62	96	.15			–	'		.15		'	tr		wk alt, mod 2nd K-spar, wk-mod sil'n. wk or tr total sulfs (py)
195.6	9.5		2.65	93	.04			–	wk-mod		.04		'	–		As above. Some leach. on py. New def. in primary zone
204.8	9.2		2.64	95	.04				'		.04		'	–		wk clay-ser. alt, mod 2nd K-Spar, wk sil'n, wk sulfs
214.7	9.9		2.61	98	.03				wk		.03		'			As above, wk-mod sil'n.
224.5	9.8		2.61	97	.03				wk (+)		.03		'			Sp alt, wk K-spar, still good gtz vnlts. Dec. in grain size
234.0	9.5		2.67	95	.03				'		.03		wk mod			As above. RK still Mz despite smaller grain size of pl.
243.3	9.3		2.66	99	.04				wk-mod		.04	tr mos	'			Mz, grain size fluct, but almost normal. Rest as above. B.b. 2/3 alt, 1/3 mos.
253.0	9.7		2.60	100	.03				'		.03		mod (-)	–		wk-mod Alt, sil'n dendrum, wk-mod py, sp cc, tr mos
262.2	9.2		2.67	97	.04				'		.04		wk-mod			Mod Alt. wk-mod sil'n wk py sp cc tr mos
270.6	8.4		2.59	100	.04				'		.04		'	tr jar		Mod Alt, wk-mod sil'n, wk-mod 2nd kspar wk py tr cc
279.9	9.3		2.63	100	.02				wk (+)		.02		[illegible]			Mod Alt wk sil'n on gtz unlets wk py, tr cc, wk 2nd kspar + bio
289.0	9.1		2.61	100	.03				wk-mod	.03			wk-mod			as above tr mos
300.0	11.0		2.60	99	.03				'	.03			'			as above
E.O.H.		Avg. Rec'y =		95%												

Final Depth 406.0'
Collar Elevation 3148.10
Coordinates 29,949.36 N; 24,529.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-101
Sheet No. 1 of 2
Date Completed 8-28-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser	lim	Rock Type	Remarks
5.0	5.0	RB	—	—	—	—							—	—	—	Rock bit
13.8	8.8	Nxwl	2.47	97	0.67	0.59		Mostly Chalc. Sp Nat. .59			.08?		WK	WK	AK	WK Alt, WK-Mod grn cuox on plag, sp mal. on volts, wk
22.9	9.1		2.46	95	.68	.41		.41	Tr		.27		WK-mod	|	Patchy Suls	Alt+min as above, wk-mod patchy cc on cpy?
32.7	9.8		2.50	91	.36	.30		chrys & Nat .30			.06?		|	|		as above, tr cc
42.0	9.3		2.48	100	.55	.10	82.6'	.10	Tr		.45		|	WK-mod		WK-mod Alt, lim, wk grn cuox on plag wk patchy cc
51.1	9.1		2.55	97	.37		@	.27	Tr?		.10		|	WK lim Sp hem		Alt as above, WK-Mod cu ox on plag, sp lim tr hem, cc wk
60.2	9.1		2.59	96	.37		.47/.33	.37	Tr				WK	|		Alt as above, WR-mod cuox on plag sp lim
69.9	9.7		2.51	94	.39			.39					|	WK lim WK hem		WK-Mod Alt WK-mod grn cuox on plag, lim on fracs
79.2	9.3		2.56	95	.58	.26		.26	Tr		.32		|	WK lim Sp hem		WR Alt WR cuox on plag WR lim patchy Mod cc.
87.6	8.4		2.57	100	.25			.15	|		.10		|	WK-mod lim, Sp hem		WK-mod Alt patchy st silix WK lim, bar. WK cuox on plag sp cc
96.5	8.9		2.55	100	1.65	.08		.08	Sp	.05	1.52		WK-mod	Sp lim Sp Jar	Sul. 90.8	WK-Mod Alt patchy silix Mod cc on WK-mod cpy, sp-wk py
100.3	3.8		2.57	100	1.76	.03		.03	|	.05	1.68		|	Sp lim		WK-mod Alt (plag alt) Mod cc on WK-mod cpy sp-wk py sp lim
109.0	8.7		2.59	98	1.28	.02		.02	|	.05	1.21		Mod	| lim		" " " mainly diss. sp leaching.
117.7	8.7		2.56	97	.52	.02	84.2'	.02	|	.03	.47		WK-mod	WK-mod		AK, WK-mod alt of plag. WK-mod cc, mainly diss. WK leac
126.8	9.1		2.57	95	1.13	.02	@	.02	Sp-WK	.05	1.06		Mod	Sp lim Mod		" " ", plus add. clay. Mod or better cc & cpy, Sp lim.
135.8	9.0		2.58	97	.54	.05	.89/.04	.05	Sp	.02	.47		|	lim, Jar		As above to 129.9 where most suls. leached away.
144.4	8.6		2.53	100	.52	.06		.06	Tr	—	.46		|	WK-mod lim, Jar		Mixed suls & leaching. Sp-WK total suls. 3" Aplite
153.1	8.7		2.43	100	.15			.06	—	—	.07		|	WK lim Mod Jar		AK, mod alt. Mixed suls & cap. Sp total suls. Lim & Jar. str
162.8	9.7		2.44	95	1.28	.03		.03	Sp	.10	1.15		|	Sp lim Sp Jar		Mod-st alt, mostly suls (py, cpy, cc) - Mod-St. Tr. bar, cp. sp
171.8	9.0		2.54	99	.54	.01		.01	WK	.05	.48		|	None		As above but no vis lim, bar, or cp.
181.0	9.2		2.55	98	.16			.06	Tr	—	.10		WK-mod	WK-mod lim, Jar		Mod alt, mostly leached, sp. suls.
190.3	9.3		2.53	100	.05			.05					WK ser	|		WK-mod Alt, sp tot sul. tr chlor. WK lim sp bk ox
199.4	9.1		2.52	97	.06			.06					|	|	Mz @ 199.2	WK-mod Alt, patchy mod cc WK py WK lim, bk ox (ma ox?)
208.3	8.9		2.54	97	.35			.03	tr	.07	.25		WK-mod ser	|	AK @ 203.2	WK-mod Alt. lim & leach to approx 205 WR-mod cc, tr py
217.4	9.1		2.53	99	.28			.02	tr-Sp	.06	.20		|	|		WK-mod Alt. WK (+) diss cc on sp cpy tr py patchy lim
226.8	9.4		2.55	93	.32			.02	|	.07	.23		|	|		as above
236.3	9.5		2.62	92	.45	.02		.02	|	.09	.24		|	|		WR-mod Alt, WR silix, wk bx w/wk-mod lim wk-mod cc sp,
244.9	8.6		2.57	99	.37	.04		.04	|	.04	.29		|	|		Mod Alt. WR silix, vuggy text 240.5-243.0 patchy sul w/ mod py WK cc wk
254.7	9.8		2.56	95	.15			.01	tr		.14	tr MoS2	|	|		WK-mod Alt, WK silix patchy suls w/WK-Mod (+) cc sp cpy tr py
264.1	9.4		2.56	95	.22			.04	-		.18		|	|		WK-mod Alt, patchy leach WK cc tr cpy py chlor, WK lim
273.2	9.1		2.50	98	.04			.04					|	|		WR-mod Alt tr tot. suls WK lim tr chlor. tr Mz jar
282.7	9.5		2.50	94	.05			.05					WK ser clay	WK lim		WK-mod Alt mainly on plag tr cuox stain on plag sp lim
291.8	9.1		2.46	98	.12			.01	WK		.11		Mod-St ser	|	Sul @ 287.2	WK-mod Alt (+) mod py WK lim, sp lim
300.6	8.8		2.45	100	.67	.02		.02	WK-mod	.15	.50		|	|	Patchy leach	mod ser Alt. mod (-) py WR-mod cc, WK lim, tr jar
309.4	8.8		2.43	100	.29		35.9'	tr	tr	.09	.20		|	Sp lim		Mod Alt to 307.5 sp-WK py WK cc, WK leaching, WK lim sp
318.4	9.0		2.42	97	.36		@	|	WK-mod	.01	.35	tr MoS2	St ser	WK-mod lim	Patchy leach	St w/patchy WK ser Alt. mod py, WK-mod cc, WK lim tr ja
327.7	9.3		2.64	95	.53	.04	.46/.03	.04	WK	tr	.49	|	Mod-St ser	WK lim		St Alt w/ st patchy silix last 2.4' has st py cc on gb un.
337.1	9.4		2.55	96	.32			tr	⇔	|	.32		WK-mod	|		9.3 un w/st py cc to 329.7 St patchy silix, WK Alt, WK cc sp py WK lim
346.5	9.4		2.56	95	.27				Sp	.10	.17		WK ser	|		WK Alt patchy silix WK py sp cc 340 cc sp lim

Final Depth 406.0'
Collar Elevation 3148.10
Coordinates 29,949.36 N ; 24,529.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-10L
Sheet No. 2 of 2
Date Completed 8-28-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser Clay	lim	Rock Type	Remarks
357.7	11.2	Nxw/	2.55	80	.19			tr		tr	.19		wk	wk-mod	AK	wk alt affects plag wk cc sp py wk lim tr cpy
366.6	8.9		2.55	100	.18				sp	.07	.11		〃	wk lim		wk-mod alt wk-mod cc sp-wk cpy tr py wk lim
375.8	9.2		2.52	97	.51	.03 }		.03	tr-sp	.20	.28		〃	wk lim		wk alt wk(+) cc sp py cpy sp-wk lim on fracs
384.9	9.1		2.52	100	.21				tr	.15	.06		〃	—		wk alt sp py cpy, cc
395.2	10.3		2.55	96	.28			tr	tr	.10	.18		wk-mod ser	wk		wk alt wk(+) cc, py tr cpy sp sil'n on gtz wk
406.0	10.8		2.70	88	.15			tr	wk		.15		〃	wk-mod		wk-mod alt patchy sil'n patchy sul+carb wk(+) cc on wk wk-mod lim
E.O.H.		Avg. Rec'y =		96%												

Final Depth 361.5'
Collar Elevation 3024.46
Coordinates 30,097.76 N ; 25,038.57 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-100
Sheet No. 1 of 1
Date Completed 8-28-6
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay/Ser	lim	Rock Type	Remarks
7.6	7.6	R.B.	—	—	—								—	—		Rock bit
17.3	9.7	NXW	2.43	93	0.06			0.06					Mod	Mod lim Tr LLm	Mz	WK-mod alt, wk silin, leached, Sp chrys. on fra
26.4	9.1		2.43	98	.07			.07					Wk-mod	Mod lim wk hem	P.M. And 17.3-20.5	P.M. and wk chrys on frac's. Mz as above w/ less l.
36.7	10.3		2.26	95	.11			cuprite .11					Mod	wk-mod lim	Y. Sp @ 29.1	wk chrys. thru-ou Mz bleached, mod sil'd. Younger "Sp" leached, partly bleache
46.2	9.5		2.38	100	.15			.13			.02		|	|		Y.Sp, dark, mod.? alt, leached
57.0	10.8		2.36	90	.15			.13			.02		|	Mod	Mz @ 52.2	Y.sp as above. Mz mod alt, mod lim, bdly b
69.0	12.0		2.49	80	.06			.06					|	Mod-st lim, wk hem		Mod alt. 1st ½ st lim stain, 2nd ½ st hem. stain. Mod 2nd K
80.1	11.1		2.56	78	.05			.05			Tr		|	Mod lim wk LLm		wk-mod Alt, patchy st silin, wk-mod LLm wk lim tr Al
89.0	8.9		2.57	100	.09			.03			.06		|	wk lim Sp hem	Sul @ 87	Mod Alt. wk lim. bx @ 83-87' wk cc on gts on
97.3	8.3		2.61	100	.36			.03	Tr		.33		|	Wk lim	Y.Sp @ 96	Mod Alt patchy lim, mod cc, wk py in fracs
105.9	8.6		2.77	95	.18			.03	wk		.15		|	|	Mz @ 104	Mod Alt Y.Sp intrudes ground Mz bx. wk-mod py mod cc
115.2	9.3		2.58	100	.42	0.02		.02	|	.01	.39		|	wk-mod lim		tr ruby silver ? in Mz, wk lim Mod-st Alt, mod-st 2nd K spar, silin, wk-mod gts uning py
123.8	8.6		2.58	100	.37			.03	|	.02	.32		wk-mod	|		Alt as above, ½ Sp (patchy) in Mz. bx in places wk-mod py wk cc
135.0	11.2		2.57	47	.07			.04	sp		.03		|	|		st silin, st lim bxwork on bar un, sp cc on wk py
143.8	8.8		2.68	99	.08			.02	|		.06		|	|	Sp @ 135.0?	"Sp" wk-mod alt, mod sil'd plus gts uning. Mixed Cap. Sp-wk cc
152.5	8.7		2.67	97	.16			.02	Sp-wk	.05	.09		|	Mod		As above but less gtz.
161.8	9.3		2.56	95	.12			.02	wk		.10		Mostly as Sp.	|	Mz @ 156.6	1' of Mz @ start then "Sp" then all Mz. wk alt, partly leached mod sil'd
170.5	8.7		2.58	100	.11			.02	|		.09		wk-mod main as Sp	|	Sp @ 162.6	Mz as above "Sp" wk alt, deer to end. Mixed sulf & cap.
180.7	10.2		2.58	90	.14			.02	Sp-wk		.12		|	|		"Sp", Sp-wk alt, mod-st sil'd, Sp 2nd K-spar. Mixed sulf & c
187.9	7.2		2.59	47	.23			.02	|		.21		|	wk		As above. Poor recy st 2nd K-spar right @ end.
197.4	9.5		2.61	93	.43	.02		.02	wk	tr	.41		Mod-st Ser	wk	Mz Circa 188	Mod-st Alt silin, wk-mod cc, py main in inlets wk lim
206.2	8.8		2.53	95	.30	.02		.02	wk	.08	.20		|	|		As above
215.4	9.2		2.54	96	1.04	.03	66.4' @ .81/.04	.03	|	.05	.96		|	sp		Mod Alt silin wk-mod cc, wk py lim tr chlor
224.1	8.7		2.52	97	1.23	.03		.03	sp	.10	1.10		|	wk	HF? @ 221.7	Mod-st Alt wk-mod cc, wk py sp chlor
235.8	11.7		2.42	84	.78	.05		.05	—		.73		|	|	Mz bx @ 225	Y.Sp? 230-235 Mz to end run st Alt mod st silin in Mz
245.1	9.3		2.60	98	.66	.04		.04			.62	tr verbenite	|			wk-mod cc, sp cu's. in Y.Sp mod chlor. st Alt silin, Mz bx wk-mod cc, wk py wk-mod chlor w
254.3	9.2		2.57	94	1.22	.08		.08			1.14		St ser	Mod lim		St Alt, mod (-) cc, tr py wk lim on fracs
266.2	11.9		2.69	77	.31			.01	tr		.30		Mod-st	|	Sp circa 264	St Alt, silin, wk-mod cc with gts
275.1	8.9		2.56	99	.12			.01			.11		|	|		St silin, 4" bx gone w/ st cc @ 273 rest leach, wk-mod lim
283.7	8.6		2.55	96	.07			.02	sp		.05					St Alt, mod silin, Sul @ 279 wk-mod cc sp py rest leach wk-m
292.9	9.2		2.55	91	.48			tr	sp	.01	.17		Wk ser	wk lim	Silty HF 284	Grn (light), silty HF wk-mod gts uning tr sp cc py sp lim
301.5	8.6		2.54	98	.25			.01	sp-wk	tr	.24		Sp ser	wk-mod		As above Sp text @ 293-294' HF - sp py tr cc ang
310.3	8.8		2.50	93	.18				wk	.18			Sp ser	wk-mod lim		light to dk grn HF wk (-) py on inlets. sp silin and wk lim
318.4	8.1		2.60	96	.15				|	.15	tr		|	|		As above sp tet Sulf wk lim
327.1	8.7		2.61	94	.13				|	.13	|		|	|		As above, patchy Sp text @ 225 sp-wk py on inlets
335.6	8.5		2.60	97	.14				|	.14	|		|	tr lim		dk grn to black grn HF patchy Sp text. wk py as frac
342.7	7.1		2.68	100	.11				|	.11	|		|	|	Sp? Circa 342	bk grn HF? med. fine gr. text suggests Sp. wk-mod py
351.6	8.9		2.63	99	.17				wk-mod	.17			|	|		dk py finely xyline material maybe sp wk py tr
361.5	9.9		2.64	97	.15				|	.15			|	|		As above good Sp @ 358.1

Final Depth 425.6'
Collar Elevation 3118.75
Coordinates 29,966.59 N ; 24,709.26 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-99
Sheet No. 1 of 2
Date Completed 8-16-6.
Logged By JAB., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay, Ser	lim	Rock Type	Remarks
5.0	5.0	RB	-	-	-	-		-	-	-	-	-	-		-	Rock bit
16.2	11.2	NXWl	2.59	76	0.04			.04					wk-mod	wk-mod lim, tr jar lim sp	DP	wk-mod(+) ser wk lim tr jar
25.7	9.5		2.59	87	.06			.06					Mod			Mod Alt, wk lim, sp-wk LLm, tr jar
34.5	8.8		2.58	99	.08			.08					wk-mod	wk lim wk-mod lim sp jar	HF? @ 28.5	Mod-st? Alt clay wk lim wk-mod hem stain no sul
43.2	8.7		2.52	99	.11			.11					Mod	sp hem Mod lim		alt as above, tr rounded qtz "eyes" HF? dark gy-bleached on sp-wk
52.2	9.0		2.53	97	.06			.06						wk lim sp jar		as above the HF appears to be an altered sandy slt/sh above
62.0	9.8		2.52	92	.06			.06						tr LLm Mod lim		as above, sp-wk lim mainly on fracs
70.9	8.9		2.59	97	.09			.09					Mod-st	lim wk-mod		as above wk silin, tr cuox, jar
79.3	8.4		2.57	97	.14			.14						wk hem Mod lim tr jar		Mod-st? Alt, seds broken + rebonded wk-mod hem stain, tr LLm, ja
91.9	12.6		2.49	75	.13			.13					St+	Mod lim sp hem		st Alt rk broken w/rounded qtz frags. patchy Dp? st clay wk-mod lim
103.1	11.2		2.50	82	.14			.14						Mod lim sp jar		as above patchy qtz site? wk-mod hem stain
109.1	6.0		2.43	100	.08			.06			.02		Mod-st	wk hem mod lim	Sul @ 109.1 Mz? 103	st Alt ser, wk silin, wk-mod hem stain, sp jar
111.4	2.3		2.71	96	.38			.01			.37			Tr lim		wk-mod Alt, ser. wk-mod(+) py, cc, diss + on uplets
119.3	7.9		2.49	100	.41	.01		.01	sp		.40			Tr lim, jar		st Alt. clay wk-mod cc on py wk qtz veining tr jar? epi 2nd k spar
128.9	9.6		2.49	87	.33				tr		.33				HF? Ox @ 122.6	st Alt clay patchy silin wk-mod(+) cc tr cuox wk hem, tr^
137.1	8.2		2.53	95	.04			.04							Hf	St Alt, mod silin sp cc mainly leach v. broken from 132.4 mod lim, hem s
146.3	9.2		2.48	91	.29			.03	tr		.26		st clay	wk lim	Sul @ 140.7	St Alt clay wk-mod lim tr jar, cuox wk cc?
154.8	8.5		2.47	94	.36	.04		.04	tr		.32					as above rk very friable, mod(-) cc? on fracs. sp py patchy ox
163.8	9.0		2.50	94	.53	.06		.06			.45			wk lim hem	Bx 155.3-156.6	Bx red w/ hem + lim stain st Alt rk looks like HF wk-mod cc on fracs tr,
172.5	8.7		2.62	92	.34	.03		.03			.31		St clay chlor	—		core pebble size frags. Mod chlor Alt, wk chrys? cc?
181.1	8.6		2.60	94	.65	.05		.05	tr		.60		Mod chlor sp clay		Mz? @ 172.5	St chlor Alt, and k spar? wk-mod(+) cc on py rk comp of anhedral felt grains in ground mass etc
189.9	8.8		2.57	94	.72	.07	80.4' @ .54/.06	.07	Tr?		.65					as above. Mod cc? on py core well broken tr cuox
198.1	8.2		2.54	100	.52	.06		.04			.46	MoS2 .0084	Mod-st Clay-ser			Mod(+) chlor, ser Alt sp py wk-mod cc mainly on fracs sp Diop fase
206.8	8.7		2.55	99	.62	.05		.05			.57		Mod chlor			Alt as above tr 2nd? k spar wk-mod(-) cc as above wk Diop fase
215.0	8.2		2.57	99	.64	.07		.07			.57					Mod(+) chlor (w) ser(-) Alt wk 2nd k spar. Mod py, cc tr cuox wk-wk Diop fas
226.1	11.1		2.58	76	.45	.05		.05	Sp		.40		Mod-st Clay, ser wk-chlor			as above mod py wk-mod(+) cc, wk qtz vns wk Diop
236.2	9.1		2.39	92	.42	.06		.06	Tr?		.36			Tr lim wk-mod lim	½ cap. Ak @ 232.4	St ser Alt wk py mod cc Ak-wk-mod Alt, silin. wk li
243.9	8.7		2.49	98	.06			.06					wk Clay, ser			wk Alt mainly affects plag xyls. sp cuox on plag tr bk ox sp
255.7	11.8		2.54	67	.06			.04	Tr		.02					wk Alt, wk silin tr cuox on plag wk lim
265.0	9.3		2.54	93	.09			.05	Tr?		.04?			wk lim Mod Jar		wk Alt wk-mod(-) jar on fracs sp wk lim
273.9	8.9		2.55	94	.14			.04	Tr	.02	.08			wk-mod lim, wk Ja		wk Alt wk cc on wk cpy tr MoS2 sp bk ox tr cuox, jar
283.7	9.8		2.54	92	.11			.07			.04			Mod lim wk Jar		wk Alt tr cc on cpy tr cuox jar sp lim bk ox
292.6	8.9		2.56	98	.13			.11	—		.02?					wk Alt, no suls sp-cuox on plag sp jar lim
301.6	9.0		2.54	106	.14			.14								as above tr cc 3" aplite dike
310.8	9.2		2.58	93	.37			.03		.10	.24			sp lim sp Jar	Suls	wk Alt, silin, wk-mod cc on cpy tr MoS2 sp lim
320.0	9.2		2.73	93	.31			.06	Sp	.10	.15			Mod lim		Dissoluable py wk-mod Alt wk(-) py cc, tr cpy wk(+) hem stain
329.0	9.0		2.49	93	.13			.11			.02?		wk-mod	wk-mod lim,	Cap	wk Alt 320'-324' wk cc tr cpy, py wk-mod hem 324'-329' st Alt
338.1	9.1		2.50	91	.09			.09						Mod lim		patchy st silin, wk lim wk-mod jar tr cuox wk-mod Alt silin, no sul. wk-mod lim tr jar, cuox
347.0	8.9		2.53	95	.07			.07					wk			wk Alt silin

Final Depth 425.6'
Collar Elevation 3118.75
Coordinates 29,966.59 N ; 24,709.26 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-99
Sheet No. 2 of 2
Date Completed 8-16-65
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	Lim	Rock Type	Remarks
356.5	9.5	Nxwl	2.53	96	0.17			.09		.02	.06		wk	wk-mod	Ak	wk (H) Alt sp jar wk lim on fracs
365.8	8.8		2.53	96	.33			.06	Tr?	.05	.22		1	1		WK Alt patchy wk-mod silic w/diss py + wk cc sp jar lim
374.0	8.7		2.54	98	.46	0.04	27.3' @ .42/.03	.04	Tr	.10	.32		1	wk		wk Alt wk cc on sp py tr cpy jar sp lim
383.9	9.3		2.58	97	.39	.03		.03	1	.15	.21		1	wk-mod		wk Alt, silic, tr py, cc chlor wk lim
392.6	9.3		2.57	91	.42	.01		.01	1	.10	.31		1	Tr		wk Alt, patchy wk silic wk cc on wk cpy tr py sp
401.3	8.7		2.57	96	.24			.01?	1	.20	.03		1	—		wk Alt, silic sp-wk cc on wk (-) cpy sp py chlor tr mo
410.4	9.1		2.53	100	.22			—	Tr-Sp	.21	.01	Tr-MoS	sp-wk			wk Alt wk qtz veining chlor, wk-mod cpy sp cc py tr mo
419.8	9.4		2.54	89	.19			.01	1	.17	.01	1	wk	sp		wk Alt, wk-mod qtz veining wk-mod cc sp-wk cpy tr lim
425.6	5.8		2.55	97	.21			.01	sp	.19	.01	1	sp-wk	1		wk Alt chlor wk cc sp cpy patchy mod silic
E.O.H.		Avg. Rec'y =		92%												

Final Depth 425.0'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination -65° ; Bearing Due West

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-98
Sheet No. 1 of 2
Date Completed 8-17-65
Logged By J.A.B, C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim	Rock Type	Remarks
4.7	4.7	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
14.1	9.4	NXW	2.36	94	0.29			0.29					Mod	wk lim	Y.Sp.	wk-mod Alt ser patchy mal on fet hxyls, tr turquois very finely diss mag?
23.9	9.8		2.59	91	.73	0.57		.57			.16		wk mod		AK@22.4'	Sp as above w/ wk bk ox on fracs AK-wk Alt tr grn cuox on plag
32.4	8.5		2.58	100	.10			.10						mod lim		as above wk lim mainly on fracs
41.6	9.2		2.58	93	.12			.12						w.k lim		wk-mod(-) ser Alt patchy st silin, tr grn cuox on plag sp lim
50.9	9.3		2.57	96	.27			.27					wk	wk hem sp lim		as above, wk hem stain on plag also grn cuox
60.2	9.3		2.56	95	.31			.31			Tr?			wk hem tr lim sp jar		wk-mod(-) Alt, wk silin wk(+) grn cuox on plag xyls sp hem tr
69.1	8.9		2.55	100	.49	.26		.26			.23?			tr lim sp jar		as above, wk-mod silin sp lim mainly on fracs
78.7	9.6		2.53	97	.47	.42		.42			.05?			sp: hem, lim, & jar		as above, patch hem stain on plag xyls.
87.8	9.1		2.55	99	.18			.18			Tr?			wk-mod lim, Tr-hem		as above w/ patchy st silin tr lim @ end run
97.2	9.4		2.58	93	.37	.21		.21	tr	.08	.08			tr hem lim	Sul ≈ 90'	wk-mod(-) Alt ser on plag, k spar fresh. hem to 90' wk-mod cuox on plag wk cc
106.5	9.3		2.58	95	.42	.33	100.9 @ .41/.32	.33			.09?	tr bar		tr hem		As above patchy st silin qtz, bar. Alnn m.e 103.4' tr lim
116.0	9.5		2.57	95	.73	.45		.45			.28			tr hem		as above wk-mod cuox on plag. wk(+) diss cc. po silin
125.5	9.5		2.52	98	.40	.32		.32			.08?			sp lim		wk-mod(-) Alt. cuox on plag wk silin, wk cc, sp lim
134.7	9.2		2.46	96	.34			.32			.02?			sp. wk hem		Alt as above patchy leach w/ wk hem no cc
143.5	8.8		2.51	96	.29			.29			tr				Leach @ 138.4'	wk-mod(-) Alt patchy st silin wk-mod hem sp lim tr cu si
151.9	8.4		2.54	100	.49	.33		.33		.08	.08			tr, hem jar	Sul @ 151	wk Alt mod silin wk(+) cuox on plag wk diss cc. sp lim
161.1	9.2		2.55	91	.73	.41		.41			.32	tr bar. MoS2				as above wk-mod diss cc, sp cu si lim
169.8	8.7		2.52	96	.64	.17		.17	tr	.10	.37					wk-mod(-) Alt, wk silin wk cuox on plag sp-wk cc on fracs.
179.1	9.3		2.65	95	.40	.08		.08		tr	.32			wk lim		wk-mod(-) Alt, silin tr-sp cuox wk cc on wk-mod py sp lim wk lim
188.3	9.2		2.51	97	.92	.05		.05		.05	.82			sp lim		wk-mod(-) Alt, ser plag wk silin on unkts wk py, sp-wk cpy wk cc tr lim jar
197.4	9.1		2.52	95	.52	tr		tr	tr	.04	.48	wk MoS2		tr lim		wk-mod(-) Alt wk py cc, tr-sp MoS2
206.7	9.3		2.51	100	.62	tr		tr		.30	.32					wk-mod(-) Alt, silin wk-mod cpy on unkts sp cc
215.6	8.9		2.52	99	.96	tr		tr		.20	.76					wk-mod(-) Alt, wk silin wk(+) cc, sp cpy wk chlor on unkts tr lim
224.7	9.1		2.56	100	1.08	.01		.01	tr	.10	.98					alt as above wk-mod(-) cc, wk cpy tr lim
233.4	8.7		2.58	97	.91	.03		.03	tr?	tr	.88	ruby Ag proustite				wk Alt wk-mod(-) silin wk cc sp cpy tr proustite on fract
242.9	9.5		2.58	97	1.16	.04		.04	sp	.05	1.07			wk-mod jar		wk Alt silin, wk-mod(-) cc on wk cpy tr sp py wk jar, tr lim
251.3	8.4		2.59	97	1.35	.09	180.2' @ .85/.05	.09	tr		1.26	tr MoS2	wk-mod	tr jar		wk-mod(+) Alt wk(+) silin wk-mod cc, tr-sp cpy tr py tr MoS2
260.4	9.1		2.57	94	.62	.04		.04	sp		.58		wk	tr lim jar		wk Alt wk(+) silin wk cc, sp-wk py tr cpy MoS2 on uns
269.5	9.1		2.59	92	.20			.02	Tr	.05	.13			wk lim sp jar		wk Alt, wk(+) silin wk-mod cc on sp py wk cpy. wk lim tr lim tr MoS2
278.8	9.3		2.57	91	3.21	.12		.12?		.05	3.04?		wk-mod			wk Alt, silin, wk-mod(-) cc on sp cpy tr py. 3/4" vn of solid cc @ 275.6
287.7	8.9		2.60	96	.81	.10		Mal .10	Tr?	.05	.66			sp lim sp jar		alt as above wk-mod(-) cc no py tr? cpy tr MoS2
296.9	9.2		2.60	93	.57	.03		.03		.05	.49			sp lim		wk-mod Alt patchy st silin wk-mod(+) cc wk cpy sp py
306.3	9.4		2.56	90	1.20	.03		.03	Tr	.10	1.07			—		wk-mod(-) Alt wk-mod(-) cc on wk cpy tr MoS2 wk hem stain
315.6	9.3		2.58	96	.72	.02		.02		.05	.65			sp lim		wk-mod Alt silin, wk cc on sp cpy tr py tr cuox lim
324.6	9.0		2.56	100	.46	.04		.04	Tr?	.02	.40		wk	wk lim		wk Alt wk silin on uns wk(+) cc. wk mod py on uns sp cpy
333.2	8.6		2.58	99	.11			.04		.02	.05					wk Alt wk silin sp cc, cpy wk lim, sp jar cuox
341.3	8.1		2.59	98	.46	.02		.02		.08	.36					wk Alt, silin. wk(+) cc sp cpy tr py sp-wk lim
350.5	9.2		2.57	90	.15	•		.04	Tr	.02	.09			wk-mod lim.		wk(+) Alt sp cc on tr py wk lim

Final Depth 425.0'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination -65° ; Bearing Due West

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-98
Sheet No. 2 of 2
Date Completed 8/16/65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay/Ser	Lim	Rock Type	Remarks
359.3	8.8	NXW1	2.56	91	0.07			.06			.01?		wk	wk-mod	AR	wk Alt wk-mod qtz vns sp-wk cc sp py tr MoS2 wk.
369.1	9.8		2.58	91	.21		-	.04	Tr	.02	.15		1	wk	leach @ 359	wk Alt wk qtz vns wk lim sp jar
377.8	8.7		2.58	97	.25			.04	Tr?	—	.21		wk-mod	Mod	Sil @ 371	wk-mod Alt wk cc tr py MoS2 Cpy jar sp-wk lim
386.5	8.7		2.65	96	.82	0.06		.06	Tr		.76		Mod	sp-wk		wk-Mod (+) Alt, wk-Mod cc wk py tr cpy? wk jar li
395.9	9.4		2.55	93	.90	.08	47.2'	.08	1		.92		1	Sp		Alt as above, wk-Mod cc sp py wk-mod jar tr lim
407.1	11.2		2.55	75	1.18	.15	@	.15	1		1.03		1	1		Mod Alt wk-mod cc tr cpy-py? wk-mod jar wk,
417.0	9.9		2.50	82	2.72	.79	1.39/0.27	cuprite .79	Tr?		1.95		1	Mod-st	bx @ 407.1-	wk Alt frags in rk flour matrix sp-wk cc, tr py wk-mod
425.0	8.0		2.48	91	1.25	.26		cuprite .26	1		.99		1	Mod		bx as above, wk-mod lim to 423.0 mod cc to end sun
E.O.H.		Avg. Rec'y =		94%												

Final Depth 440.0' Same coordinates as CDH 46 **ASARCO**

Collar Elevation 2741.08

Coordinates 29,660 N ; 26,880 E

Inclination Vertical

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-97

Sheet No. 1 of 2

Date Completed 8-7-65

Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser clay	lim	Rock Type	Remarks
12.6	12.6	RB	–	–	–	–	–	–	–	–	–	–		–	–	Rock bit
19.7	7.1	NXWL	2.67	48	0.24			0.01	wk	0.23	—	Sp MoS_2	wk ser	wk lim	Sp	Mod Alt, wk silin, wk py, cpy, tr MoS_2
26.0	6.3		2.66	53	.27			—	|	.27		Tr MoS_2	|	Tr lim		as above
39.0	13.0		2.67	72	.26			.01	|	.20	.05	|	wk ser sp clay	|		as above
47.2	8.2		2.67	97	.22			.01	|	.21	—	|	|	Sp. lim		Mod Alt, wk-mod silin wk py cpy tr MoS_2
51.6	4.4		2.67	99	.26			.01	wk-mod	.25		|	|	|		Mod Alt, wk-mod silin, wk py, cpy, tr MoS_2
60.8	9.2		2.65	93	.29				|	.29	–	|	wk-mod chlor	sp-wk lim		Alt as above, sp py, cpy, tr MoS_2
71.1	10.3		2.66	85	.26				|	.26	–	|	|	|		as above, wk chlor. alt.
79.7	8.6		2.66	98	.22				|	.22	tr	|	wk chlor ser	tr lim		as above, wk py, cpy tr MoS_2
88.0	8.3		2.65	99	.20				wk	.20	–	|	|	tr jar		Mod Alt, wk-mod silin, sp-wk py, sp cpy, tr MoS_2, sp chlor
96.8	8.8		2.67	99	.28				wk(+)	.28	–	|	|	—		as above, wk-mod chlor.
105.2	8.4		2.67	100	.23				wk	.23	–	|	|	—		as above, wk chlor, wk-mod(+) silin
113.2	8.0		2.68	100	.22				wk-mod	.22	T	|	|	—		as above
121.7	8.5		2.76	95	.49	.02		.02	wk-mod	.47	tr	|	wk-mod (+) chlor	–		Mod Alt, wk-mod chlor, wk py, sp cc? cpy tr MoS_2 en qtz veinlets
130.5	8.8		2.66	94	.28				wk	.28	–	tr(+) MoS_2	wk chlor	tr lim		Mod Alt, (+) wk-mod chlor, wk py tr cc? wk cpy tr MoS_2
139.2	8.7		2.67	96	.23				wk-mod	.23	–	tr MoS_2	wk chlor clay	–	M2@1347	Sp as above, M2 wk-mod Alt wk py, cpy sp cc py assoc w/ 6
147.7	8.5		2.66	100	.28				wk	.28	–	|	|	–		Mod Alt, silin sp-wk py cpy tr MoS_2 st silin 146.7-147.7
156.5	8.8		2.64	99	.48	.01	18.0' @ .44/.01	.01	wk-mod(-)	.47	–	|	wk chlor ser	–		WK Alt, wk-mod silin, wk py cpy tr MoS_2
165.7	9.2		2.66	96	.40	.01		.01	|	.39	–	|	|	–		as above
174.2	8.5		2.63	96	.32				|	.32	–	|	|	tr hem		as above tr hem
183.7	9.5		2.63	92	.37			.01	|	.34	.02	|	wk clay, ser	T-lim	Sp@175'?	Mod-St Alt. chlor wk py sp-wk cc
193.2	9.5		2.70	92	.20				|	.20		|	|			Mod Alt. chlor. wk-mod py wk cpy, cc.
202.1	8.8		2.70	99	.20				|	.20			|			as above
210.7	8.6		2.70	96	.25				|	.25			|			wk-mod Alt. chlor, wk silin, wk py tr cpy
219.1	8.4		2.62	95	.11				|	.11		Tr MoS_2	|			wk Alt, st silin sp py tr MoS_2
228.0	8.9		2.69	95	.22				|	.22			|			mod chlor Alt, wk-mod silin wk-mod py tr cpy unps
236.7	8.7		2.67	96	.27				Mod	.27			|			as above wk py no MoS_2
245.2	8.5		2.66	99	.27				|	.27			|			as above wk-mod py
254.5	9.3		2.70	97	.18				wk-mod	.18	tr		wk clay ser, chlor			Mod chlor Alt wk silin wk py tr cpy? MoS_2 en qtz veinlets
262.8	8.3		2.71	99	.21				|	.21	|	tr bar	|			wk-mod chlor Alt silin wk(+) py wk(-) cpy in blebs w/ qtz veins tr
271.4	8.6		2.69	98	.53	.01		.1	Mod(-)	.52	|		|			wk-mod chlor Alt wk silin, wk-mod py cpy(-) tr MoS_2 w/ qtz veins
280.5	9.1		2.69	100	.22				|	.22			|			Alt as above slightly less chlor & sil wk(+) py tr-sp cpy, tr MoS_2
289.0	8.5		2.67	99	.27				|	.27			|	tr jar?		wk-mod Alt silin wk(+) chlor. wk-mod py, sp-wk cpy sp MoS_2
297.7	8.7		2.65	100	.25				|	.25			|			as above Patchy mod chlor Alt w/ wk-mod assoc cpy, wk-mod py
306.6	8.9		2.72	99	.27				wk-mod	.27			|			wk-mod Alt, wk silin, wk chlor. wk-mod(-) py tr cpy, MoS_2 sp wk veinlets w/ qtz veins Alt
315.1	8.5		2.65	100	.21				wk	.21			mod chlor			as above
323.6	8.5		2.63	100	.21				|	.21			|			wk alt, wk chlor. Alt @ 318.0-318.5, wk total sulfs.
332.2	8.6		2.63	98	.19				|	.19			wk clay ser, chlor			wk-mod alt, wk chlor. Tex. varies fine-med grained wk-mod silin
341.1	8.9		2.62	96	.2				|				wk-mod		

Final Depth 440.0' Same coordinates as CDH 46

Collar Elevation 2741.08

Coordinates 29,660 N ; 26,880 E

Inclination Vertical.

ASARCO GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-97

Sheet No. 2 of 2

Date Completed 8-7-65

Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
349.7	8.6	NXwl	2.63	96	.25				wk	.25			wk chlor clay,ser	sp-wk Jar	Sp	Gen. wk alt., sp-wk chlor, wk-mod sil'n. wk py, sp cpy, Jar. Sp-wk
358.3	8.6		2.60	99	.35				wk-mod	.35			"	"	Mz@349.7	Ct actually grad. Alt & min as above. Tr 2nd K-spa
367.2	8.9		2.59	95	.32				"	.32			wk-mod chlor, clay	"		As preceding. RK especially play Opens st. Jar. stained more & more brecc'd. Poss rec'd. Posb. Xeno. material caused by
379.0	11.8		2.60	82	.27				wk	.27			"	"		As above to ≈ 364 where rK matrix becomes quite basic-look
388.1	9.1		2.59	94	.18				"	.18			"	sp-wk Jar tr-lim		Mod Alt, silin, no text. wk cc, py,
396.7	8.6		2.61	99	.22				"	.22			"	"		Wk-mod Alt, mod silin, resil bx circa 395' wk py, cc, sp
406.0	9.3		2.60	93	.26				wk-mod	.26		Tr MoS_2	wk-mod chlor, clay, ser	"		wk-mod Alt patchy st. silin, wk py, sp cc tr MoS_2 wk chlor
415.2	9.2		2.61	95	.09				"	.09		Tr Gal.	wk clay, ser	wk Jar tr lim		wk-mod Alt. mod gtz veining sp-wk cpy, sp py tr MoS_2 tr bn 2nd K
424.2	9.0		2.58	100	.08				"	.08		Tr MoS_2	"	"		as above
433.0	8.8		2.58	99	.09				"	.09		"	"	"		as above tr Alun on fracs
440.0	7.0		2.58	100	.08				"	.08			"	"		wk-mod Alt. chlor, tr-sp py wk lim, Alun., gtz veing
EOH		Avg.	Rec'y	94%												

Final Depth 445.0'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination −55°, Bearing Due East

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-96
Sheet No. 1 of 2
Date Completed 8-7-65
Logged By JAB., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim	Rock Type	Remarks
4.0	4.0	RB	-	-	-	-	-	-	-	-	-	-	-	-	-	—
12.6	8.6	NX	2.56	89	0.10			0.10					Mod	wk-mod lim	Younger Sp	Mod Alt, Ser (visable only under binocular micro) very fine diss. m wk lim
21.5	8.9		2.55	100	.24			.24						wk lim Tr. Jar.	AK @ 12.1	cut @ 50° to core wk-mod Alt wk lim sp bk ox. Sp as above sp-wk li
26.7	5.2		2.56	96	.36	0.24		.24			.12?			sp lim tr jar	Sp @ 18.7 Voyager	Mod Alt (see above) very fine diss. mag? sp lim
39.2	12.5		2.56	99	.45	.39		.39			.06?		wk	Mod lim Tr. LLm	AK @ 26.7	Mod Alt, Sil'N, wk mal. on plag + fracs, wk lim on fracs
48.5	9.3		2.59	98	.32			.32					Mod	Mod lim		Mod Alt, Mod-st sil'N, wk mal on plag + fracs, wk lim, tr py b
57.5	9.0		2.59	96	.33			.33						wk-mod Llm. Tr		as above, tr llm, sp bar.
65.6	8.1		2.52	99	.36	.31		.31			.05?		wk-mod	Mod lim Tr. LLm		as above
74.5	8.9		2.54	98	.42	.33		.33			.09?			wk lim		as above. wk-mod sil'N. Chrys. incr.
83.7	9.2		2.52	99	.53	.47		.47			.06?			wk-mod lim		wk-mod Alt, Sil'N, wk mal on plag xyls, tr Cu Si on fracs wk lim, sp LL
92.8	9.1		2.57	99	.42	.32		.32			.10?			wk lim		Mod Alt, Mod-st. Sil'N, and as above
101.8	9.0		2.52	98	.55	.49		.49			.08?			wk		wk Alt, wk mal? on plag + on fracs, sp lim
111.4	9.6		2.53	99	.44	.38		.38			.06?	tr bk ox				wk Alt, wk mal on plag, sp bk cuox. wk lim
120.6	9.2		2.55	97	.34	.31		.31			.03?					as above sp LLm
129.4	8.8		2.55	97	1.63	.50		.50	wk		1.13?					as above sil bx zone @ 128.9 w/ st py
136.7	7.3		2.46	99	1.18	.62		.62	wk(+)		.56					as above bx to 130.0' + as above
143.5	6.8		2.41	97	2.12	1.67		1.67			.45?		sp clay		P.M. Ande @ 136.7	sp Alt, zeolites? in vessicles, frag of included m?
156.5	13.0		2.52	90	.32	.26		.26			.06?		wk clay, ser	wk-mod lim	AK @ 143.5	wk mal on fracts, tr azurite wk Alt, wk-mod Sil'N wk grn cuox on plag sp bkm, wk-mod lim
164.2	7.7		2.54	97	.79	.68	205.8'	.68			.11?					wk Alt, sp mal on plag, sp-wk cu si on fracs wk lim
173.2	9.0		2.57	95	.48	.41	@	.41			.07?		Mod clay, ser	sp lim		as above tr cup.
182.0	8.8		2.59	99	1.04	.58	.67/.46	.58	Tr		.46				patchy sul @ 182-188'	as above
191.2	9.2		2.56	99	.80	.52		.52	Sp	.05	.23		wk clay, ser	wk-mod lim		as above wk-mod cc replacing cpy in sul zones
200.0	8.8		2.56	98	.58	.43		.43	Tr	—	.15					wk Alt, sp grn CuOx on plag, sp bk ox, sp-wk lim (wk-mod sil'N)
209.4	9.4		2.53	100	.56	.49		.49	Tr		.07					as above wk lim patch Aplite circa 208.4
218.3	8.9		2.57	99	.34	.26		.26	—	-	.08?		wk-mod ser, clay			wk-mod Alt, mod Sil'N, wk mal on plag xyls, wk lim
227.3	9.0		2.56	96	.60	.36		.36	-	—	.24?					wk-mod Alt, mod Sil'N, wk mal on plag xyls wk-mod cc replacing cpy
236.1	8.8		2.56	96	.87	.65		.65	tr		.23					alt as above patchy st. Sil'N, sp-wk mal on plag + fracs circa 227
245.1	9.0		2.62	95	.49	.20		.20	sp	tr-sp	.29				Patchy Sul 236 to 241'	wk-mod Alt mod-st Sil'N, tr grn cuox wk lim, wk-mod cc replacing c sp-wk lim, tr bk ox
253.9	8.8		2.62	95	.53	.41		.41	—	-	.27					wk-mod Alt, mod Sil'N, sp grn cuox, tr cc, wk lim
262.8	8.9		2.51	98	.51	.39		.39	-	—	.22					as above patchy aplite
271.4	8.6		2.57	99	.48	.33		.33	tr	tr	.16				Sul @ 271.0	as above wk Sil'N w/ patchy st Sil'N, wk-mod cc @ 271.0
280.3	8.9		2.60	98	.66	.15		.15	1	.02	.49				ox @ 275.6	wk-mod Alt st patchy Sil'N, wk-mod(+) cc on cpy sp grn cuox tr mos wk lim
290.0	9.7		2.52	95	.92	.31		.31	1	—	.61			wk lim sp Jar		wk Alt, Sil'N, wk allophane? on fracs spot of wk cc wk lim LLm sp-wk lim
299.0	9.0		2.54	97	2.79	.20		.20	1		2.59		Mod clay, ser	Mod-1.lim sp Jar	SP @ 295.6	wk Alt Sil'N, sp-wk py tr CC, Mos. Sp. St Alt no text wk cc? on fracs, s
308.4	9.4		2.53	99	1.18	.11	64.0'	.11	Sp		1.07	Tr Tenhenite			Sul 296'-306'	St Alt. chlor wk py. wk-mod cc? tr cuox, jar. sp lim
317.9	9.4		2.52	95	.33	.06	@	.06	1		.27	1		Mod lim	Patchy Sul @ 308	St Alt. sp py, cc. wk-mod lim on fracs
326.3	8.4		2.57	94	.69	.06	1.01/.013	.06	1	.02	.61	Tr MoS2				as above broken + leached core 324'-326.3
335.4	9.1		2.62	91	.155	.03		.03	wk		.52				Y Sp @ 330.2	St Sil'N to 330.2 Y/Sp. wk Alt. wk-mod py sp cc wk lim on frac
343.7	8.3		2.62	95	.31				1	.06	.25					

Final Depth 445.0'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination -55° Bearing Due East

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-96
Sheet No. 2 of 2
Date Completed 8-7-65
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration ser clay	lim	Rock Type	Remarks
354.6	10.9	NXWL	2.65	80	.32		163.6' @ .68/.08		wk	.32	tr		wk chlor	tr lim		as above, st patchy silin. tr cpy
363.6	9.0		2.65	98	.33				wk-mod	.33	tr		wk chlor clay	)		wk-mod Alt, chlor mod-st silin, wk py tr cpy, cc, MoS2
372.7	9.1		2.68	98	.40	.01		.01	)	.35	.05		)			as above stronger chlor.
381.2	8.5		2.67	99	.47	.01		.01	)	.41	.05		)	tr lim		wk-mod chlor Alt. wk silin, Sp py wk cpy tr MoS2 cc
390.0	8.8		2.70	95	.54	.05		.05	)	.30	.19	Tr MoS2	)	)		wk ser, wk chlor. wk-mod sil'n. wk cpy, Poss cc
399.0	9.0		2.54	93	.66	.05	71.4' @ .48/.03	.05	wk(+)		.61		wk ser	)	Hf @ 392.1	"Sp" as above to ct. Ct not sharp. Hf has dk min. on fr. pres.
408.6	9.6		2.56	91	.53	.02		.02	tr-sp	tr	.51	Tr Tourbeccite	)	)		Hf, silty in part. Num. qtz vnlts. Sp-wk cc, sp py. Also chlor on
418.4	9.8		2.54	90	.61	.02		.02	)	)	.59	)	)	)		As above
426.5	8.1		2.64	99	.60	.03		.03	sp-wk	.17	.40	)	)	)	This aplite dikelet @ 426.7	Aplite @ 426.7 Hf becoming st. metamorph. sc. spots. st in text. Thin dikelet of
435.0	8.5		2.51	98	.44	.02		.02	sp	tr	.42	)	)		AK & Aplite 432.1-434.4	Hf, silty in part. AK-Apl. dike mod sil'd. Sp-wk total sds.
445.0	10.0		2.50	100	.33				)		.33	)	)	)	AK @ 435.0	435.0-440.0 prob CT. zone RK here mainly aplite w a few sc. pieces of sds incl. Then AK w mod K-spar which appears 2ndary. Mod sil'n thru-out. AK def. post-Paleo.
EOH			Avg. Rec'y =													

Same coordinates as CDH 30

Final Depth 453.1
Collar Elevation 2700.13
Coordinates 29,520 N; 28,220 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E 95
Sheet No. 1 of 2
Date Completed 7-30-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser/clay		Rock Type	Remarks
5.0	—	RB	—	—	—	—	—	—	—	—	—	—	—	—		Rock bit
15.3	10.3	NXW	2.57	45	0.41	0.01		0.01	wk-mod	.05	.35		Mod	Tr hem sp lim	Sp	St Alt, silin wk-mod cc on cpy wk py tr MoS2
22.8	7.5		2.59	94	.73	.01		0.01	wk-mod	.25	.47		)	tr lim	)	st Alt silin, wk-mod cc, wk py tr MoS2
31.5	8.7		2.58	95	1.22	.03		.03	wk-mod	.25	.94		)	tr lim		st Alt mod silin wk-mod py, wk cc, sp cpy tr MoS2, CuP
40.0	8.5		2.59	97	1.42	.04	68.5'	.04	)	.25	1.13		)	tr jar		st Alt mod-st silin, wk py wk cc, tr cpy MoS2
48.4	8.4		2.57	94	1.38	.03	@	.03	)	.15	1.20		Mod-st	tr jar		Alt as above, wk-mod cc, wk py tr cpy MoS2
57.3	8.9		2.49	100	1.50	.04	1.01/002	.04	)	tr	1.46		)	)		st Alt, mod silin w/ mod qtz veining wk-mod cc, wk py cpy tr MoS2
65.2	7.7		2.58	96	1.03	.02		.02	)	tr	1.01		)	—		st Alt, wk to mod silin, wk-mod qtz veins w/ sp py wk-mod cc, wk cpy tr MoS2
73.7	8.5		2.56	100	.48	.01		.01	wk(+)	)	.47		)	—		Alt decr., silin incr. wk-mod py, sp-wk cc. (Sooty)
81.5	7.8		2.60	97	.35			—	wk	-	.35		Mod(+)			wk alt, mod-st silin " " , diss cpy
89.2	7.7		2.61	100	.30				wk	.05	.25		wk-mod	sp lim jar		As above w/ some qtz beginning to appear as frac
97.2	8.0		2.62	96	.29				wk(+)	.24	.05	tr MoS2	wk	)		As preceeding. cc becoming quite sporadic, sp cpy.
105.1	7.9		2.61	95	.29				)	.24	.05	)	wk	wk lim jar		wk alt, mod-st. silin, patches Mr appear. text. wk-mod py,
113.4	8.3		2.68	89	.44	.01		.01	wk-mod	.23	.20	tr MoS2	)	wk lim wk-mod jar		As above but about Mr text.
121.6	8.2		2.69	83	.25	.02			)				)	)		As above
129.6	8.0		2.62	100	.23				Mod	.21	.02	tr MoS2	wk sericite	)		wk Alt, silin, mod py tr cc, MoS2
137.9	8.3		2.61	94	.33				)	.31	.02	)	wk-mod sericite	)		wk Alt, mod-st silin, wk-mod py tr cc, MoS2
145.9	8.0		2.61	96	.24				)	.24	tr	)	)	wk lim jar		as above
158.4	12.5		2.61	72	.45	.01		.01	)	.44	tr	)	)	)		wk-mod Alt, mod-st silin, wk-mod py, cpy, tr cc, MoS2
162.2	8.8		2.61	95	.38				wk-mod	.38	tr	)	)	)		as above, no cpy
176.5	9.3		2.59	94	.32				)	.32	tr	)	)	)		as above tr cpy
183.4	6.9		2.59	100 +3	.29				)	.29	tr	)	)	)		as above wk cpy
190.0	6.6		2.63	100	.25				Mod(-)	.25	-	)	)	sp lim jar		wk-mod Alt, st silin mod py, massive in places tr cc, cpy, MoS2
199.8	9.8		2.59	87	.36				wk-mod	.36	.01	)	)	—		wk-mod Alt. st silin, sp-wk py, wk cpy sp cc, wk Alun? on MoS2 fracs
210.9	11.1		2.60	71	.29				)	.29	tr	)	)	—	Mzd 220'	wk Alt, mod-st silin, wk py sp cpy tr cc.
219.8	8.9		2.57	97	.24				)	.24	tr	)	wk ser	-	)	sp Alt mod-st silin, & as above
227.8	8.0		2.58	98	.30				)	.30	tr	-	)	tr jar		as above patchy v. st silin, wk bio. tr MoS2
236.3	8.5		2.62	92	.19				)	.19	-	-	)	)		sp Alt, mod-st silin, sp-wk py tr cpy, cc, MoS2 wk bio
244.6	8.3		2.59	94	.28				)	.28	-	-	)	)		as above, wk-mod py sp-wk cpy tr MoS2 cc sp hydr mica
253.6	9.0		2.62	99	.14				)	.14	-	tr MoS2	wk-mod ser	-		wk Alt, patchy v. st silin, sp py tr cpy, cc
262.4	8.8		2.76	99	.18				)	.18	-	)	)			wk-mod Alt patchy v. st silin, wk-mod py, sp cpy, tr cc? MoS2
270.7	8.3		2.62	96	.36				)	.36	tr	)	)	tr jar		as above but fewer patches of silin
279.6	8.9		2.62	88	.15				)	.15	tr	)	)			wk-mod Alt, wk-mod py, tr cpy, MoS2 2nd K spar?
285.8	6.2		2.62	100 +3	.23				)	.23	-	)	)	tr jar		as above
294.7	8.9		2.63	99	.21				wk-mod(-)	.21	-	)	) (-)	—		wk-mod Alt, sp 2nd bio.?, wk-mod py sp cpy, tr MoS2 192.7 to 194.7 Comp. Silin.
303.9	9.2		2.75	99	.14				wk-mod	.14	-		tr ser?	-		wk-mod Alt. folds gra-brown, patchy st silin wk-mod py tr MoS2
313.0	9.1		2.65	99	.18				wk-mod(+)	.18	-		)	—		as above, less silin wk 2nd? bio, + sp 2nd? K spar.
321.4	8.4		2.62	99	.11				wk-mod(-)	.11	-	—	)	—		wk Alt, silin, sp py biotite very bk + fresh appearing
330.3	8.9		2.62	95	.22				wk-mod	.22	-	—	)	—		wk Alt wk-mod silin sp py tr cpy

Same coordinates as CDH 30

Final Depth 453.1
Collar Elevation 2700.13
Coordinates 29,520 N ; 28,220 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-95
Sheet No. 2 of 2
Date Completed 7-30-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration ser	clay	lim	hem	Rock Type	Remarks
339.3	9.0	NXW	2.62	95	.21				wk-mod	.21	–	–	sp	–	–		Mz	wk-mod Alt, mod silin, fresh bio, tr pink K spar on veinlets wk py
348.4	9.1		2.61	95	.30				Mod	.30	–	tr MoS2		–	–			wk Alt, patchy, mod silin, wk-mod py tr cpy tr MoS2
357.0	8.6		2.73	97	.29				wk-mod	.29	–	–	wk	–	–			as above
366.0	9.0		2.70	99	.19				Mod (-)	.19	–	–		–	–			wk Alt, silin, sp-wk py tr MoS2 cpy?
375.0	9.0		2.64	96	.16				wk-mod	.16	–	–		–	–			as above tr 2nd? K spar on veinlets
382.4	7.4		2.61	99	.09				/	.09			wk	sp	Jar			wk Alt ? silin sp py, tr MoS2 wk pink 2nd? K spar, bio
391.5	9.1		2.60	96	.22				/	.22		wk chlorite	/		/			wk-mod Alt, mod silin, wk py w/ gtz veinlets, sp 2nd K spar, bio
399.0	7.5		2.61	99	.21				/	.21		/	/		/			sp-wk Alt, wk silin, sp py tr cpy wk-mod 2nd K spar, bio
407.6	8.6		2.60	98	.19				/	.19		Tr MoS2	/		/			Alt as above, st silin gtz veining Mz text patchy, wk-mod py tr MoS2 cpy
416.2	8.6		2.58	99	.26				/	.26			/		/			wk-mod Alt, st silin wk-mod 2nd bio growing in sil Mz wk py tr MoS2
425.2	9.0		2.58	100	.17				/	.17			wk-mod		/			Alt as above st silin, wk py on fracs tr MoS2 cpy
433.8	8.6		2.58	100	.23				/	.23			wk		/			st silin only wk text visable, wk-mod py tr cpy, tr MoS2?
442.3	8.5		2.58	97	.13				wk	.13					/			wk-mod Alt, wk 2nd bio, sp 2nd K spar. sp py
453.1	10.8		2.60	91	.17				/	.17					/			wk-mod Alt, silin, wk 2nd bio, sp-wk 2nd K spar, sp-wk py
E.O.H.		Avg Rec'y =		94%														

Note: Below the chalcocite zone, clay disappeared rapidly & rk had a fresh look. However, binocular microscope shows abundant sericite. The noted effects of hydrothermal fluids are, in order of importance; sericite, ~~[illegible]~~, silicification, 2ndary K-spar, and possible 2ndary biotite.

Final Depth 476.3'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-94
Sheet No. 1 of 2
Date Completed 7-27-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim	Rock Type	Remarks
6.3	6.3	NC	2.48	88	0.03			0.03					Mod	wk lim	Young qtz Sp	wk-mod Alt, sp lim tr cc?? color br-gy light
17.4	11.1	NX	2.47	89	.33			Blk ox's & Mal. .33			Poss.		/	sp-wk lim	/	mod Alt, wk lim, mal. on plag xyls tr CuSi gy to br-grn
26.2	8.8		2.46	94	.34			As above .34			/		/	wk lim	/	as above Mn Ox on fracs, no CuSi sp grn CuOx
36.4	9.2		2.47	94	.35			.35			/		/	/	/	as above, bk MnOx on fracs w/ tr Smiths(?)
44.5	9.1		2.45	95	.04			04					/	/	/	as above no smiths
54.1	9.6		2.49	86	.36			.31?	Tr		.05?		/	/	/	as above
62.7	8.6		2.55	90	.38			.33	/		.05?		/	sp	/	as above
71.5	8.8		2.54	100	.39			.34	/		.05?		wk-mod	/	/	" "
82.2	10.7		2.55	70	.27			.22	—		.05?		/	wk	/	" "
91.4	9.2		2.58	86	.63	.50	18.0' @ 681.54	.50	—		.13?		Mod	wk	/	as above 8t bar. in fract zone 86'-87' Grn CuOx & Blk ox's
100.2	8.8		2.56	95	.74	.58		.58			.16?		wk-mod	sp-wk	/	as above Mostly Mal, some chrys & wk ox's
108.7	8.5		2.53	99	.25			.20			.05?		/	wk	/	wk-mod Alt. diss lim grains or from aff mag. wk grn CuOx, bo
117.8	9.1		2.55	99	.02			.02					/	sp-wk	/	as above no bar. tr to no grn CuOx
128.1	10.3		2.55	97	.04			.04					/	wk	/	as above
137.3	9.2		2.54	99	.03			.03	Tr				/	/	/	as above
145.3	8.0		2.53	100	.03			.03	/			wk Proustite	/	sp-wk	/	as above, wk proustite (Ruby Silver) & cupritite
154.4	9.1		2.55	98	.76	.57		.57	—		.19?	wk? Proustite	/	/	/	as above wk proustite (Ruby Silver) & cupritite
163.3	8.9		2.55	99	1.66	.80		.80			.86	/	/	sp	/	wk Alt, sp-wk grn CuOx on fracs, wk-mod proustite on fracs
172.0	8.7		2.57	98	.64	.13		.13			.59	/	/	wk	Alt 168.5	as above, proustite? diss on fracs 168.5 to 172.0, some sil.
181.4	8.4		2.54	98	.59	.02		.02	sp	.05	.52	Tr MoS2	/	sp	subject to /182	Mod Alt, silin, feld Alt to ser w/some chlor, wk-mod, tr cpy
190.6	9.2		2.56	99	.44	.10		.10	/	.05	.29		wk	sp-wk	/	as above sp-wk grn CuOx on feld xyls
199.7	9.1		2.52	98	.94	.09		.09	/	.05	.80		/	/	/	Alt as above, wk-mod cc on wk cpy, wk-mod py tr CuOx on feld wk 2nd K-spar
208.7	9.0		2.48	100	.78	.04		.04	/	Tr	.74		Mod	wk	/	Mod-st Alt, Mod silin, sp cc, MoS2 lim, tr CuOx
217.8	9.1		2.49	100	.81	.02	164.4' @ .74/.10	.02	/	.02	.77		wk-mod	sp-wk	/	as above tr cc, sp MoS2 w/gtz wk py sp lim
227.0	9.2		2.57	97	.76	.01		.01	/	.05	.70		/	Tr	/	Alt as above, wk cc on wk py, sp MoS2 on unlots tr lim
235.8	8.8		2.58	96	.38	.01		.01	/	.10	.27		/		/	as above, wk cpy on unlots
246.0	9.2		2.57	100	.38	.01		.01	/	.25	.12		/		/	Mod Alt wk-mod silin patchy aplite, sp cc, wk cpy tr MoS2
254.4	9.4		2.57	99	.65	.01		.01	/	.62	.02		/		/	Mod Alt, silin sp cc, wk cpy tr MoS2 sp py
263.5	9.1		2.59	98	.27	.01		.01	wk	.16	.10	Tr MoS2	/		/	as above
273.1	9.6		2.61	100	1.00	.01		.01	sp	.02	.97		Mod		/	as above wk cc sp MoS2 on gtz unlots wk py
281.9	8.8		2.57	97	1.11	.01		.01	/	.01	1.09		/		/	wk-mod Alt, wk silin, wk-mod(-) cc mainly on fracs, sp py, cpy tr MoS2
290.9	9.0		2.58	99	1.09	.01		.01	/	.20	.88	Tr MoS2	wk-mod		/	Alt as above, wk-mod cc on cpy diss, sp py tr MoS2 w/gtz veins
299.8	8.9		2.57	99	.68	.01		.01	/	.20	.47		/		/	wk-mod Alt, patchy st silin, py on veins, wk-mod cc. on wk cpy tr MoS2
309.7	9.4		2.57	100	.40	.01		.01	sp & wk	.30	.09		/		/	as above
318.2	8.5		2.55	100	.31			—	/	.29	.02	Tr MoS2	wk	Tr lim	/	as above w/ mod(-) cpy
327.0	8.8		2.52	99	.36			.02	sp	.24	.10 500 ft		/	wk lim	/	as above, wk-mod(-) cpy
336.4	9.4		2.58	96	.33			.01	/	.22	.10 500 ft		/	sp lim	/	wk-mod Alt, wk silin, wk cc, cpy, py tr MoS2
344.2	7.8		2.57	94	.23			.02	/	.11	.10 500 ft	Tr MoS2	/	wk	/	wk-mod Alt, patchy st silin w/ sp py wk cc, wk-mod cpy, tr MoS2
354.0	9.8		2.58	92	.34			.02	/	.17	.15 500 ft	/	/	sp-wk		As above w cc & cpy diss & on vnlts Nom. leaches brwn

Final Depth 476.3'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-94
Sheet No. 2 of 2
Date Completed 7-27-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sec. clay	lim.	Rock Type	Remarks
367.5	13.5	NXWL	2.58	66	0.33			.02	sp	.10	.21	Tr MoS2	sp-wk	wk	AK	Num. leached & ac'd. poor rec'y of alt. zone near end of run. Aplaskites, wk-mod alt, patchy sil'n, wk cc & cpy, sp py. Tr cc replac. Gal.
376.6	9.1		2.57	96	0.59	0.01	25.9' @ .60/.01	.01	1	.10	.48	Tr Gal.	Sp	Sp		wk alt, wk-mod sil'n Tr leaching. wk-mod cc & cpy (?) sp py. Sp. cc replac. Gal.
385.1	8.5		2.56	100	.49	.01		.01	1	.15	.33	Tr Gal.	Sp-wk			wk-Mod Alt, Silw, wk-mod bar, gal, wk cc, cpy Sp. cc replac. Gal.
393.4	8.3		2.56	100	.73	.01		.01	1	.15	.57	Tr Gal	1			wk Alt, wk-mod bar. sp-wk cc, wk cpy tr MoS2 Tr. cc replac. Gal.
401.9	8.5		2.56	96	.25			.01	1	.10	.15	Tr Gal.	Sp	wk Jar		wk Alt, Sil'n, tr cc, wk cpy tr MoS2
411.0	9.1		2.55	99	.30			.01	1	.24	.05	Tr Gal Tr MoS2	1	1		wk Alt, Mod-st Silw, wk (+) cpy ~~sp py~~ tr MoS2
419.9	8.9		2.56	99	.29			.01	1	.28	Tr	Tr MoS2	1	1		As above dikelet of aplite @ 412, tr lim. cc
428.7	8.8		2.57	97	.24			.01	1	.23	Tr ?	1	wk	Jar sp-wk		wk-Mod Alt. wk Sil'n, sp py, wk cpy tr cc, MoS2
436.4	6.7		2.58	100	.37			.01	1	.31	.05	1	Sp	wk Jar		wk-Mod Alt, Silw, wk py, sp cpy tr cc, MoS2
446.0	10.6		2.60	85	.28			.01	1	.17	.10		wk-mod	1		as above to 411.0. st Alt, ser, wk-mod py, wk cc, 411.0 to 446.0
455.2	9.2		2.59	98	.36			.01	1	.30	.05	Tr Gal.	wk	sp Jar		wk Alt, Silw, wk py sp cpy, tr MoS2
463.0	7.8		2.61	99	.19			.01	1	.08	.10		Sp-wk	1		wk Alt, Mod Sil'n, wk-mod py, wk cpy, tr MoS2
476.3	13.3		2.61	85	.34			.01	1	.18	.15		1	1		wk Alt, Mod Sil'n, wk-mod (+) py, cpy tr MoS2 cc?
E.O.H.		Avg. Rec'y = 95%														

Final Depth 457.1'
Collar Elevation 2700.85
Coordinates 29,605 N ; 27,402 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-93
Sheet No. 1 of 2
Date Completed 7-21-65
Logged By J.A.B., C.W.H

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser, clay	Sil	Rock Type	Remarks
8	8.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	– Rock bit
22.0	14.0	NXWL	2.73	68	0.32			.01	wk-mod	.31	Tr?	Tr MoS2	sp ser, clay	wk Jar sp lim	Mz	wk-mod Alt, chlor. wk-mod py, cpy finely diss. MoS2 also diss.
29.5	7.5		2.70	100	.33				1	.33	—	1	1	1	1	wk Alt, sil wk py w/ chloritized matrix + cm on lots
37.8	8.3		2.70	98	.37	0.02		.02	Mod	.33	.02	1	1	wk Jar	1	as above
46.1	8.3		2.70	93	.51	.01		.01	1	.48	.02	1	1	1	1	as above, wk-mod py, tr cc, MoS2
54.8	8.7		2.70	93	.40	.01		.01	1	.39	Tr?	Tr-sp MoS2	1	1	1	Mod Alt, chlor. silin. qtz veining wk-mod py wk cpy tr MoS2 w/ qtz
63.8	9.0		2.64	100	.29	.01		.01	1	.28	Tr?	1	1	1	1	as above tr-sp cpy
72.5	8.7		2.63	100	.74	.01		.01	1	.73	Tr?	Tr-sp alt?	sp-wk ser, clay	1	1	Mod Alt, chlor, wk silin, tr cc, wk cpy mod py tr MoS2
81.4	8.9		2.63	99	.42	.01	78.5'	.01	1	.37	.05	Tr-sp MoS2	wk ser, clay	1	1	mod Alt, silin wk disp py, sp-wk cpy tr MoS2
89.8	8.4		2.61	92	.31	.01	@ .46/.01	.01	wk-mod	.30	—	1	sp ser, clay	1	1	as above
99.0	9.2		2.74	91	.47	.01		.01	wk-mod(+)	.44	.02	tr gal MoS2	1	1	1	Mod Alt, dk Mz in places fract. + recemented by dk matrix w/ py, cc
107.2	8.2		2.75	92	.55	tr		tr	wk-mod(+)	.55	tr	tr MoS2 bar	1	1	1	Mod Alt, wk-mod silin, mod py wk-mod cpy wk-mod cpy tr MoS2, bar
116.3	9.1		2.72	90	.47	.01		.01	1	.47	tr	1	1	1	1	Mod Alt, chlor. wk-mod silin, mod py, cpy (+), sp cc, MoS2 sp-wk bar
124.5	8.2		2.65	100	.33	tr		tr	Mod	.33	tr		1	1	1	Mod Alt, mod-st silin. wk-mod py, cpy, sp MoS2 on qtz vns
134.2	9.7		2.76	88	.24			–	wk-mod	.24	–	.052	wk-mod ser	1	bx @ 126.5-127.0	Alt as above. tr dk grn. wk py, cpy sp MoS2 bx mainly frag. qtz. diag. tr
143.4	9.2		2.69	89	.31			—	1	.31	–	1	wk ser	1	Mz	Mod Alt, wk-mod silin st text. wk-mod py, cpy sp MoS2 on qtz vns sp lim? bar frag
152.1	8.7		2.68	100	.37			–	1	.37	–	1	1	1	1	wk-mod Alt (chlor?) wk silin diss wk py, cpy tr MoS2 honeycomb in vuggy fracs.
160.8	8.7		2.66	96	.47	tr	27.8'	tr	1	.47	–	.023	1	1	1	Mod Alt, wk-mod silin diss wk py, sp-wk cpy, sp MoS2
170.1	9.3		2.71	96	.72	tr	@ .53/tr	tr	1	.72	–	.072	1	tr Jar	1	Alt as above wk-mod diss py, cpy wk cc, sp MoS2 on qtz
179.7	9.8		2.60	100	.40	.01		.01	1	.39	—	.051	1	1	1	Mod Alt, wk-mod(+) silin wk-mod(+) cpy, py, sp MoS2
188.6	8.7		2.63	99	.30			–	1	.30	–	.038	1	1	1	wk-mod Alt, silin. wk-mod py sp cpy tr MoS2 wk bar on
197.1	8.5		2.66	96	.22			–	wk-mod	.22	tr	tr gal .025	1	1	1	Alt as above, wk-mod py cpy, sp MoS2 wk-mod bar on lots
206.4	9.3		2.64	95	.37			–	1	.37	–	.026	1	—	1	wk Alt, mod silin wk-mod py cpy, sp MoS2 wk bar. diag fr
215.4	9.0		2.64	99	.47	.01	27.0'	.01	wk-mod py	.46		.025	wk-mod	tr Jar	1	wk Alt, mod silin, wk py, cpy tr MoS2 tr jar lim
224.2	8.8		2.62	100	.70	.01	@	.01	1	.70		.053	1	1	1	as above wk py cpy (+) sp MoS2
233.4	9.2		2.74	95	.55	.01	.57/.01	.01	1	.55	tr		1	1	Sp @ approx 228.4	Mz frags in qtz w/ sp MoS2 to cont. Sp mod Alt, silin, chlor. wk-mod py wk cpy
241.8	8.4		2.70	99	.28			–	1	.28	–		1	1	1	Alt + min as above, wk qtz vns w/ tr MoS2
250.6	8.8		2.75	93	.30			–	1	.30	–		1	—	1	as above, mod qtz vns w/ sp MoS2 patchy Mz-like text.
259.7	9.1		2.69	94	.29			–	1	.29	tr		1	—	1	wk Alt, mod silin, tr dk grn wk(+) py wk cpy, tr MoS2
268.2	8.5		2.68	96	.38			–	1	.38	tr		1	—	1	as above mod(+) silin wk py tr cpy MoS2
277.2	9.0		2.66	98	.28			–	1	.28	1		1	—	1	as above patch of v. sp w/ gradational cnt. 272-273 wk-mod py wk
285.4	8.2		2.65	96	.24				wk	.24		Tr MoS2	wk		1	St Alt (chlor) mod silin dk gy core w/ patchy Mz text. wk cpy
294.7	9.3		2.64	98	.24				wk-mod	.24			1		1	St Alt mod silin dk gy text. matrix flooding patchy Mz supports bx sp-wk cp
303.9	9.2		2.67	97	.31	.01		.01	1	.30			1		1	St Alt as above, wk py sp cpy tr MoS2 on wk qtz veins, tr cp
312.7	8.8		2.66	96	.78	.03		.03?	1	.75		Tr MoS2	1		1	St Alt bleaching, mod-st silin, wk matrix, wk py wk-mod cpy tr Mz + Alu
321.3	8.6		2.66	100	.26				1	.26		1	wk-mod		1	Mod-st Alt, silin, wk-mod py, sp-wk cpy, tr MoS2
330.2	8.9		2.66	97	.25				1	.25		1	1		1	St Alt, mod silin, wk-mod py, wk cpy tr MoS2 core dk grn
340.4	10.2		2.65	97	.35	.02		.02?	1	.33		1	wk		1	as above

Final Depth 457.1'
Collar Elevation 2700.85
Coordinates 29,605 N ; 27,402 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F93
Sheet No. 2 of 2
Date Completed 7-21-65
Logged By JAB-, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser		Rock Type	Remarks
349.3	8.9	NXW	2.60	99	.40	tr		Tr	wk-mod	.40			wk		Sp	WK All WK-Mod Silin dk gy, wk py Sp Cpy wispy tot
359.0	9.7		2.61	94	.35	tr		Tr	1	.35		Tr. MoS_2	1		1	WK-Mod Alt, Silin, WK-mod py, wk cpy wk gtz veins
367.7	8.7		2.60	97	.26	tr		Tr	1	.26		– 1.	1		1	WK-mod (+) Alt Silin light gy, wk-Mod py, wk cpy tr MoS_2
376.8	9.1		2.62	99	.43	.01		.01?	1	.42		?	1		1	as above
384.6	7.8		2.66	98	.19				1	.19		Tr MoS_2	sp-wk		1	as above
392.6	8.0		2.68	94	.27				1	.27		1	wk		1	as above wk py sp cpy tr MoS_2
401.1	8.5		2.77	98	.25				1	.25			1		1	st chlor. Alt. wk py, sp cpy
410.8	9.7		2.77	94	.40	.02		.02?	1	.38 ~~.40~~			1		1	as above wk gtz veins, tr MoS_2
419.1	8.3		2.76	93	.27				1	.27			1		1	Mod Alt. (chlor.), Mod Silin, sp py, tr sp cpy, MoS_2
427.5	8.4		2.77	99	.31				1	.31		Tr MoS_2	1		1	as above wk-mod gtz veins w/ cpy, MoS_2
436.3	8.8		2.69	98	.58	.02		.02?	Mod	.56		1	1		1	wk Alt, Mod-st Silin wk py sp cpy, tr MoS_2
445.0	8.7		2.69	89	.28		29.6' @ .45/.01	—	wk-mod	.28		Tr. Talc	1		Mz @ 443.6	Sp as above to cnt. Mz wk Alt, wk diss py tr cpy
453.0	8.0		2.70	93	.51	.02		.02	1	.49		Tr MoS_2	1		Sp @ 445.5	Mz as above cnt dip about 60°. Sp Mod Alt, Mod-st Silin sp, tr MoS_2
457.1	4.1		2.69	99	.41	.01		.01	1	.40			1		1	as above MoS_2 & py mainly on gtz veins
EOH																

Note: Average assay for entire hole =
0.38% Cu
0.02 oz Ag
4.6% Fe
0.038% MoS_2
N.I. Pb
0.17% Zn

Note: Only change in rock noted by hand lens & binocular scope was addition of Silica and of sericite. No epidote, chlorite, etc. seen. Clay appears to be supergene and was only on fractures, most, maybe all, of which were unmineralized. Therefore it is assumed that silica and sericite are the only effects on the original rock, and they are the results of hydrothermal alteration caused by the introduction of the ore fluids.

Final Depth 346.5'
Collar Elevation 2745.40
Coordinates 30,106.85 N ; 27,173.41 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-92
Sheet No. 1 of 1
Date Completed 7/9/65
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration	lim	Rock Type	Remarks
15.0	15.0	RB	-	-	-	-	-	-	-	-	-	-	-	-	-	Rock bit
24.3	9.3	NXW1	3.45	87	.36	.01		.01	massive	.35?	-	-	-	tr	Bk Porh seds grn to Br metaseds	black meta seds st propilite alt st py diss & on uns, wk-mod qtz
33.7	9.4		3.04	99	.36	.01		.01	)	.35	-	-	Mod qar	tr		mod-st silin, st prop alt wk-mod lim silicates st py tr cpy
43.0	9.3		3.05	95	.28	.01		.01	)	.29	-		-	)	(Hf)	as above
52.0	9.0		2.92	96	.19			-	st	.19	-	Serp	-	tr		as above mod py very vuggy text @ 49' to 52.3' tr hem
62.9	10.9		2.80	96	.22			-	)	.22	-	-	-	-	Sp @ 57	seds st above wk-mod epi. Sp mod-st Alt mod silin wk-mod epi py
72.0	9.1		2.71	100	.07				Mod	.07	-	-	tr Clay	tr.	)	St. Silin, mod Alt, mod py w/qtz uns. tr MoS2 qtz saturates rock from uns
81.1	9.1		2.85	95	.06			-	)	-	.06	-	)	)	)	Complete silin text gone except in a few patches mod (c) py, tr MoS2 on qtz uns
90.7	9.6		2.87	95	.31			.01	Mod-st	.30	-	-	-	—	)	as above massive py 88' to 90.7 (end of run)
99.6	8.9		2.85	92	.17			-	Mod	.17	-	-	-	tr	)	st silin, Mod-st Alt. mod py tr MoS2 on qtz uns
108.5	8.9		2.88	92	.09			-	)	.09	-	-	tr clay	sp	)	Mod Silin, Mod Alt, wk-Mod (c) py tr MoS2
117.3	8.8		2.64	99	.35			-	st	.35	-	-	)	sp	)	Mod-st Silin, Alt mn chlor alt. st py to 113', wk to end run. sp Man. uns wk-lim sp-wk hem
126.1	8.8		3.52	75	.30			-	)	.30	-	-	wk qar	tr	Tr @ 123'	Sp as above, mod-st Alt. Tr. st py, chlor. wk-mod qtz veining
135.1	9.0		2.79	89	.21			.21	wk	-	-	-	-	-	Hf @ 134	Tr. Mod py on uns. tr MoS2 on wk qtz uns, wk-mod hem on uns tr lim. Alt. wk-mod
144.5	9.4		2.96	89	.16			.01	)	.15	-	-	wk chlor	—	)	Mod chlor, wk-mod py st silin Hf. bx @ 139.5' end run. Trace almost blotted out by
153.4	8.9		2.73	100	.18				Mod	.18		Tr-Sp Galena	)		)	dk grn chlor or serp alt. wk-Mod hem on uns. mod-st py wk cc, hem
162.8	9.4		2.76	99	.16				Mod-st	.16		Tr Galena	wk chlor wk clay	Tr hem Tr lim	)	as above mod patchy silin
172.3	9.5		2.83	92	.29				)	.29			wk clay	Tr hem	)	as above patchy buff areas appear to be less alt. argillic
181.9	9.6		2.79	97	.32				)	.32		Tr. Spec. Tr Mag	wk chlor wk clay	Sp. hem	)	as above 50% core buff colored mod py mod hem @ 177-178, Mod galena circa 18
191.0	9.1		2.80	100	.13				)	.13		Tr. MoS2	Tr ser & clay		Sp @ 182'	Wk-Mod Silin, Alt, Mod qtz vning w/mod py & tr MoS2
200.3	9.3		2.77	98	.12				)	.12			)		)	as above
209.6	9.3		2.75	92	.08				)	.08			)		)	as above
220.1	11.1		2.76	81	.10				)	.10			)		)	wk silin, Alt. wk qtz vning w/py & tr MoS2
229.7	9.0		2.79	100	.17				)	.17			)		)	st silin, Alt st epidote, py diss & on wlls
236.7	7.0		2.75	100	.12				)	.12			)		)	as above color dark gy to bk except where text above
245.3	8.6		2.79	99	.07				)	.07			)		)	Mod Silin, Alt. gy to bk. Mod py diss on uns sp epi
254.4	9.1		2.79	98	.04				)	.04			)		)	as above wk epi, stronger py veining
264.3	9.9		2.76	89	.04				)	.04			)		)	as above tr MoS2 on qtz uns
273.6	9.3		2.76	97	.05				)	.05	-	tr hem	)		)	as above wk-mod epi
283.1	9.5		3.18	87	.20				)	.05	.15	St epi	)		)	Complete Alt to epidote wk-mod (c) py wk qtz uns
291.7	8.6		3.21	88	.17				mod	.12	.05	)	tr ser, clay		)	as above more numerous uns w/qtz & py
300.9	9.2		3.21	90	.16				)	.16	-	)	)			Sp, text almost obliterated st epi. wk 2nd felds. Mod py
310.0	9.1		2.66	99	.09				)	.09	-	-	+			Text almost Mod, but still Sp. wk Ep, 2nd felds, mod silin.
319.2	9.2		2.67	100	.04				)	.04	-	sphem	)			As above but or Mod. 2nd felds.
327.4	8.2		2.68	100	.05				)	.05	-	)	)			Sp, mod silin, wk 2nd felds, wk Ep, mod py, sp
338.4	11.0		2.64	88	.03				wk-mod	.03	-	-	)			As above
346.5	8.1		2.63	100	.04				)	.04	-		)			" "
E.O.H.		Avg Rec'y =		94%									RK appears fresh, but actually has approx mod.			Note: Hydrothermal effects are sericite in igneous rock (1) silicification (2) propilite (3) and. kao

Final Depth 476.7'
Collar Elevation 3144.81
Coordinates 29,879.76 N; 24,895.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-91
Sheet No. 1 of 2
Date Completed 7-15-63
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser	Clay	Lim	Rock Type	Remarks
7.5	7.5	RB.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
23.5	16.5	NXwl	2.51	39	.27	-		.27	–	–	-	grn CuOx	Mod ser		wk-mod lim	Mz	st silin, Alt, wk lim tr grn CuOx
39.2	15.7		2.50	48	.31	.26		.26	–	–	.05	)	)		)		as above
48.3	9.1		2.51	44	.58	.10		.10	wk	–	.48	–	)		sp-wk lim	Young? Sp @ 45.5	st Alt mainly clay dark grey ground mass
58.9	10.6		2.41	75	1.01	.13		.13	tr	–	.88	grn CuOx	)		)	)	wk-mod Alt mainly clay in plag, wk cc no py tr lim
67.1	8.2		2.37	100	1.09	.14		.14	tr	–	.95	)	)		wk lim	)	as above tr py cc very finely diss sp spi. wk-mod lim tr
75.7	8.6		2.37	100	.87	.14		.14	tr	–	.73	)	wk-mod		sp jar wk-mod lim sp jar	)	as above, sp py on uns & very finely diss wk lim. rock very pr
85.6	9.9		2.46	85	.98	.27		.27	–	–	.71	)	mod		)	)	as above, wk jar wk lim, tr grn CuOx
94.3	8.7		2.49	90	.69	.29		.29	–	–	.40	–	wk-mod		wk lim sp jar	)	as above tr py on fracts & diss wk lim, jar, wk silin on tra
103.7	9.4		2.49	90	.55	.19		.19	tr	–	.36	grn CuOx	)		)	)	as above
111.3	7.6		2.52	97	.83	.21	157.4	2.1	Sp		.62		wk-mod ser & clay		)	)	wk-mod Alt wk lim on fracts, tr py matrix alt to serp tr cc?
120.2	8.9		2.57	96	.82	.29	@	Vis. Nc cuprite .29	)	•	.53		)		sp lim, wk jar.	)	as above, wk cup. on fracts, sp lim, jar.
129.3	9.1		2.58	94	.96	.29	.78/.16	.29	)		.67		)		)	Λ	as above, wk cup on fracts & diss replacing cc? sp lim & jar.
141.4	12.1		2.59	68	.80	.28		.28	wk		.52	Tr MoS2	wk ser & clay		)	Sp @ 131.5	st silin wk-mod py on fracts tr lim, jar.
153.0	11.6		2.61	71	.69	.04		.04	)	.15	.50	)	)			)	st silin wk py on fracts, spec, jar, chlor.
162.3	9.3		2.70	90	1.06	.06		Tr Diop tase .06	)	.02	.98	)	Mod ser & clay		Tr lim	)	Mod-st silin, mod pervasive grn color Alt wk-mod py on fracts &
170.4	8.1		2.65	90	.69	.06		.06	Sp-wk	.05	.58	–	)		wk lim	)	As above mod Alt wk cc, patchy wk lim
179.0	8.6		2.65	96	.67	.03		.03	Sp	–	.64	–	)		wk-mod lim	)	st silin mod-st pervasive grn color alt wk qtz veining w/wk p
188.0	9.0		2.65	98	.38	.04		.04	sp-wk	–	.34	sp MoS2	)		)	)	as above tr cpy, wk lim tr Mo sp lim
196.6	8.6		2.60	99	.65	.11		.11	wk(+)	tr	.54	sp MoS2	)		)	)	as above
205.5	8.9		2.63	95	.17			.01	mod(-)	.05	.11	–	wk-mod clay-ser		)	Silica rock Sp? @ 203.2	Sp as above to 203.2 Complete silin bleaches & destroys text. of
214.2	8.7		2.62	92	.22			.01	\	.05	.16	–	mod ser, clay		)	bx @ 212.4	Prob. SP. Wh to pink color faint text suggests 2nd ? spar.
223.9	9.7		2.50	86	.16			.01	Sp	–	.15	–	)		)	Sp @ 224.7	bx is patchy w/ sil. Sp Frags of silica ox in matrix of dk rx floor
232.4	8.5		2.35	97	.15			.01	sp-wk	–	.15	sp bar	)		)	Sp @ 230	Cnt dips @ about 75° Mod. appear. Sp to 230 then norm. sp. wk py, sp-wk cc.
241.4	9.0		2.67	89	.12			–	wk	.05	.07	Tr MoS2	wk ser		–	Young ser Sp ≈ 238	Norm. sp to 238 then Mod. appear. Sp. wk-mod py. Sp cc, tr Mos
250.1	8.7		2.65	93	.01			–	tr-sp	–	.01	–	sp-wk ser, clay		–	)	Mod appear. Sp. wk-mod py. diss & in vnlts
258.7	8.6		2.66	95	.02			.01	tr	–	.01	–	)		Tr lim, wk	)	Some leach & on vnlts. As above but wr visible cc, diss & in vnlts.
267.6	8.9		2.47	92	.06			.02	tr	–	.04	–	)		)	)	Dk and appear. Sp Most vnlts are leach. wk diss py.
276.7	9.1		2.58	84	.10			.06	tr	–	.04	sp-wk Cup. on fra + diss	)		sp-wk lim	)	As above
285.9	9.2		2.61	96	.12			.04	tr	–	.08	–	)		)	)	" " vnlts mostly leached. Sulf are diss.
295.0	9.1		2.61	93	.13			.01	tr	.03	.09	–	sp ser clay		)	Sp @ 290.2	" " to 290.2 Dk and appear. Sp def. younger. small dikelets c older norm. sp.
303.5	8.5		2.69	95	.41	.01		.01	wk	.20	.20	Tr Sp bd	)		wk lim	)	dk gy text wk due to mod silin wk-mod cpy sp py, cc
312.7	9.2		2.59	93	.27			.01	)	.20	.06		)		)	)	as above sp cpy tr py
321.9	9.2		2.59	96	.33			.01	)	.27	.05		sp-wk clay, ser		)	)	as above no cpy wk py, sp cc
330.9	9.0		2.68	93	.36			Tr	)	.36	Tr?	Tr MoS2	Sp ser, clay		Sp Jar	)	dk gy to bk groundmass good text. wk Alt silin, patchy sl silin. sp py
339.9	9.0		2.61	93	.55	.01		.01	)	.55	Tr?	)	)		)		light gy, mod w/patchy st silin sp py
349.0	9.1		2.57	96	.12				Sp	.12	Tr?		)		)	Y Sp @ 341.7	as above to cnt. Cnt brecciated w/ py Sp intruding. wk-mod Alt sp 341.
358.5	9.5		2.56	97	.01			.01?	Sp-wk				)		wk Jar.		as above
367.6	9.1		2.67	97	.02				Sp	.02?			)		)		dk [illegible] mod Alt [illegible] no discernable [illegible]

Final Depth 476.7'
Collar Elevation 3144.81
Coordinates 29,879.76 N ; 24,895.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-96
Sheet No. 2 of 2
Date Completed 7-15-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sericite	Limo	Rock Type	Remarks
377.1	9.5	NX	2.53	95	0.10				sp	.08	.02	Tr MoS2 Tr MoS2 Tr Galena	sp	sp Jar sp lim	AK @ 371.5	Sp St Alt & broken 367.6 to cont. AK wk-mod Alt wk py
385.0	7.9		2.54	100	.29				Sp-wk	.29				sp Jar		Mod-st Sil'n. wk py cpy w/ gtz. Tr cove lite
393.9	8.9		2.51	97	.19					.19		Bot tr				as above wk chlor.
403.0	9.1		2.54	100	.14					.14						as above sp-wk py, cpy
412.0	9.0		2.59	97	.28					.27	.01	tr MoS2				St sil'n in AK w/ patchy Mod Alt Ms. sp py tr cpy, MoS2
420.9	8.9		2.58	100	.31					.30	.01					as above
429.7	8.8		2.59	92	.15					.15	tr		tr			St Sil'n, patchy wk chlor Alt. sp py cpy, tr MoS2
438.9	9.2		2.58	96	.16					.16	tr	—	sp-wk			Mod Alt w/ ser, chlor, Mod sil'n wk diss py + cpy
448.0	9.1		2.59	93	.16					.16	tr	tr MoS2				Mod Alt, as above, Mod-st sil'n wk py wk-mod cpy, tr MoS2
456.6	8.6		2.56	92	.14					.14	—	tr MoS2	sp			as above
465.8	9.2		2.56	97	.15					.15	tr	tr gal w/ fluor	wk-mod			Alt & Sil'n as above wk py w/ wk-mod cpy entrace wk py tr MoS2 vugs text.
476.7	10.9		2.55	87	.10					.10	—	tr MoS2 wk bar	Mod (-)			AK bxiated + recemented w/ gtz mod-st Alt Sil'n tr cpy py MoS2
E.O.H.		Avg. Rec'y = 88%														

Final Depth 476.7'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-91
Sheet No. 1 of 2
Date Completed 7-15-6
Logged By JAB., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser Clay	lim	Rock Type	Remarks
7.5	7.5	RB.	–	–	–	–	–	–	–	–	–	–	–	–	–	Rock bit
23.5	16.5	NXwl	2.51	39	.27			.27	–	–	–	grn CuOx	Mod ser	wk-mod lim	Mz	st silN, Alt, wk lim tr grn CuOx
39.2	15.7		2.50	48	.31	.26		.26	–	–	.05	)	)	)		as above
48.3	9.1		2.51	44	.58	.10		.10	wk	–	.48	–	)	Sp-wk lim	Porphyry Sp @ 45.5	st Alt mainly clay dark grey ground mass
58.9	10.6		2.41	75	1.01	.13		.13	tr	–	.88	grn CuOx	)	)	)	wk-Mod Alt mainly clay in plag, wk cc no py tr lim
67.1	8.2		2.37	100	1.09	.14		.14	tr	–	.95	)	)	wk lim	)	as above tr py cc very finely diss sp spi. wk-mod lim tr
75.7	8.6		2.37	100	.87	.14		.14	tr	–	.73	)	wk-mod	Sp jar wk-mod lim sp jar	)	as above, sp py on ons & very finely diss. wk lim. rock very p
85.6	9.9		2.46	85	.98	.27		.27	–	–	.71	)	Mod	)	)	as above, wk jar wk lim, tr grn CuOx
94.3	8.7		2.49	90	.69	.29		.29	–	–	.40	–	wk-mod	wk lim sp jar	)	as above tr py on fracts & diss wk lim, jar, wk silN, tr
103.7	9.4		2.49	90	.55	.19		.19	tr	–	.36	grn CuOx	)	)	)	as above
111.3	7.6		2.52	97	.83	.21	157.4	.21	Sp		.62		wk-mod Ser & clay	)	)	wk-Mod Alt. wk lim on fracts, tr py mafics alt to serp tr cc?
120.2	8.9		2.57	96	.82	.29	@	Vis. No cu in tel .29	)		.53		)	Sp lim, wk jar.	)	as above, wk cup. on fracts, sp lim, jar.
129.3	9.1		2.58	94	.96	.29	.78/.16	.29	)		.67		)	)	Λ	as above, wk cup on fracts & diss replacing cc? sp lim & jar
141.4	12.1		2.59	68	.80	.28		.28	wk	•	.52	Tr MoS_2	wk Ser & clay	)	Sp @ 131.5	st silN. wk-mod py on fracts tr Cc lim, jar
153.0	11.6		2.61	71	.69	.04		.04	)	.15	.50	)	)		)	st silN wk py on fracts, spec, jar, chlor.
162.3	9.3		2.70	90	1.06	.06		Tr Diortase .06	)	.02	.98	)	Mod ser & clay	Tr lim	)	Mod - st silN, mod pervasive grn chlor Alt. wk-mod py on fracts
170.4	8.1		2.65	90	.69	.06		.06	Sp-wk	.05	.58	–	)	wk lim	)	As above mod Alt. wk cc, patchy wk lim
179.0	8.6		2.65	96	.67	.03		.03	Sp	–	.64	–	)	wk-mod lim	)	st silN mod-st pervasive grn chlor. alt. wk qtz veining w/ wk py tr Mo
188.0	9.0		2.65	98	.38	.04		.04	Sp-wk	–	.34	Sp MoS_2	)	)	)	as above tr cpy, wk lim Sp lim
196.6	8.6		2.60	99	.65	.11		.11	wk(+)	tr	.54	Sp MoS_2	)	)	)	as above
205.5	8.9		2.63	95	.17			.01	mod(-)	.05	.11	–	wk-mod clay-ser	)	Silica rock Sp? @ 203.2	Sp as above to 203.2 complete silN bleaches & destroys text. of prob. SP
214.2	8.7		2.62	92	.22			.01	)	.05	.16	–	Mod ser. clay	)	bx @ 212.4	Wh to pink color faint text suggests 2nd f spar.
223.9	9.7		2.50	86	.16			.01	Sp	–	.15	–	)	)	Sp @ 224.7	bx is patchy w/ sil. Sp. Frags of silica ox in matrix of dk rx floor
232.4	8.5		2.35	97	.15			.01	Sp-wk	–	.15	Sp bar	)	)	Sp @ 230	Mod. appear. Sp to 230 then norm. Sp. wk py, Sp-wk cc. Cnt dips @ about 75°
241.4	9.0		2.67	89	.12			–	wk	.05	.07	Tr MoS_2	wk ser	–	Porphyry Sp ≈ 238	Norm. Sp to 238 then Mod. appear. Sp. wk-mod py. Sp cc, tr Mo
250.1	8.7		2.65	93	.01			–	tr-Sp	–	.01	–	Sp-wk ser. clay	–	)	Mod appear. Sp. wk-mod py. diss & in veins
258.7	8.6		2.66	95	.02			.01	tr	–	.01	–	)	Tr lim, wk	)	Some leach & on vein. As above but wk vis. dis cc, diss & in veins.
267.6	8.9		2.47	92	.06			.02	tr	–	.04	–	)	)	)	Dk and appear. Sp Most veins are leach. wk diss py.
276.7	9.1		2.58	84	.10			.06	tr	–	.04	Sp-wk Cup. on fra + diss	)	Sp-wk lim	)	As above
285.9	9.2		2.61	96	.12			.04	tr	–	.08	–	)	)	)	" " veins mostly leached. Suls are diss.
295.0	9.1		2.61	93	.13			.01	tr	.03	.09	–	Sp ser clay	)	Sp @ 290.2	" " to 290.2 DK and appear. Sp def. younger small dikelets. other norm. Sp.
303.5	8.5		2.69	95	.41	.01		.01	wk	.20	.20	Tr Sphl	)	wk lim	)	dk gy text wk due to mod silN wk-mod cpy. sp py, cc
312.7	9.2		2.59	93	.27			.01	)	.20	.06		)	)	)	as above sp cpy tr py
321.9	9.2		2.59	96	.33			.01	)	.27	.05		Sp-wk Clay, Ser	)	)	as above no cpy wk py, sp cc
330.9	9.0		2.68	93	.36			Tr	)	.36	Tr?	Tr MoS_2	Sp Ser clay	Sp lim	)	dk gy to bk groundmass and text. wk Alt silN, patchy st silN sp py
339.9	9.0		2.61	93	.55	.01		.01	)	.55	Tr?	)	)	)		light gy, mod w/ patchy st silN sp py
349.0	9.1		2.57	96	.12				Sp	.12	Tr?		)	)	Sp @ 341.7	as above to cnt. cat brecciated w/ wk Sp intruding wk-mod Alt. sp 341.
358.5	9.5		2.56	97	.01			.01?	Sp-wk				)	wk lim		as above
367.6	9.1		2.67	97	.02				Sp	.02?			)	)		

Final Depth 476.7'
Collar Elevation 3207.40
Coordinates 29,761.47 N ; 24,901.65 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-96
Sheet No. 2 of 2
Date Completed 7-15-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Ser-Clay	Lim	Rock Type	Remarks
377.1	9.5	NX	2.53	95	0.10				sp	.08	.02	Tr MoS2	sp	sp var sp lim	AK @ 371.5	Sp St Alt & broken 367.6 to cnt. AK wk-mod Alt wk py
385.0	7.9		2.54	100	.29				sp-wk	.29		Tr MoS2 Tr Galena		sp Jar		Mod-st Silin. wk py cpy w/ qtz To core Lite
393.9	8.9		2.51	97	.19					.19		Both				as above wk chlor.
403.0	9.1		2.54	100	.14					.14						as above sp-wk py, cpy
412.0	9.0		2.59	97	.28					.27	.01	tr MoS2				St silin in AK w/ patchy Mod Alt Ms. sp py tr cpy, MoS2
420.9	8.9		2.58	100	.31					.30	.01					as above
429.7	8.8		2.59	92	.15					.15	tr		tr			St silin, patchy wk chlor Alt. sp py cpy, tr MoS2
438.9	9.2		2.58	96	.16					.16	tr	—	sp-wk			Mod Alt w/ ser, chlor, Mod silin. wk diss py + cpy
448.0	9.1		2.59	93	.16					.16	tr	tr Diss				Mod Alt, as above, Mod-st silin wk py wk-mod cpy, tr MoS2
456.6	8.6		2.56	92	.14					.14	—	tr MoS2	sp			As above
465.8	9.2		2.56	97	.15					.15	tr	tr gal w/ Fluor	wk-mod			Alt + silin as above wk pal w/ wk-mod cpy on fracs wk pyite MoS2 vugs text.
476.7	10.9		2.55	87	.10					.10	—	tr MoS2 wk bar	Mod (-)			AK bxiated + recemented w/ qtz mod-st Alt silin tr cpy py MoS2
E.O.H.		Avg. Rec'y = 88%														

Final Depth 222.5'
Collar Elevation 2935.31
Coordinates 30,795.14 N; 24,885.27 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F90
Sheet No. 1 of 1
Date Completed 7-2-65
Logged By J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration talc serp	clay	lim	Rock Type	Remarks
15.0	15.0	RB	–	–	–	–	–	–	–	–	–	–	–	–	–	–	Rockbit through stream fill
48.8	33.8	Nxwl	2.58	23	0.12			.10	tr	.02	–	–	wk clay	wk lim		DP @ collar	+ 1st few inches, meta ls @? w/ mod calcons, limy ss @ 28, talc-serp bx @ 47'
57.9	9.1		2.57	95	.12			.10	tr	.02			wk talc	wk lim tr		Hf: bx	wk talc-serp alt. of ls to ss recemented bx wk lim
67.1	9.2		2.58	95	.30			.30	tr	–	–	wk bar.				@ 256' limy gtzite	gtzite w/ patchy grn ls w/ wk talc-serp. st lim @ 64.3' & 66.8' indicate zone
80.1	13.0		2.59	68	.35			.35	tr	–	–		wk-mod talc serp			Hf @ 87'	meta ls, mod bx no dolicts. tr py, tr wk grn
93.1	13.0		2.57	64	.29			.29	?	–	–	–	–	mod-st lim		sandstone run limy molassed	grn meta ls, wk-mod talc-serp. alt. wk bx (recem) mod lim @ end
101.3	8.2		2.57	97	.32			.32	–	–	–	–	wk-mod talc-serp			Hf:	st lim stain, core completely broken
111.6	10.3		2.67	86	.17			–	wk	.17	–	–	tr talc-serp	sp lim			as above mod lim st. patchy st talc-serp alt
120.9	9.3		2.75	97	.43	0.01		.01	mod	.42	–	mod-st hem	wk-mod calc silicates	–			1st ft run broken 2nd ½ gray limy gtzite wk py in run
130.1	9.2		3.02	88	.14			–	wk-mod	.14	–	wk-mod hem	tr talc serp			Hf 116 wk gtzite	3" mg diabase at 112' ls w mod-st alt to calc-silicates wk-mod py, tr cp wk-mod hem
139.7	9.6		2.70	92	.22			.05	wk	.17	–	mod hem	–	wk-mod lim		Hf 122	meta ls & wk ss, w/ sp calc-sil., & wk-mod talc-serp alt. wk py, wk-mod hem
149.0	9.3		2.70	91	.31			.01	wk-mod	.30	–	wk-mod hem	–	wk lim		Tr 148	as above w/ sp ss wk-mod talc-serp. alt. wk py, sp cpy wk-mod hem
158.1	9.1		2.99	85	.15			–		.15	–	mod-st hem	wk-mod talc-serp	–		meta ls	as above, wk talc serp alt, wk-mod py hem, sp-wk cpy wk-mod bx calc w/ worst shown ivory
171.2	13.1		2.57	68	.04			–	tr	.04	–	tr	mod talc-serp	–		Hf 158.2	wk calc. silic. alt. sp-wk py mod-st hem (diss) tr cpy
179.9	8.7		2.58	99	.04					.04	–	–		–		limy ss @ 165	grn limy slt st, vinegar limy ss @ 165 sp py
188.2	8.3		2.56	96	.11					.11	–	–					as above mod limy ss. wk py
196.6	8.4		2.48	98	.02					.02	–	–				weakly limy ss	as above the ss could be considered a gtzite
206.0	9.4		2.37	100	.05					.05	–	–					as above
214.7	8.7		2.46	98	.14					.14	–	wk hem	wk-mod talc-serp				ss (gtzite) lrg dark gray very fine grained tr sulf
222.5	7.8		2.46	100	.03				sp-wk	.03	–	–		–			patchy tac. @ 211. wk-mod cpy wk MnSa. rest core as above
E.O.H.		Avg. Rec'y =		78%													gtzite w/ wk-mod talc-serp alt tr sulf.
														Acid (HCl)		Reactive	

Final Depth 341.7'
Collar Elevation 2951.05
Coordinates 30,629.21 N ; 24,878.45 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F89
Sheet No. 1 of 1
Date Completed 6-28-65
Logged By J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, tal serp	lim	Rock Type	Remarks
8.8	8.8	N.C. RB	—	—	—	—	—	—	—	—	—	—	—	—	—	Rock bit; no core.
19.9	11.1	NX(W)	2.52	76	.13			.13	—	—	—	—	mod tal serp	wk lim	limy gtzite	Red stained limy gtzite dark, soft lm. talc-serp.(?) meta ls(?)
27.9	8.0		2.55	100	.53	.18	17.6' @	.18	—	.35?	—	—	wk tal-serp	wk-mod.	to 12.2' 1' to 22.9	Patchy gtzite as above for 1st 3' run. bx talc rock rest run
37.5	9.6		2.56	88	.45	.15	.49/.16	.15	—	.30?	—	—	/	wk lim	talc-serp Hf	Talc-serp-sed. wk lim. Gr. (Zg?) rx (Sp?) @ 36.5 st Hf
46.0	8.5		2.63	98	.24			.10	—	.14?	—	bx ox	wk chlor?	sp-wk	/	dark gr. to gr-br talc, serp rx wk lim, tr cal. veining
54.2	8.2		2.62	97	.15			.11	—	.04?	—	wk /	tr	wk	/	limy ss. red br to gr. wk lim
63.2	9.0		2.60	95	.35	.14		.14	—	.21?	—	wk /	/	/	bx @ 63 Hf	talc-serp rehealed bx w/ frags. of limy ss. Part. shears wk lim st
72.1	8.9		2.59	94	.58	.31		.31	—	.27?	—	wk-mod bk ox	/	wk-mod	/	rehealed talc-serp, slty ls bx. wk lim.
82.0	9.9		2.72	87	.25			.20	tr	.05?	—	wk bk ox	/	wk	gr. marb?	Gr. marb (talc-serp alt) mod cal. vns. tr lim
88.3	6.3		2.71	100	.15			.10	tr	.05?	—	/	/	sp-wk	Sp? @ 84-85	diklet of aplanetic gr rx that may be sp. Cntct gradational. mark as above
97.3	9.0		2.59	97	.05			.05	tr	—	—	—	—	sp	Sp? @ 90-91	diklet as above, wh to gr marb w/ patchy bx. tr lim on fracs
106.6	9.3		2.59	100	.42	.19		.19	wk	.13?	.10?	—	—	lim stain ends about 93' sp tr sp to Cu ox	Hf	Gr + wh marb. w/ talc-serp alt. patch lim, wk cpx, wk py
116.2	9.6		2.56	98	.03			.03	tr	—	—	—	—	sp-wk	/	Wh-tan limy ss, patchy gr talc-serp alt tr lim wk qtz vns w/tr
125.2	9.2		2.59	98	.06			.06	—	—	—	—	—	/	/	wh-tan w/tr red. limy ss patchy gr talc-serp marb. tr lim alt.
134.4	9.0		2.59	99	.10			.10	tr	—	—	—	—	/	/	light tan to light gr. limy ss. wk-mod lim alt py wk disp py
143.6	9.2		2.58	98	.10			.10	tr?	—	—	—	—	/	/	Limy ss as above, rock well broken. tr py, cc? on fracs w/ wk qtz vns
152.5	8.9		2.55	91	.04			.04	—	—	—	—	—	wk	/	As above f/t @ 149.6 - dip 60°
161.2	8.7		2.41	100	.04			.04	—	—	—	—	—	wk tr jar	/	as above but alt light gr. wk lim
170.6	9.4		2.38	99	.04			.04	—	—	—	—	—	sp-wk	bx 174.4-176.6	dip 60° as above w/ patchy stain
180.0	9.4		2.63	99	.10			.10	Tr	—	—	—	—	/	Sp? @ 173.4	diklet 3" thick gr-tan limy ss. tr mass on wk qtz vns
189.5	9.5		2.67	94	.06			.06	tr	—	—	—	—	/	sh zone 182.6-186.6 dip 60	gr-gry limy ss. wk lim in sh zone
201.6	12.1		2.35	85	.07			.07	—	—	—	—	sp talc alt.	/	slt st @ 196'	gr ss w/ wk lim @ 196 limy slt st(?) very soft wk-mod cal vns dip
211.1	9.5		2.66	91	.35	.25		.25	—	—	.10?	mod-st bar.	wk-mod clay	/	Hf bx w/ st lim @ 211	patchy bx, mod diss. lim in marb. mod-st cal vns wk bar vns tr c
221.1	10.0		2.57	93	.41	.09	19.3' @	.09	wk-mod	32	—	—	wk talc wk chr	tr	bx	Leached cntct @ 217.0' mod lim disseminations rest of run or slt st bx in wh
230.4	9.3		2.57	95	.47	.01	.44/.01	.01	/	.46	—	hem	/	—	bx to 230'	marb. matrix w/ mod-st cpy wk py, barite bx recemented w/ wh cal, mod cpy in wh marb + some dark frags
239.6	9.2		2.66	99	.04			.02	sp-wk	.02	—	—	wk chlor	wk	slt st. w/ patchy	gr slt st w/ patchy bx cem. w/ wh cal wk sulf. wk-mod cal veining
249.1	9.5		2.68	97	.07			.04	sp-wk	.03	—	—	/	wk-mod lim	bx	bx as above oxidized bx frag @ 248' may indicate downward movement
257.9	8.8		2.50	97	.15			.07	sp wk	.08	—	—	/	/	bx	bx, bx is part oxidation in part. slt st to ss gr slt st w/ patchy fen very fine grained ss. broken cem. as above rest slowly wk
267.1	9.1		2.49	100	.07			.04	tr-sp	.03	—	sp mnOx dendrites	wk chy	wk lim tr cu ox	bx to 264	wk-mod cpy, py in dark frags bx as above. Mod lim 1d 2' from patchy lim + wk sul rest of run
278.5	11.4		2.60	79	.09			.09	tr	—	—	—	—	wk lim	Hf	grn slt stone as above mod-st cal vns. wk lim + tr sul.
288.2	9.7		2.60	91	.28			.28	tr	—	—	—	—	wk lim tr hem	/	as above, wk-mod cal vns wk bk ox, cpy, py
298.6	10.4		2.59	93	.17			.15	tr	.02	—	—	—	wk lim	/	slt st as above st veinlets w/ wk sul wk lim, hem, sul
308.2	9.6		2.66	93	.11			.10	—	—	—	—	wk tal serp	wk-mod	/	slt st as above w/ mottled black + tan oxide stained marb. wk lim tr hm
317.3	9.1		2.68	100	.15			.15	—	—	—	—	—	/	/	As above w/ laminations dipping 60° to 89°.
326.5	9.2		2.59	97	.17			.17	—	—	—	—	.1	/	/	As above patchy bx frags 317-324' lam. as above cavities up to 1/4" in core
335.9	9.4		2.57	99	.17			.17	tr	—	—	—	—	/	/	core w/ lam. as above wk lim + mnO dendrites as core above wk py, chlor
341.7	5.8		2.68	99	.16			.16	tr	—	—	—	—	/	/	Core as above, wk-mod py stockwork of serp? veinlets @ end run
E.O.H.		Avg. Rec'y =		94%												oxidized brecciation - [illegible]

Final Depth 294.7
Collar Elevation 2954.33
Coordinates 30,307.85 N; 25,119.21 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F88
Sheet No. 1 of 1
Date Completed 6-30-65
Logged By J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser, Clay	lim, hem	Rock Type	Remarks
6.0	6.0	RB	—	—	–	–	–	–	–	–	–	–	–	–	–	Rock bit
24.3	18.3	NXW	2.58	41	.15			.15	–	–	–	–	wk-mod strong ser	wk lim	Seds (?) to 16'	Bk seds w/ numerous silic inlets leached to light br in places. Mg w/ wk-mod Alt @ 16'
32.8	8.5		2.58	92	.15			.15	–	–	–	–	)	)	Mg @ 27'	Bleached seds (?) 24'-27' Sp. Mod Alt Sil'N wk-mod lim on frac
40.3	7.5		2.55	97	.14			.14	–	–	–	–	)	)	)	Sp as above tr gr CuOx
49.3	9.0		2.58	91	.20			.20	–	–		–	)	sp jar	)	St Sil'N, stockwork of qtz vns, wk-mod lim on fracts tr cu
59.6	10.3		2.57	72	.13			.13	–	–	–	–	)	tr Jar	)	as above tr CuOx
68.4	8.8		2.59	92	.16			.16	–	–	–	–	tr ser	tr Jar	)	as above v. st sil'N core well broken
76.8	8.4		2.56	96	.18			.18	–	–	–	–	wk-mod ser	wk-mod lim	)	as above patchy texture showing tr CuOx
85.8	9.0		2.55	93	.27			.27	–	–	–	tr chlor	)	tr lim	)	as above, mod-st chlor in discernable text.
97.2	11.4		2.67	68	.16			.16	–	–	–	–	)	wk-mod lim, sp lim tr Jar	)	Very st. sil'N. tr text. wk lim on fracts tr. Jar.
106.0	8.8		2.60	90	.16			.16	–	–	–	–	wk ser	wk lim tr Jar	)	as above tr chlor
115.1	9.1		2.67	88	.16			.10	wk	–	.06	–	)	wk lim tr Jar, hem	Sil @ 107	As above, patchy ox. w/ wk-mod lim. wk py wk diss cc, tr MoS_2
124.4	9.3		2.62	93	.16			.10	)	–	.06	–	)	wk lim, Jar.		As above tr text, wk diss py, cc, tr MoS_2 wk patchy lim
133.0	8.6		2.46	100	.48	.04	}	.04	wk-mod	–	.44	–	wk ser wk-mod chlor	wk-mod lim	dark sp @ 127.2	very st sil'N to 127.2, contact dip 60° dark sp Mod Alt, py cc? replac folds
141.1	8.1		2.45	100	.38	.02		.02	)	tr	.36?	–	wk ser wk-mod chlor	wk lim	)	as above, mod (+) py diss & on inlets up to 1/4"
149.7	8.6		2.46	79	.25			.01	)	–	.24	tr MoS_2?	mod ser wk-mod chlor	sp Jar	)	as above
158.3	8.6		2.59	97	.16			.01	)	–	.15	)	)	)	)	Mod Alt, Mod diss py, wk on vns. color green-black ser? in groundmass
167.5	9.2		2.57	94	.27			.01	)	–	.26	–	)	wk lim	)	As above, wk py wk lim on fracts, wk-mod cc(?) replac folds.
176.5	9.0		2.56	97	.39			.02	)	–	.37	–	)	wk lim sp Jar	)	st chloritic alt of matrix as above.
185.6	9.1		2.51	88	.24			.01	)	–	.23	–	mod ser mod chlor	)	)	As above patchy complete silicification @ 189 to end run (Mg? or Sp)
194.5	8.9		2.51	98	.35			.02	)	–	.33	–	wk-mod ser Mod chlor	wk lim	)	wk-mod py on inlets sp lim Mod chlor Alt Mod py assoc w/ qtz wk-mod cc?, sp-wk lim.
204.2	9.7		2.50	92	.20			.01	)	–	.19	–	wk-mod ser wk-mod chlor	)	)	Mod-STAH chlor starting to bleach, wk-Mod diss py. wk cc? sp-wk lim
213.3	9.1		2.60	99	.30			.02	)	.10	.18	–	)	)	)	As above
222.8	9.5		2.54	94	.61	.05	}	.05	)	.20	.36	MoS_2 0.0204	mod ser sp chlor	)	)	Mod-st chlor Alt Mod diss py, tr cpy, cc, MoS_2 on sp-wk qtz vns
231.4	8.6		2.60	93	.19			.01	wk	.09	.09	tr MoS_2	)	)	)	As above, but @ 232.5 patchy st silic wk-mod py tr cc?, MoS_2 core well broken, wk-mod lim
243.5	12.1		2.58	72	.08			.10	wk	.08	–	tr MoS_2	)	+	)	As above wk-mod silic, wk-mod diss py, tr MoS_2 cc? mod ser
255.4	11.9		2.65	66	.05				sp-wk	.05	–	tr MoS_2	mod ser	—	)	as above
263.8	8.4		2.65	94	.13				sp	.13	–	)	wk-mod ser	—	)	As above st sil'N wk sul. tr MoS_2
268.5	4.7		2.76	83	.33			.01	sp-wk	.32	–	tr MoS_2	)	tr lim		as above
272.0	8.5		2.64	93	.11				)	.11	–	)	)	—		st sil'N, most tot. zone. wk chlor bdo. sp-wk py, sp MoS_2 w/ qtz + py
285.4	8.4		2.63	94	.06				)	.06	–	)	wk ser	tr lim		as above
294.7	9.3		2.64	82	.10				wk	.10	–	)	sp ser	tr lim		as above sp MoS_2 w/ qtz vns. wk
E.O.H.		Avg. Rec'y = 86%														

Note: Rock type may be "Sp" throughout. Differences in appearance may be due to silicification and alteration

Final Depth 500.0
Collar Elevation 2916.80
Coordinates 30,480.33 N ; 25,210.49 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-87
Sheet No. 1 of 2
Date Completed 6-22-65
Logged By J.A.B.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Sericite, Clay	lim, hem	Rock Type	Remarks
14.3	14.3	R.B.	—	—	—										—	Rock bit thru stream fill.
24.0	9.7	N&W	2.62	90	2.04	1.82		1.82	–		.22?	wk-mod gr. Cu ox	—	wk lim bk ox	Sltst ?	Rk hard, sil'd in part, num. qtz vns. wk-mod mal ox fr
34.3	10.3		2.55	91	.34	.13	58.3'	.13	Sp		.21?	tr gr cu ox	—	wk-mod lim, bx ox	Sp ≈ 24'	1st ft bx, then sil'd to x 29 where ck appears Ht, but too sp. py, qtz. Num. leached units.
44.2	9.9		2.61	94	.60	.31	@	.31	/		.29?	sp gr Cu ox		sp lim		bit in spots almost a sed. text leached. Num. qtz, st. Jar.
53.3	9.1		2.53	98	.65	.42	92/.65	.42	—		.23?	—		wk lim, wk lim, ban	Ht ≈ 49	Sp as above but no def. text. ct. masked. Ht sett, alt to c
62.8	9.5		2.51	97	1.26	.85		.85	—		.41?	tr gr cu ox, wk ox		wk lim		Ht, st. alt. st Jar & Cu stain. Leached. Poss. some garnet comp. leached.
72.6	9.8		2.51	92	.64	.39		.39	–		.25	)		)	Sp ≈ 67	Ht as above. Sp has vague text which incr. towards end
81.0	8.4		2.57	100	.16			.16	–		–	tr gr cu, sp dk ox		)		Sp st sil'd. text completely gone wk lim, sp cu ox
89.8	8.8		2.60	95	.09			.09	–		–	—		sp lim		as above tr Cu ox.
98.6	8.8		2.58	86	.23			.23	–		–	sp-wk mal & azur. wk gr cu ox		/		as above tr Ht, wk Cu ox
107.9	9.3		2.59	92	.35	.25		.25	–		.10?			wk	Patchy Ht	Patchy Ht. st sil'd in Sp text visable in a few places
116.6	8.7		2.58	87	.13			.13	–		–	—		sp	Sp	st sil'd. bx text masked by sil'd. sp lim, Cu ox, tr
131.6	15.0		2.56	49	.79	.63	36.8'	.63	wk-mod		.16?	wk-mod mal & ox, wk gr cu ox		wk	Ht @ 117	wk-mod qtz vns, wk lim wk-mod hem, Cu ox tr gar
142.5	10.9		2.57	93	.28	/	@	.28	/		—	tr gr cu ox		wk	Sp @ 142.5	Mod Alt, sil'd. good text visable, qtz vns w/tr MoS2 Sp lim
153.4	10.9		2.54	71	.41	.21	.53/.40	.21	/		.20			wk-mod lim		Mod Alt wk sil'd wk qtz vning tr-sp cc, sp Cu ox, lim
162.4	9.0		2.67	93	.43	.03		.03	\	.30	.10		wk-mod chlor	—	Sulf @ ≈ 153.5	Mod Alt wk sil'd wk-mod py sp cc, Cpy. tr MoS2
170.5	8.1		2.65	100	.46	.04		.04	/	.40	.02		/	tr lim		Mod Alt, wk sil'd wk-mod py, diss + vns, sp py tr cc, MoS2
179.5	9.0		2.68	95	.39	.03	53.8'	.03	/	.32	.04		/	sp lim		as above, wk py, sp Cpy, tr cc, MoS2
188.9	9.4		2.94	89	.65	.04	@	.04	st.	.61		indicates reactive calcite	st. talc	—	Sulf @ ≈ 180	Broken and recemented frags of marble, green talc predom. mod py sp-wk py
198.4	9.5		2.92	87	.54	.03	.50/.03	.03	wk-mod	.51			/	—		over streaks of white marb that follows bedding or shear direct. mod py wk-mod cpy
207.2	8.8		2.66	95	.50	.01		.01	wk	.49			/	-		Talc (dolomitic beds) with white stringers of marb. Marb carries wk py
216.8	9.6		2.66	94	.16				sp	.16		tr MoS2	wk-mod talc	tr lim	Ht bx 209-210 approx	bx P.Min. ft bx w/frags of unqtz w/MoS2 few frags qtzite? partly sp cpy
225.9	9.1		2.58	100	.02				tr	.02		tr MoS2	sp talc	-	Bx ≈ 217.2	Bx at a 217.2' frags qtz + MoS2 vns w/no talc 2 ft to end run cemented by calcite, Bx bx unqtz. sp sulf.
234.9	9.0		2.58	100	.20				tr	.20		/	Mod-st.	-	Bx to 234.5	bx. epdt at approx 234.5 wk-mod qtz vns w/ tr MoS2 tr-sp cp
243.1	8.2		2.57	100	.29				sp-wk	.29		tr	mod	-	Bx @ 237.4	qtzite or silt stone frags cem by calc 1' rest poorly concol. frags wk-mod py + tr cpy
254.1	11.0		2.78	70	.33				wk	.33		—	Mod-st.	-	/	bx. mainly marb. some qtzite(?) wk-mod py tr cpy
261.2	7.1		2.73	100	.25				wk-mod	.25		—	/	-	/	Rehealed bx, marb. + talc wk cpy, py
270.3	9.1		2.59	93	.55	.02		.02	/	.53			/	-	/	Rehealed bx, marb + talc? st sl st wk cpy, py
278.5	8.2		2.59	80	.06				tr	.06			st	-	/	as above tr py more sl'y marb. less talc alt.
288.8	10.3		2.64	79	.17				sp-wk	.17			sp talc	-	/	as above sp-wk py
300.1	11.3		2.49	70	.04				tr	.04			sp clay		/	Green meta limy slt stone, prob. alt. to chlor.? num. red splaches of hem tr py?
310.2	10.1		2.57	86	.24				wk	.24			sp talc			patchy mod antique (talc + wk cal) a gr. sil. sltst. wk-mod py
322.0	11.8		2.72	68	.29				wk	.29			/		Ell sour @ 318.9-321.2	Hard fatigue to 318.9. Ell sour fine gr. sil st. mod py in hard fatig
331.0	9.0		2.71	93	.42	.02		.02	/	.40			mod talc		Ht @ 337.4	broken + healed marb w/ dark gr. talc? mod-st py lst'k most wk py
339.8	8.9		2.78	95	.20				wk-mod(-)	.20			sp			Marb w/ sp talc py on vns. gr sil st @ 337.4 no py
349.8	9.9		2.63	87	.04				tr	.04			—		/	gr. limy sil st wk qtz vning w/MoS2 no py sp lim
359.0	9.2		2.61	78	.04				tr	.04			—		/	as above rehealed bx + wispy stringers @ 352 to end run
367.1	8.1		2.57	98	.03				tr (?)	.03		tr MoS2	—			gr. dolomitic sil st w/ vnlts of cal + stringers of wh marb no
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]				/	.03			—		Sulf @ [illegible]	as above wk cal stringers accompany [illegible] most of core is

Final Depth 500.0'
Collar Elevation 2916.80
Coordinates 30,480.33 N; 25,210.49 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F87
Sheet No. 2 of 2
Date Completed 6-22-62
Logged By JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser Clay	lim, hem	Rock Type	Remarks
385.5	9.1	NxW	2.66	94	.11				wk-	.11	-	tr MoS2	wk ser.	—	Sp	wk-Mod Alt. mafics alt to chlor. wk-mod py, sp-wk cpy, tr MoS2
394.8	9.3		2.63	99	.06				1	.06	-	1	1		Hf @393	as above, patchy seds (gr. seds) in Sp.
404.0	9.2		2.64	100	.02				tr?	.02	-	—	—			rehealed bx of do slt. st. + wh. cal. sp py tr MoS2 on wks
413.4	9.4		2.64	94	.01				tr	.01			wk-mod clay/chlor			gr. do(?) slt. st. tr (?) sulf. cal. on unlgts
416.8	3.4		2.63	99	.04				tr	.04		tr MoS2	1		bx	as above. bx of siltst rehealed. tr. sulf.
430.1	13.3		2.62	64	.07				1	.07		—	tr clay		1	as above tr sulf.
438.7	8.6		2.67	96	.07	-			1	.07		—	1			limy siltstone, st chlor. alt pink zones around chlor. mafics 2nd R-span. s
447.5	8.8		2.84	93	.35				Mod-st	.35			wk-mod talc-serp			as above, patchy stry w/bleed red hem @446 last ½ bx talc-serp rx
456.1	8.6		2.61	100	.03				tr	.03		wk-	wk talc serp			dark serp-talc rx 1st ½ light limy siltst @457 tr-sp py
465.7	9.6		2.63	92	.11				wk-mod	.11		wk	1		bx	siltst to 457 bx of weak antigne w/wk-mod py freering gr.
475.3	9.6		2.72	88	.08				SP	.08			mod talc-serp		1	wk stringers of asbestos limy areas very broken verde antigene re cemented w/cal + wh. mark sp-m
484.2	8.9		2.72	94	.16				WK	.16			1		1	as above wk patchy py
493.3	9.1		2.73	91	.26				WK	.26			st talc serp.		1	as above, seds alt to soapstone in places sp cpy, py
500.0	6.7		2.70	98	.12				sp.	.12		tr epi py	1		1	as above, asbestos on fracts. redish gt site @ 497 sp py
EOH.		Avg. Rec'y =		89%							Note:	HCl + Acid Reactive				

F-87 was generally brecciated & faulted. Probably due to its proximity to the dacite porphyry contact. From data of F-85 & F87 the Dip appears to have a vertical contact with the rx it intrudes.

Final Depth 408.0'
Collar Elevation 3149.37
Coordinates 28,572.38 N ; 27,716.10 E
Inclination -60°, Bearing Due South

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F86
Sheet No. 1 of 2
Date Completed 6-17-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sr. Clay	lim hem	Rock Type	Remarks
4.5	4.5	RB.	—	—	—			—	—	—	—		—	—		~~WK-Mod Alt, vnlng w/ alunite & lim box work, patchy lim~~
13.9	9.4	NXW1	2.49	90	.04			.04					Mod, tr	sp LLm mod lim	M2	WK-Mod Alt vnlng w/ alunite & lim box work, pblv. lim, WK hem
23.0	9.1		2.56	90	.02			.02				wk qtz veins	1 1	mod lim		as above, wk hem on fracts, wk LLm.
32.3	9.3		2.31	96	.02			.02					1 1	WK-mod lim tr hem		as above
42.0	9.7		2.31	96	.04			.04					1 1	WK lim tr hem		as above 3" qtz vn @ 36' less fracts wk py box work
50.7	8.7		2.54	93	.02			.02					Mod-st ser tr clay	WK lim wk-mod hem		Mod Alt, wk hem lim, Alunite on vns, tr box work & py
59.9	9.2		2.44	97	.02			.02					1 1	WK-Mod lim sp LLm		mod-St Alt. wk-mod hem. wk lim, Alun, wk-mod sil'n
68.8	8.9		2.45	97	.50	.01		.01	wk		.49		mod-st ser	—	SuK @ 59.8	St Alt, wk-mod cc, py diss + on vns, wk-mod Alun (light gr)
77.8	9.0		2.44	91	.42	.01		.01	wk		.41		1	sp lim, hem		WK-Mod Alt, WK-Mod cc (angtz vns) py, Pre min ftbx @ 74'
87.1	9.3		2.43	93	.75	.02		.02	wk-mod (+)		.73		1	—		St Alt, Mz (aur) dike (6") @ 80.8' mod cc wk py, wk-mod Al
95.8	8.7		2.44	100	1.05	.02		.02	mod-st to massive		1.03		st	—		St Alt. Mod cc, 6" massive py in last 1' of run mod py overall
105.8	10.0		2.63	88	.59	.02		.02	mod-st	tr	.57		mod-st	tr lim		WK-Mod Alt, Sil'N, WK py, cc. on vns
114.9	9.1		3.09	85	1.54	.02	118.0'	.02	1	—	1.52	tr Mo S2	1	—		St Alt, Mod sil'n, mod cc st py on vns + diss tr Mo S2 on qtz vn
124.0	9.1		2.49	85	.84	.02	@	.02	sp		.82		Mod			St Alt, Sil'N at last part run, Mod cc diss + on vns, mod py in qtz v
133.0	9.0		2.51	96	.45	.03	.65/.02	.03	sp-wk		.42	tr 2nd ksp	1	Tr. lim		Mod Alt, sp-wk silin, wk-mod (+) cc, wk py abund. obliterized diorite
142.0	9.0		2.59	90	.43	.03		.03	1	.02	.38	1	wk-mod	sp lim		WK-mod Alt, wk silin along qtz vns, wk (+) cc, sp-wk py tr Cu ox on Frac
155.2	13.2		2.61	52	.37	.03		.03	wk		.34	1	1	1		WK-Mod Alt, mod cc, sp-wk py, tr cpy, sulf on fracts, + w/ bio. bio as above
164.5	9.3		2.58	91	.66	.04		.04	1		.66	1	Mod	1		Mod Alt, Mod cc on fracts + patches w/ wk-mod py sp cu ox bio as above
177.9	13.4		2.54	59	.43	.03		.03	sp-wk		.40	1	1			Mod Alt, Mod cc on fracts + w/ diss py, wk py, bio as above
186.5	8.6		2.52	94	.17			.02	1		.17	1	1	Tr lim		St Alt, Silin, mod-st and k spar wk-mod (+) cc, wk py
194.3	7.8		2.56	100	.28			.02	1		.26	1	1	sp. lim		WK-mod Alt, silin, (Mod 2nd k spar (?)) wk-mod cc, wk py sp cu ox
203.5	9.2		2.56	93	.28			.02	1		.26	1	wk-mod	1		WK to Mod Alt, (2nd k spar silin? @ last 1/2 run) wk-mod py wk cc
212.5	9.0		2.57	94	.30			.02	1		.28	1	1	Tr. lim		Mod-St silin, sp-wk py wk-mod cc sp cu ox on fracts
221.0	8.5		2.56	99	.25			.02	1	.05	.18	1	Mod.			as above mod cc
229.7	8.7		2.54	95	.59	.02		.02	1		.57	1	wk-mod	•		St silin wk cc at last 3/4 run mod cc last 1/4, st qtz wk py
238.5	8.8		2.52	96	.40	.01	47.4'	.01	wk-mod		.39	1	1			St silin mod py vnlng, wk-mod py, mod diss cc. + on frac's.
247.1	8.6		2.74	98	.63	.01	@	.01	wk-mod		.62		1	—		Mz, as above. Plag. remaining are mod alt.
258.3	11.2		2.54	82	.23	.01	.44/.01	.01	wk		.22		1	—		As preceeding. cc prec wk due to cc on py. Pk chlorite fr
268.4	10.1		2.70	84	.41	.02		.02	wk-mod		.39		Mod			Mz, St silin, mod alt of plag cc, mainly diss, appears mod-st.
277.6	9.2		2.70	93	.29			.01	wk-mod		.28		wk-mod			Mz, as above. wk py vnlts wk cc.
286.6	9.0		2.71	94	.24			.01	wk		.23		sp	tr lim		As above, sp-wk cc.
295.3	8.7		2.66	92	.05				sp		.05			sp lim		Complete Silin wk diss. py. sp cc
303.2	7.9		2.66	100	.06				wk-mod		.06		wk ser tr clay	1		St. Silin wk-mod diss. py, sp cc wk qtz vns, Alunite
313.1	9.9		2.56	96	.19			.01	wk-mod		.18		sp-wk	tr.		Mod Silin text appears very fine, Mod py on vns + diss. wk cc
325.1	12.0		2.71	93	.21				wk-mod		.21		wk ser	—		Mod Alt, Silin mod qtz vnlng w/ py also diss py mod cc in Mz aplitic tx
334.6	9.5		2.72	98	.20				mod	.05	.15		1	—		St silin mod py, wk cc wk vnlng
343.2	8.6		2.72	99	.33				1	.04	.29		mod-st ser	—		As above wk-mod py sp-wk cc
352.9	9.7		2.69	89	.34				wk-mod	—	.34		1			Mod-St Alt, wk-mod py wk cc
360.9	8.0		2.73	99	.40	.02		.02	1	—	.38		mod	—		Mod St Silin wk-mod py wk cc

Final Depth 408.0'
Collar Elevation 3149.37
Coordinates 28,572.38 N ; 27,716.10 E
Inclination −60°, Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F86
Sheet No. 2 of 2
Date Completed 6/10/65
Logged By JAB

Depth	Interval	Core Size	Sp. Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Clay Ser	Lim, Bar		
369.8	8.9	NXW	2.65	98	.26				wk		.26		mod ser	—		st silic wk py wk cc
376.0	6.2		2.64	97	.19				"		.19		"	—		as above wk-mod py, cc
386.7	10.7		2.75	78	.25				"		.25		"	—		Mod-st silic wk-mod Alt. wk-mod py mins, sp-wk cc
398.9	12.2		2.75	76	.32				wk-mod		.32		"	—		as above, mod py, wk cc
408.0	9.1		2.74	81	.16				mod		.16		"	—		Mod-st silic, mod finely diss py gives core dark color, wk cc
E.O.H		Avg. Rec'y = 90%														

Final Depth 500.3'
Collar Elevation 2924.26
Coordinates 30,259.12 N ; 25,929.67 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F85
Sheet No. 1 of 2
Date Completed 6-10-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Ser Clay	lim, hem	Rock Type	Remarks
3.7	3.7	RB.	—	—	—								—	—	Dp	WK-Mod Alt. sp-wk lim, hem
5.9	2.2	NXWL	2.48	94	.10			.10	–	–	–		Mod ser	Wk lim, hem		WK-Mod Alt. sp-wk lim, hem
15.2	9.3		2.49	95	.07			.07					Wk ser	Wk lim, hem		wk-mod Alt, Mod hem stain. sp-wk lim on fracts
24.3	9.1		2.45	92	.16			.16					wk-mod clay, wk ser	Wk lim, hem		st Alt gen. hem st. core very broken
33.9	9.6		2.51	93	.14			.14					Mod ser, clay	wk-mod lim, hem		as above, gtite(?) frag in Dp. core broken + friable
44.1	10.2		2.56	90	.12			.12					wk clay ser	wk hem lim		WK Alt sil'n, sehem stain, wk lim on fracts
53.2	9.1		2.57	95	.16			.18	tr		.03		wk-mod ser, clay	wk-mod hem, lim	Sulf w/oxides	wk-mod Alt sil'n, sp hem, lim on fracts, tr MoS2 w/gtz vn
62.3	9.1		2.58	98	.32	.05		.05	wk	.09	.18		wk clay ser	wk-mod hem sp ser		wk Alt, sil'n along fracts. wk py on fracts tr MoS2
71.8	9.5		2.65	98	.62	.10	18.3' @ .52/.06	.52		.12	.40		wk clay	mod lim sp ser	Sp @ 66.4	Alt wk-mod. mod finely diss py, wk-mod cc, cpy & MoS2 w/gtz
80.6	8.8		2.72	99	.42	.02		.02		.15	.25		gr clay on fracts	wk lim		Alt. wk-mod - sulf. appear to replace matrix, Mod py wk cc, tr cpy, MoS2
89.5	8.9		2.67	99	.30	.02		.02		.08	.20		sp ser	sp lim		as above soft green min (talc?) on weath fracts
99.0	9.5		2.73	95	.29	.02		.02		.10	.17		sp ser	tr lim	Dp @ 96.9	as above, more v. finely diss py. v very dark from matrix(?) Dp st. s
108.3	9.3		2.63	98	.18			.01		.17	–		sp ser			st sil'n sp-wk py, cpy, as scattered blebs, tr MoS2 along mod. gtz vns. Core shows xenoliths of gtzite(?) + dark rock
117.1	8.8		2.64	97	.09					.09	–			–		as above, core darker in color.
126.4	9.3		2.64	94	.12					.12						Num. Xeno's. wk-mod, hydrothermal alt wk ser, abundant qtz. No supergene alt except on occas. frac's, wk py.
135.3	8.9		2.59	95	.13					.13				Tr Ser		Sug other chlor. veins. As above, but in a 1' zone at 134 chlor & RK w st py, sp cpy.
144.7	9.4		2.64	93	.08					.08			sp. clay, sp ser			" " " A 1' qz. zone indic. a flt @ 141. wk chlor.
153.7	9.0		2.64	99	.08					.08						WK Alt. sp py w/gtz vns. also tr MoS2, xenoliths evident in co
161.5	7.8		2.66	100	.10					.10		Tr MoS2	sp			wk-mod Alt, gen. silic. wk py tr cpy, MoS2 w/gtz vns
170.6	9.1		2.63	97	.08					.08						wk-mod Alt gen mod silic, sulfides as above, frags of gtzite (?)
179.8	9.2		2.65	95	.08					.08			sp clay, sp ser			wk-mod Alt. gen. mod. sil'n wk py tr cpy, MoS2 on gtz vns.
189.0	9.2		2.63	97	.09					.09				Tr lim		as above
198.4	9.4		2.62	89	.11					.08	.03		wk clay, ser	Tr. Ser		wk to wk-mod alt, spotty sil'n (mod), qtz vns. Num. xeno's. sp cpy
207.8	9.4		2.65	97	.06					.06			sp-wk clay, ser			wk alt, wk sil'n, wk chlor on s.v. frac's. sp. cpy
216.5	8.7		2.64	98	.15					.15				tr hem?		As above w one 4"-6" vn of qtz, chlor, hem. // to co
225.0	8.5		2.63	100	.04					.04						Dp, sp-wk alt, num. xeno's. sp cpy
234.6	9.6		2.64	92	.05					.05(?)						Sp-wk Alt. num. xenos, dark color (amp?) sp py
243.1	8.5		2.62	99	.07					.07(?)						sp-wk Alt., chlor. on fracts, qtz. on vns, sp py
251.5	8.4		2.65	95	.07					.07(?)						as above, chlor ut talc in xenos + along fracts
260.4	8.9		2.75	93	.06					.06					Sp @ 258.3	wk Alt, sil'n on qtz vns. The Dp has very sp qtz phenos. but is fresh
269.6	9.2		2.70	100	.11					.11		tr hem				wk-Mod Alt. sil'n on vns, Mod py, wk cpy. introduced chlorite(?)
276.2	6.6		2.73	100	.22					.22					Dp @ 274.7	as above wk-mod cpy. Dp wk-mod sil'n Tr py
285.0	8.8		2.70	94	.09					.09		tr hem			Sp @ 276.2	Mod Propolytic Alt sp carbonate(?) qtz vns w/ sp-wk cpy, MoS2
293.5	8.5		2.72	98	.05					.05		tr hem	sp			Mod-st. matrix alt to chlor (?) wk py tr hem stain
302.4	8.9		2.76	95	.05					.02		Native Cu @ 300.1' .05	tr		mixed sm andes. dikes	As above. 4" p.m. Andesite dike @ 300.1' carries powdered native Cu
310.8	8.4		2.58	92	.02					.02			tr		PM Andesite @ 305.2	SP Mod Alt. very boxwork text. near andesite contact. sp native Cu. native Cu in 1st few inches of andesite
322.5	11.7		2.64	76	.02					.02			tr		Sp @ 317.5	Contact. irregular. dipping 65°. sp. very as above tr cpy on gtz
331.5	9.0		2.69	97	.04					.04?					Dp @ 322.5	WK Alt sil'n sp-wk propolytic alt. sp py
340.2	8.7		2.64	95	.07					.07?		tr bar. hem	wk-mod			as above

Final Depth 500.3'
Collar Elevation 2924.26
Coordinates 30,259.12 N ; 25,929.67 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-85
Sheet No. 2 of 2
Date Completed 6-10-65
Logged By JAB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sr	lim	Rock Type	Remarks
349.3	9.1	NXW	2.63	99	.07				sp-wk	.07?		hem	tr-sp	–	Dp	as above sp dark frags are seen
358.1	8.8		2.70	100	.03				sp	.03?		–	–	–		wk-mod alt, sil'n, epidote (?) on uns; tr py on fracts.
367.3	9.2		2.71	94	.07				wk	.07?			sp	–		wk alt. sp py + epidote on fracts
376.4	9.1		3.59	77	.18				Massive	.18		garnet epi.	)	–	fact @ 369'	Inter mixed seds + Dp seds alt to gar, epi, chlor or talc w/ mod py
385.6	9.2		2.65	99	.07				wk	.07?			)	–	Dp @ 379.4	the contacts appear to dip about 40° seds as above, Dp st silicified wk-mod epi. prob. alt cntc
394.3	8.7		2.66	97	.05				wk	.05?			)	–	)	wk sil'n, xenos. evident sil'n w/ py on uns
402.5	8.2		2.65	100	.07				wk	.07?			sp-wk	–	)	sp-wk alt, wk sil'n on fracts w/ wk py tr xenos
409.5	7.0		2.62	100	.07				sp	.07?			sp	–	Pm and 403.3-405.9	wk alt, wk-mod sil'n, bleaching + crushing at P.M. and contact
419.9	10.4		2.67	85	.05				sp	.05?			tr	–	Dp	wk alt, sil'n on fracts sp py, wk chlor. on fracts. sp large en
424.4	4.5		2.63	100	.06				tr	.06?			tr	–	)	fld spar xls next to fracts wk alt, wk-mod sil'n along fracts wk py, epidote, tr mus (?) g3 site frag
432.9	8.5		2.65	99	.03				tr	.03?			tr	–	)	sp-wk alt, bleaching + sil'n along g3 veinlets sp epidote, chlorite
440.9	8.0		2.64	100	.03				tr	.03?			tr?	–		wk alt. poss sed. frags @ 43.4' (?) contorted banding 1/8" thick) g3 site fr
451.4	10.5		2.65	83	.02				wk	.02?			–	–		wk alt, wk sil'n + bleaching epidote along veinlets, tr py on fracts
459.9	8.5		2.63	100	.02				wk	.02		epi	?			as above. sp xenoliths
468.8	8.9		2.64	98	.03				wk	.03		epi, hem	?			as above, wk xenos
478.0	9.2		2.67	100	.06				)	.06?		Ep.				sp alt, wk-mod sil'n + bleaching g3 uns, sp py, epidote + chlorite
486.2	8.2		2.67	99	.05				)	.05?		Ep, hem				as above fewer g3 uns
495.7	9.5		2.67	98	.05				)	.05?		)				as above, xenos of schist (?) + g3 site, aplitic text w/ less sulf @ 488.7-93.
500.3	4.6		2.68	100	.05				)	.05?		Ep				as above, sp-wk epi.
E.O.H.		Avg. Rec'y =		95%												

Final Depth 651.0'
Collar Elevation 3247.84
Coordinates 28,744.55 N; 28,455.01 E
Inclination −65° ; Bearing due South

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-84
Sheet No. 1 of 2
Date Completed 6-3-65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration ser clay	lim	Rock Type	Remarks
5.0	5.0	R.B.	—	—	—										—	Rockbit for collar pipe
14.0	9.0	NXW	2.38	97	0.03			0.03				sp jar	mod mod	mod-st hem	Mz	Mod-st. alt, comp. leached, st hem stain
22.9	8.9		2.36	98	.02			.02				1	" "	1		As above plus some vuggy vnlts
32.1	9.2		2.37	96	.02			.02					wk-mod	wk hem sp lim		Mod. alt, leached, st hem stain. Num. alunite vnlts.
41.8	9.7		2.50	86	.01			.01					1	wk hem vuggy min lim		As above plus vuggy vnlts. Good LLm
51.2	9.4		2.61	86	.02			.02				sp jar	1	wk amorph tr lim, LLm		Mod alt, mod silin in middle of run. Rest as above
60.2	9.0		2.39	99	.05			.05				1	mod clay	wk-mod hem wk lim		wk-mod Alt, lim, hem, Alun vns. sp LLm in vnlets.
69.3	9.1		2.39	97	.08			.08					mod-st clay	wk hem lim		as above, patchy sulf w/carpy No LLm
78.3	9.0		2.21	98	.04			.04					1	wk-mod hem		Mod Alt, hem, Alun vns, sp LLm
87.4	9.1		2.34	93	.05			.05					wk clay	mod hem		Mod Alt, wk silin, mod hem, wk LLm, & py box work sp Alun vns
95.9	8.5		2.30	98	.04			.04				sp jar	1	wk hem		wk-mod Alt + as above
105.1	9.2		2.17	96	.04			.04				1	1	sp lim		as above
114.1	9.0		2.17	97	.04			.04					Mod clay	1		wk-mod Alt, wk hem, tr LLm. sp Alun
123.3	9.2		2.36	99	.04			.04				sp jar	wk-mod clay	wk hem		as above, wk LLm
131.9	8.6		2.38	98	.05			.05				1	1	1		as above no LLm
141.3	9.4		2.40	94	.05			.05					Clay Mod jar	Mod hem wk lim		wk-mod Alt, hem, sp lim, jar.
149.7	8.4		2.36	99	.04			.04					1	wk hem Mod lim		as above more jar
156.3	6.6		2.41	86	.05			.05					wk-mod clay & ser	Mod hem sp lim		as above sp sulf in sil zone
165.8	9.5		2.32	94	.05			.05					mod clay & clay	wk-mod hem sp LLm		wk-mod Alt, hem. sp lim silin, Alun vns - mod
174.8	9.0		2.37	95	.04			.04					wk-mod ser-clay	wk hem tr sp LLm		as above, tr lim
184.0	9.2		2.35	95	.06			.06					1	wk hem LLm, sp Jar		wk-mod Alt mod hem, wk LLm on fracts, sp lim
193.8	9.8		2.65	92	.05			.05					1	1		Mod Alt, wk-mod silin, Jar. ser, wk lim sp LLm on fracts
200.9	7.1		2.68	100	.04			.04					1	wk hem sp LLm		wk-mod Alt, hem, wk lim, Jar on fracts
209.7	8.8		2.69	99	.06			.06					1	1 wk Jar		wk-mod Alt, wk silin, wk hem, lim, Jar,
219.0	9.3		2.65	97	.04			.04					wk	1		mod Alt, ser wk LLm, lim, Jar on vns, tr sulf near end of run
228.1	9.1		2.64	98	.12			.05	sp		.07		1	1		wk-mod Alt, ser, Jar on vns, patchy sulf at 1st of run
236.8	8.7		2.52	95	.09			.02	sp-wk		.07		mod ser	mod lim wk Jar	Patchy sulf	Mod Alt, ser, wk-mod py w/cc wk hem, sp lim, LLm
245.7	8.9		2.50	99	.04			.04	—				wk	mod lim mod-st Jar	1	mod Alt, patchy silin, sp py wk-mod LLm, wk lim
258.1	12.4		2.52	79	.04			.04	sp				sp ser	1	1	st silin sp-wk py, wk-mod LLm, lim (about 50% run silica rock)
267.4	9.3		2.48	93	.04			.04	sp				sp	1	1	Mod-st Alt. silin wk py, mod lim, Alunite Mz w/included gis blebs
278.0	10.6		2.47	88	.03			.02			.01		1	mod lim wk-mod Jar	Sulf @ 274	st Alt silin, mod lim Alun last ½ run
287.1	9.1		2.48	99	.02			.01			.01(?)		mod ser	wk lim		st Alt silin, wk lim, wk-mod diss py wk Alun vns. sp gis blebs in Mz
296.4	9.3		2.57	94	.04			.04	Tr		-		wk 1	mod-st lim, Jar mod lim, Jar, hem	Mixed carp & sulf	Comp. silin st Jar w/ box work sp py
305.0	8.6		2.59	99	.06			.06	Tr				sp 1		1	st silin mod Jar, hem, lim, box work tr py
312.3	7.3		2.43	95	.06			.05	Tr				wk ser	1	1	mod-st Alt wk silin mod lim box work, tr py
323.7	11.4		2.34	79	.12			.05	wk-mod		.07		wk-mod sil	1st ½ mod lim then	Sulf. 321.0	Mod Alt, silin, wk-mod py tr MoS_2(?) wk lim, Jar
335.5	11.8		2.35	75	.82	.02		.02	wk-mod		.80		st ser	—		Mod Alt wk-mod diss py w/cc
345.3	9.8		2.37	85	.77	.04		.04	wk-mod		.73		st ser	—		mod Alt, wk-mod diss py w/wk cc
355.3	10.0		2.38	81	.67	.04		.04	wk		.63		st ser	—		as above sp sulf on vns

Final Depth 651.0'
Collar Elevation 3247.84
Coordinates 28,744.35 N ; 28,455.01 E
Inclination -65° ; Bearing due South

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. E84
Sheet No. 2 of 2
Date Completed 6-3-65
Logged By J.A.B, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser clay	lim. bem	Rock Type	Remarks
366.0	10.7	NXWL	2.28	83	0.77	0.02	83.3' @ .66/.03	.02	sp		.75		st ser	–	Mz	Mod Alt wk-mod py w/cc.
375.5	9.5		2.28	93	.54	.02		.02	wk		.52		"	–		Mod. Alt. wk-mod diss. py w/wk-mod cc.
384.6	9.1		2.26	90	.62	.02		.02	"		.60		"	–		as above end run very broken, poor recovery
396.0	10.4		2.29	83	.72	.03		.03	"		.70		"	–		Mod-st Alt. wk-mod py, cc. pass. bx text near cent. run 13½' broke
407.0	12.0		2.50	79	.43	.02		.02	sp		.41		wk-st ser & clay			Mod-st Alt wk-mod py, cc.
416.3	9.3		2.47	92	.17			Tr	sp-wk	.02	.15		Mod			Mod-st Alt wk-mod py. cc tr Mo-Sz on qtz vns
425.2	8.9		2.43	95	.17			Tr	"		.17		"			Mod Alt, wk silin, mod py - wk-mod cc tr mos. sp. chlor.
434.2	9.0		2.40	93	.22			Tr	"	.05	.17		"			wk-mod Alt wk silin, wk-mod diss. py, cc. sp. chlor.
445.0	10.8		2.71	81	.21			.01	"	.05	.15	Tr Sphal	"			Mod Alt, wk silin, wk-mod py diss & contracts, mod cc near fracts
453.7	8.7		2.72	95	.27			.01	wk	.05	.21		wk-mod			wk-mod Alt, silin, mod py in vns, mod cc diss. in vns sp. chlor.
462.2	8.5		2.61	97	.39	.02		.02	"	.05	.32		"	–		Mod Alt st silin, wk-mod py, cc, sp cpy tr mos, silin fiers bx text @ end run
471.2	9.0		2.68	94	.24	.03		.03	"	.11	.10		Mod ser	–		Mod Alt, wk-mod py, cc sp cpy tr mos. tr 2nd K spar
479.9	8.7		2.53	97	.65	.03		.03	"	.10	.52	tr 2nd K spar	mod-st ser.	–		Mod-st Alt wk-mod py, mod cc sp cpy sp 2nd K spar
488.9	9.0		2.43	94	.44	.01		.01	"	.05	.38		"			as above st ser. patchy silin no 2nd K spar.
498.6	9.7		2.57	87	.65	.02		.02	"	.03	.60		st ser			st Alt, ser. sp-wk py, wk-mod cc
507.4	8.8		2.55	96	1.43	.02		.02	wk-mod	.03	1.38		mod-st ser			Mod Alt wk py mod cc sp cpy
516.4	9.0		2.54	97	.50	.02		.02	wk	.01	.42		Mod ser			as above no cpy, wk qtz vns
525.2	8.8'		2.53	94	.32	.01	106.1' @ .62/.02	.01	wk	—	.31	Mo-Sz tr .0060	wk-mod			Wk, Mod alt, wk cc, sp py
534.0	8.8		2.55	93	.69	.02		.02	wk		.67	.0076	wk-mod			As above in sev ½" qtz vns (main)
542.3	8.3		2.55	100	.14			.	sp		.14	.0060	"			Wk, mod alt, mod qtz using ¼ "fretwork" ~~stockwork~~ @ 0.4" 0.8" 0.9" sp cc
551.0	8.7		2.53	93	.53	.03		.03	sp-wk	–	.50	.0052	"			" " " wk-mod qtz using ¼ silin, sp cc except for ½" vn.
559.9	8.9		2.44	93	.98	.02		.02	"	.10	.86	2nd K spar	st ser			st Alt wk-mod py mod cc, wk-mod cpy 2ndary K spar
568.7	8.8		2.52	99	.26	.01		.01	"	.02	.23	"	Mod ser			Mod Alt sp py, wk cc, tr py along qtz vns 2ndary K spar
577.3	8.6		2.52	95	.82	.03		.03		.04	.75		"			Mod Alt patchy st silin wk-mod py, cc, sp cpy
585.7	8.4		2.49	98	.14				"		.14	"	"			Mod Alt wk-mod silin py, cc, 2nd K spar an edge of st silin.
594.8	9.1		2.84	93	.25				"		.25	"	"			Mod Alt wk-mod silin w/ stockwork of qtz vns. wk-mod py cc 2nd K
604.8	10.0		2.80	90	.28			.01	wk	.05	.22	"	wk-mod			wk-mod Alt, mod-st silin, mod py wk cc 2nd K spar (?)
614.3	9.5		2.53	94	.51	.01		.01	"	.	.50	"	mod-st ser.			Mod Alt wk-mod patchy silin, wk-mod cc, wk py
623.0	8.7		2.51	98	.18				"		.18	"	"			as above no silin.
631.4	8.4		2.58	91	.24			.01	"		.23	"	mod ser			wk-mod Alt mod silin, wk-mod cc, py tr cpy 2nd K spar
640.6	9.2		2.58	98	.16				"		.16	"	"			Mod-st Alt st silin wk-mod py, wk cc, 2nd K spar in Mz near silin zone
651.0	10.4		2.58	97	.10				"		.10	2nd K spar	"			Mod-st Alt silin in patches & stockwork, 2nd K spar wk py cc
E.O.H.		Avg. Rec'y =		93%												

Final Depth 498.5'
Collar Elevation 2871.70
Coordinates 30,153.90 N ; 25,751.59 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-83
Sheet No. 1 of 2
Date Completed 5/21/65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu. Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser clay	lim	Rock Type	Remarks
12.6	12.6	RB	—	—	—	—							—	—	—	Stream fill
23.9	11.3	NXWL	2.90	63	.35			.35	—	—	—	bk cu ox	— mod	wk-mod Jar	HF	HF, completely leached, mostly alt. to clay, silica spotty
33.5	9.6		2.61	80	.28			.29	—	—	—	wk bk ox	"	" "	"	as above, sil'n more prevailent
44.2	10.7		2.96	74	.25			.25	—	—	—	"	"	" "	"	as above sil'n along uns, lim after py
48.2	4.0		2.94	99	.57	.42		.42	—	—	.15?	"	"	wk-mod Jar wk lim	"	HF completely leached & altered to clay
57.2	9.0		2.56	95	.44	.30		.30	—	—	.14?	bk ox	— mod	" "	"	Patchy st silin, HF w/ clay alt (mod) wk lim, bk oxides
67.1	9.9		2.52	84	.35	.20	51.0'	.20	—	—	.15?	bk ox	— wk	sp-wk Jar, lim	"	as above
77.2	10.1		2.95	80	.41	.24	@	.24	—	—	.17	wk bk ox	— "	sp Jar Mod lim		Patchy silin, st Alt to clay wk lim, wk-mod bk ox
87.3	10.1		2.55	82	.48	.36	.48/.32	.36	—	—	.12?	wk-mod bk ox	— mod	wk Jar mod lim		st Alt clay, sp bar, wk-mod lim Mod bk oxides
95.2	7.9		2.58	100	.74	.48		.48	—	—	.26?	"	"	"	Sp @ 91.5	st Alt clay, mod bk ox, wk Gr Cu ox wk lim, bar. patch of ½ (MoS2) Tr py @ 98.2
104.3	9.1		2.57	93	.08	—		—	sp	.01	.07	galena w/ barite MoS2 0.139%	wk-mod sec.	tr lim	Sulf @ 94.5	st silin wk-mod bar, tr galena(?), Py, cc, Rx sil is.
113.5	9.2		2.60	95	.08	—		—	tr.	.01?	.07?		"	"	Sp.	[Moly assay = .139 or Cu equiv. .417. this 7 times present mill heads. st silin sp py cc, wk MoS2 on Numerous qtz uns is tx w/ sp tr
122.2	8.7		2.63	97	.10	—		—	tr	.05	.05	MoS2	"	-	Sp	as above tr cpy {Core from 96.8 to 131.3 looks equal to Assay sum of .139 MoS2
131.3	9.1		2.62	91	.14				sp	.14	—	wk MoS2	st clay & talc	-	Sp	st silin, sp py & MoS2 on qtz uns
136.3	5.0		2.89	95	.66	.02		.02	wk-mod	.64	-	tr MoS2	"		"	v st silin, mod chlor & end cus. sp-wk py tr mos2 on qtz uns
141.1	4.8		2.87	85	1.60	.05		.05	st	1.55	-		—	sp & hem	Inct. @ 136.3	Mod py, wk cpy wk-mod hem, leached cap text mixed w/ talc
149.6	8.5		2.93	93	1.71	.03		.03	st	1.68	-		-	wk hem	"	Mod py, wk-mod cpy mod-st hem cap eff cpy(?) vuggy text. wk silin
159.8	10.2		2.90	85	1.09	.04		.04	mod-st	1.05		-	-	"	"	Mod py, wk cpy, mod to st hem as above, vert leached fracs w/ chlor. vugs text?
169.3	9.5		3.19	91	1.44	.02		.02	mod-st	1.42	-			"	"	as above, mod cpy, tr chlorotrichite or red garnet wk-mod silin
178.1	8.8		2.92	96	.92	.04	130.4'	.04	Mod	.88				wk-mod	"	wk-mod py, wk cpy, silin w/ MoS2, bx text w/ sub rounded – ang frags from 174.9 to 175.6
186.8	8.7		3.10	67	1.14	.09	@	.09	"	1.05				"	"	wk-mod py, sp-wk cpy, perous text w/ sp hem, mod weathering
198.0	11.2		2.64	95	.14		.83/.03	—	sp-wk	.14					Sulf? @ 186.8	Strong siliceous material w/ weak chlor, bx, cemented by silica sp py, tr MoS2, cp
207.5	9.5		2.57	99	.44	.01		.01	"	.43				Sp. Mag.	HF ≈ 200	Lime Silicates in groundmass as above, bx matrix replaced by chlor, py, chlor vst in lat & cam wk cpy
215.6	8.1		2.57	100	.60	.02		.02	wk	.58				"		as above, stronger chlor fracs tactite(?) wk py tr MoS2
223.6	8.0		2.70	97	.51	.02		.02	"	.49				"		groundmass limy st Alt to Serpentine & talc, many uns of white cal. wk py, cpy, cc
233.2	9.6		2.79	88	.30	.01		.01	"	.29				"		as above, core reacts to acid. sp py. tr cpy w/ green talc or serp.
242.3	9.1		2.75	94	.58	.03		.03	"	.55				Tr Mag		st. Serp + talc alt, cal. uns. wk-mod py – some bx text.
252.1	9.8		3.14	82	1.06	.04		.04	Mod	1.02				Sp Mag		As above, some tact(?) wk-mod py, tr cpy
261.7	9.6		3.24	83	.70	.03		.03	"	.67						st serp, talc, w/ patchy garnet & silin wk py, tr. cpy
270.6	8.9		2.85	100	.37			.02	"	.35						Becoming silid @ end. Lint fields ? HF w st. gar. wk py + cp. – serp(?) veinlets. Sp cpy w/ white stk
281.4	10.8		3.20	90	.07				wk	.07					TT ≈ 270	TT w/ lime silicates. Poss. 2nd K-spar. wk pg, sp cpy, sp blk metallic min of tr & Tr. Prob. ct zone
290.0	8.6		2.65	100	.23				"	.23					Ig @ 281.5	Ig, type unknown but prob. either Sp or Mc. St meta. alt. fracs wk py, sp. cpy. some glauc. min
297.4	7.4		3.16	94	.19				wk+mod	.19					Tr ≈ 290	ct zone st. Meta. alt. so actual ct not seen, Grades into good Tr reflections, wk total sulf
302.4	5.0		3.31	97	.17				wk	.17						TT, vuggy in part. DK areas sometimes spletches – some poss. bedding
312.5	10.1		3.14	38	.17				wk	.17						As above but without dk areas. Vipoor rec'y. for an apparent reason
323.5	11.0		2.49	73	.09			.03	sp	.06		Tr		sp lim	Sulf (?) @ 320	Tr at 1st run then clay w/ poor rec. st silin @ end run tot sulf sp
331.6	8.1		2.51	94	.13				wk-mod	.13		talc				v st silin w/ sp streaks of talc. sp py tr cpy poss. meta gtzite
342.8	11.2		2.63	84	.11					.11				tr lim		as above small patches of tact seen assoc w/ sulf.

Final Depth 498.5'
Collar Elevation 2871.70
Coordinates 30,153.90 N ; 25,751.59 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F83
Sheet No. 2 of 2
Date Completed 5/21/65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser.	lim	Rock Type	Remarks
351.8	9.0	NXW	2.48	94	0.07				Sp	0.07	Tr?		Sp.	sp-wk lim	qbite	Sil'n. sp tot sulf tr cpy, sp lim @ end of run Tr diops: on fracs
360.7	8.0		2.60	97	.07				1	.07			1	1	"	as above, tr cc(?)
369.4	8.7		2.62	89	.07				1	.07		hem			1	Sp sulf tr epidote (?)
376.3	6.9		2.63	100	.06				1	.06					1	as above tr cpy
386.0	9.7		2.55	86	.06				1	.06					1	as above, sp uns chlor(?), qlunite
395.3	9.3		2.57	92	.09				1	.09		Tr talc			1	as above
404.3	9.0		2.61	99	.05				1	.05		talc			1	as above, No alun. ons. slight dx w/some chlor + py
412.8	8.5		2.54	94	.08				1	.08					1	qbite, wk diss. py, sp patches uns of gr. tal(?) red hem st w/some py
422.1	9.3		2.56	86	.10				1	.10		tr MoS2				as above, slightly more chlor or talc, tr MoS2 1 on fracs
431.7	9.6		2.58	81	.04				1	.04						as above, more chlor-talc, vuggy text in places
447.5	15.8		2.58	48	.17				1	.17		mod magnetite			431.7 slt st. 447.0	slt stone, st. wus. text. 1st 2' run mod py w/cc(?) wk talc qbite no ons.
458.4	10.9		2.57	82	.07				1	.07					qbite	qbite w/patchy slt stone (?) alt gr. mod py patches 1st 1.5' about 6" poor r
473.3	14.9		2.51	53	.16				sp-wk	.16					slt stone ~457	very broken core, wk serp. end run appears to be sec. slt stone sp-wk py in the grn stone
490.0	16.7		2.52	45	.24				1	.24(?)						Mixed slt st + gr (serp) st. w/sp-wk py, patchy qbite wood frags @ 1st part run may indicate old working
498.5	8.5		2.55	99	.24				1	.24(?)						As above, patchy qbite, sp-wk py wood frags
E.O.H.		Avg. Rec'y =		84%												

Final Depth 385.2'
Collar Elevation 2935.02
Coordinates 30,208.68 N ; 25,363.89 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-82
Sheet No. 1 of 2
Date Completed 5/7/65
Logged By J.A.B., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser, Clay	lim	Rock Type	Remarks
8.2	8.2	R.B.	—	—	—								—	—	—	Rockbit thru cover
18.2	10.0	Nxwl	2.51	85	0.07	—		0.07	—	—	—		Ser mod	wk lim	Sp	w/fine-grained, soft, bleached. Leached, mainly after py. lim fracs.
28.2	10.0		2.51	94	.07	—		.07	—	—	—		Mod ser	wk lim sp lim	'	As above "Sp" text appearing in places. Vuggy, Ser. qzd alt.
37.7	9.5		2.45	94	.31	0.24		.24			.07		Mod. Alt		'	St Alt, ser silin along veinlets, sp lim aft. py, sp cu ox Mal.
46.8	9.1		2.48	96	.69	.42	18.2' @ .61/.42	.42			.27			wk lim mod lim	'	as above patchy silic, sp-wk lim, cu ox Mal. bar. in veinlets
55.9	9.1		2.51	90	.53	.41		.41			.12				'	As above
65.1	9.2		2.44	91	.10			.10						sp lim wk-mod lim	bx @ 58.8	v.st Alt ser, clay? bx material includes sub-angular frags of qtz veinlets
74.5	9.4		2.48	92	.08			.08						st lim mod lim	'	sp lim, tr cu ox st Alt some broken + rotated qtz frags. st. ser, wk lim
84.0	9.5		2.22	99	.05			.05						wk lim mod lim	'	st Alt, ser. mixed broken + st silin rx. wk-mod lim. some bx work aft. py
94.2	10.2		2.47	80	.10			.10						sp lim mod lim	'	st Alt, ser. bx as above, wk lim, sp cu ox, end run broken to sand size
103.6	9.4		2.21	95	1.04	.11	31.1' @ 1.10/0.11	.11	sp		.93			mod lim	Sulf @ 99.2	v.st Alt bx. of qtz frags in alt matrix, appear to be rotated, wk-mod cc, tr lim frags
115.3	11.9		2.20	74	1.31	.06		.06			1.25				bx	v.st. Alt ser. bx as above, wk-mod(?) cc
125.3	9.8		2.57	83	.89	.18		.18	sp-wk	.21	.50		wk-mod	wk lim	bx	v.st Alt, ser. wk-mod(?) cc, cpy on fracts, sp-wk py 50% run broken badly
132.6	7.3		2.47	93	.27			.02		.10	.15			sp lim	Sp @ 126.8	mod Alt, wk-mod diss py, cpy, sp cc, tr bar on veinlet
142.5	9.9		2.52	83	.20			02	wk	.08	.10		tr	sp lim	'	wk-mod Alt, wk-st silin wk-mod py, wk cpy tr cc
151.9	9.4		2.65	87	.37	.01		.01	wk-	.26	.10		—	sp bar	'	st silin wk-mod py, cpy
161.8	9.9		2.66	80	.35	.01		.01	wk	.15	.19		wk-mod ser	tr bar	Bx. Rx unknown	Mod-st silin, wk py, tr cpy, along fracts ground well broken
171.1	9.3		2.55	87	.34	.01		.01	sp	.23	.10			—	'	wk-mod Alt, silin wk py, sp cpy tr MoS2 on fracts broken ground
180.7	9.6		2.62	83	.79	.02		.02	wk-mod	.50	.27		wk clay	sp hem	'	st silin, mod py, sp cpy, ac, tr MoS2 on fracts, broken ground
189.7	9.0		2.73	90	.37	.01	55.6' @ .59/.02	.01	wk	.26	.10			tr hem	'	wk-mod silin wk-mod py, wk cpy, tr MoS2 on veinlets
198.8	9.1		2.55	97	.44	.01		.01	wk-mod	.33	.10		wk-mod clay	—		wk-mod Alt, wk silin on veinlets, wk py, sp cpy, tr MoS2 on fracts, wk chlorite
208.9	10.1		2.47	94	.65	.02		.02	mod	.58	.05		mod chlorite alt.	sp hem	Hf? @ 200	wk-mod Alt, mod silin, wk-mod py on veinlets sp cpy, mod chlor.
217.7	8.8		2.82	93	.69	.02		.02	mod	.62	.05			tr lim		mod-st Alt wk-mod silin, mod-st chlorite, wk-mod cpy w/MoS2 on qtz vns mod py
226.7	9.0		2.86	85	.56	.02		.02	mod	.50	.04		patchy v.st ser. wk-mod wk clay	tr hem		st Alt. very st chlor. core crumbles, wk-mod py
239.9	13.2		2.77	59	.37			Tr		.37					Min. bx of min frags	st Alt, silin bx text. 1st 4' run, st chlor. wk-mod cpy rx type unknown
250.2	10.3		2.67	84	.23			Tr		.23			wk mod ser			st silin, chlor(?) alt. wk-mod cpy on veinlets w/py rx type unknown
259.3	9.1		2.62	100	.11			—	wk-mod	.11	—		wk	—		st silin, chlor. wk py, cpy on vns w/qtz
268.8	9.5		2.63	97	.27	—		<	wk-	.19	.08		sp			as above, sp py cc, tr cpy MoS2(?) on fracts
278.2	9.4		2.59	98	.23	—		—	wk	.20	.03		sp			st silin, chlor wk py cpy w/qtz on fracts sp-tr cc
287.0	8.8		2.57	96	.26	—		—	wk	.22	.04		tr			st silin " sp-wk cpy + tr MoS2 w/qtz on vns. tr cc(?)
296.1	9.1		2.60	99	.32			—	wk	.28	.04		tr			as above sp cpy wk light br. bands of cherty text are being alt to chlorite (?) and turning to green stone
305.1	9.0		2.69	99	.24			—	wk	.22	.02		tr			st silin wk qtz vns sp py on vns
314.6	9.5		2.68	93	.27			—	wk	.27	—		tr			st silin vert banding of buff + green sp-wk qtz vns w/py + MoS2, cp
323.7	9.1		2.56	96	.07			—	sp	.07	—		tr			st silin w/chlor tr py, cpy MoS2 sp qtz vns
332.5	8.8		2.56	95	.07			-	sp	.07	—		tr			st silin, lighter grn than above runs - less chlor. sp py tr MoS2
340.9	8.4		2.56	93	.09			—	sp	.08	.01	tr MoS2	tr			as above chlor along fracts tr py, MoS2
349.4	8.5		2.59	98	.13			—	sp	.12	.01	tr MoS2	tr			as above sp py wk cpy on vns w/qtz + MoS2
358.4	9.0		2.67	94	.47	.01		.01	sp	.46	—		st chlor		Mz(?) 357' to 358.4	st chlor + silin Mz? w/2nd K spar @ 357-358.4 wk cpy, tr MoS2
369.1	10.7		2.68	78	.08				sp	.08	—		—			v.st silin wk-mod chlor sp py tr cpy MoS2

Final Depth 385.2'
Collar Elevation 2935.02
Coordinates 30,208.68 N ; 25,363.89 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. E-82
Sheet No. 2 of 2
Date Completed 5/7/65
Logged By JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Ser Clay	Lim		
378.3	9.2	NXwl	2.63	93	.18				wk	.13	–	tr MoS2	tr, sp			St silic, tr py MoS2 faint text suggests Mz
385.2	6.9		2.69	77	.10				sp	.10	–	tr MoS2 grn clay	mil grn clay			St silic wk-mod chlor on uns. Vuggy text at bd part rem tr py MoS2
E O H.		Avg. Rec'y =		89%												

Final Depth 597.5'
Collar Elevation 3200.20
Coordinates 28,134.00 N ; 28,003.91 E
Inclination -50°. Bearing due South

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-81
Sheet No. 1 of 2
Date Completed [illegible]
Logged By [illegible]

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser. Clay	Lim, Lim	Rock Type	Remarks
5.0	5.0	RP	—	—	—	—							—		—	Top soil cut
14.6	9.6	NXW	2.56	90	0.03			0.02	Tr		0.1		wk wk	Sp Lim wk lim mod hem	MZ Suls	Mod alt?, mod silin, mixed cap & suls. (Py & cc)
24.0	9.4		2.60	89	.16			.04	Sp-wk		0.12		1 1	Sp Lim lim & hem		As above, but mostly suls. Leached with contain alunite
33.4	9.4		2.53	93	.16			.02	wk		.14		1 1	1	Cap @ 33.0	" " suls spo. v. wk leaching except @ cap
42.6	9.2		2.54	95	.03			.03					1 wk-mod	Sp Lim wk lim mod hem		as above
51.7	9.1		2.42	100	.04			.04					1 1	wk lim mod lim wk hem		Mod Alt, Mod-st silin wk-mod hem
61.7	10.0		2.46	88	.04			.04					1 1	1		As above wk-mod silin, sp Alun. on vein's hem stained fill. xyl.
70.3	8.6		2.47	99	.03			.03					1 Mod	St silin Sp lim mod hem		As above
80.0	9.7		2.45	94	.03			.03					1 1	1		St silin wk-mod hem on fracts. Tr. Sulfs in ground mass
89.9	9.9		2.60	91	.01			—	Tr	—	.01		wk-Mod wk	mod hem sp lim		St silin wk hem sp cc, py, Jar. Mod ser.
99.0	9.1		2.62	94	.04			—	Tr	—	.04		wk wk	sp lim	Sul @ 89.9	Mod-st silin wk diss. py, cc, Tr cpy MoS2, sp lim on fracts
109.0	10.0		2.58	93	.03			—	Tr.	—	.03		1 1	Sp lim Mod hem		as above
118.9	9.9		2.66	77	.02			—	Tr	—	.02		Mod 1	wk-mod hem, lim	Cap @ 109.0	Mod-st silin, Alt. sp py + py boxwork Mod Alunite, hem
128.3	9.4		2.46	95	.39	.03		.03	sp-wk	—	.36		Mod-st ser	—	Sulf @ 118.9	Mod silin, Alt. Mod py, cc wk cpy Tr hem, Alunite
136.8	8.5		2.53	100	.10				sp-wk	—	.10		Mod, ser	wk-mod hem	Mixed cap sulf	Mod Alt-wk-Mod silin Mod-st py Mod cc, tr cpy Mod hem, Alunite
146.0	9.2		2.61	93	.66	.03	18.1' @ .53/.04	.03	wk-mod	.13	.50		Mod-ser	—	Sulf @ 136.8	Mod silin Mod py, cc, sp cpy Tr MoS2 wk-Mod ser
154.9	8.9		2.60	95	.40	.05		.05	wk-mod	—	.45		Mod-st ser	—		Mod silin-wk Mod Alt Mod py, cc ser. Tr MoS2
163.4	8.5		2.73	94	.18			0	wk		.17		wk wk			V. st silin wk py tr cc vuggy texture
173.0	9.6		2.68	90	.27			02	1		25		1 1	Sp Lim wk lim		V. st silin, mod py wk cc vuggy text tr hem
181.5	8.5		2.70	99	.33			.02	wk-mod		.31		1 1	Sp Lim sp lim		V. st silin, wk py, cc, tr MoS2 tr lim boxwork, tr cpy
190.2	8.7		2.72	91	.43	.01	11.8' @ .53/.02	.01	1		.42		1 1	Tr lim	MZ	st silin, Mod py, wk cc, tr MoS2, tr cpy
199.3	9.1		2.72	92	.67	.02		02	1		.65		1 1	Sp Lim wk lim		st silin wk-Mod py, cc tr MoS2
208.3	9.0		2.71	96	.31	.01		.01	1		.30		1 1	Sp lim		st silin, wk-Mod diss py coated w/ cc
217.1	8.3		2.72	95	.10			.01	1		.09		1 1	Sp Lim sp lim		st silin, wk-mod py, sp cc (?)
226.2	9.1		2.73	95	.25			.02	1		.23		1 1	Sp Lim sp lim wk lim		st silin, wk-mod py, sp cc, tr lim
235.5	9.1		2.71	93	.22			.02	1		.20		1 1	1		st silin, wk-mod Alt, sp-wk py, cc tr hem, lim
244.8	9.5		2.68	95	.31			.01	1		.30		1 1	Sp Lim sp lim		as above
253.6	8.8		2.79	90	.14			02	wk		.12		1 wk-mod	wk lim wk lim		st silin, wk-mod py, cc sp lim
262.2	8.6		2.62	91	.13			.03	1		.10		1 1	mod hem wk lim	Mixed Cap & Suls	Mixed Cap & suls mod silin wk-mod py sp cc
271.0	8.8		2.59	93	.21			.02	1		.19		1 1	wk hem wk lim		As above. Vuggy in spots. Prob. mod. st before silin
280.1	9.1		2.61	94	.03			.03					1 wk	mod hem wk lim	Leached Cap.	Mostly cap, sp suls. Vuggy, some hem. Mod. silin
289.0	8.4		2.50	96	.04			.04					1 Mod	St hem wk lim		Cap. Mod alt, Mod silin. Patches of good Mz text.
298.3	9.3		2.53	90	.10			.02	wk		.08		1 1	wk hem wk lim	Mixed Cap & Suls	As above vn sp-wk suls (cc & py)
307.3	9.0		2.56	96	.09			.04	Tr		.05		1 1	Sp Lim Mod hem wk lim	Cap.	Mod alt, wk-mod silin No visible suls
310.4	3.1		2.45	94	.02			.02					1 wk-mod	1		As above
318.4	9.0		[illegible]	90	.03			.03	Tr		Tr		1 wk	wk lim Mod hem		Mod alt? Mod-st silin. Silin leaves only remnants of [illegible]
328.5	9.1		2.61	94	.08			.01	Sp-wk		07		1 1	Sp Lim wk hem	Suls circa 3.4	As above, goethite and. Suls wk-sp cc, + cc fracs & diss. leached over a wide
337.5	9.0		2.61	93	.10			.01	wk		.09		1 1	Sp Lim Sp hem		RB orig. prob. mod alt. Mod-st silin. wk suls, mainly py.
346.7	9.2		2.66	95	.07			.02	Sp-wk		.05		1 1	wk lim wk hem	Mixed Cap & [illegible]	" " " " " " " " " "

Final Depth 597.5'
Collar Elevation 3260.20
Coordinates 28,739.00 N ; 28,663.91 E
Inclination - 50°. Bearing due South

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-81
Sheet No. 2 of 2
Date Completed 5/10/65
Logged By BNW, CWH, JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser.	Clay	Lim	Rock Type	Remarks
355.6	8.9	NXW1	2.52	96	0.07			0.03	Sp		0.04		wk	wk	sp LLm mod hem	Mz mostly sils.	60% leached. 40% sils. Mod-st sil'n wk sulf, py & cc
365.0	9.4		2.53	100	.10			.01	wk		.09			sp-wk	wk hem sp LLm		Felds mod alt. Mod-st sil'n wk py & cc, diss & on fracs. Some leaching
373.7	8.7		2.79	97	.08			.02	sp-wk		.06				wk lim sp LLm		st. sil'n & qtz vns, some m py. Text. obl.t. wk. leaching.
383.3	9.6		2.79	89	.05			.01	wk-mod		.05				sp LLm sp lim		As above but py incr to mod last ½ of run
392.1	8.8		2.77	100	.04				st		.04			wk	~~sp~~ lim		st py as vns & mass. Mod sil'n. Mod alt showing good Mz tx
401.2	9.1		2.79	95	.03			Tr	Mod		.03				Mod lim		leached vugs & text. Mod py & ~~qtz~~ vns " " " " " "
410.5	9.3		2.66	97	.05			.01	wk		.04			sp-wk	wk-mod lim		Mod sil'n incr to st. & qtz vns. sp-wk py. sp wk leaching.
424.0	13.5		2.71	66	.06					.02	.04	Tr MoS_2					st sil'n, wk py sp cpy, cc wk-mod ser.
433.1	9.1		2.72	95	.06						.06			wk			st. sil'n, wk-mod py wk cc, tr cpy
442.3	9.2		2.78	93	.07				wk-mod		.07		wk-mod	wk			st sil'n, wk-mod py, wk cc, tr cpy vuggy text.
451.5	9.2		2.73	94	.08						.08						st sil'n, wk-mod py, cc, tr cpy. vuggy text
458.8	7.3		2.76	100	.15						.15						st sil'n, mod py, wk-mod cc, vuggy text
469.1	10.3		2.91	82	.05						.05						st sil'n as above
478.8	9.7		2.75	93	.21				wk		.21		mod				st sil'n, mod py, cc. some bx text. mod-st. ser.
488.2	9.4		2.82	93	.09			—	wk		.09		mod		—		v.st. sil'n, mod py, wk cc mod ser [very fine cc on py gives low assay]
497.6	9.4		2.75	91	.12			—	wk-mod		.12		Mod		-		st Alt, mod sil'n, wk-mod py wk-mod cc w/ py
506.6	8.9		2.77	94	.14			-	" "	—	.14		mod				st Alt, wk-mod sil'n, wk-mod py, cc (on fracts)
515.8	9.3		2.75	87	.19			—	wk-mod	—	.19		Mod-st-				st Alt wk cc on fracts sp py mod-st ser.
525.5	9.7		2.54	90	.48	0.02		.02	wk-mod	—	.46		Mod-st				Mod-st Alt wk sil'n, py mod cc on fracts, ser.
534.2	8.7		2.56	100	.19				wk	.01	.18		Mod-st				Wk-Mod Alt sp-wk py cc bx mat. on fracts not cc(?)
540.6	6.4		2.49	84	.09			—	sp	—	.09		wk-sp		—		Mod → sp Alt. sp py cc on fracts
549.7	9.1		2.48	96	.29				sp	.05	.24	Tr MoS_2	wk ser				sp-wk Alt sil'n wk py sp-wk cc wk ser
562.6	12.9		2.42	58	.29				sp	.02	.27		Mod. ser				Wk Alt sp-wk py sp cc wk ser.
572.2	9.6		2.48	84	.34	.02			sp-wk	.02	.32		" "				Mod Alt, ser, wk diss py w/ wk cc
583.7	11.5		2.61	73	.25				wk	—	.25		mod ser				Mod Alt, sil'n, wk py on vns sp cc
592.8	9.1		2.62	87	.34				wk	—	.34		mod		—		Mod-st Alt. wk py, sp cc
597.5	4.7		2.61	77	.19				wk	-	.19		wk-mod		—		Mod-st Alt, mod sil'n along qtz vns, sp-wk cc
EOH		Avg Rec'y = 92%															

Final Depth 372.5'
Collar Elevation 3007.90
Coordinates 30,284.62 N ; 24,853.83 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-80
Sheet No. 1 of 2
Date Completed 4/30/65
Logged By J.A.B., CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser clay	lim	Rock Type	Remarks
7.0	7.0	RB	—	—	—	—							—	—	—	Rockbit
16.3	9.3	Nxcl	2.60		0.16			0.04			0.12?		St Sp	wk lim	Sp	cc as v. fine diss. throughout ch. Prev. none on bits. Mod-st sil'n, numerous qtz veinlets wk lim
25.7	9.4		2.45		.51	0.24	18.4' @ .56/.24	.24			.27		1 wk	Mod lim	1	St sil'n to 19.4' 'Sp' cut by qtz veinlets w/ py up to .07" thick sp lim
34.7	9.0		2.45		.62	.24		.24			.38		1 Sp	1	1	patchy silic. numerous veinlets to .1" thick, rest frost thru, good tex
44.6	9.9		2.52		.12			.08			.04		1 1	1	1	Mod-st sil'n OHM, qtz vns w/ lim tr py(?) sp lim
53.4	8.8		2.58		.24			.10			.14		1 wk	1	Mz @ 51.9	Mod. sil'n as above, Mz-Mod. Alt small frag. made in side core
62.2	8.8		2.56		.39	.18		.18			.21		1 Sp	1	Sp @ 61.5	Mz as above 'Sp'-wk Alt, wk-mod sil'n wk lim on fracts
71.2	9.0		2.56		.59	.35	33.3' @ .50/.26	.35			.24		Mod Sp	1	Mz @ 67.1	'Sp' as above, Tr. Mal, then mixed 'Sp' & Mz. All leached
78.4	7.2		2.58		.37	.23		.23			.14		St 1	1	Sp w/ dark Mz	Mod-st sil'n sp lim along qtz veinlets
87.9	9.5		2.53		.45	.21		.21			.24		1 1	vl	Sp	Mod alt, several qtz vn's, wk lim on frac's – 6" of Mz @ 86.0'
95.5	7.6		2.61		.59	.26		.26			.33		1 1	1		'Sp' as above w/ patches showing better texture. v. sp. cc.
105.0	9.5		2.60		.28	.08		.08			.20		1 1	wk lim		Mod alt thruout, text that of 'Sp' but a little different from E side
114.1	9.1		2.60		.20			.10	Sp		.10		Mod 1	mod lim		As above w/ sp lim on frac's, occ qtz vn. Text intermed between Sp + pit
122.9	8.8		2.57		.27			.15			.12		1 1	1		wk alt + patchy sil'n, occ. patch Mz, wk lim on frac's. at tip
131.6	8.7		2.59		.20			.10	Tr		.10		St 1	Mod lim sp var		As before to 132.0, then mod alt of bluish 'Sp'
140.8	9.2		2.41		.38			.15			.23		1 1	1		Wk-mod alt, num. sm qtz veinlets, v. wk lim on frac's.
149.7	8.9		2.39		.37			.15			.22		1 1	1		As above.
159.0	9.3		2.38		.25			.10	Sp		.15		1 1	Mod lim		As above w/ occ patches textureless w/ mod alt.
167.9	8.9		2.56		.16	—		—	Sp	—	.16		St. Sp	"	Mixed Sp + Mz	St sil'n in Sp sp py tr cc(?); wk-mod Alt in Mz Mz 163.9-165.9
176.7	8.8		2.61		.32	—		—	v. Sp(?)	—	.32(?)		st. tr(?)	wk lim	"	Sp to wk Alt in Sp min. along qtz veins Mz-wk Alt
185.1	8.4		2.60		.13	—		—	v. Sp(?)	—	.13(?)		St. Tr.	wk lim	Mz 178.5-181.5	Mz. wk Alt Sp-wk sil'n w/ lim on veins
194.7	9.6		2.61		.21	—		—	v. Sp (?)	—	.21(?)		v.st no	wk lim	Sp @ 181.5	Patchy sil'n lim on qtz veins, (Argillization) = complete sericite no clay
203.8	9.1		2.49		.18	—		—	"	—	.18(?)		v.st no	"	Sp	v. st Alt complete (Argillite) = ser. w/ patchy silic thru most rock, lim. veins
212.8	9.0		2.64		.12	—		—	v. Sp	—	.12(?)		v.st no	"	1	st silic & (argillite) ser. sp py diss & on fracts broken core
222.6	9.8		2.65		.17	—		—	v. Sp	—	.17		v.st no	"	1	st silic, mod (Argill) ser. wk py on fracts v broken core
230.2	7.6		2.61		.24	—		—	Sp	Tr	.24		v.st no		1	Mod-st sil'n. wk py sp cc tr cpy lim on fracts
239.4	9.2		2.58		.30	—		—	Sp	.05	.25		v.st no	"	1	Wk-mod silic wk py on fracts, tr cc lim
248.4	9.0		2.66		.27	—		—	wk	.04	.23		mod no	"	1	Wk Alt, wk-Mod silic, qtz veinlets sp py, wk lim on fracts
257.5	9.1		2.67		.38	—		—	wk	.15	.23		Mod no	wk-Mod lim	1	wk Alt wk silic sp py along qtz veinlets coated w/ cc
266.2	8.7		2.61		.31	—		—	sp-wk	.05?	.26		wk-Mod no	wk	1	wk Alt wk-st silic wk py, cc assoc. w/ qtz, tr cpy
274.6	8.4		2.38		.20	—		.02?	Tr-Sp	—	.18		wk-mod	wk	1	wk-Mod Alt, silic sp py, cc, tr Co ox
283.4	8.8		2.77		.09	—		—	wk	—	.09	Tr MoS2	st ser no	"	1	almost complete silic, wk diss, + occ py, cc tr MoS2(?)
296.0	12.6		2.59		.12	—		—	wk	—	.12	Tr MoS2	1 1	wk lim Tr var	1	As above, tr lim
304.8	8.8		2.54		.12			.02	Sp		.10?		1 wk	wk-mod lim	1	v. st. silic, ser. sp py, cc
313.3	8.5		2.51		.14			.02	Sp-wk		.12?		Mod 1	1	1	v. st. silic, ser. wk-mod py along veinlets sp cc, tr MoS2
323.5	10.2		2.60		.23	.02		.02	1		.21?		1 1	sp lim	1	st silic ser. core very broken sp py cc, tr cpy
332.4	8.9		2.65		.62	.02		.02	wk	.60			1 1	1	1	Wk-Mod silic, ser Alt. mod-st interstitial + vein py sp cc
341.4	9.0		2.63		.29	.01		.01	1	.28			1 1	Mod lim	1	st silic, wk-mod py sp cc
350.1	8.7		2.70		.12			.01	1	.09	.02		1 1	wk lim	1	Wk silic, wk-mod sp cc

Final Depth 372.5'
Collar Elevation 3007.90
Coordinates 30,284.62 N ; 24,853.83 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-80
Sheet No. 2 of 2
Date Completed 4/30/65
Logged By J.AB, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser. Clay	Lim	Rock Type	Remarks
359.3	9.2	NXW	2.67	94	0.17			0.02	wk	0.15			Mod wk	Mod lim	Sp	st. Sil'n, wk-mod py, sp, cc. Most frac's show lim.
368.3	9.0		2.65	96	.11			.02	1	.09			wk. mod 1	1		st Sil'n, wk alt, vuggy in spots wk sulf, mainly py
376.5	4.2		2.66	71	.11			.02	1	.05	.04		wk 1	1		As above. Poss. qtz-moly vein
EOH.		Avg. Rec'y		90%												

Final Depth 405.8'
Collar Elevation 3070.70
Coordinates 30,183.03 N ; 24,550.72 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. E-79
Sheet No. 1 of 2
Date Completed 4-23-65
Logged By JAB, C WH, BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
0-3.4		R.B.	—	—	—	—							↓ ↓		—	Rockbit
12.4	9.0	NX wk	2.42	67	0.04			0.04					wk - wk	mod hem, wk lim	Mz	Wk-Mod Alt, ser, clay Alunite(?) Mod hem
21.9	9.5		2.59	88	.03			.01	sp		.02		sp wk	mod lim wk hem		Wk-Mod Alt, ser, clay, hem, wk ~~py~~, lim desim. py Wk silic
31.3	9.4		2.60	89	.04			.02	v. sp		.02		wk wk	wk hem, lim v. sp Lim		Wk-Mod Alt. ser, clay, hem. sp. py, w/silic, lim, Tr. Lim
40.6	9.3		2.55	90	.02			.02					wk wk	wk hem, lim		Wk-Mod. Alt. clay, ser. hem. Tr. lim,
49.9	9.3		2.50	90	.05			.05					mod wk	wk-mod Fe Oxs		as above
58.7	8.8		2.42	91	.02			.02	tr				wk wk	mod lim, sp hem		Wk-Mod Alt. clay, ser. wk hem, sp. lim, gfs + py on fracts, Tr. Alunite(?)
67.3	8.6		2.63	94	.03			.01	sp		.02		wk wk	wk hem, lim sp Lim		Wk-Mod Alt. clay, ser. wk hem, lim. st. silic circa cont. run wk py, gfs on fr
77.4	10.1		2.60	85	.04			.02	1		.02		w-m sp	wk hem, lim		Wk-Mod. Alt, clay, ser. hem, silic. wk py w/silic + diss sp. lim Tr. turquoise circa end run
86.0	8.6		2.67	86	.11			.02	wk		.09		m-st-sp	tr lim		Wk-Mod. Alt. ser, clay, mod silic w/py tr cc Tr hem, CuOx, grn clay
94.6	8.6		2.65	88	.19			.02	wk-mod		.17		w-m wk	v. sp lim		Wk-Mod. Alt. ~~ser~~, clay Sp. cc Tr py CuOx
102.8	8.2		2.62	90	.12			.01	mod		.11		mod - wk	tr lim		Mod Alt, ser, clay spotty st. silic w/diss-mass. py sp-wk cc Tr. CuOx c
111.8	9.0		2.56	97	.11			—	wk	—	.11	Tr MoSo	wk-wk	—	Sul	Wk-Mod Alt ser. clay cc, py on fracts, end run broken
120.4	8.6		2.65	93	.07			—	sp	—	.07		wk-wk	wk lim	ox. on fract's	Wk-Mod Alt. ser, clay, cc, py highly broken
131.4	11.0		2.54	75	.06			—	sp	—	.06		wk-wk	wk-mod		Wk-Mod Alt. ser, clay py on fracts sp cc wk lim
140.3	8.9		2.53	95	.03			.03	Tr	—	—	—	wk-sp	wk-mod lim hem	Ox	Wk-Mod Alt ser, clay silic w/wk py. Mod hem
148.7	8.4		2.70	99	.04			.04	Tr	—			wk-sp	Mod to wk	"	Wk-Mod Alt. clay, ser. patchy silic, mod silic, ~~#~~ wk py on fract, Tr CuOx
158.2	9.5		2.55	90	.05			.05	Tr	—	—	—	wk-sp	Mod lim	"	Wk-Mod Alt. clay, ser, silic sp cpy, cc wk-mod. hem
166.9	8.7		2.60	98	.11			.04	sp	—	.07	—	wk-wk	wk-Mod lim	Sul	Wk-Mod Alt ser, clay ~~py~~, sp cc silic sp FeOx Tr. bor.
176.1	9.2		2.61	97	.11			.02	sp	—	.09	—	wk-wk	wk-mod lim	"	Wk Alt, clay, ser. py, cc. lim, Tr cpy
187.1	11.0		2.58	84	.06			—	sp	—	.06	sp ser.	wk-wk	wk-mod lim	"	Wk-Mod Alt, ser, clay patchy silic sp. lim. py on fracts, sp cc
195.8	8.7		2.59	96	.11			.03	sp-wk	—	.08	—	wk-wk	wk-mod lim	Sul	Wk Alt ser, clay patchy silic w/py sp. lim, cc, Tr CuOx
205.7	9.9		2.49	89	.08			.01	wk		.07		sp-wk	wk lim, tr jar		Wk Alt ser, clay, silic w/py along fracts sp cc
295.7	10.0		2.49	89	.06			.01	sp	tr	.05		wk-sp	mod lim	Mixed cap-sul	Wk-mod alt, patchy silic, wk py, tr cc, wk lim throughout.
224.3	8.6		2.51	100	.06			.03	v. sp		.03		wk wk	1	Mostly cap	Generally wk alt, small patches, silic, tr cc + py, drk grn felds/abs. c wk l
232.9	8.6		2.52	97	.06			.04	tr		.02		mod wk	wk-mod lim	All cap	Wk-st alt, generally mod, wk-mod lim throughout
241.7	8.8		2.51	94	.06			.04	1		.02		mod wk	1		Wk-mod alt, patchy wk silic, tr py, wk lim
250.5	8.8		2.62	93	.08			.03	sp		.05		wk wk	1	Mostly sul	Fresh-wk alt, good Mz, wk py, sp cc, tr cpy, sp. lim along frac
258.7	8.2		2.60	100	.08			.03	1		.05		wk wk	1	Mixed cap-sul	Wk alt, wk-mod py, wk cc, sp cpy, sp-wk lim along frac's.
267.8	9.1		2.58	92	.10			.01	wk	tr	.09		sp sp	wk lim		Wk alt, mod py (massive + diss), patchy silic, sp cc, tr cpy, sp
276.8	9.0		2.55	96	.16			.01	1	.02	.13		tr wk	1	Mostly sul	Wk alt, py, v. sp cc coats py, tr cpy, v. sp lim
285.7	8.9		2.58	95	.08			.01	wk-mod	.01	.06		sp sp	wk lim, sp jar		Wk-mod alt, v. wk py, sp-wk cc, tr cpy, v. wk lim
295.1	9.4		2.62	92	.07			.01	wk	.02	.04		tr wk	1		Fairly fresh Mz, sp py, tr cc + cpy, v. wk lim on frac's.
303.7	8.6		2.62	91	.09				1	.05	.04		sp sp	wk lim		V. wk alt, wk py, v. sp cpy, tr cc?, still some grn felds.
312.8	9.1		2.58	93	.06			.01	mod	tr	.05		sp sp	wk lim, tr jar		Wk + occ. mod alt, sp py, tr cpy, cc, sp lim
322.1	9.3		2.61	91	.06			.01	sp	tr	.05		v. wk sp	1		Generally wk alt, v. wk py, tr cpy, sp lim
330.5	8.4		2.60	98	.06			.01	sp	.05	—			sp lim		" " " " , wk lim on frac's, sp. chlor
339.7	9.2		2.59	96	.07			—	wk	.02	.05					Mz, sp to wk alt, (sp) some lemh. of frac's. sp chlor. sp-wk py, Tr cc.
348.4	8.7		2.60	98	.05			—	[illegible]	.02	.03				Pos. Min. Hole 01: 341.7-347.8	As above except for this Aut dike as noted

Final Depth 405.8'
Collar Elevation 3070.70
Coordinates 30,183.03 N ; 24,550.72 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-79
Sheet No. 2 of 2
Date Completed 4-23-65
Logged By JAB, CWH, BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Ser, clay	lim	Rock Type	Remarks
356.9	8.5	NX wl	2.58	98	0.06			—	sp	.03	.03		mod, mod.	Mod lim	Mz	wk alt., sp chlor., wk cc @ start. Vuggy 5' completely leached zone
366.0	9.1		2.66	96	.13			—	wk	.03	.10		wk-wk	wk-mod.		" " " Partly leached, part sils. (Pq)
375.8	9.8		2.69	83	.05			—	Mod-st	.sp	.05		wk-wk	sp-wk		1st 2' bx w/ mod-st py in vlts. Rest mixed leached & sul.
384.5	8.7		2.61	96	.10				wk	.06	.04		wk, wk	"		wk. alt, most vnts leached. Most sils diss & as py.
394.0	9.5		2.62	91	.06				wk	.06			wk	"		As above
403.1	9.1		2.61	94	.08				wk	.08			sp sp	wk lim		" "
405.8	2.7		2.65	74	.05				"	.05			" "	"		wk alt, py, sp cc, tr cpy, sp lim on frac's.
E.O.H.		Avg Rec'y =		92%												

Final Depth 321.8'
Collar Elevation 3082.47
Coordinates 29,917.24 N ; 25,145.61 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-78
Sheet No. 1 of 1
Date Completed 4/17/65
Logged By CWH, JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Ser	Lim.	Rock Type	Remarks
9.0	9.0	R.B.	—	—	—								—	—	—	Rockbit
15.2	6.2	NXW	2.33	49	1.97	1.76	27.9' @ .83/.70	1.76	—	—	.21(?)		Mod Tr	Wk-Mod lim	Mz	wk-mod alt, st leached, weathered. wk chlorys
24.8	9.6		2.46	86	.46	.39		.39			.07?		Mod	Mod lim		wk alt. Leached w lim on frac's. Grn Cu Oxides (Grn folds) sc. thru-o.
36.9	12.1		2.43	.69	.54	.40		.40			.14?		|	|		As above, lim after py & poss. cpy. Folds are green, showing adsorbed Cu.
46.4	9.5		2.39	90	.33	.26		.26			.07?		|	Mod-st lim		As above w numerous qtz vnlts, 1/4" - 1/2" in size
56.2	9.8		2.50	99	.29			.29					|	wk lim wk Lim		As preceding.
65.7	9.5		2.50	92	.17			.17					|	wk-mod lim, st Lim		wk alt, num. qtz vnlts, leached, showing lim & Jar. Grn Cu on vnlts (absorbed on folds. Mod and K-folds)
74.5	8.8		2.50	99	.14			.14					|	|		As above w poss xeno, now chlor & aplitic 1/2" "vnlt-dike".
83.2	8.7		2.50	97	.15			.15					|	|		sl. incr. in alt, still wk. Mod lim-Jar on frac's. Grn folds.
92.3	9.1		2.48	93	.16			.16					|	wk lim Tr Lim		wk-mod alt, green "Xeno's" (chlor?) sc. throut wk lim. Grn folds
101.9	9.6		2.47	90	.11			.11					wk-mod	mod hem mod lim Tr Calc		" " " , mod lim, sp-wk hem. Tr cc & py @ end.
104.5	8.6		2.50	94	.06			.06					|	st hem wk lim		As above, but no sulfs.
110.6	6.1		2.53	99	.59	.03		.03	sp	.01	.55		Mod	wk lim	Sulfs @ 104.5	Mod. alt, a few leached vnlts. wk-mod cc, sp-wk py. (cc on fracs mostly, less d.ss.)
119.6	9.2		2.52	94	.46	.03		.03	sp-wk	.01	.42		wk-mod	sp hem mod lim		" " , considerable leached vnlts. wk cc, py. Grn folds
128.6	8.8		2.49	97	.42	.03	32.9' @ .47/.03	.03	sp		.39		|	wk lim		wk alt, a few leached vnlts. sc. grn cu. & K-spar. wk cc
137.4	8.8		2.50	96	.43	.04		.04	|		.39		Mod	|		As above, but mod. cc. Grn Cu as Mal. on frac's (on folds)
146.2	8.8		2.52	98	.31	.05		.05	|	.01	.25		|	|		As preceding
154.9	8.7		2.54	97	.35	.04		.04	|		.31		wk-mod	|		wk-mod. alt. More leaching. Considerable grn Cu. wk. cc. on frac
162.8	7.9		2.59	98	.19			.03	|	.03	.13		wk	|		wk alt, mod K-spar. Sp cc. Many leached frac's. still grn c
170.1	7.3		2.51	98	.17			.03	sp-wk	.05	.09		|	sp-wk lim		As above. Fewer leached frac's.
179.8	9.7		2.58	92	.15			.02	sp	.04	.09		|		wk alt, st. K-spar. No leaching. Chlor on frac's. sp cc.
189.0	9.2		2.58	96	.12				|	.03	.09		|		" " mod " chlor on frac's. sp cc
198.5	9.5		2.60	95	.10				sp-wk	.05	.05		|		As above
207.3	8.8		2.58	98	.06				|	.05	.01		|	wk Jar	wk. alt, mod K-spar, vuggy, Jar? stained plag. No visible sp cpy
216.2	8.9		2.58	97	.04				|	.04	Tr?		|	|		" " , mod propy. (chlor-py-Ep?) alt.
225.1	8.9		2.61	97	.04				|	.02	.02		sp-wk	sp Jar sp lim		As above. Sp cpy, Tr lim on py.
233.9	8.8		2.61	99	.09				5%	.09			sp	sp Jar		wk. alt, wk K-spar, wk propy. 1st 2 1/2' st qtz & py vn.
242.6	8.7		2.61	98	.05				sp-wk	.05			|	|		" " Mod K-spar, sp propy., sp cpy, sp-wk py (Mainly d.ss.)
252.1	9.5		2.60	91	.04				|	.04			|	|		As above.
261.3	9.2		2.61	85	.05				|	.05			wk	|	"	sp-wk Alt 2nd K-spar wk py, silk along frac's. Tr cpy
270.2	8.9		2.64	93	.04				|	.04			sp-wk	|	|	as above
278.4	8.2		2.63	100+2	.03				wk	.03			|	|	|	sp-wk Alt 2nd K-spar. wk-mod py, silk along frac's. Tr cpy st. silk w/py circa 277'
285.4	7.0		2.61	100	.05				sp-wk	.05			sp	|	|	as above
295.4	10.0		2.62	78	.05	—		—	"	.05(?)	—		"	|		sp-wk alt, Mod K-spar, badly broken, Propy. sp. wk total sulfs.
304.4	9.0		2.61	88	.04	—		—	"	.04(?)	—		"	"		As above. Sulfs almost entirely as py.
312.5	8.1		2.63	85	.03	—		—	"	.03	—		sp wk	|		wk Alt. 2nd K-spar. py on fracs. Tr. cc
321.8	9.3		2.62	83	.10	—		—	"	.10	—		sp wk			As above
End of hole			Aver. rec'y = 92%													

Final Depth 623.5
Collar Elevation 3260.20
Coordinates 28,739.00 N ; 28,663.41 E
Inclination – 64°. Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-77
Sheet No. 1 of 2
Date Completed 4/25/65
Logged By CWH, JAB, BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	L Lim Lim Hem Other	Rock Type	Remarks
10.6	10.6	NXW	2.31	100	0.04			0.04					Mod Mod	St. Hem	Sp	Mod. alt, st hem. stain, num qtz & alunite vnlts
19.2	8.6		2.43	99	.05			.05					1 1	St. hem Sp lim		As above w sev. LLm vnlts.
28.6	9.4		2.44	95	.06			.06					1 1	Wk. hem mod Lim Sp. Llm		Mod. alt, wk hem stain. Nume. qtz & alunite vnlts. Sp cc
37.7	9.1		2.50	96	.21			.02	Sp-wk		.19		1 1	Mod Lim Tr hem	Sul. zone 31.2-36.9	As above. Suls w wk cc tr 31.2 – 36.9
43.4	5.7		2.46	98	.06			.06					1 1	Mod hem WK Lim Tr hem		Mod. alt, wk-mod hem. stain, Num. qtz & alunite vn
52.3	8.9		2.48	99	.13			.02	Sp-wk		.11		1 1	mod hem wk lim		Mod alt, mod. sil'n. 1st 4' spotty poss. Mz text. show wk cc & py; rest leached
60.9	8.6		2.37	100	.02			.02					wk-mod clay & Ser	wk-mod hem wk. lim	Mz circa 58.0	wk-mod alt, mod sil'n. Mod. hem. stain. qtz & alunite v
69.5	8.6		2.44	96	.03			.03					1	mod hem wk lim	Sp circa 60.9	As above. No Mz text
78.6	9.1		2.43	98	.14			.02	Sp-wk		.12		mod clay & Ser	wk hem wk lim		1st 6' run as above, then sul. zone, wk total suls.
87.3	8.7		2.67	95	.48	0.04		.04	Sp-wk	.14	.30		Mod, Mod	wk hem wk lim		Suls to 83.5 then leached cap. Mod alt. Sp. sil'n.
95.9	8.6		2.55	97	.02			.02	–	–	–		Mod Mod	wk Llm Mod Hem wk lim		wk-mod alt, wk-mod sil'n. Mod hem stain, lim & hem on fra
104.4	8.5		2.56	98	.02			.02	–	–	–		Wk-Mod wk Mod	wk Llm, Hem mod Hem		wk alt, wk sil'n. Mod-st Fe stain (hem, lim, Jar.)
112.5	8.1		2.62	98	.03			.03	–		–		wk-mod clay & Ser	sp Llm Mod hem wk lim		wk-mod alt, mod sil'n. Mod Fe stain " " "
122.9	10.4		2.67	85	.35	.05		.05	Tr	.05	.25		Mod clay, Ser	Tr. lim	Suls @ 112.2 cap @ 122.9	Mod alt, wk sil'n. Sp-wk total suls (cc & py). Grain size inc
132.9	10.0		2.51	92	.02			.02					1	wk hem st lim Sp. Llm	Mz @ 128.3	Mod. alt, mod lim & hem stain. Sev. thick qtz vns.
140.9	8.0		2.56	99	.60	.03		.03	wk	.01	.56		1	sp hem Sp lim	suls @ 140.9	" " , sp lim & hem stain. Sp-wk total suls (cc, py)
150.0	9.1		2.57	98	.57	.03		.03	1	.02	.52		1			Mod. alt, wk or better total suls. cc on py?
159.8	9.8		2.59	93	.61	.05		.05	1	Tr	.56		1		Sp @ 159.3	" " , Mod total suls, mainly py.
167.9	8.1		2.65	97	.61	.04		.04	1	.02	.55		wk-mod clay, Ser			" " " " , apparent incr in cc w rock ch. mainly diss.
177.6	9.7		2.67	93	.98	.03		.03	1	.05	.90		Mod clay, Ser		Mz @ 172.1	As above.
186.0	8.4		2.61	97	.51	.03		.03	wk-mod	.05	.43		1		Sp @ 179.9	Mod alt, py incr to st. wk? cc.
195.2	9.2		2.61	92	.57	.02		.02	1	.03	.52		wk Clay, Ser			wk-mod alt. 2 small Mz dikelets & mod py. sp-wk
204.1	8.9		2.60	99	.78	.01	143.7' @ .62/.02	.01	wk		.77		Mod			1st 2½' Aplite w cc, Cpy & py. This grades into "Sp", Mod-st
213.5	9.4		2.72	97	.63	.01		.01	1	.02	.60		1			"Sp", mod-st sil'n, vuggy. wk-mod alt? sp? suls.
222.3	8.8		2.79	93	.78	.01		.01	1	Tr	.77		1			As above. wk py, mainly on vnlts. cc mainly diss. Mod?
231.3	9.0		2.77	94	.90	.03		.03	1		.87		wk-mod			As preceed. ng.
240.9	9.6		2.75	96	.52	.02		.02	1		.50		Mod		Mz @ 238.0	"Sp" mod alt, mod sil'n, mod? cc. Mz mod alt. wk? cc
249.5	8.6		2.15	95	.42	.02		.02	1	Tr	.42		wk-mod		Sp @ 240.6	"Sp", wk-mod alt, mod sil'n. Mod? cc. Tr Cpy.
258.3	8.8		2.74	94	.74	.02		.02	1	Tr	.72		1			As above.
267.8	9.5		2.62	95	.34	.01		.01	1		.33		wk	sp. Jar sp. lim		wk-mod alt, mod-st sil'n. Rk bx into frags w qtz fillings wk?
276.6	8.8		2.68	99	.41	.03		.03	1	Tr	.37		Mod, wk	—	Sp	Strong silt wk py on fns. very fine black and flable min thru ptg cc?
285.9	9.3		2.68	94	.12	—		—	Sp	Tr	.12		" "	Sp lim on fend		Mod-st silt Sp py Tr cpy v fine black min. as above. Am circa 28
294.5	8.6		2.76	97	.34	.03		.03	wk	Tr	.31	Alunite Tr-MoS2	Mod, wk	Sp lim Tr hem		Mod Rft. mod to st silt wk py Tr cpy(?) fine black min as above Tr.
303.8	9.3		2.58	98	.21	-		—	wk	–	.21		wk Mod	Sp lim	Aplite @ 299.2	wk-mod alt, mod sil'n. C.T. gradational. wk suls. qtz-m.
312.7	8.9		2.56	97	.24	—		—	wk	—	.24	Tr MoS2	wk, wk	wk lim		As above. 3 leached vnlts.
322.2	9.5		2.62	93	.34	.01		.01	wk	—	.33	Tr MoS2	wk, Mod	Tr lim		" " 2 " " wk cc & Cpy. Moly?
331.0	8.8		2.68	98	.38	.02		.02	wk	.08	.28	Tr MoS2	wk, wk	Tr. lim		wk-mod alt, mod-st sil'n. sev. leached vnlts. wk cc & Cpy
340.0	9.0		2.70	96	.45	.03		.03	wk-Mod	.02	.40	Tr MoS2	wk, Mod	Tr. lim		As above Sev. vuggy (w qtz xls) areas.

Final Depth 623.5
Collar Elevation 3[illegible]0.20
Coordinates 28,739.00 N ; 28,663.91 E
Inclination -64°. Bearing Due South

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F77
Sheet No. 2 of 2
Date Completed 4-25-65
Logged By J.A.B, BW, CW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
351.8	11.8	NX	2.66	94	0.48	.02		.02	wk		.4	tr MoS_2	sp wk	tr lim	Sp	Wk-Mod Alt silw Mod py sp cpy, cc. wk-Mod ser-clay Tr moly Tr
361.1	9.3		2.64	96	.47	.02		.02	wk-mod	.01	.44		sp wk	1		Wk-Mod Alt, silw, ser & clay, py. Wk cpy tr MoS_2 Mz dikelet circa 354.8
370.0	8.9		2.72	93	.47	.02		.02	wk	tr	.45		wk sp			Mod. Alt. silw ser, clay, cc on fract, py wk cpy patchy Mz near end of run Tr MoS_2
379.0	9.0		2.69	91	.44	.02	75.4' @ .47/.02	.02	1	.03	.39		wk sp			Mod Alt silw, ser, clay cc on fract, sp cpy py " " " " " "
387.7	8.7		2.66	96	.33	.01		.01	1	tr	.32	tr MoS_2	wk sp			as above Mz dikelets
398.0	10.3		2.67	88	.59	.02		.02	1	.02	.55		wk-mod sp			Wk-Mod Alt cc, py Wk py sp cpy Tr Cu ox
406.4	8.4		2.74	89	.49	.01		.01	1		.48		wk wk			Mod Alt ser, clay. Mod cc on py sp cpy Tr lim.
415.8	9.4		2.70	92	.32	.01		.01	1	.01	.30		sp sp			Mod. Alt ser, cly, Mod cc on py. St silw. Tr. lim Cu ox
424.7	8.9		2.70	94	.32			.01	wk-mod	tr	.31	MoS_2 Tr	sp sp			Wk-Mod Alt clay, ser, silw cc on diss Mod py Tr MoS_2 lim patchy Mz 1st 8' run Tr
434.2	9.5		2.71	85	.22			.01	1	.01	.20	Tr MoS_2	wk wk			Mod. Alt clay, ser., finely diss. py w/cc, silw. Tr MoS_2, cpy
443.8	9.6		2.73	85	.26			.01	wk	.01	.24	"	wk wk			Wk-Mod Alt clay, ser. finely diss py w/cc, silw Tr MoS_2, cpy
451.1	7.3		2.74	100	.48	.02	16.0' @ .49/.04	.02	1	.02	.44	"	1 1		Mz @ 448	Wk-Alt ser, clay patchy silw w/finely diss py cc Tr MoS_2, cpy.
459.8	8.7		2.75	94	.44	.05		.05	1	.01	.45		1			Wk Alt, clay, ser patchy silw finely diss py w/cc, tr cpy
468.5	8.7		2.77	100	.16				1	—	.16		1 1			silw thru out finely dis. py w/cc op cpy. Ser, clay.
476.4	7.9		2.61	95	.35	.02		.02	wk-mod		.33		tr sp			as above
485.0	8.6		2.74	94	.57	.03		.03	wk		.54		1 1			silw throut wk-mod py on fracts & diss w/cc ser, clay
493.9	8.9		2.71	98	.21	.02		.02	mod		.19		1 1			as above
502.8	8.9		2.77	93	.13			.01	1		.12		sp sp			st silw wk diss py Tr cc, cpy
511.1	8.3		2.62	98	.16			.01	1		.15		wk sp			Mod-st silw Mod py sp cc rx vuggy at end run
518.9	7.8		2.61	100	.18			.01	wk mod		.17		sp sp			st silw wk cc, py rx vuggy
528.1	9.2		2.64	92	.26			.01	1		.25		1 1		Sp Circa 518	"Sp?", wk-mod alt, st silw, vuggy sp cc
537.3	9.2		2.62	93	.05				wk		.05	Tr MoS_2	1 1			As above
546.1	8.8		2.62	98	.37				1		.37	1	1 1		Silw Rx? 544.4 Sp? 546.2	Rx Pg, not silw st far dis. st silw, vuggy, mod py, sp cc. Flex @ 544.9 wk silw & start Mz here
555.0	8.9		2.61	96	.13			.01	1		.12		wk wk			As above to ct. "Sp" Sp? 547.2
563.6	8.0		2.15	98	.06				1		.06		sp 1			"Sp" wk-mod alt, mod, silw, vuggy Sp cc wk py.
572.2	8.6		2.12	95	[illegible]				1		[illegible]		wk			Rx type? Rx was silw throut, v. sp cc, wk py diss & mod
581.3	9.1		2.71	94	.11				sp wk	Tr	.11		1 1			wk alt, was silw, test. interbed between 'Sp' & Mz; wk-mod py.
590.3	9.0		2.14	93	.14				1		.14		sp 1			As above & vuggy in places.
598.8	8.5		2.12	97	.12				1	.05	.11		1 sp		Mz @ 590?	Rx coarse enough to be good Mz patchy silw, patches wk mod cc,
607.2	8.4		2.11	92	.15				1		.15		1 1			Mod silw & qtz veining, wk-mod py, v. sp cc, tr lim.
616.2	9.0		2.69	92	.04				1		.04		1 wk			Mod silw, wk py, tr cc, cpy. Some qtz veing. Rx definitely i
623.5	7.3		2.18	96	.07				1		.07		1 1			As above.
E.O.H.		Avg Rec'y		95%												Note: Rx listed as "Sp" may be Mz, but was not so strongly silicified as Tr appears "Sp"

Final Depth 548.3'
Collar Elevation 2921.25
Coordinates 30,336.47 N; 25,529.43 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-76
Sheet No. 1 of 2
Date Completed 4-9-65
Logged By BNW, CWH, JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
8.3	8.3	rb	—	—	—								—	—	—	Cover
18.1	9.8	NXwl	2.59	99	0.06			0.06					mod clay wk ser	wk hem, sp lim, jar	AK	wk alt, patchy sil'n, tr cc, lim, sp hem, some qtz vning
28.3	10.2		2.33	88	.06			.06					wk clay, ser	sp jar, tr lim		wk-mod alt, tr lim, patchy sil'n + qtz vning, orthoc pink.
38.5	10.2		2.30	89	.07			.07					1	sp hem, lim, jar		wk alt but crumbly rk, patchy sil'n, wk FeOx. Plag clouded gr
47.5	9.0		2.41	98	.06			.06					1	wk lim, sp hem, jar		wk-mod alt, patchy sil'n, wk patchy Lim.
56.6	9.1		2.48	93	.06			.06					1	1		Generally wk alt, sp-wk lim, tr hem, cc. Poor looking cap.
67.1	10.5		2.51	84	.19			.05	sp		.14		wk-mod clay, sp ser	v. wk lim tr jar	Mixed cap-sul	wk-mod alt, patchy wk cc, wk lim.
75.7	8.6		2.50	99	.41	.05		.05	v. sp	.03	.33		wk clay, sp ser	v. wk lim	1	wk-mod alt, wk cc + lim, patchy sil'n, qtz vning.
83.0	7.3		2.52	95	.47	.05		.05	tr	tr	.42		1	v. wk lim tr jar?	mostly sul.	wk-mod alt, wk-mod patchy cc, v. sp cpy, tr py, sp lim
92.9	9.9		2.48	93	.84	.11		.11	Tr		.73		1	1	All sul.	wk-mod alt, wk diss cc, tr cpy, v. sp CuOx, tr lim.
102.4	9.5		2.47	94	.63	.09		.09	Tr		.54		Mod clay & ser	Sp. Jar		wk-mod alt, cc, v. sp cpy, tr CuOx, patchy sil'n + qtz vni.
111.6	9.2		2.46	95	.52	.06		.06	Tr	.02	.44		1			wk-mod alt, patchy sil'n, wk-mod cc, tr cpy, some lim st
120.2	8.6		2.43	94	.60	.04		.04	tr	.02	.54		1			Mod-st alt last ½ of run, mod sil'n, qtz vning first ½, wk cc.
129.7	9.5		2.49	92	.71	.13	156.4'	.13	tr	.02	.56		1			Mod-st alt wi patchy sil'n, wk cc.
138.9	9.2		2.48	90	.90	.15	@	.15	Tr	tr	.75		1			Generally st alt, very crumbly + clayey, wk + maybe mod cc
148.3	9.4		2.40	91	.94	.10	.86/.19	.10	tr	tr	.84		1			wk-mod alt, at least wk diss cc, tr-v.sp cpy, qtz vning
158.0	9.7		2.76	86	1.11	.10		.10	sp	tr	1.01		1			Mod alt, tr py, wk cc, v. sp cpy, tr lim
167.5	9.5		2.52	91	1.80	.67		.67	tr	tr	1.13		mod-st clay, wk ser	wk-mod lim	Oxidation @ 160.0'	Mod-st alt wi patches st sil'n, wk-mod lim, sp cc, tr cpy,
176.5	9.0		2.48	94	1.10	.75		.75			.35?		wk clay, sp ser	1		wk-mod alt, wk lim thru AK rk, sp-wk grn CuOx (mostly mo
186.1	9.6		2.51	91	.85	.51		.51			.34		wk-mod clay, sp ser	1		As above but wi patches st alt.
195.1	9.0		2.51	94	1.14	.22		.22			.92?		1	mod lim, sp hem	Mixed ox-sul	Generally mod alt, patchy wk cc-py, sp grn CuOx, sp lim on frac
204.0	8.9		2.53	94	.44	.10		.10	tr	.02	.32		1	mod lim	1	Mostly oxide but tr cc-py, wk lim. Alt varies wk-st.
213.9	9.9		2.56	91	.95	.07		.07	tr	.06	.82		wk clay, ser	wk lim	1	wk alt, good AK wi plag tinted grn, orth brnish. Sp cc-py on sea
223.5	9.6		2.54	92	1.08	.02		.02	sp	.10	.96		wk-mod clay-ser	1	1	wk alt, 1st half partly leached. sp cc-cpy-py.
232.6	9.1		2.53	97	.33	.02		.02	sp	.10	.21		1	sp lim wk jar		wk alt, sp leaching. wk sil'n. sp cc-cpy-py
242.9	10.3		2.59	86	.18			.02	wk	.11	.05		1	tr lim wk jar	1	As above. Non-suls. mainly as clays or absorb-on fo
251.5	8.6		2.58	98	.24			.02	1	.12	.10		1	wk jar		wk alt. wk sil'n. wk cpy, diss + as vnlts, py. Tr c
260.4	8.9		2.52	97	.26			.07	sp	.14	.10		1	sp lim sp jar		As above but w some lim on uns. sp-wk cu(?) cc
269.0	8.6		2.53	94	.14			.02	1	.05	.07		1	wk lim tr hem	Mixed ox-suls	wk alt, Mod-st sil'n, sum as qtz vns. Cons. leaching on fra
277.5	8.5		2.53	95	.37			.02	1	.10	.25		1	wk lim	1	wk-mod alt, part. leached, part sulfs sp-wk cc-cpy, p
286.8	9.3		2.52	89	.05			Tr	Tr	.02	.03		1	1		As above
288.9	2.1		2.53	98	.44	.01		.01	sp	.20	.23		wk clay, ser			As above
298.9	10.0		2.53	87	.60	.02		.02	1	.20	.38		1		All sul	wk alt, occ. patchy sil'n, wk cc, py, tr cpy. Min both diss + on
307.4	8.5		2.57	98	.89	.02		.02	1	.67	.20		1			As above to 305.0, then wk-mod alt, mod sil'n, cc, wk py, sp cpy.
316.0	8.6		2.55	95	.79	.02	56.0'	.02	Tr	.20	.55		1	Sp. lim.		wk-mod alt, patchy st sil'n, tr lim, wk-mod cc, wk py, tr cp
325.1	9.1		2.57	90	.87	.02	@	.02	1	.30	.55		1			wk-mod alt, wk patchy sil'n, wk cc, py, tr cpy.
333.7	8.6		2.56	97	.74	.02	.73/.04	.02	sp	.38	.40		wk-mod clay, ser	-		wk alt, wk patchy sil'n, wk-mod cc, sp-wk py, tr cpy
342.8	9.1		2.62	95	.59	.14		.14	Tr	.30	.15	Tr Moly	sp clay ser.	Tr. lim.		wk alt, sp carb, mod qtz, tr cc, wk diss. cpy, sp py
351.8	9.0		2.61	98	.27	.02		.02	Tr	.20	.05		sp clay ser	"		" " " sp carb " " , wk-mod diss. cpy, large

Final Depth 548.3
Collar Elevation 2921.25
Coordinates 30,336.47 N ; 25,529.43 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-76
Sheet No. 2 of 2
Date Completed 4-9-65
Logged By BNW, CWH, JAB

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Ser	lim	Rock Type	Remarks
361.1	9.3		2.61	98	0.27	0.02		.02	Tr.	.21	.04		Tr. Tr	Tr. lim	AK	wk alt, ~~mod~~ qtz, sp. chlor. Wk-mod cpy, tr. cc, sp. py.
369.9	8.8		2.65	97	.47	.01	27.4' @ .41/.01	.01	Sp	.40	.06	Tr MoS_2	Tr —	—	"	Fresh-wk alt, sp. chlor. Wk. cpy. Sp py.
379.4	9.5		2.58	92	.28	.01		.01	Tr	.29	~~.04~~	"	Tr —	—	"	~~AB~~ above but no increase in silica & cpy
388.5	9.1		2.67	95	.48	.01		.01	Sp	.47	.02	Mod MoS_2	Tr —	Jar.	"	Sp alt, sp-wk chlor, diss & on fracs. Some blebs of cpy.
397.3	8.8		2.60	98	.28	.01		.01	Tr	.24	.03	Tr MoS_2	Tr —	Jar.	"	" " " " , mod. silica. Wk-mod cpy, sp. py.
401.8	4.5		2.61	97	.34	.01		.01	Sp.	.30	.03	"	Tr	Tr. lim	"	" " wk chlor, some blebs of cpy, as well as d.s.
411.4	9.6		2.59	98	.25	.02		.02	Sp	.22	.01?	"	Sp —	—	"	V. Wk Alt Tr. py, moly, Sp cc ~~Sp~~ Wk cpy Sc qtz vns.
420.3	8.9		2.57	97	.16	—			Tr	.16	—	"	Sp —	—	"	Wk Alt Sp py, Sp-Mod cpy, cc, moly Sp Chlor Ser. Wk Sil'n
429.6	9.3		2.58	95	.22	—			Tr	.17	.05	"	Sp —	—	"	Sp Alt - wk at end run Wk-Mod cpy py Tr moly, cc Sp clay Wk S.
439.2	9.6		2.56	95	.23	—			Tr	.17	.06	"	Sp —	—	"	Sp Alt - Sp clay Wk py Wk-Mod cpy, cc Wk chlor Tr moly
448.0	8.8		2.59	95	.31	.01		.01	Sp	.30	—	"	Sp —	—	"	Sp Alt - qtz vns w/ Tr moly Wk cpy Tr py cc Sp clay sil'n
458.0	10.0		2.58	86	.36	.01		.01	Sp	.35	—	"	Sp Tr	—		Wk Alt - qtz vns. w/ Tr. moly, Tr. py, cc. Mod cpy Sp clay
466.8	8.8		2.56	93	.19			—	Sp	.19	—	"	Sp Tr	—		Sp-Wk Alt - qtz vns. w/ moly + cpy Wk-mod cpy Sp clay Sp chlor.
476.4	9.6		2.57	97	.19			—	Sp	.19	—	"	Sp Tr			Wk Alt. - Sp clay Wk-Mod sil'n qtz vns w/ moly Wk ~~cpy~~ Tr py
485.9	9.5		2.56	96	.33	.01		.01	Tr	.32	—	"	Sp Tr			Wk Alt - qtz vns w/ Sp-mod MoS_2 Wk-Mod py massive py at 484' Wk cpy
495.0	9.1		2.58	97	.78	.01	26.8' @ .54/.01	.01	Sp-Mod	.72	.05	"	Sp Sp			Wk Alt. Sp clay Wk-Mod sil'n Wk-mod moly w/ qtz vns Mod py Wk cp
503.6	9.1		2.81	97	.25	—		—	Wk	.24	.01	"	Sp Wk			Wk Alt. Wk-mod clay qtz vns w/ Tr moly Sp cpy
512.7	8.9		2.56	94	.58	.02		.02	Wk	.35	.21	"	Sp Wk			Wk-Mod Alt. mod clay qtz vns w/ Tr moly Sp-Wk py Sp cp
521.6	9.3		2.57	97	.24	—		—	Sp	.24	—	"	Sp Wk			Wk Alt Sp clay Wk py, cpy, qtz vns w/ Tr moly v. fine
530.9	9.3		2.57	94	.25	—		—	Sp	.24	.01	"	Sp Wk			Sp-Wk Alt Sp clay Sp py, cpy Vuggy qtz qtz vns w/ Tr moly
540.2	7.5		2.58	96	.21	—		—	Tr	.21	—	"	Tr. Sp			Sp Alt Sp clay, Tr py Sp cpy, chlor Tr moly
548.3	8.1		2.56	100	.16	—		—	Sp	.16	—	"	Tr. Sp			Wk-Mod Alt. Wk-mod clay Sp moly cp Tr py

Avg Rec'y = 94%

Final Depth 386.4'
Collar Elevation 3242.99
Coordinates 28,714.90 N ; 28,855.31 E
Inclination - 49° ; Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-75
Sheet No. 1 of 2
Date Completed 4-5-65
Logged By BNW ; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay, sericite	lim	Rock Type	Remarks
6.0	6.0	NC	—													Cover
10.0	4.0	NXw	2.43	99	0.07			0.07					sp clay, ser.	wk hem, sp lim	Mz	wk alt, mod hem staining throuout – occ. patch mod alt
19.2	9.2		2.44	88	.04			.04					wk clay, ser	mod hem, wk lim		wk alt, wk hem + lim, some qtz veining.
28.3	9.1		2.60	86	.03			.03					sp-wk clay, wk-mod ser.	sp hem, wk-mod lim		Mz v. hard, generally bleached w/ sp hem, v. wk lim, sp Llm.
37.8	9.5		2.50	90	.05			.05					wk clay, ser.	sp hem, wk-mod lim		wk-mod alt, wk patchy hem, wk lim, generally bleached, alun? veins
46.9	9.1		2.33	89	.04			.04					wk-mod clay, sp-wk ser.	mod hem, sp lim		Mod alt w/ patchy sil'n, wk hem + lim, patchy wk Llm.
55.0	8.1		2.32	96	.03			.03					wk clay, ser.	sp lim, Llm, wk-mod hem		wk-mod alt w/ considerable sil'n, v. wk hem, wk lim, sp Ll.
64.0	9.0		2.40	97	.03			.03					1	wk hem, lim, tr Llm		wk-mod alt, v. wk hem, wk lim, alun + lim in frac's, tr Llm.
74.0	10.0		2.55	94	.09			.03	v. wk	tr	.06		1	v. wk lim hem, sp Llm	Mixed cap-sul	wk-mod alt, generally bleached + wkly silicif, wk lim, patches wk
83.0	9.0		2.66	99	.05			.02	wk-mod	tr	.03		1	wk lim, tr hem	1	wk 81.0' → mod alt, patchy silicif, mod-st py, v. sp cc, sp lim on frac's
92.0	9.0		2.63	98	.07			.01	wk		.06		1	sp lim	1	wk-mod alt, patchy silicif, wk-mod py, sp-wk cc, sp lim.
101.5	9.5		2.59	94	.21			.03	v. wk		.18		mod clay, sp. ser.	wk lim, v. sp hem	1	wk-mod alt, wk patchy silicif, sp lim + hem, sp Llm on frac's, wk
110.8	9.3		2.41	93	.03			.03	v. sp		tr		wk clay, ser.	wk hem, lim	All oxide	wk-mod alt, occ. patch bleached + silicif, mod hem, wk lim, py, sp-
119.9	9.1		2.53	95	.16			.02	sp	tr	.14		mod clay, sp ser.	wk hem, sp lim	Suls @ 114.0'	wk alt, mod sil'n throuout, wk py, sp cc, tr cpy, sp hem, tr
128.7	8.8		2.71	88	.08			.02	1	tr	.06		sp clay, ser.	v. wk lim + hem	Mixed cap-sul	wk alt, patchy mod sil'n, sp py, v. sp cc, hem, lim on f
138.3	9.6		2.53	90	.35			.02	wk		.35		mod clay, tr ser.	tr hem, v. sp lim	All suls	Mod-st alt, patches Mz test left, mod cc, sp py.
147.3	9.0		2.46	94	.21			.02	1	tr	.19		wk-mod clay, sp ser.	wk lim, v. sp hem	Mixed cap-sul	Mod alt ½ way → wk alt + sil'n, mod cc + sp py ½ of run, sp hem, tr
157.0	9.7		2.57	89	.04			.04	tr				wk clay, sp ser.	wk hem + lim	All cap	Mod alt, st silicif + qtz veining for 5-6', wk hem, sp lim, tr Ll
166.4	9.4		2.57	88	.05			.04	sp		.01		1	mod hem, wk lim	Mixed cap-sul	wk-mod alt w/ patchy sil'n, v. sp py, tr cc, wk hem.
175.5	9.1		2.50	91	.04			.03	1		.01		1	wk lim, sp hem	Mostly cap	Generally mod sil'n throuout, tr suls, lim, sp hem, still M
186.0	10.5		2.52	86	.03			.03					sp clay, wk ser.	wk hem, lim, tr Ll	All cap	wk alt + patchy sil'n, wk grnish; last 2', wk lim, v. sp hem.
195.4	9.4		2.60	92	.02			.02					1	sp hem, lim, wk Llm		wk-mod alt, considerable mod sil'n, wk hem, sp lim + Llm.
204.6	9.2		2.41	97	.04			.04					wk clay, ser	wk hem, sp lim, Llm		Generally wk alt, patchy sil'n, wk Llm on frac's, wk hem, sp lim
213.1	8.5		2.48	97	.15			.02	wk		.13		1	sp hem, lim	Mostly sul	wk alt, mod py, v. wk cc coats py, good Mz text, tr lim + hem
222.2	9.1		2.45	96	.13			.01	wk-mod		.12		1	1	1	wk alt, patchy sil'n vuggy in places, wk-mod py, v. wk cc, sp Fe
229.1	6.9		2.54	96	.09			.02	wk		.07		mod clay, wk ser.	wk hem	Mixed cap-sul	wk-mod alt, patchy sil'n, sp py, wk cc, wk hem, sp lim, tr Ll
239.1	10.0		2.62	89	.03			.03					wk clay, ser.	Mod Llm, hem.	All cap	wk alt, patchy mod-st sil'n, wk-mod hem, v. wk lim.
248.1	9.0		2.57	95	.14			.04	sp		.10		wk-mod clay, ser.	st Llm, mod hem	Mixed cap-sul	wk alt + patchy sil'n, some mod alt at end, wk hem, sp Llm, mod patchy + wk
256.9	8.8		2.44	94	.29			.02	sp		.27		1	wk lim, hem	Suls @ 249.5'	wk-mod alt, good Mz text, mod py, wk-mod cc, sp FeOx.
266.2	9.3		2.49	92	.31	.04		.04	sp-wk		.27		1	1		As above w/ no FeOx + mod-st cc.
275.1	8.9		2.52	93	.47	.03	18.1' @ .44/.02	.03	sp-wk		.44		mod clay, ser	tr lim		Generally mod alt, sp lim + patchy sil'n, mod cc + py, tr cpy.
284.3	9.2		2.54	93	.41	.02		.02	1		.39		wk clay, mod ser.	wk lim, hem		wk-mod alt, tr lim, patchy wk cc, sp py, tr cpy.
293.0	8.7		2.54	98	.19			.01	1	.01	.17		1	wk lim, hem	Mixed cap-sul	wk-mod alt, patchy wk py-spec, v. wk hem, lim
302.2	9.2		2.56	91	.29			.01	wk		.28		mod clay, wk ser.	sp lim	Mostly sul	wk-mod alt, wk py, cc, tr cpy, lim, Mz text
311.2	9.0		2.48	97	.15			.01	sp		.14		wk clay, ser	tr lim, sp Llm, wk hem	Mixed cap-sul	wk-mod alt w/ patchy st sil'n, patchy sp-wk cc, py, wk Llm, he
320.4	9.2		2.60	87	.20			.01	1		.19		1	wk lim, hem	1	Generally wk alt, wk cc mostly on frac's, wk py, sp hem + li
329.4	9.0		2.50	97	.03			.01	tr		.02		1	sp Llm, wk hem, wk lim	All cap	wk-mod alt + sil'n throuout, wk Llm on frac's, v. sp lim, wk he
338.7	9.3		2.59	92	.12			.03	sp		.09		1	wk Ll, tr hem, tr lim	"Sp" @ 329'	Rk now more "Like Sp than Mz". Gen. leached but pods of cc.
348.1	9.4		2.56	94	.07			.02	wk		.05		wk-mod clay, ser	1		wk-mod alt mod sil'n. Gen leached but some cc.

Final Depth 386.4'
Collar Elevation 32 42.99
Coordinates 28,714.90 N; 28,855.31 E
Inclination -49°; Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-75
Sheet No. 2 of 2
Date Completed 4-5-65
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Clay, Ser.	LLm, Lim		
357.9	9.8		2.50	96	0.13			.03	sp-wk		.10		wk clay, ser	wk LLm wk hem	"Sp"	wk-mod. alt, mod sil'n, mixed leached cap. & sulfs (cc).
367.6	9.7		2.50	89	.11			.02	wk		.09					As above
372.3	4.7		2.64	96	.11			.02			.09					" "
381.9	9.6		2.50	94	.10			.04	sp		.08		wk-mod clay, ser	wk LLm wk Lim wk hem	Mixed cap-sul	wk-mod alt, wk sil'n & qtz vning, v. sp py, tr cc, wk hem, tr l,
386.4	4.5		2.51	99	.03			.03	tr		tr			Tr LLm wk Lim sp hem	All cap	Mod alt, vk crumbly, wk hem, lim, v. sp LLm on frac's.
E.O.H.		Arg. Rec'y		93%												

Note: Rk listed as "Sp" is a fine-medium grained, qtz and plag. igneous rock. Appears to be an aplite.

Final Depth 412.9'
Collar Elevation 2921.25
Coordinates 30,336.47 N; 25,529.43 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-74
Sheet No. 1 of 2
Date Completed 3/24/65
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	Lim	Rock Type	Remarks
38.0	38.0	rb	—	—	—	—							—	—	QAl	Alluvium – Stream fill
47.7	9.7	NXwl	2.48	85	0.55	0.31		0.31			.24?		mod clay tr ser	wk-mod lim mod blk ox	Diorite? Sp?	Rk v. crumbly, partly silicif, wk lim on frac's, tr mal, mod chl
56.3	8.6		2.67	94	.37	.26		.26			.11		wk clay, sp ser			wk-mod alt, definitely ign text, mod chlor, mod lim after py on fra
65.4	9.1		2.67	93	.31	.19		.19	sp	.02	.10		sp clay	v. wk lim + blk ox	Tt @ 62.4'	As before to 62.4', then silicated seds wi patches epidote, wk py + cc tr
74.4	9.0		3.18	91	.32	.13		.13	wk	.07	.12			wk lim		Partly leached Tt wi much brown garnet, wk lim, patches epidote, wk py, c
84.0	9.6		2.90	98	.42	.29		.29	sp	.03	.11		wk-mod clay	mod lim	Calc. Hf	Rk mostly calcareous Hf wi some patches garnet + cpi, wk mal, sp py, c
93.4	9.4		3.15	94	.09			.03		.03	.03		tr clay, ser	wk lim	Mz? @ 85.6'	General mod-st sil'n, vague ign text, sp mal + blk Cu ox(?), tr py, cc, wk
102.6	9.2		2.61	92	.06			.02		.01	.03		sp clay, tr ser	sp-wk lim		Wk alt + mod sil'n wi patches v. crumbly rk, wk-mod py, v. wk cc, sp cpy, lim
111.7	9.1		2.62	91	.11			.04		.02	.05		tr clay, sp ser	wk lim		Mod-st sil'n, patches show ign text, pieces Hf?, wk lim, sp CuOx + blk ox, tr cp
121.0	9.3		2.62	91	.04			.02	v. sp	.01	.01		tr ser			Mod-st sil'n, Mz? text, sp cc, tr cpy, wk py + a 1/2" pv vn, wk lim on frac's.
129.5	8.5		2.66	100	.14			.01	wk-mod	.12	.01	tr moly		sp lim	Sp @ 127.0'	As before to 127.0', then finer porph ('sp') text wi mod lim, qtz vn's, wk py,
134.9	5.4		2.67	92	.27			.01	mod	.23	.03		tr clay, ser			Wk alt, qtz vn's wi sp-wk cpy, tr moly, cc, wk py, wk-mod lim
144.0	9.1		2.46	97	.51	.02		.02	wk	.39	.10		wk clay	wk lim	chloritic Hf @ 138.4'	As before to 138.4', then chloritic Hf wi wk diss py, sp cpy, mu
154.6	10.6		3.07	79	1.43	.03		.03	mod-st	1.00	.40		mod clay	mod hem	Calc. Hf	Mod Fe-staining from 145.3' on, mod-st py, mod cpy.
164.6	9.4		2.64	90	.60*	.05		.05	patchy st	.45	.10		sp-wk clay	wk hem	Late andesite @ 155.5'	As before to 155.5', then unmineralized + unaltered Tap wi patches Hf.
171.8	7.8		2.81	94	.76*	.05		.05	mod-st	.61	.10		wk clay	sp-wk hem	Calc Hf 164.5-168.2', Tap @ 168.2'	Tap unaltered + in steep ct wi calc Hf. Hf has mod cpy, wk py,
180.8	9.0		2.76	88	2.94	.06	97.1' @ 1.06/0.04	.06	st	2.88	tr?			sp hem	Calc + chlor Hf @ 171.8'	Hf wi much calcite in spots, silicif in others, st py, mod cpy, wk
189.8	9.0		2.58	93	.22*	.03		.03	mod	.19			sp clay	v. sp hem	Tap @ 180.8, chlor Hf @ 187.4'	Going right down oxidized ct of Tap dk. Hf wi mod py, sp cpy, has pate
199.4	9.6		3.16	83	2.34*	.09		.09	wk-mod	1.10	1.15		wk-mod clay		Tap @ 197.7'	Calc + chloritic Hf wi mod-st cpy in places, sp cc + py.
208.0	8.6		3.14	95	.68*	.06		.06	mod	.42	.20				Calc. + garnet-bearing Hf @ 200.0'	Tap unalt. Hf wi patches brn garnet, mod py, wk-mod cpy.
216.3	8.3		3.12	98	.50	.01		.01	mod-st	.24	.25			sp hem	Mixed Tt, Hf	Much brn garnet but quite calc, also. Mod-st py + cpy, wk-mod c
225.5	9.2		2.91	96	.84	.01		.01	st	.80	.03		sp clay		Chlor. Hf	Much chlor, no more garnet, still calc, bx tuf in places, mod-st py wk-mod cpy.
232.0	6.5		2.62	81	.40	.01		.01	wk-mod	.39						Mostly silicif wi patches chloritic Hf. Chloritic rk only has mod py, sp
245.5	13.5		2.54	89	.14*				sp	.14					Tap @ 232.0'	Unalt unmin Tap except for patch silicif Hf wi wk py @ 236.5-237.5
255.3	9.8		2.49	80	.38	.01		.01	wk	.36	.01		wk clay		Calc. chlor Hf @ 245.5'	Rk very soft except for silicif patches, finely diss mod py-cpy?
264.3	9.0		2.44	90	.07				sp	.07	tr					Hf mod-st sil'n throughout, a little chlor + calcite, only tr unimineral
271.0	6.7		3.02	99	.74	.01		.01	mod-st	.65	.08		v. sp clay	wk hem	Bedding change to calc Hf	Calc vuggy Hf wi wk hem, sc. qtz vnlets, patchy mod py, sp cpy, sp cc?
280.1	9.1		3.17	96	.15				wk	.15					Mz @ 272.0'	As before to 272.0', then wk alt + sil'n, sp diss py, tr cpy
289.3	9.2		2.58	92	.09				v. wk	.09			tr clay			Hydroth. altered but not weathered, biotite → chlor, wk py, sp cpy.
298.1	8.8		2.57	96	.13					.13						Non-weathered wi patchy silicif, wk-mod py, sp-wk cpy, sp chlor
306.3	8.2		2.63	97	.11				wk	.10	.01	tr moly				Fresh Mz wi patchy sil'n, clay on some frac's, v. wk py, tr cc, sp
314.3	8.0		2.58	98	.12					.10	.02					Fresh Mz, wi sp epidote, cpy, v. wk py.
326.6	12.3		2.57	96	.13				wk-mod	.13	tr					V. hard rk, sp epidote, chlor in vugs, sp py, v. sp cpy, tr cc
335.8	9.2		2.76	95	.28	.02		.02	mod-st	.25	.01		wk clay, tr ser		Calc Hf @ 331.0'	As before to 331.0', then calc Hf, wk chlor, mod py, v. wk cpy.
345.7	9.9		2.76	85	.53	.02		.02		.51	tr		wk clay		Calc chlor Hf	St chlor in places, mod py, v. wk cpy.
355.1	9.4		2.75	91	.16			.01	mod	.15			tr clay			Hf as above wi silicif patches, wk py, sp cpy.
364.0	8.9		2.61	95	.13*			.01	wk-mod	.12				tr hem	Tap @ 358.5	As above to 358.5 wi calcitic vn's, then unalt post-min.
372.9	8.9		2.55	89	.03				sp	.03			sp clay		Silicif Hf	Some chlor + calcite for 4', then mod-st sil'n. Sp py.
381.8	8.9		2.62	91	.04*				sp	.04			tr clay		Tap (?) 379.2'	Silicif seds to 379.2' wi wk py, then post-mineral

Final Depth 412.9'
Collar Elevation 2921.25
Coordinates 30,336.47 N ; 25,529.43 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-74
Sheet No. 2 of 2
Date Completed 3/24/65
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	Clay, Sericite	Lim		
391.8	10.0	NXwl	2.53	89	0.05				sp	0.05		tr moly?	tr clay		Silicif seds @ 387.7'	Tap wi calcite in fracs, silicif seds wi qtz vn's, wk chlor, v. sp py, tr moly
401.5	9.7		2.60	92	.04				sp-wk	0.04			?			Grn-colored sd wi mod-st sil'n + qtz veining, tr py.
412.9	11.4		2.65	90.	.02				v. sp	.02		tr moly	?		Qtzt?	Light-green highly siliceous rk wi sp py, tr moly. Possibly some of Permian qtzt found on hill N of Danube area
E.O.H.		Avg. Rec'y		92%												

Final Depth 190.7'
Collar Elevation 3020.07'
Coordinates 30,207.43N 29,148.88E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-73
Sheet No. 1 of 1
Date Completed 3/8/65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay, sericite	lim	Rock Type	Remarks
5.0	5.0	R.B.	—	—	—										—	Rockbit through cover
15.2	10.2	NXWL	2.50	50	0.10			0.10					sp clay, wk ser	mod lim, sp hem, Mod lim, sp Lem	Dp	wk-mod alt, mod sil'd. A "fretwork" of leached veins.
22.5	7.3		2.51	44	.06			.06					wk clay, ser	1		As above. v/poor rec'y.
32.2	9.7		2.56	81	.09			.05	v. wk		.04		sp clay, ser	wk-mod lim, sp hem		Dp? Low qtz but w/ frags. WK alt, mod sil'n. Tr py, cc. WK lim
40.9	8.7		2.56	93	.08			.02	1	.01	.05		1	wk lim	some sulf @ 36.0	wk alt + mod sil'n throughout, wk py mostly on frac's, v.sp cc, sp lim
49.9	9.0		2.58	98	.22			.01	mod	.02	.19		1	sp lim	Sp	RK definitely 'Sp' this run, wk-mod alt, mod py, v.sp cc + cpy.
58.3	8.4		2.60	98	.10				1	.02	.08		1	v.sp lim		Generally wk alt but crumbly rock, tr-sp cc + cpy, mod-st p
67.4	9.1		2.61	95	.09				wk-mod	.07	.02		1	1		wk alt w/ mod sil'n throughout, mod py, tr cpy.
74.1	6.7		2.67	91	.09				mod	.05	.04		1	1		Mod-st sil'n, patch bxiation, mod py on frac's, sp lim on frac's
82.2	8.1		2.70	98	.09				1	.06	.03	tr moly	1	sp drk lim		Mod-st sil'n, rk maybe Mz?, mod py, tr moly.
91.3	9.1		2.71	93	.07				mod-st	.06	.01		tr clay, sp ser.			Wk alt + mod sil'n, much chlor last 2', rk probably 'Sp', mod py, tr
98.5	7.2		2.71	97	.11			.01	wk-mod	.06	.04		sp clay + ser.			Wk-mod alt w/ patches st sil'n, patchy mod-st py, tr cpy?
107.6	9.1		2.73	95	.09				mod-st	.07	.02	tr moly	tr clay on frac's			Wk alt w/ wk sil'n throughout, mod py, tr moly, occ. qtz vn, 'Sp'
116.3	8.7		2.68	94	.09				1	.07	.02		1			Wk alt, patchy sil'n + qtz veing, mod py, v.sp cpy, cons. chlor, text intermed. Sp +
125.3	9.0		2.66	93	.08				1	.07	.01		1			As above. One large qtz vn is vuggy.
134.4	9.1		2.67	92	.10				1	.10		tr moly	1			V. wk alt, patchy sil'n + vuggy qtz vn's, mod py, sp-v.wk cpy, tr
143.3	8.9		2.79	91	.10				1	.10			1			As above.
152.9	9.6		2.75	90	.11				1	.11		tr moly	1			Wk alt, patchy sil'n, mod-st py, sp cpy, tr cc, moly
161.5	8.6		2.70	98	.07				mod	.07			1			Mod sil'n w/ patches text. left, wk-mod py, tr cpy.
170.8	9.3		2.72	92	.08				1	.08			1			Mod sil'n throughout, rk dk gray fr chlor?, sp-wk py, tr cpy
179.7	8.9		2.67	94	.12				mod-st	.12			1			Patchy mod sil'n, considerable chlor, patchy wk py, v.sp cpy
190.7	11.0		2.73	95	.13				1	.13			1			As above.
E.O.H.		Aver. rec'y = 89%														

Final Depth 301.1'
Collar Elevation 3068.78'
Coordinates 29083.20 N 28916.63 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-72
Sheet No. 1 of 1
Date Completed 3/3/65
Logged By BWW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay, sericite	lim	Rock Type	Remarks
4.0	4.0	rb														Cover
12.8	8.8	NXwl	2.45	91	0.03			0.03					mod clay, wk ser.	wk-mod lim, sp hem	Sp	Generally wk alt w/ wk sil'n, wk patchy hem, wk lim.
23.8	11.0		2.44	79	.03			.03					/	As above w/ sp lim		Wk-mod alt, patchy wk sil'n, wk lim & jar, sp patchy hem
34.6	10.8		2.47	78	.04			.04					wk clay, ser.	wk lim + hem, sp LLm		Wk-mod alt, rk finely crushed in spots (some cave?), wk lim, sp pat
42.3	7.7		2.44	93	.04			.02	v. sp		.02		sp clay, wk ser.	sp lim, LLm, wk hem	Mostly cap	Wk-mod alt, 2 short patches w/ wk py + tr cc, otherwise wk hem, lim
54.9	12.6 ~~7.4~~		2.36	75	.02			.02	tr				/	wk hem LLm, tr lim	All cap	Wk-mod alt, sericite along frac's, mod hem, tr LLm.
64.3	9.4 ~~8.8~~		2.27	96	.03			.03					mod clay, ser.	wk hem, mod LLm		Mod alt, wk lim + hem, patchy diss LLm, vuggy frac's
74.1	9.8		2.25	90	.03			.03					/	/		Mod-st alt, wk hem, lim, ~~sp~~ patchy LLm
83.9	9.8		2.24	89	.04			.04					mod-st clay, wk ser.	sp hem, wk LLm, sp lim		As above.
96.0	12.1		2.27	55	.03			.03					mod clay, sp ser.	mod LLm, tr lim, wk hem		Mod-st alt, st clay in places, mod LLm – hem, sp lim
103.8	7.8		2.48	94	.06			.06					st clay, sp ser.	mod hem, sp wk LLm		Mod alt, sericite along frac's, wk-mod hem, sp lim, LLm
114.0	10.2		2.47	93	.20			.03	mod		.17		mod-st clay, sp ser.		Sul zone @ 103.8	Mod-st alt, wk-mod py, wk cc, tr cpy.
122.9	8.9		2.57	92	.36			.03	/		.33		mod clay, wk ser.	sp hem + lim		Generally mod alt, occasional patch cap, mod py, sp cc, v.sp Fe
133.3	10.4		2.42	84	.35			.03	/		.32		/	/		Mod-st alt, occ. patch cap, mod py, sp + occ. wk cc, sp lim + he
144.9	11.6		2.81	80	.27			.02	wk-mod		.25		mod-st clay, wk ser.			Mod-st alt, sericite along frac's, mod py, sp cc.
154.6	9.7		2.80	86	.36	0.02		.02	/		.34		/			Wk-mod alt ½ way → mod-st alt, mod py, sp cc throughout, sericite along
166.0	11.4		2.77	75	.48	.04		.04	/		.44		st clay, sp ser.			St alt, wk py, wk-mod cc in places, very clayey.
177.6	11.6		2.74	74	.18			.02	/	tr	.16		mod clay, wk ser.			Generally mod alt, still good 'Sp' text, mod py, v.wk cc.
184.7	7.1		2.75	99	.14			.02	mod-st	.05	.07		sp clay + ser.	tr jar.		Wk alt, rock becoming fairly fresh, mod cc, v.sp cc, tr-sp c
192.3	7.6		2.74	100	.15				1	.15	tr		sp clay, ser.	/		Wk alt, mod-st py, tr cc + cpy. ground rk 1st 1'
201.2	8.9		2.73	93	.12				mod	.12	tr		/	/		Wk alt, good 'Sp' text, mod-st py, tr cpy, sp lim, jar.
211.2	10.0		2.71	85	.13				mod-st	.06	.07	tr cov.	/	/		Wk alt, rk crumbly in places, mod py (much in frac's), v.sp cpy, sp
219.9	8.7		2.74	91	.21				mod	.09	.12		wk clay, ser.	sp lim, tr jar		Wk alt but brittle rk, rather st py, tr lim, sp jar.
228.9	9.0		2.59	94	.26				/	.15	.11		tr clay			Wk alt, 'Sp' fairly coarse-text., mod-st py, v.sp cpy, patchy sil'n, tr
238.5	9.6		2.57	89	.12				mod-st	.06	.06		tr clay, v.sp ser.	tr jar.		Generally wk alt (patchy mod alt + sil'n), mod-st py, tr cpy, cc?
247.4	8.9		2.75	93	.21				/	.10	.11		/	/		Rk crumbly but alt wk, sericite along frac's, mod py, tr cp
256.6	9.2		2.72	90	.08				/	.06	.02		/	tr lim, jar.		V.wk alt, patchy qtz veining, mod-st py, v.sp cpy.
267.5	10.9		2.73	85	.09				/	.09			/	tr lim		V.wk alt, patchy sil'n, mod-st py, tr-sp cpy.
275.1	7.6		2.66	95	.11				/	.11		tr moly	/			V.wk alt, chlor on frac's, mod py, tr-sp cpy, tr moly
283.8	8.7		2.63	92	.10				/	.08	.02		v.sp clay, ser.	tr lim		V.wk alt, patchy sil'n, mod py, sp-v.wk cpy, tr cc?
293.0	9.2		2.65	91	.10				/	.08	.02		/			V.wk alt, good 'sp' text, mod py, v.sp cpy.
299.1	6.1		2.72	97	.12				/	.06	.06	tr moly	/	tr lim		V.wk alt, mod py, tr-sp cpy.
301.1	2.0		2.69	84	.13				/	.12	.01		/			As above.
E.O.H.		Aver. recy = 86%														

Final Depth 704.4'
Collar Elevation 3242.49
Coordinates 28,714.90 N ; 28,855.31 E
Inclination -65° ; Bearing Due South

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-71
Sheet No. 1 of 3
Date Completed 3-19-65
Logged By BNW ; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
5.0	5.0	HB														Cover
15.1	10.1	NXwl	2.29	91	0.05			0.05					mod clay, sp ser	mod hem, sp lim		wk-mod alt, various alum vn's, wk. hem. + LLim, sp lim
30.0	14.9		2.34	92	.04			.04					wk-mod clay, sp ser	sp-wk LLim, sp lim, mod hem	M2	As above w/ wk-mod hem, some qtz vnlets.
39.9	9.9		2.35	90	.04			.04					/	/		Generally wk alt, mod hem, wk lim, various alum. + qtz vnlet
48.7	8.8		2.33	100	.04			.04					wk clay, ser	/		As above w/ sp-wk LLim to 46.5', then mod-st sil'n w/ mod diss L
57.6	8.9		2.60	98	.03			.03	wk		tr		sp clay, wk ser	wk lim, sp LLim	Mixed cap-suls	wk alt + sil'n throughout, bleached, wk-mod patchy py, tr cc, wk patchy
66.9	9.3		2.56	94	.03			.03	sp-wk		tr		/	/	/	As above w/ v. sp lim, tr hem.
76.9	10.0		2.66	90	.03			.03	v. sp		tr		/	wk lim, LLim	All cap	Patchy st sil'n, rk well fractured in places, LLim on frac's, sp lim + hem
85.5	8.6		2.56	99	.04			.04					wk-mod clay, ser	wk lim, LLim, sp hem		Wk alt w/ num qtz vn's, mod alt in places, wk LLim, sp lim, mod he
93.9	8.4		2.44	96	.03			.03					/	Mod LLim, wk lim, hem		wk-mod alt, various alum + qtz vn's, wk-mod hem + LLim, sp lim.
103.4	9.5		2.48	90	.02			.01	wk		.01		/	wk LLim, lim, sp hem	Suls @ 98.7'	As above to 98.7', then wk alt + mod-st sil'n, wk-mod py, tr cc, sp l
112.1	8.7		2.41	97	.04			.04	sp		tr		/	mod lim	Mostly cap + Mixed cap + suls	wk alt, wk patchy sil'n, sp-wk py. 1st 1.5', then wk lim on frac
121.5	9.4		2.60	89	.01				wk		.01		sp ser, tr clay	mod lim, tr hem		wk alt, patchy mod sil'n, sc. qtz + alum vn's, sp py, tr cc, sp lim
131.0	9.5		2.71	92	.38	.01		.01	wk-mod		.37		wk clay, ser.	wk lim, sp hem	All suls @ 125.0	As before to 125.0, then wk alt, sc qtz vn's, mod py + sp-wk cc.
139.5	8.5		2.73	92	1.07	.03		.03	sp		1.04		mod clay, wk ser			Wk-mod alt, rk crumbly in places, wk-mod py + cc (cc coats py)
148.3	8.8		2.58	96	.89	.02		.02	/		.87		/			Wk-mod alt, wk py + mod cc, considerable sericite in spots.
156.6	8.3		2.58	99	.62	.02		.02	wk	.02	.58		wk clay, ser.			wk alt, 2-3 K-spars, wk-mod py, generally mod cc diss + on vn
165.7	9.1		2.46	93	.89	.02		.02	wk-mod	.05	.82		wk-mod clay, ser.			Wk-mod alt, wk-mod py, cc, sc clayey vnlets.
174.5	8.8		2.60	92	.11			.0	sp	.01	.09		wk clay, ser.	wk hem, sp lim, LLim	Cap @ 169.7	Wk-mod alt, wk py + v.wk cc to 169.7, then mod hem, sp lim. Mod sil
183.7	9.2		2.50	90	.30	.01	124.1' @ .55/.02	.01	wk		.29		/	wk hem, sp lim	Suls @ 180.5	wk-mod alt, mod-st sil'n w/ wk hem to 180.5, then mod cc w/ wk py.
193.0	9.3		2.68	96	.87	.01		.01	sp	.10	.76		wk-mod clay, ser	tr lim		Wk-mod alt, mod patchy sil'n, wk-mod py, sp cpy, wk-mod cc.
198.5	5.5		2.65	97	.36	.01		.01	/	.03	.34	tr moly	/	sp lim		Wk alt, mod sil'n, tr moly, wk-mod py + cc
211.3	12.8		2.64	97	.73	.02		.02	sp-wk	.12	.59		mod clay, sp ser	v. sp lim, tr hem		Wk alt, patchy sil'n, wk-mod py, mod cc.
223.1	11.8		2.65	94	.09			.04	sp patchy		.05		/	mod lim, sp hem, tr lim, hem	Mixed cap-sul	Wk-mod alt, patchy sil'n + qtz veining, v.wk patchy cc-py, wk hem, lim
228.6	5.5		2.64	98	.22	.01		.01	wk		.21		/		All suls	Wk alt, wk cc, wk-mod. py — M2 text still quite visible.
237.1	8.5		2.66	97	.40	.02		.02	sp		.38		mod-st clay, sp ser.			Wk-mod alt, patchy sil'n, wk-mod py + mod cc.
246.0	8.9		2.72	94	.56	.03		.03	sp-wk		.53		mod clay, sp ser.	sp hem, tr lim.		Wk-mod alt, patchy sil'n + short patch w/ wk hem — mod py, wk cc.
255.1	9.1		2.70	94	.50	.03		.03	/		.47		/			Mod alt, mod py, mod cc, M2 text gone, sc qtz vn's.
261.7	6.6		2.72	100	.31	.02		.02	/	.04	.25		wk clay, v. sp ser	v. sp lim		Wk-mod alt, mod py, wk cc, patchy sil'n + qtz veining, v. sp lim.
270.8	9.1		2.67	90	.21			.01	sp	tr	.20		/	/		Wk-mod alt, patchy sil'n + qtz veining, vuggy lim-filled frac's, sp cc, wk py
279.8	9.0		2.64	93	.11				sp-wk		.11		sp clay, tr ser.	/		Mod-st qtz introduction throughout, sp-wk py, sp cc, lim.
288.9	9.1		2.64	92	.13				wk	.02	.11		sp-wk clay, sp ser	sp lim, tr hem		Wk-mod alt, wk-mod py, wk cc disc + in frac's, sp FeOx's, mod sil'n in spots
297.8	8.9		2.62	96	.39			.02	/	.03	.34		/	wk hem, sp lim		Wk-mod alt alternates w/ mod-st sil'n, no rk text, wk cc, py.
306.9	9.1		2.58	92	.16			.01	sp-wk	.01	.14		/	sp lim + hem		Wk alt, considerable sil'n + qtz veing, wk patchy py + cc, sp hem, lim, M2 text apparently
316.2	9.3		2.57	94	.15				wk		.15		Mod clay, ser			Wk-mod alt, num qtz vn's, wk + sometimes mod cc, v. wk py.
324.4	8.2		2.54	94	.18			.02	sp-wk		.16		/	wk lim, hem? lim		Generally wk alt w/ patchy sil'n, mod cc first 1/2, then wk hem + tr c
333.6	9.2		2.62	97	.50	.01		.01	wk	.02	.47		/	wk lim		Wk alt, patchy + vuggy sil'n, wk py + cc, v. sp lim.
342.7	9.1		2.69	94	.31	.01		.01	/	.02	.28		wk clay, ser.	sp lim		Wk alt, patchy wk sil'n, wk w/ v. sp cpy, wk-mod py —
352.0	9.3		2.71	89	.26			.01	/	.01	.24		/	v. sp lim		Generally wk alt, sil'n, sil'n, M2 [illegible]

Final Depth 704.4'
Collar Elevation 3242.99
Coordinates 28,714.90 N ; 28,855.31 E
Inclination -65° ; Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-71
Sheet No. 2 of 3
Date Completed 3-19-65
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
361.1	9.1	NXwl	2.62	94	0.18			.01	wk		.17		mod-st clay, sp ser	Sp lim, hem	Mz	wk-mod alt, patchy mod cc, mod py, tr jar?, tr cpy, bx in spo
370.3	9.2		2.58	92	.24	.01		.01	1	tr	.23		1			Mod alt, patchy sil'n. sp-wk cc
379.4	9.1		2.60	94	.40	.01		.01	1		.39		1			" " cc appears wk-mod, but in part on py.
387.1	7.7		2.43	97	.69	.02	26.1' @	.02	sp		.67		1		"Sp" @ 385.2	wk-mod alt. cc as noted above. Mainly diss.
396.4	9.3		2.42	95	1.14	.03	.75/.02	.03	1		1.11		1			" " " A few dikelets of Mz. cc appears wk-mod
405.8	8.6		2.45	98	.37	.01		.01	1		.36		1		Mz @ 397.3	wk-mod alt. CT brkn. wk-mod sil'n. " " mod, but on py
414.1	9.1		2.46	93	.19			.01	v. wk		.18	tr moly	mod clay, sp ser			wk-mod alt, sc qtz vn's, wk cc, wk-mod py, tr moly
422.8	8.7		2.47	91	.09			.01	sp		.08		1			wk-mod alt, patchy sil'n, wk-mod py, sp cc, tr cpy.
431.9	9.1		2.41	93	.09				1		.09		1			As before to 428.0', then mod alt, wk py + cc.
441.2	9.3		2.41	90	.18			.01	1		.17		mod-st clay, sp ser			Generally mod alt, rk crumbly in places, v. wk py, wk cc.
450.0	8.8		2.48	96	.19			.01	1	.01	.17		mod clay, sp ser			wk-mod alt, good Mz text, wk-mod py, sp-wk cc, tr cp.
454.8	4.8		2.47	98	.19			.02	1		.17		mod-st clay, tr ser			wk-mod alt, num. qtz. vnlets, wk-mod py, sp cc, tr cpy
464.1	9.3		2.48	91	.24			.02	sp-wk	.01	.21		wk-mod clay, wk ser			Mod alt, rk crumbly in places, mod py diss + in vnlets, v. wk
473.6	9.5		2.47	88	.27			.02	wk	.02	.23		wk clay, ser			wk-mod alt, py + cc, good Mz text. w/ pink K-spar, gra plag. phe
483.1	9.5		2.48	90	.24	.01		.01	1	tr	.23		1			wk-mod alt, sc qtz vn's, wk-mod py, wk cc.
491.9	8.8		2.45	94	.54	.04		.04	1	.01	.49		wk-mod clay, sp ser			wk alt w/ mod alt for 3' in center of run, wk-mod cc, tr cpy, wk-mo
499.5	7.6		2.55	99	.35	.02		.02	1	.01	.32		1			As above. K-spars quite prominent
508.5	9.0		2.58	97	.25	.01		.01	1	.03	.21		1			wk-mod alt, patchy sil'n, some 2nd'ary K-spar development, v. wk cc
517.5	9.0		2.56	99	.44	.03		.03	wk-mod	.02	.39		wk clay, mod ser			wk alt, rk text finely granular + silicif, wk-mod py, sp-wk cc.
526.7	9.2		2.59	92	.67	.02	27.6' @	.02	1	tr	.65		mod clay, wk ser			wk-mod alt, silicif destroys text, wk-mod cc, py, some qtz vn
536.1	9.4		2.57	91	.55	.02	.55/.02	.02	1	.02	.51		1			wk-mod alt, patchy silicif, wk-mod cc, v. wk py.
541.7	5.6		2.55	98	.16			.01	Sp-v. wk	tr	.15		wk clay, ser	wk lim on frags		Mod alt ½-way → mod sil'n, wk-mod v. patchy py, v. sp cc, sp lim
549.6	7.9		2.64	94	.17			.01	sp		.16		1	wk-mod lim		White qtz thru much of run, w/ wk lim, otherwise wk alt, no text, wk py, sp-w cc
558.6	9.0		2.61	98	.50	.03		.03	1		.47		wk-mod clay, sp ser			Generally wk alt, patchy sil'n, wk-mod py + patchy wk-mod cc, sp lim.
567.0	8.4		2.72	99	.46	.03		.03	1		.43		1			wk alt w/ 'mushy patches', mod patchy py, wk cc, tr GoOx
576.3	9.3		2.71	92	.48	.02		.02	wk		.46		1			wk-mod alt, mod-st silicif in many places, wk-mod py + cc.
583.7	7.4		2.70	96	.48	.01		.01	1	tr	.47		1			wk-mod alt, patchy sil'n + qtz veining, sp cc. Poss. 'Sp' rk?
592.7	9.0		2.70	91	.55	.02		.02	1	tr	.53	Tr moly	1			wk-mod alt, patchy sil'n, Mz text, wk-mod py, wk cc.
601.8	9.1		2.61	92	.63	.02	76.3' @	.02	wk-mod	.10	.51		1			As above
607.1	5.3		2.60	91	.30	.01	.57/.02	.01	sp-wk	.05	.24		1			wk-mod alt, patchy sil'n + qtz veining, sp py, wk-mod cc.
616.1	9.0		2.64	95	.34	.02		.02	wk	tr	.32		1			wk-mod alt, patchy sil'n, wk py, sp-wk cc, tr cpy.
625.9	9.8		2.82	86	1.20	.02		.02	wk-mod	.05	1.13		mod clay, sp ser			As before ½-way, then mod-st alt, mod py, sp-wk cc, st clay in spots
633.1	7.2		2.69	96	.25	.02		.02	1	tr	.23	Tr moly	sp-wk clay, ser			wk alt + mod sil'n throughout, wk py, v. sp cc + cpy, tr moly
642.6	9.5		2.64	90	.34	.02		.02	1		.32		wk clay, sp ser			Mod alt, patchy wk sil'n, wk-mod py, wk cc, v. sp cpy.
652.0	9.4		2.65	90	.30	.01		.01	1	.14	.15		1			wk alt + mod sil'n throughout, mod py, sp cpy, sp-wk cc, Mz text.
660.1	8.1		2.63	95	.41	.01		.01	mod	.10	.30		1			wk-mod alt + patchy sil'n, wk-mod py, sp cpy, sp-wk cc.
669.3	9.2		2.69	89	.13	.01		.01	wk-mod	.10	.02	Tr moly	1			Mod-st sil'n w/ patches mod alt + crumbly, wk, tr-sp cpy + cc, wk py, tr moly
678.7	9.4		2.79	89	.18			.01	mod-st	.10	.07	Tr moly	1			wk-mod alt + mod sil'n, wk-mod py, v. sp cpy, sp cc.
687.6	8.9		2.78	99	.99	.01		.01	1	.30	.68		1			As above

Final Depth 704.4'
Collar Elevation 3242.99
Coordinates 28,714.40 N; 28,855.31 E
Inclination -65° ; Bearing Due South

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-71
Sheet No. 3 of 3
Date Completed 3-19-65
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	clay, sericite	lim		
696.6	9.0	NXwl	2.76	97	.08				mod	.07	.01		sp clay, wk ser		M_2	wk alt + mod sil'n throughout, mod-st py, sp cpy + cc.
704.4	7.8		2.74	95	.37			.02		.35	tr		wk clay, ser.			wk-mod alt, patchy sil'n, M_2 text, wk-mod py, sp cpy, wk cc. May
E.O.H.		Aver. rec'y = 94%														

Final Depth 408.5'
Collar Elevation 3130.60
Coordinates 28,609.38 N ; 29,206.22 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-70
Sheet No. 1 of 2
Date Completed 2-23-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	rb														Cover
15.1	9.1	NX-w1	2.46	98	0.03			0.03					wk clay, sp ser	wk lim + hem	Mz	Mod alt, wk hem, mod lim, tr LLim
24.2	9.1		2.48	91	.03			.03					/	/		wk-mod alt w/ patches mod alt, v. wk hem, mod lim, qtz vnlg
33.8	9.6		2.58	91	.03			.03	sp-wk	tr	tr		sp clay, ser.	sp lim, wk hem, LL		wk-mod alt, patchy sil'n + qtz vning, wk lim, LLim, mod hem in plac
44.1	10.3		2.60	81	.08			.03	/	.01	.04		tr clay, sp ser	wk lim, sp hem, LLim	Mixed cap-sul	Mod-st sil'n throuout, generally bleached, wk-mod py, tr cc, sp lim, ne
53.9	9.8		2.29	100+2	.02			.02	v. sp		tr		sp clay, wk ser.	wk LLim, hem + lim	Cap @ 46.1	wk alt 47.0' → mod alt, wk py + cc to 46.1, then mod hem, wk lim, v.sp LL
63.5	9.6		2.48	92	.03			.03					/	wk-mod hem + lim		Mod alt except where silicified, mod hem, sp lim, tr LLim
72.8	9.3		2.52	95	.06			.06					wk clay, ser.	/		wk-mod alt, st alt in spots, wk-mod hem, wk lim, some qtz vning, sp LLim
82.1	9.3		2.55	90	.03			.03					wk-mod clay, sp ser	sp hem, mod lim		As above.
91.9	9.8		2.44	89	.03			.03					mod clay, tr ser	sp hem, wk lim		Generally mod-st alt + v. crumbly, sc qtz vning, mod lim, sp hem + LL
101.5	9.6		2.40	96	.04			.04					wk clay, mod ser.	wk LLim, lim		wk-mod alt, patchy sil'n + sericite along frac's, wk-mod hem, wk lim + LL
111.4	9.9		2.46	87	.03			.03					wk clay, ser.	wk-mod hem + lim, sp LLim		wk-mod alt, patchy sil'n + qtz vning, wk-mod hem, wk lim, v.sp LL
120.0	8.6		2.40	100+1	.03			.03					/	wk-mod hem, wk lim		wk-mod alt, patchy sil'n, wk-mod hem + lim.
128.6	8.6		2.43	90	.03			.03					mod clay wk ser.	wk hem, wk-mod lim		Generally mod alt, wk-mod lim + hem — good Mz text.
138.8	10.2		2.35	87	.02			.02					/	wk-mod lim, sp hem		Mod alt somewhat bleached, wk-mod lim, sp hem
148.3	9.5		2.38	93	.03			.02	v. sp		.01		wk clay, ser.	wk hem, wk-mod lim		wk-mod alt patchy sil'n + sp patchy py, sp-wk hem + lim
157.7	9.4		2.39	92	.03			.03	tr		tr		mod clay, sp ser	wk hem, sp lim		Mez-st alt + v. crumbly after 150.0', sp py + trace in places, wk-mod hem, lim
169.0	11.3		2.51	83	.03			.03					/	mod hem, sp lim		Mod-st alt, tr cc + py, mod hem, sp lim, lim, patchy sil'n + qtz vning.
178.5	9.5		2.58	96	.03			.01	wk		.02		tr clay, sp ser	v.sp hem, wk lim	Mostly sulf	wk-mod alt, mod py, v.sp cc, patchy sil'n + qtz. vning.
188.2	9.7		2.57	95	.02			.03	v. sp		tr		wk clay, ser.	wk lim, LLim	Mixed cap-sulf	wk-mod alt, patchy wk py w/ sp cc, wk lim, sp hem + wk m
192.2	4.0		2.33	84	.03			.03					mod clay wk ser.	wk-mod hem, sp lim	Mostly cap	wk-mod alt, patchy sil'n, LLim diss + on frac's, tr cc-py. Good Mz.
200.3	8.1		2.26	100	.05			.02	v. sp		.03		wk-mod clay, ser	wk-mod hem, lim	Mixed cap-sul	wk-mod alt, wk py, tr cc, mod hem in spots, sp lim, patchy sil'n
209.5	9.2		2.68	95	.03			.03	/		tr		mod clay wk ser	sp hem, wk mod lim	/	wk 205' → mod alt, patchy sil'n, wk py, v.sp cc, wk hem + lim.
218.6	9.1		2.44	100	.53	.01		.01	wk	tr	.52		mod clay, wk-mod ser.	sp LLim + lim	Sul zone 209.8	wk-mod alt, patchy + vuggy sericit, mod py, sp-wk cc, sp lim + hem.
224.1	5.5		2.47	98	.90	.02		.02	wk-mod		.88		/	tr lim		Generally mod alt, patchy wk sil'n, mod py, sp-wk cc, tr lim.
232.9	8.8		2.38	96	.23	.02		.02	wk		.21		/	Tr LLim sp lim		Mod-st sil'n to 239.0', then wk alt + sil'n — sp lim + tr hem on frac, wk-mod py, v. wk cc
242.3	9.4		2.50	95	.68	.02	80.0' @ .54/.02	.02	wk-mod		.66		Mod clay Mod ser			wk-mod alt, patchy wk sil'n, mod py, wk cc on py.
251.5	9.2		2.49	97	.54	.03		.03	/		.51		/			As above.
260.4	8.9		2.49	97	.78	.03		.03	/	02	.73		/			wk-mod alt, py, cc, tr chlorite, clay on frac's. Good Mz text.
271.3	10.9		2.50	84	.32	.03		.03	/		.29		/			wk alt + mod sil'n w/ vuggy areas to 267.5, then mod-st alt. wk-mod py, mod cc
280.3	9.0		2.50	93	.33	.01		.01	wk		.32		/			wk-mod alt, py + v. wk cc w/ tr cpy.
289.5	9.2		2.49	93	.69	.02		.02	mod	.07	.60		/			wk-mod alt w/ patches mod alt, wk-mod py + cc, tr cpy.
298.7	9.2		2.45	92	.32	.01		.01	wk-mod	.09	.22	tr cov	mod-st clay wk ser.			Generally mod alt, wk-mod py, v. wk cc, tr cpy.
308.0	9.3		2.53	93	.21			.01	/	.15	.05	/	mod clay wk ser.			wk-mod alt, patchy sil'n, wk mod py, sp wk cc, sp cpy.
317.2	9.2		2.51	91	.17			.01	/	.10	.06	/	/			Generally mod alt + w/ patchy sil'n, wk mod py + cc, tr cpy.
326.0	8.8		2.60	90	.60	.01		.01	/	.25	.34	/	/		sp @ 321.2	wk alt w/ considerable sil'n, wk py, v. wk patchy cc, sp-wk cpy.
334.8	8.8		2.54	92	.44	.02		.02	mod	.25	.17		wk clay, mod ser.			wk-mod alt, sp cc on mod py. sp cpy.
343.9	9.1		2.76	95	.40	.03		.03	/	.15	.22		/			wk-mod alt decr to sparse [illegible]
353.6	7.7		2.90	95	.53	.03		.03	mod-st	47	03		sp clay.			

Final Depth 408.5'
Collar Elevation 3130.60
Coordinates 28,609.38 N; 29,206.22 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-70
Sheet No. 2 of 2
Date Completed 2-23-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, Sericite	lim	Rock Type	Remarks
363.3	9.7	NX wl	2.90	92	.42	.01	91.3' @ .48/.02	.01	mod-st	.35	.06		wk clay + ser	tr lim	Sp	Sp. ser-clay alt, Mod [illegible] bio & chlor alt. Mod. py, sp
371.6	8.3		2.72	99	.45	.02		.02	mod	.39	.04		1	1		As above
380.3	8.7		2.65	99	.48	.01		.01	1	.45	.02		1	1		Alt & min as above. Several st qtz arrays & sev. vuggy qtz vnl.
389.1	8.8		2.70	98	.37	.01		.01	1	.36	tr	T. MoS.	sp clay, wk ser.	1		Sp ser-clay alt, mod 2nd bio & chlor. Sev. vuggy qtz v. occ qtz-py-cpy v.
399.5	10.4		2.74	83	.32	.01		.01	1	.32	tr		tr clay, sp ser.			Wk alt, sp wk cpy, wk py, tr lim, considerable chlor
408.5	9.0		2.73	99	.82	.02		.02	mod-st	.80			1			Wk alt but v. crumbly last 1½', wk-mod py, v. wk cpy, v. sp cc
E.O.H.		Aver rec'y = 93%														

Final Depth 371.1
Collar Elevation 3125.59
Coordinates 28,776.41 N ; 29,194.99 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-69
Sheet No. 1 of 2
Date Completed 2-12-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	/lim	Rock Type	Remarks
6.6	6.6	rb														cover
18.9	18.9	NXwl	2.44	67	0.03			0.03					mod clay, sp ser.	mod hem, sp lim, LLm	Sp	Mod alt wi patchy silh, mod hem, sp lim + LLm.
27.6	27.6		2.32	100+2	.02			.02					/	wk hem, lim, LLm		Wk-mod alt wi patches mod-st alt, sericite outward fr. frac's, wk hem +
36.8	36.8		2.33	95	.02			.02					mod clay, wk ser.	mod LLm, sp lim, tr		Generally mod alt, good LLm in places, wk-mod hem + lim, several lea
49.3	12.5		2.38	65	.02			.02					/	sp LLm, lim, wk hem.		Mod-st alt, oxidized + silicified in places, wk-mod hem + lim, sp LLm.
58.6	9.3		2.30	90	.05			.05					/	mod LLm, wk hem, sp lim		Generally mod alt, somewhat bleached, good LLm on frac's + in vugs,
67.4	8.8		2.02	100+4	.05			.05					mod clay, sp ser.	wk LLm, lim.		Mod alt wi wk-mod LLm, lim, sp hem, vk vuggy in places
76.9	9.5		2.18	100+4	.04			.04					wk-mod clay + ser.	sp hem, wk lim + LLm		Mod alt, patch of bx + silh near 76.0', wk-mod diss LLm, wk he
85.3	8.4		2.42	97	.04			.04					mod clay, sp ser.	mod LLm, sp lim, hem		Mod alt, nearly st alt in places, wk LLm, lim + hem.
95.1	9.8		2.27	79	.03			.03					mod clay, wk. ser.	sp hem, tr lim, wk-mod LLm		Gen. mod. alt. Mod hem & lim. stain. Wk LLm, mod li
104.5	9.4		2.43	68	.04			.04					mod clay, sp ser.	sp lim, wk hem, mod LLm		Mod alt, sc. silh. wk-mod LLm, mod lim.
114.0	9.5		2.49	74	.03			.03					/	wk LLm, sp lim, hem		As above w. sev ¼" calcite veins.
123.1	9.1		2.21	93	.03			.03					/	/		Mod alt. wk-mod LLm, diss & on veins. Mod lim. mainly diss
132.3	9.2		2.51	100+1	.07			.03	patchy wk-mod		.04		/	/	Mixed suls & cap @ 124	" " , wk LLm, mod lim, sp hem. sp-wk py & cc
141.5	9.2		2.54	86	.02			.01	wk		.01		wk-mod clay, sp ser.	wk lim tr hem	/	Wk-mod alt Most frac's leached. wk diss py, sp cc.
150.8	9.3		2.45	93	.14			.02	/		.12		/	As above wi v. sp LLm	/	1st ½ mostly leached except for sev. diss last 40' mod st, suls, sp-w
159.6	8.8		2.71	95	.17			.01	wk-mod		.10		/	v. wk lim, tr hem, LLm	Mostly suls.	Wk alt, mod. silh. v/little leached. Mod. py, sp-wk cc.
169.5	9.9		2.66	98	.67	.02		.02	/		.65		/		All suls	Mod alt wi patchy wk silh, mod py (in vns + diss), wk cc coating
179.0	9.5		2.71	98	.57	.02		.02	/		.55		mod clay, sp ser.			Mod-st alt, quite clayey, mod py, sp cc, tr cpy?, clay + py on
189.5	10.5		2.48	90	1.11	.05		.05	/		1.06		/			Mod alt wi mod-st py in places, patchy wk cc generally coats
199.0	9.5		2.48	100+5	.85	.03		.03	mod		.82		/			Mod alt wi patches st clay, mod-st diss py coated by wk-mod c
208.5	9.5		2.42	99	.45	.02		.02	wk-mod		.43		mod clay			Generally mod alt, mod-st py coated wi wk cc — lots of coat
214.2	5.7		2.57	84	.22	.01	108.6 @ .56/.02	.01	/	.02	.19		/			Wk-mod alt wi patchy wk silh, mod py, sp-wk cc. two on last 2
222.7	8.5		2.77	100+4	.48	.01		.01	mod	.15	.32		wk clay, ser.			Wk-mod alt, vuggy in silicified areas, wk-mod py, wk cc, tr cpy
231.9	9.2		2.45	100+7	.33	.01		.01	/	.08	.24		mod clay, tr ser.			Wk supergene alt, patchy silh, mod py, wk-mod cc (tho much may be
241.2	9.3		2.65	97	.49	.02		.02	/	.02	.45		wk clay, sp ser.			Wk-mod alt, patchy silh, wk-mod py + cc diss + in veinlets, tr cpy. coating on
250.4	9.2		2.64	92	.35	.01		.01	wk-mod	.04	.30		mod clay, sp ser.			Rather wk alt, qtz vning throuout, mod py, wk cc (mod at end), v.sp c
259.2	8.8		2.52	100+3	.41	.02		.02	/	.05	.34		/			Wk-mod alt, clayey in spots + crumbly towards end, mod py, wk-mod c
268.2	9.0		2.60	99	.50	.01		.01	mod	.05	.44		/			Wk-mod ½-way mod alt, mod py, v. wk cc coats py, v. sp cpy. sp cp
276.9	8.7		2.62	100+4	.37	.02		.02	/	.05	.30		mod clay			Wk-mod alt, py, v. sp cc, tr cpy, patchy silh.
286.2	9.3		2.56	96	.32	.01		.01	/	.01	.30		/			Wk-mod alt, v. sp cc + tr cpy, mod py diss + massive.
295.1	8.9		2.52	100	.20			.01	wk-mod	.02	.17		mod clay sp ser			Generally mod alt, qtz vning in places, mod py, v. sp cc, tr cpy.
304.0	8.9		2.77	89	.09			.01	/	.01	.07		/	tr lim		Wk-mod alt, patchy silh + qtz vning, wk-mod py, tr cc, sp cpy.
313.8	9.8		2.69	97	.05				mod-st	tr	.05		sp clay, ser.	v. sp lim		Wk-mod alt, mod-st silh last ½ of run, mod-st py, wk cpy.
322.7	8.9		2.78	96	.05				/	.01	.04		/			Mod-st silh throuout, mod py, wk cpy. No ign. text.
331.1	8.4		2.66	100+8	.08				/	tr	.08		/			Wk alt, mod silh, mod py, tr sp cpy + cc.
339.2	8.1		2.76	88	.09				mod	/	.09		/			Wk-mod alt, patchy silh, crumbly vk in places, wk-mod py, sp cc.
348.1	8.9		2.77	95	.15				/	.03	.12		/			Mod-st silh throuout, mod py, v. sp cpy.
357.6	9.5		2.62	96	.08				wk-mod	tr	.08		wk clay			

Final Depth 371.1'
Collar Elevation 3125.59
Coordinates 28,776.41 N ; 29,194.99 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-69
Sheet No. 2 of 2
Date Completed 2-12-65
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	clay, sericite	lim		
366.6	9.0	NXwl	2.69	96	0.07				mod	.01	.06		wk clay, sp ser		Sp	wk alt, mod py, v.sp cc, tr cpy.
371.1	4.5		2.79	79	.11				wk-mod	tr.	.11		"			wk alt + patchy silic, wk-mod py, tr cc.
E.O.H.		Aver	rec'y =	92%												

Final Depth 485.5'
Collar Elevation 3191.54
Coordinates 28,573.09 N; 29,070.28 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-68
Sheet No. 1 of 2
Date Completed 2-9-65
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay, sericite	lim	Rock Type	Remarks
2.0	2.0	rb														Cover
13.0	11.0	NXwl	2.57	53	0.02			0.02								
22.6	9.6		2.54	79	.02			.02					sp clay, wk ser	tr lim, wk hem & LLim	Mz	Mod sil'n, patches wi rk crumbly & mod alt, v. wk lim + hem, sp
32.9	10.3		2.57	79	.02			.02					/	Sp lim, hem wk-mod LLim		Mod-st sil'n throuout, sp hem & lim. No text. recognizable
40.6	7.7		2.68	93	.02			.02					/	sp lim, wk hem, sp LLim		Mod sil'n, wk hem, sp-wk lim.
49.7	9.1		2.55	89	.02			.02					/	/		As above to 39.0', then wk-mod alt, partial sil'n, mod hem,
58.9	9.2		2.35	100+4	.03			.03					wk clay & ser	wk hem & LLim, sp lim		Generally wk alt, mod patchy sil'n, rk crumbly in spots, sp lim, mod
68.6	9.7		2.65	90	.02			.02					Mod clay, sp ser	/		Mod alt, patchy sil'n, wk lim, mod hem, wk-mod LLim
78.3	9.7		2.49	92	.02			.02					/	Mod hem, wk LLim, lim		Generally mod alt, partial sil'n, faint Mz text, tr py, wk hem +
87.3	9.0		2.37	86	.04			.04					wk-mod clay, sp ser	wk hem, lim, sp LLim	Mixed cap & suls	Wk alt + mod sil'n, mod py for 4', then wk hem + lim.
95.7	8.4		2.61	95	.03			.03	tr		tr		mod clay	sp lim + LLim, wk hem	/	Wk-mod alt, rk crumbly at start + end, patchy sil'n, wk py, sp cc,
103.8	8.1		2.61	99	.04			.04	wk		tr		mod clay, sp-wk ser	/	/	Generally mod alt, mod sil'n last 1.5', sp py, tr cc, sp hem, lim
113.0	9.2		2.65	90	.14			.02	/		.12		wk clay, sp ser	wk lim	All suls	Mod sil'n throuout, vuggy in places wi sp lim, wk py + cc.
122.2	9.2		2.63	98	.03			.03	sp		tr		/	/		Wk alt + patchy sil'n, wk py, cc, tr cpy, sp lim on vuggy frac's
131.8	9.6		2.67	89	.44	0.01		.01	wk-mod		.43		/	wk lim, sp hem	Mixed cap, suls	Wk-mod alt, patchy sil'n, v. sp py, tr cc, sp lim on frac's, tr
136.6	4.8		2.61	100	.61	.01	14.4' @ .5%/.01	.01	wk		.60		mod clay	sp lim, tr hem	/	Wk-mod alt, patches sil'n, wk py, v. sp cpy, wk-mod cc last 5', sp
145.9	9.3		2.59	96	.28				wk-mod	.08	.20		wk-mod clay, tr ser	wk hem & lim	/	Wk-mod alt, patchy silic, wk-mod py + cc wi tr cpy for 3', then cap wi mod
154.6	8.7		2.79	96	.09				mod	.02	.07		/	sp lim	/	Mod sil'n throuout, Mz text, wk hem, sp lim + LLim, wk py + cc, tr
163.8	9.2		2.52	100+2	.05			.01	sp		.04		wk clay + ser	wk lim	/	Wk alt and/or mod sil'n, sp lim + hem, patches of wk py + cc.
173.2	9.4		2.71	97	.06			.01	wk		.05		sp-wk clay, mod ser	wk-mod lim, sp hem	/	Wk alt + patchy mod sil'n, wk hem mostly on fract, sp py, cc,
182.6	9.4		2.65	99	.04				wk-mod		.04		sp clay, wk ser	wk-mod lim, tr hem	/	Wk alt, patchy sil'n, st lim on some frac's, patchy wk py + sp
192.0	9.4		2.31	93	.07			.05	—		.02		tr clay, sp ser	/	/	V. wk alt wi mod sil'n throuout, patchy wk py-cc, sp wk lim +
202.0	10.0		2.54	91	.33	.02		.02	sp	.03	.28		mod clay, sp ser	wk-mod hem, sp lim	/	Sil'n ends @ 184.5', then Mz wi mod-st alt, mod hem, sp lim + LLim, patchy sp
211.3	9.3		2.77	94	.51	.02		.02	wk	.06	.43		/	/	/	Mod alt, qtz veins last 2', patchy mod cc + sp py, but most rk wi mod hem, sp
221.0	9.7		2.57	91	.14			.02	/	.02	.10		/	v. sp lim	All suls	Wk-mod alt, sp py (altering to lim), wk-mod v. fine diss cc
229.8	8.8		2.30	100+3	.04			.03	—		.01		/	wk hem, sp lim, LLim	Oxides @ 215.5	Generally mod alt, wk-mod py + v. wk cc to 215.5', then wk-mod hem,
238.9	9.1		2.68	88	.06			.04			.02		st clay	wk hem + lim	Mostly cap	Mod-st alt, v. broken rk, tr py-cc, patches sil'n, wk lim + hem
247.4	8.5		2.63	90	.05			.03	tr		.02		Mod clay + ser	mod LLim, sp lim	/	Mod alt, patchy silicif, one 8" run wi wk py-cc, otherwise mod hem,
256.0	8.6		2.60	98	.48	.02		.02	sp		.46		mod clay, sp ser	wk lim	all cap	Mod alt wi patches st alt + of mod sil'n, some bxiation, tr py, wk lim
266.1	10.1		2.47	72	.36	.03	30.6' @ .47%/.02	.03	/		.33		/	sp lim	Suls wi 249.5'	1st 2.1' as before, then mod-st alt wi patchy sil'n, tr hem, wk-mod py + cc
278.0	11.9		2.39	68	.56	.02		.02	/		.54		/			Mod alt, wk-mod py + cc, some minor sil'n, tr lim. Mz tex
287.7	9.7		2.48	100+6	.14			.02	/		.12		mod-st clay, tr ser			Generally mod alt, mod py + cc – both massive at one point.
297.3	9.6		2.39	100+3	.34			.02	/		.32		st clay			Mod alt, clay or alun along frac's, wk-mod py, wk cc, tr cpy.
306.1	8.8		2.53	94	.19			.02	/		.17		/			Mod alt, 2nd ary k-spar common, wk-mod py + cc.
316.3	10.2		2.50	92	.14			.02	wk		.12		Mod-st clay, wk ser			Rather wk alt but very crumbly last 2', wk py, sp cc, tr cpy, 2nd ary k.
326.4	10.1		2.49	92	.73	.03		.03	sp		.70		/			Wk alt wi mod alt in places, wk py, v. wk cc, good Mz text
335.6	9.2		2.39	95	.43	.03	19.3' @ .59%/.03	.03	/		.40		mod clay, wk ser			Wk-mod alt, wk-mod py, sp-wk cc, tr cpy
344.5	8.9		2.50	100+4	.16			.02	sp-wk		.14		/			Wk-mod → mod alt, wk-mod py, v. wk cc, Cu disseminated into fells.
354.2	9.7		2.61	94	.15			.01	mod	.01	.13		/			Mod alt wi various qtz va's, rk severely broken in places, wk-mod py + wk
													wk clay,			

Final Depth 485.5'
Collar Elevation 3191.54
Coordinates 28,573.09 N; 29,070.28 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-68
Sheet No. 2 of 2
Date Completed 2-9-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
363.3	9.1	NXwl	2.64	100+1	0.22			.02	wk	.08	.12		sp clay + ser.	tr lim	M2	wk alt, sp lim on frac's, sp qtz unkts, mod py, sp cpy, tr
372.0	8.7		2.61	100	.03			.01	wk-mod	.01	.01		1			wk alt w/ wk-mod py, intense sil'n in places + solid unmineralized qtz last
381.4	9.4		2.50	100	.22			.02	1	.10	.10	tr moly	wk clay + ser.	tr lim		wk-mod alt w/ intense sil'n near start, sc qtz vn's, wk-mod py,
390.4	9.0		2.61	93	.16			.02	wk	.06	.08		sp clay + ser.	1		wk-mod alt, sandy in middle, v. wk py, tr cpy + cc, qtz vn at 20,
399.5	9.1		2.65	95	.14			.01	mod	.10	.03		1	1		wk alt, good M2 text, wk py + sp cpy, some sericite along
408.6	9.1		2.64	96	.13				wk	.11	.02		tr clay, sp ser.	1		wk alt, wk py, tr cc, v. sp cpy.
417.9	9.3		2.64	92	.10				1	.08	.02		sp clay + ser.	1		wk alt → mod alt last 1', wk py, tr-sp cc, cpy.
426.9	9.0		2.62	99	.16			.01	1	.12	.03		1	1		Generally wk alt, tr moly, wk-mod py, sp cpy, tr cc
435.0	8.1		2.63	100+7	.22			.01	1	.20	.01		1	1		wk alt, sp-wk py + cpy.
445.0	10.0		2.62	86	.16			.01	1	.12	.03	Tr. MoS2	sp ser.	1		As above w/ st. sil'n last ½ run.
452.3	7.3		2.76	100+5	.20			.02	wk-mod	.12	.06	1	usp clay, sp ser.			wk-mod alt, incr in ser. Mod. sil'n, sp chlor. wk. Py. Sp
459.6	7.3		2.52	99	.18			.02	1	.05	.11		wk clay, tr ser.			wk thru mod alt. Decr. sil'n. Sev. Py vns. Sp. Cpy.
468.1	8.5		2.58	97	.24			.02	1	.11	.11	Tr. MoS2	sp-wk clay, sp ser.			" " " ". Sev. Py-chlor. vns. Blk sul. gg.
474.7	6.6				This run consolidated with following run.											As above. More py-chlor vns w/ gg. wk-mod. py.
480.0	5.3		2.68	54	.18			.02	mod	.04	.12		wk-mod clay, sp ser.			Mod. alt, mod. sil'n. Poss. flt zone, crumbly. Mod chlor.,
485.5	5.5		2.47	69	.16			.02		.02	.12		mod clay, wk ser.			Mod alt, rk vuggy, wk-mod py, sp cc, tr cpy.
E.O.H.		Aver.	rec'y =	92%												

Final Depth 273.0'
Collar Elevation 3095.81
Coordinates 28,878.54 N ; 29,093.30 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-67
Sheet No. 1 of 1
Date Completed 1-30-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
1.0	1.0	rb	—	—	—								—	—		cover
5.9	4.9	NXsb	2.42	82	0.07			.07					mod. clay sp. ser	wk. LLm mod lim	Sp	wk-mod alt w/ patchy silicif, wk lim, sp hem + LLm.
12.7	6.8	NXwl	2.56	88	.03			.03								Generally mod alt w/ patchy silicif, wk LLm (diss), wk-mod lim
21.3	8.6		2.28	96	.03			.03					Mod. clay & ser.	Mod LLm Mod lim		Mod alt, sericite along borders of frac's, clay in frac's, FeOx's + LLm above
31.1	9.8		2.48	91	.04			.04						Mod-st LLm		wk-mod alt w/ partial silicif throuout, generally bleached, wk lim + LLm
39.8	8.7		2.55	99	.04			.04						Mod LLm		Generally mod alt, patchy silicif, wk-mod lim, sp hem, wk-mod LL
50.2	10.4		2.43	82	.03			.03					mod-st clay wk ser	mod LLm, wk hem, lim		Wk-mod alt., patchy silin., rest as above.
60.6	10.4		2.40	87	.05			.05								Mod alt, mod LLm, hem, & lim. Sev. chlor. frags in sp ot
71.7	11.1		2.47	80	.04			.04					mod clay, wk ser	wk hem, tr LLm		Mod alt, well bleached w/ wk lim + sp hem. Patches silin.
76.5	4.8		2.42	90	.06			.06					Mod-st clay, mod ser	sp lim, hem mod LLm		Mod alt, wk lim, hem + LLm.
85.2	8.7		2.41	41	.02			.02								Mod-st alt, v. crumbly + clayey in places, bleached w/ mod LLm, wk lim
93.7	8.5		2.38	53	.03			.03					st clay, sp. ser.	sp hem, mod LLm		As above tho less bleached + stronger lim
101.3	7.6		2.37	88	.64	.05	17.2' @ .56/.04	.05	wk		.59		st clay		Sul zone @ 93.7	Mod alt, wk-mod py, v. wk cc, clay in frac's.
110.9	9.6		2.41	88	.50	.04		.04			.46					Mod-st alt, wk-mod py, wk cc — some cc is but coating on py.
119.3	8.4		2.41	92	.34	.04		.04			.30		mod-st clay			As above. py-cc diss + in veinlets + frac's.
129.1	9.8		2.68	89	.25			.02	mod		.23		wk clay sp. ser.	sp lim		Wk-mod alt, crumbly rk, some qtz vn's + alt out fr. lim-filled frac's, wk py, v. sp cy
139.7	10.6		2.84	76	.17			.01		.05	.11		sp clay, ser.			Wk alt, rk crumbly in places, mod silin in places, mod py, sp cpy, tr cc.
148.8	9.1		2.80	91	.09				mod-st	.03	.06					Wk alt, wk-mod py, sp cpy, silin along frac's, lim on some frac's
158.3	9.5		2.75	91	.07				mod	.04	.03		tr clay, ser.			Mod silin throuout, wk py, tr cpy, — py most in frac's.
167.5	9.2		2.85	93	.07					.05	.02					As above. Rk still definitely 'Sp'.
176.2	8.7		2.86	93	.05					.03	.02		sp clay, tr ser.			V. wk supergene alt, mod silin + some qtz vn's, mod py, tr cpy, sp lim.
185.6	9.4		2.60	86	.07				wk-mod	.04	.03		wk clay	tr lim		Wk alt 180.0 → st alt, wk-mod py, tr cc? Very clayey in places.
194.0	8.4		2.76	99	.05				mod	.03	.02		sp clay, tr ser.	v. sp lim		Mod alt 189.5 → wk-mod alt, patchy silin + qtz vning, wk py.
207.2	13.2		2.73	57	.06				mod-st	.04	.02		tr clay, sp. ser.			V. wk supergene alt, much qtz vning, wk-mod py.
216.6	9.4		2.55	91	.13					.11	.02			tr lim		V. wk alt, considerable mod silin, wk-mod py, tr cc?, sp lim.
227.2	10.6		2.82	85	.11				mod	.10	.01		sp clay, ser.			Mod alt w/ first 4' st alt + very crumbly. Wk py, v. sp cc, lim
236.5	9.3		2.79	99	.06				mod-st	.03	.03		tr clay, ser.			Mod-st silin, mod-st py mostly in vn's, tr cc?
245.6	9.1		2.74	97	.05					.02	.03					Mod-st silin, mod py diss + in vn's. Rk type probably 'Sp'.
254.5	8.9		2.79	93	.03				mod	.02	.01		sp clay, tr ser.			As above. Siliceous rk vuggy + fractured in places.
263.0	8.5		2.80	99	.06				mod-st	.02	.04					St silin, py st in places (vn's), wk in others (diss).
273.0	10.0'		2.78	96	.05				wk-mod	.01	.04			tr hem		Generally mod-st silin, wk-st py, crumbly rk in places (and over last 2').

E.O.H. Aver. rec'y = 86%

Final Depth 629.5'
Collar Elevation 3236.22
Coordinates 28,622.72 N ; 28,928.93 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-66
Sheet No. 1 of 2
Date Completed 1-23-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay-Ser.	Lim-Hem	Rock Type	Remarks
7.0	7.0	R.B.	—	—	—								—	—	—	Rock bit thru drill site & mont/t.
17.6	10.6	NXW	2.57	90	0.04			0.04					wk clay, ser	wk LLm, hem	Mz	Mod alt, incr sil'n. St hem stains. Ser. LLm, vol'ts.
27.3	9.7		2.40	86	.04			.04					/	wk LLm, hem, sp lim	Sp? @ 19.1	As above to CT? Then aplitic appearance, rk, st. silica. St. gen. stain. VISP LLm.
36.6	9.3		2.39	94	.03			.03					wk-mod clay & ser	wk LLm, mod hem, wk lim	Mz @ 28.0	RK mod silicif, wi Mz text @ 28.0. Mod hem, wk lim, sp LLm.
45.8	9.2		2.37	95	.04			.04					/	/	Sp? by 41'	Mod silicif wi patches wk alt, sp lim, wk LLm, mod hem. Sil'n destroys Mz tex
55.1	9.3		2.53	93	.03			.03					/	/	Mz @ 53.1	Generally mod silicif, patches wk-mod alt, mod hem, sp LLm.
64.1	9.0		2.52	93	.04			.04					/	/		Good Mz text, st clay on frac's, alternate mod sil'n & mod alt, FeOx as above
73.3	9.2		2.55	92	.04			.04					/	mod LLm, hem, wk lim		Patchy mod silicif, text obscure, sp lim, wk hem & LLm.
82.7	9.4		2.58	91	.03			.03	Tr				/	wk LLm, hem, lim		wk-mod alt, granular SiO_2 throuout, rk type? wk LLm, hem, tr py
94.5	11.8		2.58	88	.04			.04					wk clay, ser.	wk LLm, lim, mod hem		wk-mod alt, patchy sil'n, wk LLm, hem, tr. lim, vague Mz text
103.4	8.9		2.59	93	.24	0.01		.01	wk	.01	.22		wk clay, sp ser.	wk hem, sp lim, tr LLm	Mixed cap & suls	Mod sil'n throuout, sp hem & lim, wk py, sp cc, tr cpy.
113.0	9.6		2.58	93	.15			.01	sp-wk		.14		sp clay, wk ser.	wk lim, sp hem, tr LLm	/	As above wi wk-mod py, sp-wk cc, tr cpy.
122.1	9.1		2.57	96	.07			.01	wk	.01	.05		/	/	/	Mod sil'n, sp lim on frac's, sp hem, wk cc & py. RK type?
133.8	11.7		2.63	95	.06			.01	sp-wk		.05		/	wk hem, lim		WK alt, partial silicif, mostly cap wi wk hem, lim on frac's, v. sp py, tr c
140.9	7.1		2.61	91	.87	.02		.02	wk		.85		mod-st clay		Sol. zone Sp' by 133.3	WK-mod alt, wk-mod py & cc, minor qtz veining, good 'Sp' text
149.8	8.9		2.63	88	1.61	.05		turquoise? .05	wk-mod		1.56		/			Mod alt except where sil'd. (½ sil'd) wk py, st cc, tr cpy, tr CuSO4
159.8	10.0		2.65	96	.62	.05		.05	/		.57	Tr MoS_2	mod clay tr ser	tr lim		Mod. alt, wk sil'n. Wk py, st. cc (mostly diss, some veinlts) No visible cpy-Tr. CuSO4
169.4	9.6		2.59	99	1.84	.09	66.9' @ .83/.05	.09	v. wk		1.75		/	v. sp lim		" to wk-mod sil'n. Wk-mod py, mod-st cc, Tr. CuSO4
176.3	6.9		2.60	86	.24	.02		.02	sp		.22		/	wk lim	Mz 175.1 Cap. @ 173.6 Suls @ 184.8	As above. Sil'd 1' ground CT. Many frac's leached but mod diss. Suls
184.8	8.5		2.52	98	.07			.04	tr		.03		wk clay, sp ser.	wk hem & lim, tr LLm		Mz, wk-mod. alt, spotty sil'n. Sp hem, wk-mod lim. Tr suls @ end.
191.7	6.9		2.75	98	.59	.02		.02	wk		.57		mod-st clay	tr lim		Sil'd w/ leached frac's at start, then mod alt, spotty sil'n. Mod suls.
200.7	9.0		2.50	93	.55	.03		.03	/		.52		mod clay wk ser	sp lim		Mod alt, wk sil'n. 2 leached vol'ts. wis py, mod-st cc, tr CuSO4
208.2	7.5		2.64	100	.14			.04	sp		.10		sp-wk clay & ser	wk lim, sp hem	Mixed suls & cap @ 20.5	Mod alt, deer-wk-mod. Spotty sil'n. Most frac's leached. suls. diss.
218.0	9.8		2.61	82	.06			.03	/		.03		wk-mod clay & ser	mod hem, wk lim	Cap @ 208.2	Mostly leached & sil'd. Spotty mod alt, no silica & suls.
227.9	9.9		2.42	91	.03			.03	tr		tr		/	wk hem, lim, sp lim		wk-mod alt, spotty (50%) sil'n. Mod hem & lim, mostly staining
232.3	4.4		2.53	96	.05			.02	sp		.03		/	/	Mixed cap & suls	Wk-mod alt, good Mz text, sp py-cc, some qtz vn's, wk hem, sp lim
241.8	9.5		2.55	50	.22	.01		.01	wk		.21		mod clay & ser	sp lim	All suls	WK-mod alt, mod cc, wk-mod py, rk. crumbly in places, sp hem, tr lim
251.7	9.9		2.80	83	.49	.02	23.1' @ .62/.02	.02	/		.47		mod clay, wk ser.			Wk-mod alt, patches mod-st alt, mod cc, wk-mod py.
264.9	13.2		2.81	52	.71	.02		.02	/	.01	.68		mod clay, sp ser.			Mod 263.0 st alt, mod-st cc, sp cpy, wk-mod py, patchy sil'n.
273.9	9.0		2.53	94	.34	.02		.02	wk-mod	.02	.30		/			WK-mod alt, wk-mod py & cc, sc qtz vn's, fields are grn & pink.
283.6	9.7		2.53	88	.10			.01	/	.02	.07		/			As above wi patchy silicif, qtz-cc shear zones.
293.6	10.0		2.56	89	.32	.02		.02	/	.02	.28		/			WK-mod alt, st sil'n & wk lim last 6", overall wk py, mod cc.
302.1	8.5		2.59	95	.04			.03	tr		.01		mod clay, tr ser	sp hem, lim	Mixed cap-suls	Mod alt alternates wi mod-st sil'n, sp py-cc, wk hem, tr lim.
308.1	6.0		2.56	94	.16			.02	wk	tr	.14		/	wk-mod hem & lim	/	Generally mod alt wi patchy silicif, sp-wk hem & lim, where suls – mod cc, wk py.
320.5	12.4		2.47	95	.42	.01		.01	sp-wk		.41		/	sp hem, lim	All suls	Mod-st alt, Mz rk, mod cc sometimes st, wk py, & sp lim. Cc coats py
332.0	11.5		2.45	82	.50	.01		.01	wk-mod	tr	.49		/	tr lim		Generally mod alt. wi sp py & mod-st cc, mod sericite, sp lim after py.
343.4	11.4		2.45	84	.37	.01		.01	/	tr	.36		/			Mod alt, mod cc, sp-wk py, tr cpy, sc qtz veinlets. Cc coats py.
352.6	9.2		2.46	93	.56	.01		.01	/	.01	.54		/			WK-mod alt, patchy silicif, wk py, mod cc. Good Mz text
361.8	9.2		2.47	92	.96	.02		.02	/	.10	.84		/			

Final Depth 629.5'
Collar Elevation 3236.22
Coordinates 28,622.72 N ; 28,928.93 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-66
Sheet No. 2 of 2
Date Completed 1-23-65
Logged By SWW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
372.9	11.1	NXwl	2.47	78	.44	.03		.03	wk-mod	.02	.39		wk-mod clay, sp ser.		Mz	wk-mod alt, patchy silicif, wk py, wk-mod cc, tr cpy.
383.1	10.2		2.44	86	.44	.01		.01	1	.02	.41		1			wk-mod alt, in qtz-wals, wk-mod py, wk cc, tr cpy.
394.3	11.2		2.46	76	.38	.01		.01	wk	.01	.36		mod clay, tr ser.			wk-mod alt → st alt last 2', wk-mod py, wk cc.
404.2	9.9		2.48	89	.46	.02	177.1' @ .58/.02	.02	sp	tr	.44		mod-st clay			Mod-st alt w/ patches partly silicif, wk py, cc.
416.9	12.7		2.45	74	.63	.03		.03	wk-mod	.02	.58		mod clay, sp ser.			Mod alt, patchy silicif, rk very crumbly, sp-wk py, wk-mod c
426.7	9.8		2.57	88	.71	.02		.02	sp-wk	tr	.69		1			Mod alt, wk py, wk-mod cc (some coating py), 2nd ary pink ortho
437.6	10.9		2.47	84	.54	.02		.02	wk		.52		1			As above.
446.1	8.5		2.40	98	.75	.02		.02	1	tr	.73		1			Mod alt, good Mz text, wk cc + sp-wk py, dark clay on f
457.2	11.1		2.46	78	.66	.02		.02	sp-wk		.64		1			As above w/ patches rather wk alt. Also various qtz-w
466.6	9.4		2.50	91	.52	.02		.02	1		.56		1			Wk-mod alt, 2ndary felds numerous, wk py, wk-mod cc (much coat
475.7	9.1		2.48	89	.82	.02		.02	1	.02	.78		mod clay, tr ser.			Wk-mod alt, wk cc, py, sp cpy.
485.2	9.5		2.47	90	.94	.03		.03	wk		.91		1			Wk-mod alt, st alt fr. 479.0-480.5'. Wk mod py, sp cpy +
494.7	9.5		2.54	88	.25	.01		.01	1		.24		1			Wk-mod alt w/ patchy silicif, wk-mod py, sp-wk cpy, sp cc.
503.9	9.2		2.56	92	.25			.01	wk-mod	tr	.24		1			Wk-mod alt, py on frac's, wk py, sp-wk cc, sp cpy.
513.2	9.3		2.58	90	.22			.01	1	.04	.17		wk-mod clay, sp ser.			Wk-mod alt, some patches silicif, dark clay on frac's, sp-wk py, sp
522.3	9.1		2.56	95	.28			.01	1	.10	.17		1			Wk-mod alt, v. sp cc, tr cpy, wk py. Good Mz text
531.0	8.7		2.71	99	.48	.01		.01	1	.02	.45		1			Rather wk alt, patchy silicif, wk py + v. wk cc, tr cpy.
537.8	6.8		2.74	98	.43	.02		.02	1	02	.39	.10 on Ag	1			Generally mod-st silicif w/ patches, wk-mod alt, mod py, wk cc.
545.5	7.7		2.83	97	2.32	.02		.02	15-20%	None	2.30	No Phzn	Sp. clay			Entire run a bx – qtz + py, w/ st cc + a black silicate (qtz?). Pb is
547.4	1.9		2.62	88	.64	.03		.03	wk-mod	.02	.59		Mod. clay, sp. ser.			Mz text again, mod-st alt w/ mod py, wk-mod cc.
556.7	9.3		2.43	91	.46	.04	79.9' @ .62/.02	.04	1	.02	.38		1			Mod alt, wk-mod cc, sp-wk py, Various tiny py cc veinlets
567.4	10.7		2.43	89	.35	.02		.02	wk	.02	.31		1			Wk-mod alt + py, sp-wk cc, tr cpy.
576.5	9.1		2.47	89	.48	.02		.02	wk-mod	.04	.42		1			Wk-mod alt, patchy silicif, crumbly rk, sp cc, wk-mod py.
586.2	9.7		2.56	93	.52	.02		.02	1	.02	.48		1			Generally mod alt, one ½" qtz vn, wk-mod py, v. wk cc.
595.7	7.5		2.50	100++	.28	.01		.01	mod	.04	.23		1			1st half as above, then wk-mod alt, sc qtz felds, wk sulfs,
602.2	8.5		2.57	93	.43	.02		.02	wk-mod	.02	.39		mod clay			Wk alt, mod-st. sil'n, sc qtz vns. wk cc, diss py on fracs.
610.0	7.8		2.61	99	.34	.01		.01	mod	.05	.28		wk clay, tr ser.			Wk alt, gen st-int. sil'n. wk-mod diss. sulfs. wk ? cc.
619.4	9.4		2.61	98	.21			.01	1	.10	.10		mod clay, tr ser.			Wk-mod alt, spotty st. sil'n, wk-mod overall. Mod total sulfs.
629.5	10.1		2.55	91	.12				wk-mod	.06	.06		1			" " " , sev. ½" qtz vns. cc on py, sp. cpy. Total ov. sp-w
E.O.H.		Aver. rec'y =		89%												

Final Depth 543.0'
Collar Elevation 3157.11
Coordinates 28,794.68 N ;
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-65
Sheet No. 1 of 2
Date Completed 1/18/65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	rb	—	—	—								—	—		Cover
16.3	10.3	NX wl	2.52	74	0.06			.06					wk-mod clay wk-ser	Mod lim sp Llm	M2	Mod alt w patchy sil'n, wk-mod lim, wk hem, tr clays.
25.2	8.9		2.40	98	.05			.05								Mod alt, various qtz vn's, fracs filled w clay, wk lim, sp hem
34.5	9.3		2.29	100+4	.04			.04	sp					wk-mod lim wk Llm		Mod alt, patchy sil'n, sp py & wk Llm 25.2-28.0, wk-mod lim +
43.7	9.2		2.34	100+2	.04			.04					mod clay wk ser	wk lim wk Llm		Mod alt, patchy sil'n, mod lim, wk hem, alun vn's, sp Llm
53.6	9.9		2.45	89	.05			.05						wk Llm wk lim mod hem		As above.
62.5	8.9		2.32	99	.04			.04								
75.7	13.2		2.39	63	.04			.04					wk-mod clay wk ser	wk lim mod Llm mod hem	Sp ca. 67'	Mod alt, patchy sil'n, alun in several vn's, mod hem, sp lim,
87.2	11.5		2.58	91	.04			.03	v. sp		.01			mod lim sp hem		Rk type? Mod sil'n + patchy oxiation, wk lim, wk-mod hem +
94.3	7.1		2.61	99	.50	.03		.03	wk-mod		.47		mod clay sp ser.	tr lim	Sp' zone @ 87.2	Wk-mod alt, patchy sil'n, mod alun + clay vn's, mod hem, sp lim
103.3	7.0		2.59	94	.42	.02		.02			.41					Wk-mod alt, wk-mod py, sp-wk cc, mod alun vns.
112.0	8.7		2.55	95	.23	.03		.03			.30					Wk-mod alt, mod sil'n, finely granular rk, probably is 'Sp', wk py, v
121.2	9.2		2.79	92	.24	.02		.02	1		.02		wk-mod clay, sp ser.			As above w/ wk-mod py, v. wk cc.
130.2	9.0		2.80	94	.42	.01		.01	1		.74					Generally mod alt, sil'n, rk is crumbly, mod py, wk cc.
139.6	9.4		2.74	91	.29	.01		.01	mod		.28		wk clay			Wk-mod alt, mod sil'n, tr lim, mod py, wk cc.
146.7	7.1		2.71	93	.29	.01		.01	wk-mod		.28		wk-mod clay			Wk-mod alt, mod sil'n, rk very crumbly in places, mod py v.
153.8	7.1		2.55	97	.39	.02		.02	1	.05	.32		mod-st clay			Alt as above, wk-mod py, v. wk cc, rk bleached in places.
161.1	7.2		2.53	98	.51	.02		.02	1	.02	.47		mod clay			Rk wk alt, patchy sil'n, clay as frac's, Sp cc as frac's.
169.0	7.9		2.56	97	.46	.01		.01	1	.05	.34					Wk alt, clay as frac's, sp-wk cc, remainder mas. with clay as frac's
177.2	8.2		2.55	96	1.94	.07		.07	1	.02	.85		mod-st clay, tr ser.			Wk alt, qtz + py + cp + qtz + calcite, strongest harvest of cp + calc;
185.4	8.2		2.48	95	.53	.01		.01	1	.02	.50		wk-mod clay, sp ser.			Mod alt, mod py, wk cc, sp cp, Very T Alt on frac's.
194.0	9.7		2.58	96	.69	.04		.04	mod		.65		mod clay sp ser.			Wk-mod alt w disseminated py + sp cc, tr cp + Alt minerals
204.9	10.9		2.45	86	.96	.04	239.2 @ .60%.02	.04	1		.92		mod-st clay wk ser.			Mod alt w/ patches ox, wk py w/ some py vn's, sp cc.
214.0	9.1		2.74	93	.67	.02		.02	1	.01	.64					Mod alt, wk-mod py, v. wk cc, several py veinlets.
223.6	9.6		2.54	93	.87	.05		.05?	1		.84					Mod alt w/ patchy silicif, mod py, sp wk cc.
233.1	9.5		2.23	96	.84	.03		.03	1		.81					Wk-mod alt, patchy silicif, wk-mod py, wk cc – still obvious 'Sp'
242.0	8.9		2.21	98	.78	.03		.03	1		.75		mod clay wk ser.		F.G. M2 by 235.0'.	WK-mod alt, patchy sil'n, mod py, sp cc, tr cpy, text ½ M2 ½ Sp
251.4	9.4		2.47	94	.78	.02		.02		.02	.74		mod clay tr ser.			Generally wk alt, patchy silicif, mod py, sp-wk cc, rk closest to
260.5	9.1		2.46	91	.72	.02		.02	wk-mod	.05	.65					Mod alt, wk-mod py, v. wk cc. Text is near [illegible] 'Sp'
270.2	9.7		2.62	89	.18	.02		.02	mod	.01	.55		mod clay			Wk alt w/ patchy silicif, wk-mod py, sp cc.
279.4	9.2		2.65	91	.42	.02		.02	1	.01	.40		wk-mod clay, sp ser.			Wk-mod alt, patchy silicif, wk-mod py, wk patchy cc.
288.8	9.4		2.67	91	.20	.02		.02	wk-mod	.01	.25		mod clay sp ser.			Wk alt w/ partial silicif, mod py (diss + in vn's), sp cc.
298.4	9.6		2.68	91	.41	.01		.01	mod	.03	.37					Wk-mod alt, patchy silicif, wk py w/ v. sp cc, several qtz vn's.
307.4	9.5		2.64	100+	.56	.01		.01	mod-st	.12	.43		wk clay + ser.		"Sp" circa 298.4'	Wk alt w/ patchy mod silicif, mod py diss + in vn's, tr cpy? Text [illegible]
316.7	9.3		2.66	99	.21	.01		.01	mod	.03	.17					" " "

Final Depth 543.0'
Collar Elevation 3157.11
Coordinates 28,794.68 N; 28,976.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-65
Sheet No. 2 of 2
Date Completed 1/18/65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
359.8	7.4	NXWL	2.57	96	0.19			.01	mod	.04	.15		sp clay wk ser.		Sp	wk alt, mod py, tr cc, tr-cpy?
370.8	11.0		2.56	94	.25			.01	mod-st	.20	.04		1			Fresh-wk alt in chlor. Mod py (8-10%) no vis. cc.
380.4	9.6		2.58	97	.22			.01	1	.16	.05		1			As above
389.4	9.0		2.58	98	.20			.01	1	.12	.07		wk clay + ser.			Fresh-wk alt in chlor. Some sp clay on fracs. wk-Mod py, sp cpy!
392.5	3.1		2.69	91	.15			.01	mod	.10	.04		1			As above
402.8	10.3		2.68	85	.22				1	.12	.10		1			wk alt, good 'Sp' text, wk-mod py, wk cpy, sp cc.
412.0	9.2		2.64	91	.16				wk	.14	.02		sp clay, ser.			wk alt, wk-mod py, sp-wk cpy, tr-sp cc, sp qtz unlch
421.1	9.1		2.73	91	.22				wk-mod	.18	.04		1			Fresh-wk alt, wk py, v. sp cpy, tr cc?
429.4	8.3		2.73	100	.23				mod	.21	.02		1			As above, clay + chlorite in one frac.
438.4	9.0		2.62	96	.20				1	.20	tr		mod clay sp ser.			Wk-mod alt, mod py, sp-wk cpy, sp cc is sometimes wk
446.7	8.3		2.69	97	.14			.01	mod-st	.04	.09	Tr moly	1			Mod alt, mod py, sp-v. wk cc, tr cpy + moly = considerable chlorn
456.4	9.7		2.58	92	.13			.01	mod	.03	.09		1			Mod alt, wk-mod py, sp cc (mostly on frac's), tr cpy.
465.6	9.2		2.60	93	.23			.01	1	.02	.20		1			Wk-mod alt, patchy sil'n, wk-mod py, sp-v. wk cc.
476.1	10.5		2.57	86	.23			.01	1	.02	.24		1			Wk-mod alt, mod py, cc picking to at least wk, clay on frac's.
483.9	7.8		2.64	99	.27			.01	1	.07	.09	tr cov.	1			Wk-mod alt w/ patches st alt, mod py massive in places, wk cc, sp cpy.
493.1	9.2		2.67	95	.17				1	.07	.08		1			Wk-mod alt, mod py, sp cc, v. sp cpy.
501.1	8.0		2.61	96	.15			.01	1	.02	.13		1			Generally mod alt, quite clayey in places, mod py, sp-wk cc, tr cpy.
510.7	9.6		2.65	92	.08			.01	wk-mod	.05	.02		mod-st clay			Mod-st alt, mod diss py, tr cpy (very f.g.t), tr cc, some bx last 6
519.5	8.8		2.62	92	.05				1	.03	.02		1			Mod-st alt, very clayey, wk-mod py, tr cc.
528.4	8.9		2.78	90	.06				wk	.04	.02		mod clay			Generally mod alt, v.k. crumbly, wk-mod py.
535.0	6.6		2.77	94	.05				mod-st	.03	.02		sp clay, ser.			Mod alt w/ patchy silicif, mod py (diss, massive + on frac's).
543.0	8.0		2.66	96	.05				mod	.04	.01		1	tr lim		wk-mod alt, patchy silicif + qtz veining, tr cpy, wk-mod py diss + on vn's, good 'Sp' text at end of hole.
E.O.H.			Aver. rec'y = 93%													

Final Depth 618.6'
Collar Elevation 3242.99
Coordinates 28,717.40 N ; 28,852.31 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-64
Sheet No. 1 of 2
Date Completed 1-7-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	RB	—	—												Cover
15.3	9.3	NXwl	2.37	96	0.02			0.02					mod clay, wk ser	Mod lim, hem.	Mz	Mod alt, vuggy qtz-lim vn's, sc alun vnlets, wk lim, wk-mod he
24.8	9.5		2.57	95	.01			.01					/	mod lim, wk hem,		Mod alt, patchy silicif, wk-mod lim + hem, various qtz vnlets.
34.4	9.6		2.42	95	.05			.05					wk clay, sp ser.	mod hem, wk lim		Mod alt, st. hem. stain, num. qtz & alun. tr vnlts.
43.6	9.2		2.41	98	.05			.05					wk-mod clay	Ditto wi sp lim		As above
52.9	9.3		2.40	97	.05			.05					wk clay, sp ser.	mod hem, sp lim, LLm		As above wi sev. qtz-sericit, LLm vnlts.
62.2	9.3		2.33	97	.05			.05					/	/		Mod. alt, s.t. hem. stain, one 3/8" alun. vnlt. parall. core.
71.8	9.6		2.34	97	.05			.05					/	mod hem, sp LLm		" " " " " sev. alunite vnlts. Lighter @ end.
81.2	9.4		2.34	100	.04			.04					sp clay, ser.	Ditto wi sp lim		" " " " " " " "
90.8	9.6		2.43	96	.04			.04					wk-mod clay, sp ser.	mod hem, wk lim		As above. Last ft no hem stain but lim & jar. instead.
99.9	9.1		2.74	87	.04			.04					sp clay, wk ser.	wk-mod lim, hem, wk LLm		Mod alt. st silic in tr-sp py. vuggy vnlet. Last 4 hem. stain,
108.8	8.9		2.37	100	.05			.05					sp clay, ser	mod hem, sp LLm		Mod alt, s.t. hem. stain, alunite & qtz-ser. vnlts.
112.7	3.9		2.60	69	.04			.04					wk clay, sp ser.	mod hem, sp lim	Sul. ct @ 112.7 Cap again @ 118.6	As above
118.6	5.9		2.46	95	.58	.02		.02	wk		.56		wk-mod clay	sp lim, tr hem.		Mod. alt, m-spotty hem. stained leached areas. Sp-wk cc.
127.7	9.1		2.37	98	.16			.10	tr		.06		sp-wk clay mod ser	mod hem, sp lim, wk LLm		Mod alt, patchy wk silicif, tr py-cc for 2", mod hem, sp lim, LLm.
137.3	9.6		2.46	96	.03			.03					mod clay, wk ser.	wk hem + lim, LLm		Wk-mod alt, patchy silicif, wk-mod lim + hem, sp LLm
146.2	8.9		2.47	95	.05			.05					wk clay, mod ser.	wk-mod hem, wk lim, LLm		Generally mod alt wi patchy wk silicif, wk-mod hem, sp lim + LLm.
155.7	9.5		2.34	94	.08			.04	v. sp		.04		mod clay, wk ser.	wk-mod hem, wk lim, LLm	Suls @ 151.3	As before to suls, then mod py, wk cc, sp hem + wk-mod alt.
165.9	10.2		2.59	90	.27			.02	Sp-wk		.25		wk clay, ser.	wk hem, lim		Wk-mod alt, wk-mod py, wk cc, sp hem, lim, patchy silicif
174.6	8.7		2.60	99	.27			.02	wk		.25		v. wk clay, v. sp. ser	wk lim		wk-mod alt, patchy silicif, mod py, wk cc, tr cpy, v. sp lim.
183.9	9.3		2.65	99	.04				wk-mod		.04		tr ser	sp lim		Wk alt, generally mod silicif, mod py, sp-wk cc, sp lim on frac's + in vuggy qtz vnl.
189.8	5.9		2.61	98	.04			.03	v. sp.		.01		mod clay, sp. ser	wk-mod lim, sp hem	Sul zone @ 189.8'	Mod alt, wk-mod hem, wk lim, sp LLm, tr py-cc
201.8	12.0		2.60	98	.54	.01		.01	wk-mod	tr	.53		mod-st clay			Mod alt, wk py, mod cc on frac's + diss, 2nd ary K-spars.
211.3	9.5		2.44	96	.50	.01		.01	1	.07	.42		/			Wk-mod alt, py + cc wi cc mod-st in places. Good Mz.
220.8	9.5		2.42	95	.44	.01		.01	1	.05	.38		mod clay, sp ser.			Wk-mod alt, patchy silicif, wk-mod py, generally wk cc.
229.8	9.0		2.42	98	.41	.01		.01	1	.04	.36		/			Mod alt, wk-mod py + cc, sc alun vn's.
239.4	9.6		2.41	90	.42	.01		.01	1	.03	.38		mod-st clay			Mod alt, wk py, wk-mod py, sc alun vn's.
246.0	6.6		2.50	98	.80	.03		.03	wk	.05	.73		st clay, mod ser.			Mod alt wi st alt in places, wk py, mod cc.
255.6	9.6		2.39	94	.36	.01		.01	wk-mod		.35		/			Wk-mod alt, wk py, wk-mod cc.
266.2	10.6		2.48	88	.52	.01		.01	sp-wk		.51		st clay, sp ser.			Mod alt 261.2 st alt, mod cc, v. wk py, sp chlor
274.9	8.7		2.49	93	.63	.01		.01	sp		.62		mod clay, wk ser.			Mod alt wi st alt in places, wk py, wk-mod cc.
284.5	9.6		2.40	92	.49	.01	187.6' @ .50/.01	.01	1		.48		st clay, wk ser.			Generally mod alt, mod cc, wk-mod py, good Mz, little additional qtz
292.4	7.9		2.42	94	.60	.01		.01	v. sp		.59		mod clay, ser.			Generally mod alt wi patchy silicif, wk brxiated in places, mod cc, wk py.
301.8	9.4		2.39	93	.46	.02		.02	1		.44		/			Mod alt wi patchy qtz-cemented brxiation, wk py, wk-mod cc.
312.2	10.4		2.49	87	.57	.01		.01	wk-mod	.02	.54		wk-mod clay, wk ser.			Mod alt wi patchy silicif last 4', wk-mod cc, v. wk py.
320.8	8.6		2.49	91	.62	.02		.02	1	.03	.57		/			Wk-mod alt, vuggy qtz vn's, wk-mod cc, sp-wk py.
330.0	9.2		2.84	96	.75	.03		.03	wk		.72		wk clay, sp. ser.			Wk-mod alt, wk-mod cc, wk py.
338.9	8.9		2.87	97	.29	.01		.01	mod	.06	.22		sp clay, tr ser.			Wk alt, patches mod alt, wk-mod cc, mod py — cc-py in vn's.
348.2	9.3		2.86	94	.40	.02		.02	1	.04	.34		mod clay,			

Final Depth 618.6'
Collar Elevation 3242.99
Coordinates 28,717.40 N ; 28,852.31 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-64
Sheet No. 2 of 2
Date Completed 1-7-65
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim.	Rock Type	Remarks
357.5	9.3	NXwl	2.48	94	.40	.02		.02	wk-mod	.02	.36		mod clay, sp ser	wk hem + lim	Mz	wk-mod alt, wk-mod py, wk cc, sp cpy.
368.3	10.8		2.44	93	.37	.02		.02	1	.01	.34		mod-st clay	wk lim		Generally mod alt, st silicif last 1', wk-mod py, wk cc, tr cpy
377.4	9.1		2.49	98	.54	.02	428.8' @ .50/.01	.02	1	.01	.51		mod clay, sp ser	tr lim		Wk-mod alt, patchy silicif, locally st py — generally wk py, cc, tr hem
386.4	9.0		2.50	97	.08			.06	tr.		.02		mod clay, wk ser	wk lim, v.sp hem	Mixed cap-sulfs	Sulfs for 2' as above, then mod alt + patchy st silicif wi wk hem, lim, tr c
395.5	9.1		2.52	99	.07			.01	sp		.06		1	1		Mod alt wi various qtz vn's + wk lim, sp hem to 393.5', then wk py-cc, tr Cu
403.1	7.6		2.46	99	.07			.05	tr-sp		.02		mod clay, sp ser.	wk lim, sp hem		Mod alt wi patchy st vuggy qtz, wk hem + lim, tr CuOx + cc.
413.0	9.9		2.57	96	.65	.01		.01	wk-mod	.07	.57		1		All sulfs	Generally mod alt, wk py, cc, tr cpy, sc qtz vnlets — good Mz rk
420.3	7.3		2.53	95	.80	.02		.02	1	.07	.71		1			Mod alt, 2ndary K-spar, sp py, wk cc, sc qtz vnlets, tr CuOx
429.2	8.9		2.52	95	.54	.02		02	1	.10	.42		1			Wk-mod alt, wk cc, tr cpy, v.sp py, various qtz vn's.
438.3	9.1		2.48	96	.41	.02		.02	1	.10	.29		1			As above wi more qtz.
441.8	3.5		2.48	99	.29	.02		.02	1	.05	.22		Mod clay wk ser			Mod alt, sp py, wk-mod cc, tr cpy, grn (Cu)-stained qtz.
451.8	10.0		2.47	92	.45	.03		.03	1	.10	.32		1			Wk-mod alt wi patches st alt, wk-mod cc, sp py.
460.9	9.1		2.50	98	.51	.03		.03	1	.10	.38		Mod-st clay, sp ser			Mod alt, wk cc, py, tr cpy, sc qtz vnlets, good Mz text.
470.5	9.6		2.56	97	.61	.02		.02	wk	.05	.54		Mod. clay sp-wk ser			Mod alt wi patchy wk silicif, sp py, v.wk cc.
479.9	9.4		2.53	99	.36	.01		.01	1	.05	.30		1			Wk-mod alt wi patchy silicif, wk py, sp cpy, wk-mod cc.
489.4	9.5		2.51	95	.67	.01		.01	1	.10	.56		1			Wk-mod alt, v.wk cc, py — good Mz rk.
500.1	10.7		2.53	86	.48	.01		.01	1	.15	3 2		1			Wk-mod alt, wk-mod py, v.wk cc, tr cpy.
508.1	8.0		2.55	100	.71	.02	215.5' @ .54/.02	.02	1	.03	.66		1			Mod alt, last ½ heavy silica, wk cc, sp cpy, mod py
517.3	9.2		2.55	95	.48	.01		.01	mod	.08	.39		1			Mod alt, mod sil'n + qtz vns, sp-wk cc, sp cpy, wk-mod py
526.9	9.6		2.56	95	.33	.01		.01	wk	.10	.22		mod clay sp ser		Sp @ 523.7 @ 420	Mz wk-mod alt, mod sil'd in "Sp" of HO. Min'n as above. C.T. short p. clout with sil'd
536.2	9.3		2.57	94	.29	.01		.01	1	.15	.13		mod clay tr ser			"" Min. mostly diss. from note on.
545.7	9.5		2.64	94	.24	.01		.01	v.sp	.21	.02		1			"Sp" wk-mod alt, decr. Mod qtz vning, sp cc, sp-wk cpy, wk-mod py.
555.0	9.3		2.79	95	.92	.02		.02	wk	.75	.15		wk clay sp ser			Wk alt, occas. chlor on frac's, wk-mod qtz vning, tr cc, sp cpy, wk-mod py.
563.4	8.4		2.76	96	.78	.01		.01	1	.67	.10		1			Wk. alt decr towards fresh. Mod py, wk cpy, tr cc? sp cpy mainly diss.
572.0	8.6		2.78	98	.93	.01		.01	mod-st	.77	.15		sp clay, ser.			Fresh-wk alt, mostly chloritic, some clay. Mod py mainly vnlts.
582.0	10.0		2.77	89	.47	.01		.01	mod	.42	.04		1			Wk alt, patchy sil'n + qtz vning, wk-mod py, wk cc, v.sp cc.
590.2	8.2		2.73	97	.80	.01		.01	mod-st	.69	.10		1	tr lim?		Wk-mod alt, patchy sil'n, wk-mod py, sp-wk cpy.
599.3	9.1		2.68	96	.60	.02		.02	1	.54	.04		1	1		Wk alt, py, sp-wk cpy, good 'Sp' text.
608.2	8.9		2.67	98	.44	.02		.02	mod	.30	.12		1			V. wk alt, wk-mod py, sp-wk cc, v.sp cc on frac's.
618.6	10.4		2.66	99	.34	.01		.01	1	.20	.13	tr moly	1			Fresh-wk alt, patchy sil'n, wk-mod py, sp cpy, tr cc?
																Wk alt, mod py, wk cpy, tr cc? tr moly.
E.O.H.		Avg. Rec'y		95%												

Note: Hole had to be stopped as Boyle's skid rig was not large enough to take it farther.

Final Depth 353.7'
Collar Elevation 3131.58
Coordinates 28,946.63 N ; 28,710.98 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-63
Sheet No. 1 of 1
Date Completed 12/29/64
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
5.0	5.0	RB			—	—							—	—		Cover
14.2	9.2	NXwl	2.24	95	0.03			0.03					Mod clay + ser.	Mod lim + LLm	Sp	Mod alt wi wk patchy silicif, wk-mod hem, wk lim, sp LL
23.7	9.5		2.24	92	.04			.04						Mod lim wk LLm		
34.9	11.2		2.53	79	.29	0.05		.05	wk-mod		.24			wk LLm		Mod alt, wk-mod lim, wk hem, tr LLm.
43.4	8.5		2.51	96	.39	.06		.06			.33			wk lim sp Jar	Sul zone @ 24.0:	Mod alt, wk-mod py, wk cc (mostly on fracs), sp lim @ start.
52.0	8.6		2.40	96	.44	.06		.06	wk		.38		st clay mod ser.			Mod alt, wk-mod py, wk cc, v.sp lim on fracs, tr CuOx.
61.3	9.3		2.38	94	.52	.07		.07	sp-wk	Tr	.45		Mod-st + clay	Sp. lim		Mod-st alt, wk py + cc, considerable chlor, v.sp. lim.
70.1	8.8		2.51	94	.39	.05	89.9' @ .50/.03	.05			.34		mod ser. st. clay	Tr. lim		Mod-st alt, v. wk py, wk cc, tr LLm, v. sp lim.
80.0	9.9		2.59	90	.48	.02		.02	wk		.46		Mod. Ser.			Mod-st alt, wk py, wk-mod cc, considerable chlor on fracs.
90.7	10.7		2.57	81	.39	.02		.02	wk-mod	tr	.37		mod clay wk ser.			Mod alt wi patches st alt, wk-mod py, sp cc.
101.2	10.5		2.49	82	1.00	.02		.02	sp		.98		mod-st clay			As above w sp chrys.
114.2	13.0		2.53	76	.42	.01	149.7' @ .45/.02	.01	wk		.41		mod clay sp ser.			Mod-st alt, wk py, wk-mod cc, tr CuOx.
124.8	10.6		2.53	83	.48	.01		.01	wk-mod		.47					Generally mod alt, crumbly rk, wk-mod py, sp cc, tr CuOx.
133.4	8.6		2.65	85	.23	.01		.01			.22		wk-mod clay sp ser.			Mod alt wi patchy mod silicif, mod py, wk cc, tr cpy.
142.0	8.6		2.66	95	.32	.01		.01	mod	.02	.29		wk clay sp. ser.			wk-mod alt, mod. sil'd. wk-mod py, sp-wk cc.
151.6	9.6		2.64	82	.28	.01		.01		.01	.26		wk-mod clay, tr ser.			As above, wi poss. inter in sil'n.
161.0	9.4		2.63	100+5	.42	.01		.01	wk-mod	.01	.40	Tr MoS2	mod clay			wk-mod alt, st sil'n. sp cc, wk-mod py. tr. CuOx.
170.9	9.9		2.63	100	.41	.01	33.0' @ .45/.01	.01		.02	.38		wk-mod clay			" " " mod sil'n, sp cc, wk-mod py, Mod clay on frac
177.7	6.8		2.53	100+3	.39	.01		.01	mod	.01	.37		mod-st clay, sp ser.			" " " " " sp-wk cc, " " " " "
184.6	6.9		2.68	81	.61	.02		.02	wk	.02	.57		mod clay, tr ser.			wk-mod alt, mod-st, spotty sil'n, wk cc(?) Sev. sel gg's sp-wk cc, wk-mod py.
191.3	6.7		2.49	49	.19				wk-mod	.04	.15					As above to 184.6, thro mod alt, no apparent sil'n. Nev. sel gg.
200.4	9.1		2.58	96	.19					.12	.07		wk clay, sp ser.			Mod alt, clay + sel gg. on frac's sp-wk cc, wk-mod to mod py
209.7	9.3		2.60	95	.16					.08	.08					Mod alt, sp cc, wk-mod py, sc qtz inlets, tr lim.
218.8	9.1		2.70	95	.39	.02		.02		.08	.29					Generally wk alt, wk py, tr cc + cpy, patchy silicif, 1 py vn in last
228.9	9.1		2.55	88	.17					.08	.09		wk clay, ser.	tr hem		wk-mod alt, mod py, sp-wk cc, tr cpy, patchy silicif.
238.4	10.5		2.54	88	.18				wk	.12	.06		tr clay, wk ser.			Wk-mod alt, some qtz vn's + patchy silicif, mod py, sp cc, sp-wk cpy
247.1	8.7		2.74	99	.29				mod	.15	.14			sp lim		Wk-mod alt, good 'Sp' rk, wk-mod py, sp-wk cpy, sp cc.
256.1	9.0		2.75	96	.20					.15	.05		tr clay, ser.			Wk-mod alt, sc qtz + py vn's, wk-mod py, v. sp cpy, tr lim
264.5	8.4		2.76	98	.27				wk-mod	.20	.07			tr lim		Wk alt, sc qtz. vnlets, wk-mod py, sp cpy, tr lim.
273.5	9.0		2.72	98	.67	.02		.02	mod	.30	.35					As above wi only tr cpy.
282.4	8.9		2.69	98	.20					.15	.05		tr clay			Wk alt, mod py, wk cpy, tr cc, sc qtz vnlets.
290.6	8.2		2.73	98	.21				wk-mod	.10	.11		sp clay			Wk alt, good 'Sp' rk, wk py, v.sp cpy.
299.6	9.0		2.68	98	.17					.15	.02					Wk alt, vuggy qtz-py vn's, mod py, tr cpy + cc.
305.5	5.9		2.68	100+	.15				wk	.12	.03					As above. Rk now coarsely porphyritic - a cross between Tp, Ptz.
313.9	8.4		2.79	98	.17				mod	.12	.05					Wk-mod alt, wk py, sp cpy.
322.3	8.4		2.80	99	.13					.10	.03					Wk alt, mod py, sp-wk cpy, several py vn's.
332.8	10.5		2.69	95	.10				wk-mod	.09	.01					Wk alt, wk-mod py, sp cpy, tr lim.
342.3	9.5		2.81	96	.22				mod-st	.15	.07		tr clay	sp lim		Wk alt, wk py, tr-sp cpy, tr lim.
349.5	7.2		2.71	99	.12				mod	.10	.02	Tr mol				Wk alt, good 'Sp' rk, generally wk py, sc vn's py + qtz, tr cpy.
353.7	4.2		[illegible]	[illegible]												

Final Depth 323.0'
Collar Elevation 3039.53
Coordinates 29,271.10 N ; 28,766.20 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-62
Sheet No. 1 of 1
Date Completed 12/15/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
19.1	19.1	RB														Dump
28.8	9.7	NXwl	2.46	87	0.02			0.02					mod-st clay, tr ser	mod lim, wk LLm	Sp	Mod-st alt, mod lim, sp hem + LLm.
43.3	14.5		2.40	72	.04			.04								Mod alt wi patchy silicif, wk-mod lim, wk patchy hem + LLm
52.9	9.6		2.38	96	.04			.04					wk-mod clay, sp ser	mod lim, wk-mod LLm	Mixed cap + sul	WK alt, partial silicif, v. sp py, tr cc, wk hem, sp lim + LLm
62.1	9.2		2.47	98	.13			.02	sp		.11		mod clay, sp ser	mod hem, wk-mod lim, sp LLm		wk alt + mod silicif, wk py, sp cc, wk hem, sp lim.
71.5	9.4		2.46	95	.09			.02			.07	Tr moly		wk hem, wk lim, mod LLm		wk alt, patchy silicif, wk py, v. sp cc, tr moly wi qtz va, wk hem, sp lim
80.9	9.4		2.56	94	.04			.04								All cap, wk-mod alt, apparent 'Sp' rk, wk lim, sp hem, LLm + cc
85.3	4.4		2.44	80	.04			.04							All cap	Mod alt, tr cc + py, wk hem + lim, tr LLm.
90.0	4.7		2.46	93	.30	0.02		.02	mod		.28			sp hem + lim, v. sp lim		Mod alt wi mod py (diss + in va's), sp-wk cc.
100.0	10.0		2.48	94	.32	.02		.02	wk-mod		.30			tr lim	Duls @ 85.3'	Mod alt + patchy silicif, wk-mod py, wk cc, tr lim + jar.
110.7	10.7		2.50	85	.54	.02		.02			.52			v. sp lim, tr jar		As above to 108.7', then st alt + clay, wk-mod py + cc, sp cpy.
119.3	8.6		2.49	97	.60	.03		.03		tr	.57		mod clay, tr ser.	tr lim		Alt ranges from mod wi mod sil'n to st — wk-mod py + cc, sp cpy
128.7	9.4		2.48	96	.81	.02		.02			.79					Alt + silicif as above, mod py, wk cc, tr cpy.
137.0	8.3		2.47	98	.52	.03		.03	mod-st		.49		mod-st clay			Mod-st alt wi mod silicif last 1', wk-mod py, sp-wk cc.
145.8	8.8		2.57	97	.52	.02		.02	wk-mod		.50		mod clay, sp ser			Mod silicif wi mod py, tr cc to 143.0', then mod alt wi wk-mod py, sp.
155.0	9.2		2.78	98	.56	.03	111.9' @ .60/.03	.03	mod		.53		mod-st clay			Mod. alt, spotty sil'n, Mod-st. py, mod cc, tr cpy
164.7	9.7		2.58	94	.68	.03		.03	wk-mod		.65					Mod-st alt, v/crumbly, mod py & cc.
173.7	9.0		2.55	98	.44	.03		.03	mod	.03	.38		mod clay			As above 1st 2', then mod. alt., Mod-st py & cc.
180.2	6.5		2.60	91	.59	.03		.03	wk-mod	.03	.53		mod clay, tr ser			Mod alt, mod py & cc, mainly diss. Tr cpy
187.6	7.4		2.68	70	.61	.02		.02		tr	.59		mod-st clay			1st 5' sil'd, mod diss. cc, just on fracs. Then mod alt, mod cc.
195.7	8.1		2.75	95	1.04	.04		.04			1.00					WK-mod. alt w spotty Sil'n. Where sil'd pow cc & mod cc. Otherwise
205.3	9.6		2.74	90	.47	.01		.01	mod	.10	.36		wk-mod clay			WK alt, mod sil'n. Most cc on vnlts, gen. diss. py, 1-5% cc. Sev. st cc-py vnlts. overall Cu prob.
211.9	6.6		2.67	97	.44	.02		.02		.08	.34		mod clay			Alt & sil'n as above. Some charac. of M2 appearing. Stem
221.5	9.6		2.55	99	.38	.02		.02		.03	.33		mod clay, sp ser			WK alt → mod-st alt last 4', mod py, sp-wk cc, v. sp cpy.
229.6	8.1		2.57	98	.32	.03		.03		.03	.26	tr moly		tr lim	M2 @ 227.0'	Generally mod alt, mod py, sp-wk cpy, sp cc, tr moly, sc qtz v.s.
238.7	9.3		2.60	96	.27			.02		.10	.15		sp clay, ser	Sp lim	M2 wi patches of Sp	WK alt, patchy silicif, wk-mod py, sp cpy + cc, tr moly.
247.0	10.1		2.61	89	.17			.01	wk-mod	.08	.08					WK-mod alt, patchy silicif, wk-mod py, sp cpy, tr cc + moly.
257.7	8.7		2.56	94	.21			.01		.09	.11			tr lim		As above to 255.7', then mod alt + py, tr cpy, cc, moly.
266.7	9.0		2.53	96	.21			.01		.09	.11			v. sp lim	Sp ca. 262.0	Mod alt, mod py + chlor, wk cc, sp cpy
275.4	8.7		2.51	98	.26	.03		.03	mod	.06	.17		wk clay, v. sp ser			WK-mod alt, mod py, wk cc, sp cpy. Not so chloritic as above.
284.2	8.8		2.66	96	.41	.02	12.7' @ .43/.02	.02	wk-mod	.02	.37		mod clay			WK-mod alt, mod-st py, wk cc, tr cpy, sc qtz vnlets.
288.1	3.9		2.57	98	.46	.03		.03		.03	.40					WK-mod alt, crumbly rk, rk type?? mod py, wk cc.
297.7	9.6		2.49	95	.20			.02		.02	.16		wk-mod clay			WK alt + partial silicif, mod py, v. sp cpy, tr cc.
307.3	9.6		2.66	93	.17			.01		.03	.13		wk clay			WK-mod alt mod py, v. sp cpy, tr cc.
316.8	9.5		2.67	95	.16			.01		.03	.07		sp clay, tr ser.	tr lim		As above. Text. intermediate between M2 + Sp.
323.0	6.2		2.59	93	.21			.01		.10	.10	tr moly				WK alt wi partial silicif, wk-mod py, sp-wk cpy, tr cc, moly
E.O.H.			Aver rec'y = 93%													

Final Depth 557.9'
Collar Elevation 3223.11
Coordinates 28,800.57 N ; 28,768.27 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-61
Sheet No. 1 of 2
Date Completed 12/16/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay, sericite	lim	Rock Type	Remarks
6.0	6.0	R.B.	—	—												Rock pit
12.6	6.6	NXwl	2.59	92	0.03			.03					mod clay, sp ser	wk hem, lim, patchy sp Llm	Mz	Wk-mod. alt, leached, hem. stained, wk lim & Llm
22.3	9.7		2.34	100+3	.02			.03	v. wk				/	Ditto w/ patchy st Llm		As above w/ about 1' of suls. mainly py.
31.9	9.6		2.56	95	.03			.03					mod-st clay	mod hem, sp lim, Llm		Mod alt, hem stained. Mod Llm on frac's
39.0	7.1		2.51	97	.03			.03					mod clay, sp ser.	wk lim, hem, Llm		" " " " Ser. st. Llm veins, ser. alunite veins
48.5	9.5		2.32	91	.02			.02					/	wk hem, sp lim, Llm		Mod alt w/ short runs st alt, mod hem, wk Llm, sp lim, tr cc
57.8	9.3		2.34	95	.02			.02					wk clay & ser.	wk-mod hem & Llm		Wk-mod alt, some qtz veins last 4', mod hem, wk lim, sp Llm
67.1	9.3		2.55	93	.02			.02					/	As above w/ v. wk lim		Wk-mod → mod alt, patchy silicif, tr py-cc, wk hem, lim, tr Llm.
78.1	11.0		2.55	82	.02			.02	tr		tr		wk clay, wk-mod ser.	wk hem, sp Llm	Suls @ 78.0	Wk-mod alt, patchy silicif & sc qtz vns, mod hem, wk lim & Llm, tr cc
86.9	8.8		2.67	98	.05			.01	sp		.04		sp clay, wk ser.	sp hem & Llm, wk lim		Wk alt w/ patchy silicif, wk py & cc, v. wk lim, tr Llm, sp hem.
95.7	8.8		2.68	96	.01			.01	wk		tr		tr clay, sp ser	wk lim		Wk alt, generally mod silicif, wk-mod py, v. sp cc, sp lim on frac's
105.0	9.3		2.66	96	.07			.01	wk-mod		.06		/	wk lim, sp hem, Llm		Wk alt, patchy silicif, mod py, v. sp cc, sp hem, lim on frac's
114.1	9.1		2.77	94	.21			.01	mod		.20		sp clay & ser	v. sp lim		Wk-mod alt, mod py, sp cc, sp lim on frac's
123.6	9.5		2.63	95	.04				/		.04		/	wk lim		Generally wk alt, patchy silicif, mod py, wk cc, sp-wk lim
132.4	8.8		2.65	97	.16			.01	/	.02	.13		/	sp hem, lim		Wk alt, patchy vuggy silicif, patches cap material, wk py, sp cc, hem, lim
141.3	8.9		2.60	97	.07				wk-mod	.01	.06		/	wk lim, sp Llm, hem		Wk-mod alt, patches cap w/ wk lim & sp hem, w/ qtz vns, wk py, cc.
150.5	9.2		2.55	99	.02			.02					/	wk lim, hem, sp Llm	Mostly cap	Wk alt & generally mod silicif, wk lim, sp lim & Llm on frac's.
159.1	8.6		2.63	97	.02			.02					wk clay, mod ser	wk lim & Llm, sp hem	Mixed cap-suls	Wk-mod alt, patchy silicif & sc qtz vnlets, sp py, tr cc, wk hem, sp lim
170.0	10.9		2.32	89	.02			.02					mod clay, wk ser.	/	Mostly cap Suls ca. 176.5	Wk-mod alt, good Mz, wk hem & lim.
176.8	6.8		2.40	100+28	.02			.02	Tr	Tr			/	Mod. hem wk lim & ser		Wk-mod alt, patchy silicif, v. sp py-cc, wk hem, sp lim, Llm
186.3	9.5		2.50	89	.80	.02		.02	wk	sp	.78		Mod. clay, Mod. ser			Generally mod alt, mod py, wk-mod cc, tr cpy.
195.4	9.1		2.50	95	.54	.02		.02	/	Tr	.52		/			As above.
204.2	8.8		2.50	97	.42	.02		.02	sp-wk		.40		/	Mod. hem wk lim & ser	Mixed cap-suls	Mod alt, wk-mod py, mod cc, wk hem, sp Llm, cpy.
213.3	9.1		2.48	97	.18			.02	/		.16		/	/	/	Mod alt & py, wk cc, hem, sp Llm, tr cpy & lim
222.1	8.8		2.47	97	.40	.01		.01	wk-mod		.39		/		All suls	Mod alt, mod py, wk-mod cc, tr cpy (cc on p.2 Note)
232.5	10.4		2.38	80	.21	.02		.02	sp-wk		.19		/	wk hem, mod lim, sp Llm	Mixed cap-suls	Generally mod alt, st py, wk-mod cc, patchy silicif, wk hem & lim.
239.8	7.3		2.41	100	.38	.02		.02	wk	tr	.36		/		All suls	Mod alt, one alunite vnlet, wk-mod py & cc, sp cpy & hem.
248.7	8.9		2.40	99	.33	.03		.03	/	.01	.29		/			Mod alt w/ patchy silicif, wk-mod py, mod cc, sp cpy.
260.0	11.3		2.46	90	.79	.04		.04	sp		.75		mod-st clay		Sp ca. 252.6	Mod alt w/ partial silicif last 5', wk py, mod cc, tr cpy.
269.8	9.8		2.34	95	1.14	.04		.04	/		1.10		/			Mod alt, sc alun vnlets, wk-mod py & cc, tr cpy.
278.9	9.1		2.48	99	1.43	.04		.04	wk	.04	1.35		mod clay, sp ser			Generally wk-mod alt w/ patchy qtz veing, mod py & cc, sp cpy.
288.8	9.9		2.60	96	.88	.04	216.7' @ .63/.02	.04	/	.06	.78		/			Wk-mod alt, wk partial silicif, mod py, wk-mod cc, sp cpy.
296.6	7.8		2.39	100+1	.62	.02		.02	/	.06	.54		/			Wk-mod alt, wk-mod py & cc, mainly diss.
306.4	9.8		2.41	96	.77	.02		.02	wk-mod	.05	.70		wk clay, ser.			As above
316.0	9.6		2.62	96	.74	.02		.02	mod	.05	.67		mod clay wk ser			" " poss. fer. in cc, tr cpy
324.8	8.8		3.34	85	.79	.02		.02	wk-mod	.04	.13		/			Wk-mod alt, spotty sil'n, wk cc, sp cpy.
332.9	8.1		2.55	100	.78	.02		.02	wk	.02	.74	Tr MoS2	mod-st clay			Weak thru mod alt. Some wk appearance cc on p.1. Sp color on frac's
342.3	9.4		2.49	91	.83	.03		.03	wk-mod	.03	.77	/	/			Wk-mod alt. Diss cc on p.1, sp cpy. Color on frac's
352.6	10.3		2.52	91	.44	.02		.02	/	.02	.40	/	mod clay sp ser			

Final Depth 557.9'
Collar Elevation 3223.11
Coordinates 28,800.57 N ; 28,768.27 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-61
Sheet No. 2 of 2
Date Completed 12/16/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
362.0	9.4	NXwl	2.53	98	.40	.01		.01	wk-mod	.05	.34		wk-clay, sp ser.		Sp	Generally mod alt, mod py, sp-wk cc + cpy, sc qtz vnlets
371.5	9.5		2.60	93	.59	.01		.01	mod	.04	.54		1			As above.
384.3	12.8		2.61	76	.40	.01		.01	wk-mod	.07	.32		1	tr lim		wk-mod alt, sc qtz vnlets, mod py, wk cc + cpy.
393.5	9.2		2.79	91	.54	.01		.01	1	.09	.44		1			wk-mod alt → mod alt wi sc qtz vnlets, mod py, wk cpy + cc
402.2	8.7		2.56	87	.39	.03		.03	1	.10	.26	tr moly	sp clay, wk ser.			wk-mod alt, sc qtz vnlets, mod py, sp-wk cc + cpy, tr moly
411.0	8.8		2.72	95	.34			.02	1	.06	.26		wk clay, sp ser.			Mod alt, wk-mod py, sp cpy + sp-wk cc.
420.7	9.7		2.59	92	.27			.02	1	.10	.15		mod clay			Mod alt, mod py, sp cpy, v. wk cc
430.1	9.4		2.62	96	.34			.02	wk	.15	.17		mod-st clay			Mod alt, mod py, sp cc as films on py, sp cpy.
439.0	8.9		2.61	97	.35			.02	wk-mod	.12	.21		1			Mod alt wi some patches st alt, wk-mod py, v. wk cc, sp cpy
449.3	10.3		2.62	89	.25			.01	1	.10	.14		mod clay			Mod-st alt ½-way mod alt, wk-mod py, sp cpy + cc, good 'Sp' r
458.4	9.1		2.67	96	.13				wk	.07	.06		wk-mod clay, sp ser.			Wk-mod alt, mod diss py, sp-v. wk cpy, v. sp cc.
468.1	9.7		2.67	93	.33			.02	wk-mod	.10	.22		1			Generally mod alt wi patchy vuggy silicif, mod py, sp-wk cc + cpy.
477.3	9.2		2.70	96	.20			.01	1	.10	.09		1		Mz ca. 475.0	Generally wk alt wi patches wk alt, wk-mod py, wk cc, sp cpy.
486.3	9.0		2.71	95	.09				1	.04	.05		1		Sp ca. 485.0	Mod alt wi patches v. crumbly, wk-mod py, wk cc, sp-wk cpy.
495.8	9.5		2.75	96	.29			.01	1	.02	.26		1			Mod alt, patchy wk silicif, wk-mod py, sp cc + cpy.
504.6	8.8		2.76	98	.12				1	.02	.10	tr moly	wk-mod clay			Mod alt, wk-mod py, sp cc, cpy, tr moly.
513.5	8.9		2.69	95	.09				mod	.01	.08		v. wk clay, tr ser.	tr lim		Wk-mod alt, silicif along qtz vns, mod qtz, tr cc, v. sp cpy
522.6	9.1		2.62	97	.11				1	.05	.06		wk-mod clay			Wk-mod alt, patchy silicif, mod py (vn's + diss), sp cc, v. sp cpy
531.0	8.4		2.58	97	.07				mod-st	.01	.06		mod clay			Wk-mod alt, st py 1st 1 ft, then wk-mod py, sp-wk cc, tr cpy.
540.4	9.4		2.79	92	.13				1	.02	.11	tr moly	wk-mod clay			Mod alt, mod-st py, mostly in vn's, wk cc, tr cpy + moly.
545.8	5.4		2.79	88	.24				1	.02	.22		mod clay			Mod-st alt but coherent rk, wk-mod py, wk cc
553.4	7.6		2.66	96	.14				1	tr	.14		sp clay, ser.	sp lim		Generally wk alt, wk-mod py, tr cc, cpy. Good 'Sp' text
557.9	4.5		2.67	98	.15				mod	.01	.14	tr moly	1	1		Wk-mod alt, wk py, v. sp cpy, tr cc, moly, sc qtz vnlets.
E.O.H.		Aver. rec'y = 94%														

Final Depth 414.7'
Collar Elevation 3116.76
Coordinates 29,130.04 N; 28,620.60 E
Inclination Vertical.

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-60
Sheet No. 1 of 2
Date Completed 12/7/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim.	Rock Type	Remarks
8.2	8.2	R.B.														Cover
17.0	8.8	NXwl	2.40	100	0.04			0.04					sp clay, wk ser	mod lim	Sp	wk alt + partial silicif, 1st 4' bleached, then v. wk hem
26.7	9.7		2.52	91	.03			.03					wk clay, sp ser.	mod lim, sp hem, lim		wk alt + partial silicif, wk lim, sp Llim + lim.
38.1	11.4		2.51	78	.03			.03					mod clay, tr ser.	wk lim, sp hem, wk lim		Generally, mod alt, patchy silicif, 1st ½ bleached, then wk
47.8	9.7		2.47	93	.05			.01	wk		.04		wk clay, sp ser.	wk hem + lim, sp lim		wk-mod alt, patchy qtz vning, wk hem + lim, patchy sp
56.4	8.6		2.55	97	.07			.01	wk		.06		1	wk hem, sp lim	Mixed cap + suls	wk alt, patchy wk py-cc, wk-mod hem, sp lim, good Llim on vn's
62.4	6.0		2.43	99	.05			.02	sp		.03		1	sp hem, w lim	Mostly cap	wk-mod alt, one patch w/ sp py-cc, wk-mod hem, v. sp lim.
71.8	9.4		2.51	96	.09			.03	1		.06		wk-mod clay, wk ser	wk hem, lim, sp Llim	Mostly suls	wk alt, wk-mod py, v. wk cc, various qtz valets, sp hem,
81.0	9.2		2.45	93	.17			.03	wk		.14		mod clay, tr ser.	1	Sul zone @ 79.0	As above to 79.0', then mod alt, mod py, wk cc + no FeOx
90.3	9.3		2.64	95	.47	0.02		.02	1		.45		mod-st clay			Mod alt, mod-st py, mod cc.
99.4	9.1		2.61	96	.57	.02		.02	1		.55		mod clay			As above.
108.3	8.9		2.60	97	.62	.02		.02	1		.60		mod-st clay			Mod alt, cc + py, occasional clayey valets.
117.4	9.1		2.60	94	.40	.01		.01	wk-mod		.39		1			wk-mod alt, mod py, wk-mod cc, tr cpy?
126.9	9.5		2.71	96	1.27	.02		.02	1	.05	1.20		mod clay			As above w/ sp cpy + wk cc.
136.6	9.7		2.70	96	.83	.03	112.1'	.03	1	.02	.78		mod-st clay			Mod alt, mod py, wk cc w/ st py-wk cc last 1'
145.5	8.9		2.57	96	.53	.03	@	.03	1	.02	.47		wk-mod clay			wk-mod alt, py, v. wk cc, good Sp text visible @ times.
154.4	8.9		2.57	97	.48	.02	.61/.02	.02	1	.02	.44		mod-st clay			Mod alt → st alt last 1½', wk-mod py, wk cc, tr cpy.
163.0	8.6		2.55	95	.79	.05		.05	1		.74		1			Mod alt, wk-mod py, wk cc, v. sp cpy.
171.7	8.7		2.54	93	.48	.02		.02	wk		.46		1			Mod-st alt, heavy clay, wk py, cc, tr cpy. Rk type?
182.0	10.3		2.46	38	.39	.03		.03	1		.36		st clay			Mod-st alt, wk-mod py, wk cc, sp cpy.
193.1	11.1		2.57	89	.48	.02		.02	wk-mod	.02	.44		mod clay	tr lim		st alt to 188.3', then wk-mod alt, mod py, sp-wk cc, v. sp cp
204.5	11.4		2.61	94	.18			.01	mod	.04	.13		wk-mod clay	1		wk-mod alt, occ. patch mod-st alt, mod py, sp cc + cpy.
213.7	9.2		2.64	96	.21			.01	st	.10	.10		sp clay, ser.	sp lim		wk-mod alt, patchy silicif, mod py, sp cpy, tr cc — rk intermed betw 'sp'
223.0	9.3		2.88	90	.15			.01	mod-st	.08	.06		1	1		wk alt w/ patchy st silicif, mod py, v. sp cc, tr cpy - good
232.5	9.5		2.78	87	.15			.01	1	.08	.06		1	1		Mod alt, occ silicified patch, wk-mod py, tr cc + cpy.
241.3	8.8		2.61	94	.15			.01	1	.07	.07		v. wk clay + ser.	v. sp lim		wk alt, wk-mod py, tr cpy.
249.8	8.5		2.59	98	.26			.01	1	.07	.18		1	tr lim		Darkish 'sp' rk, v. wk alt w/ patchy silicif, wk py, v. sp c
259.0	9.2		2.56	96	.22			.01	mod	.15	.06		wk clay sp ser.	1		wk alt, sc qtz vn's, wk py, tr cpy + cc.
268.5	9.5		2.57	95	.24			.01	1	.15	.08		wk-mod clay	1		wk-mod alt, wk-mod py, tr cpy, v. sp cc.
281.3	12.8		2.56	77	.36			.02	mod-st	.20	.14		mod-st clay		M2 ca. 274.0	wk-mod alt, mod py, tr cpy — patchy silicif.
290.2	8.9		2.64	100	.44	.02		.02	st	.20	.22		wk-mod clay			wk-mod alt w/ patchy v. uggy silicif, mod py, sp cpy + cc.
303.0	12.8		2.68	81	.13			.01	1	.10	.02		mod-st clay		Sp?	wk-mod alt, silicif along fracs, mod py, sp cpy, tr cc. Text abs
311.8	8.8		2.73	97	.20			.01	1	.15	.04		mod clay			wk-mod alt, partial silicif, mod py (incl. some py valets), sp cpy, wk c
320.9	9.1		2.73	96	.15			.01	1	.09	.05		1			Mod silicif w/ one patch st alt (313.5-314.5), mod-st py, wk cc, v. sp cpy.
330.2	9.3		2.61	97	.63	.02		.02	mod	.20	.41		1		M2	wk-mod alt w/ patchy mod silicif, mod py, sp cpy, wk cc. M2 r
338.9	8.7		2.61	99	.96	.03		.03	1	.20	.73		1			wk-mod alt, patchy silicif, mod py, wk-mod cc, tr cpy.
347.6	8.7		2.68	96	.68	.02	51.1'	.02	1	.10	.56		1			wk alt + partial silicif throughout, wk-mod py, wk cc, tr cpy.
354.7	7.1		2.58	100+2	.43	.01	@	.01	1	.10	.32		1			wk alt + partial silicif, wk py, sp cpy, v. wk cc.
363.8	9.1		2.47	96	.33	.01	.59/.02	.01	1	.06	.27		mod clay			

Final Depth 414.7'
Collar Elevation 3116.76
Coordinates 29,130.04 N ; 28,620.60 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-60
Sheet No. 2 of 2
Date Completed 12/7/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
372.0	8.2	NXwl	2.77	97	.48	.02		.02	wk-mod	.05	.41		sp clay, wk ser	sp lim	Mz, wi 'sp' ca. 365.0'	wk alt + partial patchy silicif, wk-mod py, v. sp cpy, sp cc
381.2	9.2		2.68	91	.28	.02		.02	mod	.03	.23		/	tr lim		wk-mod alt, wk-mod py, sp cc + cpy.
390.0	8.8		2.74	95	.36	.02		.02	wk-mod	.15	.19		/	/		wk-mod alt, much 'dark Sp' in this run, wk-mod py, sp-wk cc-cpy
397.9	7.9		2.72	96	.30	.02		.02	/	.20	.08		/	sp lim		As above.
405.4	7.5		2.82	93	.46	.02		.02	mod	.25	.19		tr clay, wk ser	/		Rk st. 5:1% @ start, then grad. dimin. showing dk "sp". Tr cc + cpy
414.7	9.3		2.84	95	.23			.02	/	.16	.05		wk clay, tr ser	tr lim		Def. "sp", wk alt, incr. @ end; sp-wk py, tr cc + cpy
E.O.H.		Aver rec'y = 92%														

Final Depth 209.0'
Collar Elevation 2914.11
Coordinates 29,778.34 N; 28,951.58 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-59
Sheet No. 1 of 1
Date Completed 11/25/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
8.0	8.0	RB														Cover
12.5	4.5	NXwl														Cover
16.6	4.1		2.47	100+3	0.09			0.09					mod clay, sp ser	wk-mod lim, sp hem	Mz	Wk-mod alt, partial silicif, wk lim, sp hem, 2 small patches w/ wk py, sp
26.3	9.7		2.43	91	.09			.07			.02		wk clay, ser	As above sp LLim		As above incl. patches wk sul min.
36.3	10.0		2.40	89	.11			.08			.03					Wk-mod alt, rk crumbly in some patches, patchy silicif, tr CuOx w mod Fe
46.4	10.1		2.43	87	.12			.09			.03		wk-mod clay, sp ser			Wk-mod alt, sp hem, mod lim, tr chrys.
55.7	9.3		2.34	93	.07			.07						wk lim + hem		Wk-mod alt, wk hem + lim, sp LLim, tr CuOx.
67.2	11.5		2.34	89	.10			.06	sp		.04		mod clay, sp ser	sp lim + hem		Wk-mod alt, wk hem + lim, sp CuOx, sp py + wk cc last 1½'
73.9	6.7		2.54	89	.50	.08		.08	wk-mod	.03	.39			sp lim	Sul zone @ 67.2	Mod alt, wk py, mod cc, sp CuOx on fracs, v. sp lim.
82.9	9.0		2.56	92	1.07	.06		.06		.08	.93		sp clay, ser			Wk-mod alt, mod py, wk cc, sp gra CuOx (diaptase?).
91.5	8.6		2.56	95	.49	.07		.07	mod	.06	.36					Wk-mod alt, wk py, sp-wk cc, v. sp malachite & diapt.?
100.0	8.5		2.57	95	.55	.06		.06	wk-mod	.04	.45					Wk-mod alt, wk py, wk-mod cc, tr CuOx. Good Mz rk.
110.0	10.0		2.60	89	.57	.05	91.6' @ .56/.06	.05		.02	.50		mod clay, sp ser			Wk-mod alt @ 105.0' → mod-st alt, wk py, wk-mod cc, grn-stained f
119.6	9.6		2.57	85	.59	.07		.07	sp-wk		.52			tr lim		Mod-st alt, sp py, wk-mod cc, wk chlor.
128.9	9.3		2.58	88	.61	.05		.05	wk		.56		wk clay, tr ser			Mod alt, sp-wk py, wk cc.
141.5	12.6		2.59	79	.35	.05		.05			.30		sp clay, ser			Generally wk-mod alt, wk-mod py, sp-wk cc, tr cpy.
149.9	8.4		2.60	91	.35	.04		.04			.31					Wk-mod alt, wk-mod py, v. sp cc + cpy. Good Mz rk.
158.8	8.9		2.61	87	.52	.04		.04	sp-wk	.04	.44		wk clay, sp ser	tr lim		Wk-mod alt, wk py, sp cpy, wk cc, chlor.
167.7	8.9		2.62	97	.36	.03		.03	wk	.02	.31			tr Jar		Wk alt, sp py, wk-mod diss cc.
176.9	9.2		2.62	95	.23			.02		.05	.16		sp clay & ser			As above w/ wk py. Good Mz rk.
184.9	8.0		2.64	97	.22			.01	sp-wk	.07	.14			Tr. Jar Tr lim		Wk alt, minor patchy silicif, wk diss cc, wk-mod py, tr cpy
193.9	9.0		2.65	91	.43	.02		.02	wk	.10	.31		sp-wk ser & clay			Wk alt → mod alt last 8", tr lim, wk diss cc, wk py, tr cpy
201.9	8.0		2.62	40	.13			.02	sp	.05	.06		wk ser & clay	Tr Jar		Mod-st alt, wk-mod diss py, sp cc, tr cpy?
209.0	7.1		2.60	71	.10			.01	sp-wk	.03	.06					Wk alt, partial silicif, wk-mod py, sp cpy, tr cc.
E.O.H.		Aver. rec'y = 88%														

Final Depth 418.3'
Collar Elevation 3208.20
Coordinates 28,859.87 N ; 28,593.52 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-58
Sheet No. 1 of 2
Date Completed 12/4/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	RB	—	—	—								—	—		Cover
8.4	2.4	NXwl	2.61	93	0.03			0.03					tr clay, ser.	wk hem, sp lim.	Mz	St silicif (white qtz) wi sp-wk hem & lim.
13.5	5.1		—	—	—								—	—		Sandy (vuggy) ground — no recovery.
19.8	6.3		2.52	97	.05			.05					wk clay, mod ser.	mod hem, sp lim, wk LLm		wk-mod alt, patchy silicif, mod lim, sp LLm, lim.
28.3	8.5		2.51	96	.02			.02					1	wk hem, lim, sp LLm		WK-mod alt, mod hem stain, sp lim on frac's.
37.4	9.1		2.49	99	.02			.02					wk clay, ser	1		Generally wk alt, patches mod alt + silicif, partly bleached, mod lim, sp
45.8	8.4		2.48	95	.04			.04					wk-mod clay, sp ser	wk-mod hem, wk lim, sp lim		Wk-mod alt, patchy silicif, mod hem, sp lim.
55.0	9.2		2.48	95	.05			.05					wk clay, sp ser	1		As above wi somewhat weaker alt by weathering.
64.3	9.3		2.47	95	.04			.04					1	wk hem + lim, tr LLm		WK-mod alt, patchy silicif, mod hem (particularly staining of fs
73.6	9.3		2.65	96	.06			.06					1	wk-mod hem, wk lim		Alternate silicif + wk-mod alt, wk-mod hem, wk lim, tr chrys, sp LL
82.8	9.2		2.48	95	.04			.04					sp clay, ser	1		wk-mod alt, patchy silicif, mod hem, wk lim.
92.0	9.2		2.48	95	.04			.04					wk clay, ser	wk hem, LLm, sp lim		Mod alt, wk-mod hem, wk lim, sp LLm, sp patchy py
101.5	9.5		2.48	93	.02			.02					sp clay, mod ser	wk-mod lim, hem, LLm		Mod alt, occ wk patch silicif, mod hem, sp LLm, lim, sp patchy py
110.5	9.0		2.45	94	.02			.02					wk-mod clay & ser	mod hem, sp lim, LLm		As above wi no visible sulfs.
119.0	8.5		2.37	100	.03			.03					mod clay, sp ser	wk-mod lim + hem		Mod alt wi patches stronger alt last 3', wk-mod hem + lim, sp LL
127.9	8.9		2.36	96	.06			.06					wk clay, sp ser	wk lim + hem	Mixed cap-sulf	Mod alt, patchy silicif, wk-mod hem + lim, py, sp-wk cc.
139.8	11.9		2.49	92	.05			.03	tr		.02		1	1		WK alt + partial silicif thruout, sp py-cc, v. wk hem + lim
147.1	7.3		2.56	91	.30	.03		.03	wk		.27		mod clay	sp lim	Sil zone @ 139.8'	wk-mod alt, tr lim, CuOx, wk-mod py + cc.
156.6	9.5		2.45	91	.54	.04		.04	wk-mod		.50		mod-st clay	tr clay		Wk-mod alt, some patches st alt, mod py, wk-mod cc, tr cpy, lim
165.9	9.3		2.55	91	.54	.03	51.1' @ .66/.05	.03	1		.51		1			St alt for 2', then mod alt — mineralization as above.
174.7	8.8		2.57	95	.66	.03		.03	1		.63		1	tr jar	Sp ca. 173.0'	Mz wi mod alt, 'Sp' wk-mod alt — mod-st py, mod cc, sp
183.7	9.0		2.47	92	.95	.10		.10	wk		.85		1			Mod alt, mod cc, wk py, tr chrys — mod-st alt last 6"
192.9	9.2		2.53	94	.61	.04		.04	mod-st	.08	.49		mod clay, tr ser	sp lim, LLm		Generally wk-mod alt, wk lim-hem last 1', wk-mod py + cc.
198.2	5.3		2.51	86	.71	.04	124.6' @ .69/.04	.04	mod	.04	.67		mod-st clay	sp lim		Mod-st alt for 1', then wk-mod alt, sp lim at start, mod cc wk
207.9	9.7		2.49	88	.10			.10					mod-st clay, wk ser	wk hem + lim, LLm		Mod alt, probably 'Sp' rk, tr cc + CuOx, wk-mod LLm, wk hem, lim.
217.4	9.5		2.50	95	.31	.03		.03	mod		.28		wk clay, sp ser	wk hem, tr lim, wk LLm		Wk alt, mod silicif + qtz vning, wk py, sp cc, tr cpy, sp l
226.5	9.1		2.67	94	.87	.04		.04	1	.06	.77		1	v. sp lim		wk alt, mod silicif + qtz vning, mod py, wk-mod cc, sp cpy, tr l
235.7	9.2		2.53	92	.85	.02	54.3' @ .68/.03	.02	wk-mod	.06	.77		1			As above to 233.0', then mod-st alt, wk-mod py, wk cc.
244.7	9.0		2.67	92	.68	.04		.04	1	.06	.58		mod clay, tr ser	sp lim		Generally mod alt wi st alt last 2', wk-mod py + cc, sp lim, patchy s
254.8	10.1		2.47	91	.64	.03		.03	1	.03	.58		1	tr lim		Mod-st alt, wk-mod py, v. wk cc. Rk probably 'Sp'
263.9	9.1		2.45	90	.60	.03		.03	1	.02	.55		mod clay	sp lim		Wk-mod alt wi mod sil'n to 262.0', then st alt — mod py, v. wk cc
271.7	7.8		2.69	98	.40	.01		.01	Mod	.29	.10		wk clay ser	Tr lim Tr Jar		V. wk alt wi generally mod silicif, mod py, wk cpy, tr cc
280.2	8.5		2.55	95	.38	.02		.02	wk	.10	.26		1	Tr Jar		Wk-mod alt, sp qtz vns, wk-mod py, sp cpy, tr cc.
289.4	9.2		2.54	96	.30	.01		.01	1	.10	.19		Mod clay & Ser	Tr lim		Wk-mod alt wi mod-st alt 282.0–287.0 — wk diss py.
298.3	8.9		2.48	98	.39	.01		.01	1	.10	.28		1	—		Mod-st alt, mod py, sp cc + cpy. 'Sp' text still recognizable
309.7	11.4		2.47	81	.33	.02		.02	1	.10	.21		mod-st clay			Mod-st alt to 308.0', then mod alt — mod-st py, sp cpy, sc.
318.8	9.1		2.72	90	.30	.02		.02	wk-mod	.20	.08		sp clay + ser	sp lim		Wk-mod alt, sc qtz veinlets, mod py, tr cpy, v. sp cc.
327.2	8.4		2.66	96	.24				1	.20	.04		1	1		Wk alt, partial silicif + vuggy in places, wk py, tr cpy, sp lim.
340.2	13.0		2.66	73	.30				1	.24	.06		1			

Final Depth 418.3'
Collar Elevation 3208.20
Coordinates 28,859.87 N ; 28,593.52 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-58
Sheet No. 2 of 2
Date Completed 12/4/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim	Rock Type	Remarks
349.2	9.0	NXwl	2.84	91	0.42	0.02		.02	mod-st	.15	.27		v. sp clay, tr ser.		Sp	Mod-st silicif throuout, mod py, wk cpy.
358.4	9.2		2.82	89	.24				1	.20	.04		tr clay			As above wi several py-cpy vn's.
366.9	8.5		2.72	96	.17				mod	.15	.02		v. sp clay	tr lim		wk alt, mod silicif, vuggy rk throuout, mod py, sp-wk c
376.0	9.1		2.67	92	.23				1	.17	.06		1			Mod silicif throuout, wk-mod py, v. sp cpy.
389.0	13.0		2.68	61	.18				1	.14	.04		1			v. wk alt, partial silicif, mod py, wk cpy.
397.7	8.7		2.76	99	.24				st	.10	.14		sp clay			Mod-st silicif + qtz vning, mod-st py, v. wk cpy.
406.6	8.9		2.84	98	.25	.01		.01	st	.10	.14	tr moly	1			st silicif, mod py, sp cpy, vuggy qtz vn's, solid py last 9"
412.8	6.2		2.69	94	.23			.01	1	.10	.12	1	tr clay, ser			Well silicif 'Sp' rk, wk-mod py, tr cpy — solid py first 9"
418.3	5.5		2.67	86	.23			.01	mod	.10	.12		1			Mod-st silicif, wk-mod py, tr cpy.
E.O.H.			Aver. rec'y =	92%												

Final Depth 232.0'
Collar Elevation 2944.29
Coordinates 29,929.04 N; 29,020.60 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-57
Sheet No. 1 of 1
Date Completed 11/18/64
Logged By BNW + CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, Sericite	lim	Rock Type	Remarks
6.0	6.0	RB	—	—												Cover
15.2	9.2	NX WL	2.33	93	0.14			0.14					mod clay, sp ser	wk-mod FeOx, wk lim	Mz	wk-mod alt w. mod silicif last ½, mod hem, wk lim.
25.3	10.1		2.31	91	.25			.15			.10		wk-mod clay, ser	/		Alternate mod silicif w. wk alt, wk-mod hem, mod lim, boxwork
32.0	6.7		2.59	93	.09			.09					wk clay, ser.	wk-mod hem, wk lim		Mod silicif throuout, wk lim + hem, sp diss. lim.
41.9	9.9		2.55	93	.04			.04					/	Ditto w/ sp-wk lim		Gen. silic, wk lim, sp hem.
52.1	10.2		2.53	86	.08			.08					mod clay	wk-mod lim + hem		1st foot as above, then mod thru st. alt. Mod lim & hem.
61.8	9.7		2.24	95	.11			.11					mod clay, sp ser.	mod hem, wk lim		Mod alt, hem & lim stained, sp leached sulfs.
71.0	9.2		2.37	96	.19			.19					/	mod lim, sp hem, lim		As above w. sp gen CuOx (chrys??) on fracs.
80.3	9.3		2.39	96	.12			.12					wk-mod clay, ser	/		Mod alt w. spotty silic. wk-mod hem & lim staining
89.6	9.3		2.38	97	.12			.12					/	/		Mod alt, tr gen CuOx, wk-mod hem & lim stain. sp leached
98.7	9.1		2.39	95	.11			.11					wk clay, sp ser.	mod hem, wk lim		Alt & color incr slightly, otherwise as above.
107.2	8.5		2.50	98	.41	0.04		.04	sp. wk		.37		/	wk FeOx	Mixed cc & sp @ 100	1st ½' as above then sp cc. mixed with cap, wk-mod
116.3	9.1		2.62	95	.51	.04		.04	wk-mod		.47		v. sp clay, wk ser.	sp lim, jar	All sul zone @ 108.2	Wk alt, wk-mod py, v. wk cc on fracs, sp lim 1st ½'
125.2	8.9		2.65	98	.56	.09		.09	mod	.10	.37		/	sp jar, tr lim		Wk alt, wk-mod py, v. wk cc on fracs, sp jar.
134.6	9.4		2.62	95	.74	.10	60.9' @ .58/.06	.10	/	.10	.54		/	sp lim, jar		As above w/ v. sp lim on fracs.
142.8	8.2		2.61	95	.37	.04		.04	mod-st	.05	.28		/	/		As above.
150.9	8.1		2.63	100	.43	.05		.05	mod	.10	.28		tr clay, wk ser.	/		Wk alt, wk diss py, wk cc on fracs, sp jar
159.6	8.7		2.70	95	.98	.05		.05	mod-st	.05	.88		v. wk clay, sp ser.	wk jar, sp lim.	Sp ca. 154.8	wk alt w/ patches mod alt to 156.8, then mod silicif — wk py, sp cc,
168.6	9.0		2.69	97	.26	.01		.01	/	.10	.15		sp clay, ser.	sp jar		Generally wk alt, one patch mod alt, patchy silicif, mod py, tr cpy
177.6	9.0		2.71	97	.23	.01		.01	/	.15	.07		/	sp jar, v. sp lim		Mod-st silicif throuout mod py, wk cpy, v. sp cc.
187.9	10.3		2.69	92	.22	.02		.02	/	.15	.05		sp ser	/	Mz type dk in Sp-178.4-182.3	Wk alt, patchy silicif, one vuggy qtz vn, mod py, v. wk cpy, tr cc,
197.1	9.2		2.66	95	.80	.09		.09	mod	.05	.66		sp clay, ser	wk jar, v. sp lim	Mz @ 192.0	wk alt, vuggy rk in places, v. sp lim, wk lim, v. sp cpy, wk cc — 2 types of
																Mz — the regular Mz followed by the dk-rock type abo
205.6	8.5		2.68	99	.28			.02	/	.07	.19		/	tr lim		Mostly the sparse phenocryst Mz mentioned 3 runs above, but some patches
214.5	8.9		2.68	95	.09				/	.06	.03		/		Sp @ 214.2	wk alt, wk-mod py, sp cpy, v. sp cc.
223.8	9.3		2.70	96	.24			.01	/	.10	.13	tr moly	/			Wk alt w/ patches mod alt, wk-mod py, v. wk cpy, sp cc, tr moly
232.0	8.2		2.68	97	.20				/	.15	.05	tr moly	/			Wk alt, mod py, sp cpy, tr cc, moly.
E.O.H.		Aver recy = 95%														

Final Depth 229.0'
Collar Elevation 2980.19
Coordinates 30,004.00 N ; 29,357.24 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-56
Sheet No. 1 of 1
Date Completed 11/11/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
49.1	49.1	rb	—	—	—								—	—		Dump
61.4	12.3	NXwl	2.53	75	0.05			0.05					mod clay	wk hem + lim, tr LLm	Sp	Wk-mod alt wi patchy mod silicif, wk-mod hem + lim.
68.3	6.9		2.38	91	.04			0.04	v. sp				Sp ser			As above wi mod hem + wk lim
76.0	7.7		2.59	87	.04			.04	1				1	wk-mod hem, wk LLm		Generally well silicif, crumbly wi mod alt in places, wk hem, wk-mod lim, sp-wk LLm, sp py + cc.
—	—	—	—	—	—			—					1	wk hem, wk-mod lim	Mixed cap, suls	
85.4	9.4		2.60	95	.11			.02	wk		.09		—	—		Wk-mod alt, grnish clay on frac's, mod py, v. wk cc coats p.
94.5	9.1		2.57	96	.20			.02	wk-mod		.18		mod clay Sp ser	wk hem, lim, sp wk	All suls	Wk-mod alt, silicif along frac's, mod py, wk cc.
104.3	9.8		2.66	90	.16			.01	1		.15		mod clay tr ser			Wk-mod alt → st alt last 2', wk-mod py, v. wk cc, grn clay on fr
113.8	9.5		2.67	92	.14				mod		.14		1			Mod-st alt, mod py, wk cc mostly coating py, v. sp lim.
123.1	9.3		2.57	98	.25			.01	1		.24		mod-st clay	sp hem + lim, tr LLm		As above, no lim.
131.8	8.7		2.36	98	.81	0.03	18.6' @ .66/.02	.03	1		.78		1	sp lim		Mod-st alt wi patchy silicif, mod py, wk-mod cc.
141.7	9.9		2.30	94	.53	.02		.02	wk-mod		.51		st clay			Mod-st alt, mod py, cc (cc thickly coats py), tr CuOx
151.3	9.6		2.48	92	.24	.01		.01	1		.23		1	sp lim, tr [illegible]		Mod-st alt, considerable clay, good Sp text, wk-mod py, sp cc, lim
161.1	9.8		2.61	92	.27			.01	1		.26		mod clay sp. ser	tr lim, [illegible]		Mod alt, some py unlets wi accompanying sil'n, mod py, wk cc, tr cpy
170.2	9.1		2.66	91	.20			.01	mod		.19		sp clay, ser	tr lim, sp [illegible]		Wk-mod alt, patchy silicif, sc qtz + py unlets, min as above.
179.2	9.0		2.65	96	.05				1	.01	.04		sp ser	1		Wk-mod alt, mod py, sp-wk cc, tr cpy.
191.6	12.4		2.65	73	.05				mod-st	.01	.04		sp clay, ser	tr hem		Wk-mod alt, sc patchy silicif, mod py, v. sp cc, tr cpy.
201.0	9.4		2.61	94	.11				mod	.05	.06		wk-mod clay, sp ser			Wk-mod alt → wk alt, patchy silicif, mod py (several uni's), v. sp cc, tr cpy
209.8	8.8		2.61	99	.06				1	.03	.03		sp clay, ser			Generally wk alt, patchy silicif, mod py, sp cc.
218.8	9.0		2.62	95	.14				1	.05	.09		wk clay, tr ser			Wk alt ½ way → mod-st alt, mod-st py, v. sp cc, tr cpy.
229.0	10.2		2.78	88	.58	.02		.02	1	.05	.51		mod clay			Mod-st alt wi patchy silicif mod py, v. sp cc, cpy.
E.O.H.		Aver. rec'y = 86%											1			

One small pocket of cc-py boosted the assay. The last 6' of run was all pyritic, no cc.

Final Depth 214.9'
Collar Elevation 2979.00
Coordinates 30,009.33 N ; 28,793.11 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-55
Sheet No. 1 of 1
Date Completed 11/5/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
22.0	22.0	rb	—	—	—											Dump
33.6	11.6	NXwl	2.22	92	0.10			.10					wk clay wk ser	Mod-st. LLm & lim	Mz	wk-mod alt, patchy silicif, generally bleached wi wk hem, sp lim,
42.7	9.1		2.43	98	.09	0.01		.01			.08		Mod clay, ser	wk hem, mod lim, sp LLm		Mod alt, patchy silicif, mod hem, sp lim, LLm
51.6	8.9		2.42	98	.20	.08		.08			.12		1	1		wk-mod alt, patchy silicif, wk-mod hem & lim, v.sp L
60.8	9.2		2.45	97	.15	.02		.02			.13		1	1		Wk-mod alt, grn biotite, wk hem, wk-mod lim
70.2	9.4		2.46	93	.12.			.03			.09		wk clay, mod ser	mod lim, sp LLm		Generally wk alt wi partial silicif, sp chlor, sc qtz valets, wk
80.3	10.1		2.54	92	.35			.10			.25		1	1		As above wi one Cu-stained grn alum vn. + tr LLm.
89.8	9.5		2.50	92	.33	.16		.16	tr.		.17		mod clay wk ser	mod lim sp jar		Wk alt, wk lim, sp hem.
98.4	8.6		2.69	95	1.45	.55		.55	sp-wk		.90		v.wk clay sp ser	wk lim	Sul zone + Sp @ 89.8	wk-mod alt, mod py, wk-med cc, sp lim on frac's.
108.1	9.7		2.69	99	.89	.62		.62	sp		.27		1	wk lim, sp jar		wk-mod alt, sp qtz vning, wk-mod py, wk cc, s.p. lim.
117.9	9.8		2.64	95	.37	.21		.21	1		.16		wk clay sp ser	1		wk-mod alt, 1st 4' partially leached, wk-mod py, wk cc + lim
126.2	8.3		2.64	95	.89	.05	64.0' @ .80/30	.05	v. wk		.84		1	1		wk-mod alt, sc qtz vn's, sed xenoliths, wk-mod py, sp-wk cc,
135.6	9.4		2.55	92	.90	.23		.23	wk	.05	.62		1	mod lim, sp LLm		wk-mod alt wi patches silicif, several qtz vn's, wk py + lim, sp c
144.8	9.2		2.55	96	.73	.27		.27	1	.03	.43		sp-wk clay, sp ser	wk-mod lim sp jar		As above. There may be more cc than apparent in this f.g. roc
153.8	9.0		2.60	95	.46	.18		.18	mod	.10	.18		sp clay, ser.	wk lim		wk-mod alt, sc qtz valets, wk py, sp cc + lim.
162.8	9.0		2.64	99	.31	.02		.02	1	.15	.14		tr clay sp ser	1		wk alt, mod py, sp cc, tr cpy, v. sp lim on frac's.
171.8	9.0		2.63	98	.21	.01		.01	1	.05	.15	v. sp moly	sp clay, ser	1	Mz fr 163.8-166.0. Then Sp	wk alt, wk-mod py, v.sp cc, tr cpy, one mdy valet, sp lim
181.0	9.2		2.64	98	.18	.02		.02	1	.05	.11		tr clay, sp ser	sp lim		wk alt wi silicif last ½, sc qtz vn's, wk py, v.sp cc, lim, tr cp
189.9	8.9		2.62	97	.22	.01		.01	1	.10	.11		1	1		wk alt, patchy silicif, some sed xenoliths, wk py, tr cc, v.sp
198.9	9.0		2.69	97	.34	.01		.01	mod-st	.05	.28		v.sp clay, tr. ser	wk lim, v.sp jar		wk alt, patchy silicif, mod py, tr cc, sp lim, sc qtz vn's – (py diss +
208.1	9.2		2.68	97	.18	.01		.01	mod	.03	.14		1	sp lim, jar		wk alt, patchy silicif, wk-mod py, v. sp lim.
214.9	6.8		2.61	95	.18	.01		.01	1	.09	.08		tr clay, sp ser.	v.sp lim, jar		As above wi wk cpy, tr moly, sc qtz vn's.
E.O.H.			Aver. rec'y = 96%													

Final Depth 225.0'
Collar Elevation 3044.16
Coordinates 30,410.51 N ; 28,785.94 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-54
Sheet No. 1 of 1
Date Completed 10/29/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
7.0	7.0	rb														Cover
16.4	9.4	NXwl	2.45	95	0.08			0.08					wk clay, ser.	Mod lim, sp hem	Dp	Wk-mod alt, wk lim + sp hem, patchy silicif.
26.3	9.9		2.57	91	.06			.06						Mod lim		As above
37.9	11.6		2.54	85	.04			.03			.01		mod clay, sp ser.	wk-mod lim	Sp @ 37.2'	wk-mod alt to 37.2, then mod-st alt. Wk-mod lim, sp hem.
46.9	9.0		2.40	90	.03			.03					st clay	wk-mod lim, v. sp hem		St alt, wk-mod lim, tr hem
59.7	12.8		2.40	72	.07			.07					Mod clay, tr. ser.	Mod lim		Mod alt, mod lim, tr cc? St alt fr 52-56'
69.0	9.3		2.56	94	.04			.04					sp clay, ser.	wk lim	Mixed cap-sul	Good 'Sp' rk wi wk-mod alt, sp lim, tr py, v. sp finely diss c
77.9	8.9		2.60	97	.04			.04								As above. Visible py usually in form of cubes.
87.2	9.3		2.54	96	.05			.04	v. sp		.01					Generally wk alt, sp lim, py, v. sp cc?, various qtz unlets.
96.2	9.0		2.60	96	.04			.04								wk lim wi occ. mod patches, v. wk py, tr cc, sp lim.
105.3	9.1		2.65	95	.02			.02	tr				tr clay	sp lim	All suls	Wk lim, sp py, v. sp lim, sc qtz unlets.
114.5	9.2		2.64	95	.02			.02					sp clay	wk lim		V wk alt, sp lim, v. sp py.
123.8	9.3		2.62	97	.03			.03	sp				wk clay, sp ser.			wk alt, sp lim, tr py, wk chlor on frac's.
133.0	9.2		2.65	95	.06						.06		-wk sp clay			Wk alt, wk chlor on fracs + small flts, v. sp py.
141.1	8.1		2.65	95	.02					.02	Tr					As above
149.7	8.6		2.63	96	.02					.02	Tr ?		wk. clay			Wk alt, sp chlor, py.
158.7	9.0		2.65	95	.02					.02						Wk alt, brittle rk, sp chlor, wk py, sp patchy silicif.
167.7	9.0		2.64	95	.02					.01	.01		sp-wk clay			Wk alt, quite brittle rk, wk chlor, sp py.
176.3	8.6		2.64	99	.02					.02	Tr	Tr MoS2 ?				As above wi occ patchy silicif.
185.9	9.6		2.65	90	.02					.02			mod clay & ser			Wk-mod alt, core ground up in places, v. sp py.
195.0	9.1		2.62	95	.01					.01			wk-mod clay & ser			As above wi darkish chlor.
204.5	9.5		2.68	94	.01					.01			wk clay & ser			Wk alt + chlor, sc qtz unlets., v. sp py.
213.4	8.9		2.68	94	.02					.02			sp-wk clay & ser			Mod-st silicif. throuout, tr py, some chlor on frac's.
222.2	8.8		2.67	88	.03					.03			tr clay			Gen. fresh, blk, in wk ep. Tr 2nd folds., occas. xeno. sp py.
225.0	2.8		2.66	100+	.02					.02						As above. Sp. clay on occas. frac.
E.O.H.			Aver rec'y = 93%													Note: Last 2 runs may just be unaltered facies of preceding "sp" but appears more like the "black dacite". RK is fresh, st. in qtz + white folds. pheno's, and carries occasional xenolitic frags up to 1" in size.

Final Depth 573.8'
Collar Elevation 3260.20
Coordinates 28,737.15 N ; 28,663.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-53
Sheet No. 1 of 2
Date Completed 11/13/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	r.b.														Cover
14.8	8.8	NXwl	2.31	99	0.04			0.04					mod clay sp ser.	st hem, sp lim, LLm	Sp?	Mod-st alt disguises rk type, sc qtz vnl's, st hem, sp
26.2	11.4		2.29	96	.04			.04					/	mod hem, wk lim, tr LLm		Mod-st alt, sc qtz vnlets, mod-st hem, sp lim, wk-mod
33.5	7.3		2.59	98	.61	.04		.04	wk		.57		mod-st clay	wk lim, sp hem	Sul zone @ 26.2'	Mod alt, rk looks more like 'Sp' than anything else, mod py, cc, hem,
42.8	9.3		2.57	94	1.16	.06		.06	wk-mod		1.10		/	sp FeOx, LLm		As above wi mod-st cc.
52.2	9.4		2.55	96	1.11	.07	57.1' @ .98/.05	.07	wk		1.04		st clay	—		Mod alt, wk-mod py, mod-st cc, v. sp hem.
61.4	9.2		2.50	96	.88	.04		.04	v. sp		.84		/		Definite Sp	Mod-st alt, tr CuOx, wk-mod py + mod-st cc.
70.7	9.3		2.50	96	1.11	.06		.06	sp		1.05		/	tr hem		As above.
83.3	12.6		2.43	92	.95	.04		.04	v. sp		.91		/	sp lim		Mod-st alt, tr lim, mod-st cc, mod py.
89.4	6.1		2.53	96	.08			.04	tr		.04		sp clay, ser.	mod-st hem wk lim	capping + Mz @ 86.0	wk-mod alt, patchy silicif, tr cc + py, mod hem, v. sp lim
98.9	9.5		2.40	95	.04			.04					mod clay sp ser.	Mod hem wk lim		Wk-mod alt wi patch st alt (92-95'), mod hem + lim, wk LL
107.9	9.0		2.53	96	.04			.04					wk clay ser.	mod hem + lim		wk-mod alt wi patchy silicif, wk-mod hem + lim, sp LLm
117.1	9.2		2.42	93	.01			.01					/	Mod hem, wk LLm, lim		wk-mod alt, partly bleached, mod hem wi wk LLm, sp
126.1	9.0		2.45	95	.07			.02			.05		sp clay, ser. wk some wk clay	Mod hem, sp lim, LLm	Mixed cap + sul's.	wk-mod alt, ½ wi wk py, wk-mod cc – 2nd ½ wi silicif, mo hem
134.8	8.7		2.47	91	.04			.04					/	/		Wk-mod alt, mod-st hem, sp lim + LLm, sp py-cc for 8'
144.1	9.3		2.47	93	.08			.04	Tr		.04		/	Mod hem wk lim		wk alt, sp py-cc at end of run, mod hem, sp lim, patchy silici
153.1	9.0		2.43	93	.27			.04	Sp		.23		wk-mod clay & ser.	Mod hem sp lim		wk-mod alt, wk-mod py, v. wk cc, patches wi mod hem, sp l
162.4	9.3		2.43	96	.04			.04					/	Mod-st, wk hem, tr lim	All cap	wk-mod alt, mod-st hem, wk lim, sp LLm, patchy silicif.
171.8	9.4		2.41	96	.02			.02					/	/		wk-mod alt, mod-st hem, sp lim, sp LLm, partial patchy sil
181.3	9.5		2.38	94	.17			.02	sp		.15		/	wk hem wk lim	Mixed cap + suls	Mod alt 1st 2', then wk alt wi wk-mod py, sp cc + spy, wk hem + lim.
190.7	9.4		2.35	94	.24			.03	wk		.21		/	wk-mod hem wk lim	Mostly suls	v. wk alt wi partial silicif, wk cc, mod py, sp cpy, sp lim, v. wk hem.
200.4	9.7		2.59	100	.16			.03	sp-wk		.13		/	wk hem mod lim		wk alt, patchy silicif, wk hem, tr lim, wk-mod py, wk cc.
209.5	9.1		2.68	93	.08			.02	wk		.06		/	sp hem mod lim		As above wi stronger cc.
218.6	9.1		2.72	95	.05			.01	/		.04		sp clay Mod ser.	/	Mixed cap + suls	Wk alt → mod alt, mod py, v. sp cc, wk-mod lim, patchy sil
227.8	9.2		2.52	93	.03			.03	/		Tr		Mod clay & ser.	Mod hem mod lim		wk-mod alt of cap → silicif suls @ 225.6', st py, mod hem
237.1	9.3		2.78	93	.04			.02	/		.02		/	wk hem wk lim		wk alt, generally well silicif, mod-st py, tr cc, sp lim, wk hem
246.2	9.1		2.76	97	.06				wk-mod		.06		wk clay & ser.	Tr lim	Mostly suls	Mod silicif thruout, mod-st py (frequently massive), tr lim,
255.9	9.7		2.76	78	.26			.03	mod		.23		/			Mz mod alt, but also mod-st sil'd. + qtz vning. Mod py, sp-wk cc
262.8	6.9		2.64	100+	.04				mod-st		.04		sp clay + ser.			Mod alt, st-int. sil'n; vuggy qtz vns. Mod py, sp-wk diss cc
272.2	9.4		2.79	93	.07			.01	/		.06		/			As above but sil'n decr to mod. Fewer qtz vns.
280.9	8.7		2.81	100+1	.20			.02	mod		.18		wk clay sp ser.			Mod alt, wk-mod sil'n, wk-mod py, sp-wk cc, diss cc py.
285.6	4.7		2.80	91	.23			.02	/		.21		wk-mod clay, sp ser.			As above, poss. sl. inc. in cc, mainly on frac's
292.0	6.4		2.47	97	.46	.01		.01	/		.45		mod clay tr ser.			Mod alt, wk. sil'n, wk py, wk cc.
301.1	9.1		2.51	95	.41	.02		.02	/		.39		Mod clay mod ser.			Mod alt, patchy silicif, wk-mod py, v. wk. cc.
310.7	9.6		2.51	90	.40	.02		.02	/		.38		mod-st. clay wk ser.			Mod alt, wk py, cc, patches st alt wi mod cc.
319.7	9.0		2.51	95	.49	.01		.01	/		.48		mod. clay wk. ser.			Mod alt, silicif along some frac's, wk py, cc.
329.4	9.7		2.52	90	.42	.04	84.1'	.04	/		.38		Mod-st clay wk. ser.			Mod-st alt, patchy silicif zones wi st py, otherwise sp. py, wk-mo
339.2	4.8		2.56	80	.22		@	.01	/	.01	.20		mod-st clay sp. ser.			Mod alt, wk py, cc, some qtz vning
342.5	8.3		2.77	99	.22	.04	.40/.02	.04	mod-st		.18		wk-mod			

Final Depth 573.8'
Collar Elevation 3260.20
Coordinates 28,737.15 N ; 28,663.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-53
Sheet No. 2 of 2
Date Completed 11/13/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
352.0	9.5	NXwl	2.78	92	.40	.03		.03	st	.05	.32		wk-mod clay, tr ser		M2 (cont'l)	wk-mod alt, wk py, mod cc, some patchy silicif + massive,
360.5	8.5		2.77	98	.54	.01		.01	sp		.53		mod-st clay			Wk-mod alt, good M2, mod py, wk cc as coating on py.
369.7	9.2		2.53	96	.40	.02		.02	mod	.05	.33		1			As above wi grn Cu-absorbent plagioclase + some 2ndary K-
378.5	8.8		2.50	95	.39	.01		.01	wk-mod	.02	.36		mod clay	v.sp lim		As above wi bx last 2'. Bx cemented by white massive qt
388.1	9.6		2.43	90	.32	.02		.02	1	.03	.27		mod clay wk ser			WK alt wi well silicif bx for 1st 4', mod py, sp-wk cc.
397.1	9.0		2.44	98	.33	.01		.01	wk	.02	.30		mod-st clay, sp ser			Generally mod alt, sc qtz vn's, wk py, sp-wk cc, patches st al
406.2	9.1		2.42	96	1.31	.03		.03	wk-mod	.01	1.27		1			Wk-mod alt wi mod-st silicif particularly last ½, wk cc, sp py.
415.6	9.4		2.42	96	2.54	.05		.05	mod	.05	2.44		1			Mod alt or silicif + vuggy throuout, mod cc wi wk-mod py.
422.6	7.0		2.59	70	1.38	.07		.07	1	.10	1.21		mod clay			Generally silicif, mod cc, v.sp py, crumbly rk.
430.2	7.6		2.57	69	.45	.02		.02	1	.02	.41		1			Mod alt wi patchy silicif, wk cc, mod-st py, tr cpy.
441.3	11.1		2.54	89	.51	.02		.02	1	.05	.44		mod clay, sp ser			Mod alt + generally mod silicif, v. wk cc, mod py, v.sp c
448.9	7.6		2.60	49	.58	.01		.01	1	.05	.52		wk clay			Mod alt where not well silicif, wk cc, v.sp cpy, mod py.
460.5	11.6		2.59	68	.56	.02	135.2'	.02	1	.07	.47		1			As above. RK type?
469.7	9.2		2.50	95	.84	.03	@	.03	wk-mod	.02	.79		st clay			Mod silicif for 4', then mod-st alt, wk-mod py, sp cc.
478.1	8.4		2.50	95	.88	.02	.76/.02	.02	1	.02	.84		1			Mod-st alt, mod py, sp-wk cc. RK type?
486.7	8.6		2.48	98	.36	.01		.01	mod	.03	.32		mod clay			Mod-st alt, wk-mod py, sp cc. Apparently M2 rk.
495.6	8.9		2.44	94	.57	.01		.01	wk-mod	.15	.41		1			Mod-st alt, mod py, sp cc, cpy. RK type?
504.2	8.6		2.75	94	.37	.01		.01	mod	.20	.16		wk-mod clay			Wk-mod alt, mod silicif throuout, mod-st py, tr cc, sp cpy
513.5	9.3		2.75	90	.21	.02		.02	mod-st	.14	.05	tr moly	wk clay			As above, changing to st alt wi mod py, tr cc + cpy last 2
522.7	9.2		2.75	91	.46	.01		.01	mod	.30	.15					Wk alt wi considerable mod silicif, wk-mod py, sp cpy, tr cc.
532.3	9.6		2.76	90	.54	.02		.02	mod-st	.42	.10		sp clay	Tr. Jar		As above. RK type still uncertain but probably M2.
540.8	8.5		2.67	98	.25				Mod.	.20	.05					Wk alt + generally mod sil'n throuout, mod py, sp cpy, v sp c
549.5	8.7		2.67	95	.31					.26	.05					Mod-st silicif, st alt last 6", mod py, wk cpy, sp cc.
554.5	5.0		2.69	95	.26					.16	.10					Mod alt wi patches silicif, wk-mod py, sp cpy, tr cc
564.2	9.7		2.68	89	.34					.29	.05	Tr MoS2	Wk Clay			V wk alt, generally well silicif, wk-mod py, wk cpy, sp cc
573.8	9.6		2.69	94	.49	.02		.02?		.37	.10	tr moly	sp clay			Wk-mod alt, patchy silicif, mod-st py, wk cpy, v sp cc, tr moly
E.O.H.		Aver rec'y = 93%														

Final Depth 269.2'
Collar Elevation 2942.76
Coordinates 29,999.76 N ; 28,643.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-52
Sheet No. 1 of 1
Date Completed 10-22-64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	Lim	Rock Type	Remarks
2.0	2.0	rb	—	—	—								—	—		Cover
5.0	3.0	NC	2.34	81	0.06			.06					mod clay-ser.	wk-mod hem, wk lim	M2	wk-mod alt, wk-mod hem, wk lim, v. sp cc.
13.8	8.8	NXwl	2.29	98	.05			.05						wk. hem		wk alt, sp lim after py + sp lim on frac's, tr hem.
24.4	10.6		2.40	94	.04			.04					mod-st clay & ser	wk. lim wk. hem st. lim		wk-mod alt, sp hem, wk lim, vuggy rk in places.
35.3	10.9		2.42	90	.07			.07					wk-mod clay & ser	wk hem mod. lim		Wk-mod alt, wk hem + lim, sc qtz unlets
44.6	9.3		2.35	96	.07			.07						Mod lim		As above, wi sp lim after py.
52.1	7.5		2.34	91	.07			.07					wk clay & ser	wk-mod lim		Wk-mod alt, sp lim, – some lim after py.
61.1	9.0		2.52	98	.08			.08			.05					Wk-mod alt, rk is pink from hem staining, sp lim after py
69.6	8.5		2.60	96	.13			.08	tr		.05		sp clay, wk ser			As above wi mod alt to 62.0 → 65.2 Sp cc-lim tr py
78.4	8.8		2.51	97	.14			.10			.04				Sp? ca. 77.0	Wk alt, partial silicif last 2' of run, hem stain throuout, sp-cc-lim
87.2	8.8		2.50	96	.31			.12			.19		wk clay, sp ser.		Mixed cap + sulf.	Mod alt, sp lim + hem, wk cc in places, tr py, CuOx.
96.2	9.5		2.50	95	.25			.10			.15			wk lim sp hem, lim	M2 @ 86.8'	wk-mod alt, sp lim + hem, sp-wk cc, tr py.
105.8	9.1		2.46	95	.40	.20		.20	tr		.20		sp clay wk ser	mod lim		Wk-mod alt, vuggy rk in places, wk lim, sp hem, tr CuOx.
115.1	9.3		2.52	96	.70	.16		.16	sp		.54				Sp @ 107.2	Mod alt, sp-wk lim, wk cc + py.
125.4	10.3		2.54	95	.67	.31		.31	wk	.10	.36		sp clay, ser.	wk-mod lim, sp jar		wk-mod alt sp lim, wk py, wk-mod cc.
134.4	9.0		2.56	99	.54	.08		.08		.20	.08					Wk alt, sp lim, sc qtz unlets, sp cpy + cc, wk-mod py.
143.6	9.2		2.53	98	.47	.12	101.3' @ .63/.13	.12	mod	.15	.20			wk lim		V. wk alt, several qtz unlets, wk py, tr cpy + cc.
153.1	9.5		2.54	96	.54	.10		.10	wk	.15	.29				M2? ca. 148.5'	Wk alt, partial silicif last 2', mod-st py, tr cpy, cc, sp lim
161.9	8.8		2.59	99	.79	.05		.05	wk-mod	.15	.59		sp clay, tr ser.	sp-wk clay		wk alt, partial silicif, wk py, tr cpy, sp lim – sp cc.
170.8	8.9		2.50	99	.72	.11		.11		.20	.41			wk clay	Sp @ 16.9.0	Wk alt, wk lim, sp cpy + cc, wk py.
179.5	8.7		2.59	98	.72	.03		.03	mod	.20	.49			sp lim		Mod alt, wk py, sp cpy + cc, sp lim on frac's.
188.6	9.1		2.56	97	.82	.17		.17		.17	.48			wk lim	M2 @ 180.4'	Wk-mod alt, wk py, sp cc, tr cpy, wk lim diss + on frac's.
198.0	9.4		2.56	96	.61	.07		.07	wk-mod	.20	.34		tr ser			Wk alt wi partial silicif throuout, wk-mod py, wk cc, sp cpy
207.3	9.3		2.55	97	.36	.01		.01	mod	.15	.20		wk clay + ser.	sp lim		Wk alt, patchy silicif, patchy wk-mod cc, mod py. wk lim
216.7	9.4		2.58	93	.16			.01		.10	.05			tr lim, jar		As before to 213.0', then mod alt, py, tr cpy + cc, sp lim.
225.6	8.9		2.71	98	.12				st	.06	.06		mod clay wk ser			Wk-mod alt, patchy silicif, st py at start, then mod py, wk cc, sp cpy
234.8	9.2		2.70	95	.20				wk-mod	.15	.05		wk clay ser.	tr lim		Generally mod silicif but patches mod alt, wk-mod py, sp cpy.
244.0	9.2		2.64	96	.37				mod	.20	.17				Sp ca. 237.5'	Wk alt, mod py, wk cpy, tr cc, vuggy rk in places.
253.1	9.1		2.63	98	.20				wk-mod	.15	.05			tr lim	M2 ca. 246.0'	Wk alt, partial silicif throuout, wk py, v. sp cpy, sp diss lim.
260.9	7.8		2.62	97	.17				wk	.07	.10					Wk-mod alt, mod py, sp cc, tr lim.
269.2	8.3		2.62	98	.30				mod	.25	.05					Good M2 wi wk alt, wk py, v. sp cpy.
E.O.H.		Aver	rec'y =	96%												

Final Depth 229.6
Collar Elevation 2994.97
Coordinates 30,178.81 N ; 28,802.18 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-51
Sheet No. 1 of 1
Date Completed 10/15/64
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
6.0	6.0	rb	—	—	—	—										Cover
16.1	10.1	NXwl	2.36	90	0.16			.13	Sp		.03		sp clay, tr ser.	Mod LLm, wk lim, hem	2	Mod-st silicif, ~~extremely vuggy (py leached)~~, mod LLm, lim, sp
27.3	11.2		2.56	86	.19			.17			.02		sp clay, wk ser.	wk LLm, mod lim	Sp ?	wk-mod alt. wi patchy silicif, sp hem, wk lim, generally bl
34.4	7.1		2.56	87	.24			.20			.04		1	sp LLm, jar, wk lim		As above wi tr CuOx & jar
43.0	8.6		2.59	95	.26			.20	tr		.06		sp clay, ser.	mod lim, wk jar		Mod-st silicif thruout, sp chrys, mod lim, crumbly rk.
53.0	10.0		2.58	91	.21			.16	1		.05		1	mod lim tr jar		V. wk alt, patchy silicif, apparent 'Sp' rk, wk-mod lim
62.7	9.7		2.46	90	.20			.15	1		.05		1	1	Definitely Mz @ 54.0	V. wk alt, patchy silicif, wk-mod lim on frac's.
71.9	9.2		2.56	91	.22			.16	1		.06		1	mod lim, sp jar	Sp? @ 67.2	V. wk alt, patchy silicif, wk-mod lim on frac's, sp jar.
81.1	9.2		2.50	91	.23			.17	1		.06		1	mod lim	Sp	Wk-mod alt, definite Sp, mod lim, sp LLm & cc.
89.7	8.6		2.55	96	.16			.14			.02		wk clay, sp ser.	wk-mod lim, sp hem		Wk-mod alt → mod-st alt, mod lim, sp hem, tr LLm, cc.
96.6	6.9		2.54	93	.10			.07	sp		.03	Tr moly	mod clay	wk-mod lim, hem	Mz dk @ 91.8 to 96.5	Mod-st alt, wk hem, mod lim, tr cc, some qtz vn's.
99.6	3.0		2.42	100	.72	.06	13.5' @ 0.73/0.03	.06	wk		.66	Tr moly	sp clay	sp lim		Mod-st alt, very clayey, sp py, mod cc, sp lim, tr jar.
110.1	10.5		2.68	85	.73	.02		.02	wk-mod		.71		wk-mod clay	v. sp lim	Mz recognized @ 109.0	Mod-st alt, quite clayey, wk-mod py, mod cc, tr lim, sp chlorite
121.2	11.1		2.53	85	.34	.01		.01	wk		.33		1		Sp @ 113.5	Mod alt, mod py, sp patchy cc.
130.9	9.7		2.51	96	.27			.01	1	.08	.18		1			Mod alt & crumbly, wk-mod py, sp cc (but st for last 1').
141.9	11.0		2.66	90	.30			.01	wk-mod	.10	.19	Tr moly	v. wk clay	tr lim		Wk-mod alt, sc qtz vn's wi tr moly, mod py, wk?? finely diss cc, tr cpy
150.4	8.5		2.51	98	.33			.02	1	.15	.18	Tr moly	sp clay, ser			Wk alt of good Sp textured rk, mod py, v. sp cc, tr cpy, moly.
158.9	8.5		2.57	98	.18			.01	1	.15	.02	Tr moly	1			Wk alt, patchy silicif & sed frags in 'Sp', wk-mod py, sp cc, tr moly
168.1	9.2		2.57	95	.24				wk	.23	.01	Tr Moly	1		Mz wi patches Sp @ 159.0	Another variety of Mz, wk alt, patchy silicif, wk py.
176.8	8.7		2.63	99	.19				1	.17	.02	Tr Moly	1			Nearly fresh, occasional patch silicif, wk-mod py.
185.5	8.7		2.64	98	.26				wk-mod	.16	.10		sp-wk clay, ser			Mod silicif wi some qtz vn's, patches seds, vuggy in places, wk py, tr cpy, cc, moly
194.7	9.2		2.62	97	.35	.01		.01	mod	.32	.02	Tr moly	1		Sp? @ 188.0?	Wk alt & mod silicif, wk py, cpy, tr cc, moly. ~~Rk type??~~
203.4	8.7		2.64	100	.43	.01	17.5' @ .43/.01	.01	1	.42			sp clay, ser.			V. wk alt, patchy silicif, wk py, sp cpy, tr cc, moly. Probably 'Sp'
212.2	8.8		2.63	96	.43	.01		.01	1	.42			sp-wk clay, ser			As above.
220.9	8.7		2.59	99	.25				1	.25			1		Sp	V. wk alt, sp py, tr cpy, good dark 'Sp' rk, diss epidote.
229.6	8.7		2.58	97	.24				1	.24		Tr moly	1			V. wk alt, wk-mod py, tr moly, patches silicif.
END OF	HOLE															
		Avg. Rec'y		93												

Final Depth 430.8'
Collar Elevation 3256.50
Coordinates 28,686.55 N 28,298.63 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-50
Sheet No. 1 of 2
Date Completed 10/21/64
Logged By BNW, CWH.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	/lim	Rock Type	Remarks
6.0	6.0	rb			—											Cover
16.3	10.3	NXwl	2.34	88	0.04			.04					wk clay, tr ser	wk hem, lim	M2	Mod alt, some qtz veining, mod hem, sp LLm, lim.
28.5	12.2		2.26	83	.04			.04					mod-st clay	/		Mod-st alt, mod lim + hem.
37.2	8.7		2.25	98	.04			.04					mod clay, sp ser	mod hem, wk lim		Mod alt → wk alt @ end of run, sp lim, wk LLm, mod hem
46.0	8.8		2.38	98	.04			.04					wk clay, tr ser	mod hem sp lim		Mod alt, mod-st hem, sp lim, tr LLm.
55.0	9.0		2.37	98	.04			.04					/	/		As above wi sp LLm + sc qtz veinlets.
64.3	9.3		2.41	96	.05			.05					/	/		Mod alt wi sc patchy silicif, mod-st hem, sp-wk lim, s
73.6	9.3		2.53	97	.05			.05					/	mod hem, wk lim		Mod alt, bleached in places, mod hem, wk lim, tr LLm.
83.3	9.7		2.34	94	.05			.05					mod clay, tr ser	wk hem + lim		Mod alt, mod hem, sp lim, tr LLm.
92.5	9.2		2.34	82	.04			.04					/	/		Mod-st alt, mod-st hem, wk LLm, sp lim.
100.8	8.3		2.37	99	.03			.03					/	/		Mod alt, mod hem, wk lim, sp-wk LLm.
109.5	8.7		2.45	95	.03			.03					wk clay tr ser	/		St alt → mod-st @ 102.7', mod hem, wk-mod lim, wk LL
119.2	9.7		2.46	92	.19			.05	tr		.14		mod clay	wk hem, sp lim	Mixed cap + Suls.	Mod-st alt wi wk FeOx, tr CuOx — suls wi wk cc, sp py fr 113.9-117
127.8	8.6		2.50	94	.12			.04	sp	.01	.07		/	wk lim, tr hem		Mod alt, sp hem, tr LLm, wk lim — suls. wi wk cc + py fr. 122.0-124.
137.4	9.6		2.50	88	.14			.08	tr		.06		sp clay, tr ser	wk lim, hem, sp LLm	All cap	Wk-mod alt, sp chrys, mod lim + hem, sp LLm, patchy silicif
141.6	4.2		2.46	93	.05			.04	tr		.01		wk clay	sp hem, wk lim		Wk-mod alt wi wk silicif, sp chrys, wk hem, sp lim.
151.9	10.3		2.47	91	.53	.04	17.6' @ .51/.06	.04	sp		.49		mod clay	v. sp lim	Suls @ 141.6	Mod alt, wk cc + py, sp chrys, lim.
159.2	7.3		2.51	93	.48	.08		.08	sp-wk		.40		/	v. sp jar		Mod alt → mod-st alt @ 157.0 — sp py, wk-mod cc, tr CuOx, ja
163.0	3.8		2.39	92	.11			.09	tr		.02		wk-mod clay	sp hem, LLm, wk lim	Cap @ 159.2	Mod alt, sp hem, tr LLm, wk-mod lim.
171.8	8.8		2.45	98	.10			.05	v. sp		.05		wk clay, sp ser	wk lim, tr hem	Mixed cap + suls	Mod alt, patchy wk hem + lim, patches wi wk py-cc.
181.0	9.2		2.45	97	.15			.07	/		.08		sp clay ser	wk lim, sp hem		Mod alt wi tr py + cc, wk hem, lim, v. sp chrys.
190.5	9.5		2.53	93	.36	.03		.03	wk	.05	.28		sp clay tr ser	wk-mod lim		Wk-mod alt, wk FeOx wi sp LLm, suls fr 181.0-185.2 — sp py + chrys, wk cc
199.7	9.2		2.54	98	.39	.03		.03	/	.05	.31		wk clay, tr ser	wk lim	Mostly suls	Wk-mod alt, wk lim, v. sp hem, wk py, cc, tr sp CuOx.
208.2	8.5		2.59	97	.53	.02	26.3' @ .54/.02	.02	mod	.08	.43		sp clay, ser	sp lim	Suls	Wk alt, 2nd ary feldspath of M2, sp-wk py, wk-mod cc, tr chrys
217.1	8.9		2.52	97	.68	.03		.03	/	.06	.59		/	sp lim + hem		Mod alt → wk alt @ ca. 213.5, sp-wk py, mod cc, sp FeOx.
226.0	8.9		2.51	98	.40	.02		.02	wk-mod	.05	.33		v. sp clay, sp ser	wk lim		Wk alt, mod py, v. wk cc, wk lim on frac's.
235.1	9.1		2.58	98	.14	.01		.01	/	.07	.06		/	/		As above wi weaker py.
244.2	9.1		2.59	97	.28			.02	/	.12	.14		sp clay + ser	/		Wk alt, partial silicif, wk py + cc, wk lim on frac's.
253.1	8.9		2.59	96	.18			.02	wk	.08	.08		/	wk-mod lim		As above wi but sp-wk cc.
260.4	7.3		2.55	96	.14			.02	/	.08	.04		/	wk lim		Wk alt, vuggy in places wi wk lim on frac's, sp py, cc.
269.5	9.1		2.59	95	.31	.02		.02	/	.08	.21		/	/		As above wi wk py, sp cc.
278.3	8.8		2.61	98	.08			.02	v. sp	.01	.05		/	mod lim		Wk alt, partial patchy silicif, v. sp suls, wk lim on frac's.
287.4	9.1		2.53	95	.07				sp-wk	.03	.04		/	wk-mod lim		As above wi sp cc, py.
296.5	9.1		2.53	97	.11				/	.04	.07		tr clay, sp ser	wk lim		Wk alt, partial patchy silicif, wk py, sp-wk cc.
305.5	9.0		2.58	95	.19			.02	wk	.06	.11		sp clay, tr ser	wk lim, tr hem		Wk alt, mod py, wk cc, sp cpy, tr hem, wk lim on frac's.
314.8	9.3		2.58	97	.25			.02	/	.10	.13		/	wk lim		Wk alt, wk py, sp cc, tr chrys, cpy, sp-wk lim on frac's.
323.9	9.1		2.59	97	.20	.02		.02	wk-mod	.15	.03		tr clay + ser	/		V. wk alt wi 2nd ary feldspath, wk-mod py, tr cc + cpy, wk lim.
332.9	9.0		2.61	95	.19			.02	wk	.07	.10		/	/		" " " " " sp diss py. Tr cpy - lim on frac's
343.0	10.1		2.61	90	.17			.01	wk-mod	.10	.06		tr ser	sp lim		

Final Depth 430.8'
Collar Elevation 3256.50
Coordinates 28,686.55 N; 28,298.63 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-50
Sheet No. 2 of 2
Date Completed 10/21/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
350.6	7.6	NXwl	2.63	90	0.06			.01	wk	.04	.01		tr ser	wk-mod lim	Mz	V/wk alt on 2nd-ary flds. Sp diss. py, tr cpy. Wk lim on frac's.
361.0	10.4		2.60	82	.08			.01	1	.05	.02		Sp clay, ser	wk lim		As above wt ≈ 1' of ⅛" blk sul. qq on a frac.
370.0	9.0		2.62	96	.12			.04	1	.07	.01		1	wk-mod lim		V. wk alt, 2nd-ary feldspath., wk py + sp cpy, wk lim on fra
379.5	9.5		2.60	95	.17			.04	1	.12	.01		Tr clay ser	1		Wk alt, wk py, sp cc, tr cpy, wk lim on frac's.
388.0	8.5		2.61	98	.12			.03	1	.08	.01		1	1		V. wk alt, wk py, tr cc + cpy, wk lim
397.1	9.1		2.62	94	.12			.03	1	.08	.01		1	mod. lim.		Wk alt, wk py, sp cpy, tr cc, wk lim.
407.1	10.0		2.61	90	.17			.04	1	.11	.02		sp clay, ser	Tr hem		Wk alt, sp lim + hem, sc qtz vnlng, wk py, tr cpy + cc
417.7	10.6		2.62	91	.16			.02	wk-mod py	.12	.02		1	wk-mod lim		V. wk alt, wk-mod py, u. sp cpy, tr cc, sp lim.
424.5	6.8		5.58	90	.12			.01	mod	.08	.03		1	wk lim		Wk alt, wk py, sp cpy, tr cc, several qtz vn's.
430.8	6.3		2.56	89	.09			.01	wk-mod	.07	.01		tr clay, sp ser.			V. wk alt, mod silicif. thruout, mod py, tr cpy, sp cc.
E.O.H.		Aver. rec'y = 94%														

Final Depth 286.1'
Collar Elevation 3056.26
Coordinates 30,308.95 N; 28,666.00 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-49
Sheet No. 1 of 1
Date Completed 10/6/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, Sericite	lim	Rock Type	Remarks
5.0	5.0	rb			—	—							—	—		Cover
16.3	11.3	NXwl	2.47	83	0.36			.36			?		Mod clay & Ser	Mod dark lim, 2' Mod lim & Brn Lim	Sp	Mod alt, occ silicified patch, sp hem, mod-st lim, tr alum
25.0	8.7		2.51	98	.23			23			?		/	/	Mz @ ? (Dik)	As above. Rk rather coarsely porphyritic in spots.
34.1	9.1		2.50	95	.23			23			?		/	/	Sp	Mod alt, rk (definite 'Sp') gets dark last 2' wi sp' cc — FeOx
44.0	9.9		2.46	95	.24			.24					wk-mod clay & Ser	/		Mod-st alt, probably still 'Sp', mod-st lim, sp hem + Lim
52.8	8.8		2.43	94	.19			.19					sp clay	mod lim wk hem	Mz @ 44.0	wk-mod alt, bleached in patches, sp hem, wk lim
62.3	9.5		2.51	87	.21			.19			.02?		sp clay, ser.	mod lim sp jar		As above wi patchy silicif
75.8	13.5		2.51	64	.26			.06	sp		.20		wk clay sp ser.	/		wk-mod alt, wk hem + lim — one 2' length wi sp py, wk
85.0	9.2		2.46	95	.13			.03	/	tr.	.10		/	wk-mod lim, sp jar.		wk alt, patchy silicif, wk lim, sp hem.
93.5	8.5		2.45	99	.16			.01	/		.15		mod clay	wk lim	Mixed suls + cap	wk-mod alt, sp hem + lim, wk py-cc, tr CuOx, sp alu
101.0	7.5		2.64	100+	.53	.06		.06	wk		.47		/	/		Mod alt, mod cc + py, sp lim thruout, tr CuOx.
109.4	8.4		2.72	96	.81	.05		.05	/		.76		wk clay, tr ser.	v. sp lim + hem	Mostly suls	Rk appears to be cross between Mz & 'Sp'. wk-mod alt. mod c tr CuOx
116.3	6.9		2.71	92	2.85	.14		.14	/		2.71		/	tr lim, sp jar.		wk-mod alt, 2nd folds, qtz veing & some silic. Mod-st cc & py Tr Cu
123.8	7.5		2.60	92	.77	.07		.07	/		.70		sp clay, ser	/	Sp circa 116.3	Rk prob. 'Sp' in Mz dike @ end of run. Rest as above.
134.3	10.5		2.60	92	.90	.15		.15	/		.75		/	wk jar		'Sp', wk alt, 2nd folds, wk chlor. Mod cc & py. Sp CuOx
143.3	9.0		2.61	100	.87	.09		.09	/	.02	.76		/	sp jar		Rk as above. More thin qtz veins. cc spotty, gen. wk
146.7	3.4		2.65	96	1.08	.13		.13	/	.02	.93		wk clay sp ser.	/		wk-mod alt, wk-mod cc & py. Tr CuOx (Mal.)
155.8	9.1		2.65	96	1.38	.22	153.7' @ 1.17/0.14	.22	/	.10	1.06		sp clay	sp lim, jar.		wk-mod alt, mod cc finely diss, mod py, tr lim.
163.6	7.8		2.65	94	.93	.21		.21	/	.05	.67		/	sp jar		wk alt, mod cc mostly on frac's, wk-mod py, tr CuOx.
171.9	8.3		2.55	95	1.12	.23		.23	sp	?	.89			sp jar, tr lim		wk alt, mod-st cc, wk py, good 'Sp' rock.
181.2	9.3		2.55	94	1.94	.27		.27	wk	.07	1.60		sp clay			wk-mod alt, minor silicif in places, wk-mod py + cc.
190.0	8.8		2.48	94	1.17	.24		.24	wk-mod	.10	.83		/			v. wk alt, rather brittle rk wi wk-mod py + mod cc.
200.0	10.0		2.43	97	1.14	.26		.26	wk	.07	.81		tr clay		Mz ca. 190.8	v. wk alt, sp CuOx, wk cc, wk-mod py. 'Sp' is best h
209.7	9.7		2.52	95	1.10	.11		.11	/	.10	.89		sp clay tr clay	tr lim	Sp ca. 205	wk-mod alt, mod-st py, mod cc, sp CuOx, sp lim, sp cp
218.2	8.5		2.67	99	1.48	.05		.05	/	.15	1.28		sp clay, tr ser.			wk alt, wk-mod py, cc, wk cpy.
227.5	9.3		2.68	99	1.46	.05		.05	/	.20	1.21		/	tr lim		Wk alt, wk-mod py, wk cc + cpy.
236.4	8.9		2.66	98	.99	.05		.05	/	.10	.84		/			v. wk alt, wk py + cc, sp cpy, tr lim.
247.2	10.8		2.65	88	.70	.05		.05	/	.05	.60		/			As above to 240.3, then mod-st chlor, mod alt, sp lim, py, v. sp
255.9	8.7		2.55	97	.05				mod		.05		/			wk-mod alt, partly bxiated + silicif, mod py, sp cc.
265.0	9.1		2.55	97	.09				/		.09		/			Wk alt, considerable qtz veing, wk-mod py, sp cpy, tr cc
273.4	8.4		2.60	98	.07				wk		.07	tr moly	/			Wk alt, some qtz introduction, wk py.
280.3	6.9		2.67	96	.14				mod st		.14	tr moly	/			wk alt, partly bxiated + silicified, wk-mod py, sp cc, tr m
286.1	5.8		2.67	98	.12				mod		.12		/			As above wi mod py, tr-sp cc + cpy, tr moly.
E.O.H.		Aver. rec'y = 93%														

Final Depth 370.6'
Collar Elevation 3130.50
Coordinates 28,484.48 N ; 27,413.78 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-48
Sheet No. 1 of 2
Date Completed 10/6/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
4.5	4.5	rock b.h.	—	—	—	—		—	—	—	—	—	—	—		Cover
14.7	10.2	NXwl	2.16	91	0.14			0.14				Tr. Pb	wk-mod clay & ser	Tr. Hem sp lim wk var.	Mz?	Wk alt, mod-st silicif, bleached, tr CuOx, sp hem, lim.
23.9	9.2		2.48	98	.09			.09				Tr. Pb	Mod clay & ser	Mod. LLm wk lim wk var		Wk alt, patchy st silicif, generally bleached, sp hem, lim, LLm, sc
33.0	9.1		2.56	100	.05			.05					/	+ / Tr hem		As above.
42.4	9.4		2.56	97	.04			.04					wk-mod clay & ser	wk LLm wk lim wk var		Generally mod-st silicif, some bx last 2', bleached, sp lim, hem
49.2	6.8		2.59	94	.04			.04					sp clay, ser.	wk lim sp hem		Mz? micro-graphic text. Mod-st sil'n & qtz veining Blea. Lea
58.7	9.5		2.54	94	.12			.12				Tr. Pb	wk-mod clay, sp ser	wk hem lim, sp LL	Rk? @ 42.2	Rk v fine-gr., sil'd w qtz veing. Last 2' v vuggy & reaction
69.5	10.8		2.29	98	.05			.05					sp clay, wk ser.	wk-mod lim sp hem, LLm	Mz? @ 65.0	As above for 2', then sc. vuggy areas. Mz w M G. texture. at
79.2	9.7		2.35	95	.07			.05	sp		.02		/	wk-mod lim sp LLm		Wk alt & patchy st silicif, sp lim & hem, vuggy areas, rk w some Ak
89.1	9.9		2.59	91	.03			.03	tr				/	/		Mod-st silicif throuout, quite vuggy, sc alum vnlets, sp lim, hem.
97.6	8.5		2.59	97	.03			.03					sp patchy clay	wk clay, tr LLm	Mixed cap + Sm ls!	Porph text w mod-st silicif throuout, mod py, sp lim in vu
107.6	10.0		2.60	94	.03			.03	tr				ditto w sp ser	wk-mod lim		Mod-st silicif, tr py, wk lim on frac's & in vugs.
117.1	9.5		2.59	94	.04			.01	sp-wk		.03		wk clay, sp ser.	wk lim		Wk alt, patchy st silicif, wk py, tr cc, sp lim.
126.2	9.1		2.51	94	.06				wk		.06		tr clay, ser.	/		Mod-st silicif, wk-mod py, sp cc, lim in vugs & on
135.4	9.2		2.60	96	.02				/		.02		tr ser	/	Rk type??	St silicif, wk py, wk lim on frac's, xls of goethite? in vug
144.4	9.0		2.59	92	.01				sp		.01		sp ser.	wk lim, sp LLm		St silicif & bxiation, vuggy rock, sp lim & tr py.
152.7	8.3		2.66	100+2	.05				mod		.05		/	sp-wk lim		St silicif, wk-mod py, tr cc, vuggy rk, sp lim on fra
161.7	9.0		2.71	98	.35	0.01		.01	wk		.34		sp-wk clay	v sp lim		St silicif, wk-mod py diss & in vnlets, tr cc, sp hem
170.9	9.2		2.69	98	.38	.01		.01	/		.37		sp clay tr ser.	tr lim		St silicif, wk-mod py, wk cc, tr lim, rk vuggy in place
180.1	9.2		2.44	95	.54	.01		.01	mod		.53		wk clay tr ser.			RK is a generally well-silicif porph w wk-mod py, sp cc
189.6	9.5		2.43	96	.30	.01		.01	/	.02	.27		/		Mz	Nearly fresh Mz w patchy st silicif, wk-mod py, tr cc.
198.7	9.1		2.56	96	.46	.01		.01	/	.04	.41		sp clay			As above w sp cc.
207.8	9.1		2.65	95	.15				wk	.05	.10		/			Well silicif to 205.0', then wk alt of Mz. Alum qtz vnlets, wk
217.4	9.6		2.74	92	.37	.01			wk-mod	.10	.26	T. Sphalerite	/			Alternate wk alt + mod-st silicif, wk-mod py, v. wk. cc, tr cpy. mod py, cc
223.6	6.2		2.64	45	.24				/	.05	.19		wk clay			Wk alt, wk-mod py + cc, v. sp cpy.
233.0	9.4		2.54	95	.24				mod	.05	.19		sp clay	tr lim		Mod-st silicif, mod py, wk cc, sp cpy, tr lim.
242.7	9.7		2.71	95	.21				wk-mod		.21		wk-mod clay			As before to 237.0', → v. wk alt, mod py, wk-mod cc.
251.8	9.1		2.77	100	.35	.01		.01	mod	.04	.30		/	sp jar		Mod silicif throuout, mod-st py, wk cc, tr cpy.
260.4	8.6		2.47	98	.53	.01		.01	wk	.02	.50		mod clay			Mod silicif, mod-st cc, mod py.
269.0	8.6		2.49	98	.41	.01		.01	mod	.03	.37		sp ser.			V wk alt, patchy silicif, mod py, wk cc.
277.7	8.7		2.74	96	.31	.02		.02	/		.29		sp clay			Patchy silicif w patches st alt, patchy st cc, overall mod py.
284.4	6.7		2.83	89	.12				/		.12		mod clay			As above ~~w/ decr in cc~~
293.2	8.8		2.83	99	.16				wk-mod		.16		wk clay			As above for cc & py. Alt decr, sil'n incr.
302.9	9.7		2.83	91	.15				mod		.15		sp clay			Gen. sil'd w qtz-py vnlts. Occasional cc vnlt.
313.6	10.7		2.76	95	.13				mod-st		.13		sp clay tr ser.			RK type almost obl't by sil'n. Wk. py, sp cc
318.5	4.9		2.77	98	.23				wk-mod		.23		/			Sc. alt. areas, rest sil'n. Wk py, sp-wk to wk cc
326.0	7.5		2.75	91	.41	.01		.01	mod		.40		wk clay, sp ser.			As above w stronger cc-py vnlts.
335.9	9.9		2.56	91	.14				mod-st		.14		/			Patchy silicif w vuggy rock between, wk py, tr cc.
345.4	9.5		2.55	94	.11				mod		.11		mod clay tr ser. wk clay			

Final Depth 370.6'
Collar Elevation 3130.50
Coordinates 28,489.48 N ; 27,413.98 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-48
Sheet No. 2 of 2
Date Completed 10/6/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
356.5	11.1		2.54	87	.14				mod	?	.14		wk clay, ser		? Volc?	Mod-st silicif throuout, ck a. volcanic ??, mod py, wk c
365.4	8.9		2.69	98	.30				1		.30		tr clay, sp ser			As above w/ st py, wk-mod cc.
370.6	5.2		2.58	92	.06				1	tr	.06		sp clay, tr ser			Mod-st qtz vning + silicif, wk py, tr cc.
E.O.H.		Aver.	rec'y =	94%												

Final Depth 218.4'
Collar Elevation 3030.28
Coordinates 30,356.55 N ; 28,308.85 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-47
Sheet No. 1 of 1
Date Completed 9/28/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
36.0	36.0	rockbit	—	—	—	—										Dump
45.5	9.5	NXwl	2.32	96	0.06			.06					wk-mod clay & ser.	mod hem, lim & jar	Sp.	Mod alt, patchy silicif, mod-st hem, sp lim.
55.0	9.5		2.55	99	.05			.05					1	sp hem Mod lim		Wk-mod alt, sp hem, mod lim (mostly on frac's). Good Sp te
64.5	9.5		2.59	97	.05			.05					1	Tr hem Mod lim		Wk-mod alt, mod lim (mostly on frac's), num. qtz vnlets.
73.9	9.4		2.55	97	.07			.04	Sp		.03		1	1	Mixed cap + suls.	Wk-mod alt, patchy qtz, wk-mod lim, wk py, sp-wk cc (one v
83.3	9.4		2.56	97	.05			.05	Tr		Tr		1	Mod lim		Wk-mod alt, num qtz vnlets, wk-mod lim, wk py, v. sp. cc, h
93.0	9.7		2.59	94	.06			.05	1		.01		wk clay & ser.	1		Wk-mod alt → mod alt, mod silicif, sp py, v. sp cc, wk lim, sp h
102.5	9.5		2.56	95	.08			.07	Sp		.01		wk-mod clay & ser.	Mod-st lim		Wk-mod alt, sp py, tr cc, some qtz vning, wk-mod lim.
111.8	9.3		2.56	95	.12			.12			Tr?		wk clay & ser.	Mod lim sp hem	All leached	Wk-mod alt, good 'Sp' text, mod qtz vning, wk-mod lim
120.8	9.0		2.55	97	.07			.06			.01		sp clay, tr ser.	mod lim tr. hem		As above
129.8	9.0		2.51	95	.06			.05	v. sp		.01		1	mod lim		Wk-mod alt, tr py + cc, occ qtz vn, wk lim (mostly on fr
139.2	9.4		2.57	97	.10			.06	Sp		.04		wk clay, tr ser.	1	Mixed cap + suls.	Wk-mod alt, sp py, cc, various qtz vn's, sp lim.
148.0	8.8		2.58	99	.06			.01	wk	.01	.04		tr clay, sp ser.	wk-mod lim		Wk alt, sc qtz vn's, v. sp lim., mod py, tr cc.
156.0	8.0		2.53	100+1	.18			.02	1	.01	.15		sp clay	wk lim, v. sp lim		Wk-mod alt, various qtz vnlets, v. sp lim, wk py, cpy, tr cc
165.3	9.3		2.57	96	.08			.01	1	.04	.03		1	wk-mod lim	Mostly suls	Wk-mod alt, various qtz vnlets, tr lim, wk py, tr cpy, cc
174.6	9.3		2.62	97	.03			.01	sp	.02				wk lim		V. wk alt, num qtz vn's, tr-sp lim, sp py.
183.3	8.7		2.60	97	.01				1	.01			tr clay	mod lim		V. wk alt, num qtz vn's, mod py, tr cc, sp lim, tr jar
192.7	9.4		2.65	97	.01				wk	.01			tr-sp clay, ser.	wk lim		As above.
201.4	8.7		2.65	98	.01				1	.01				1		Generally st silicif w/ patches remnant 'Sp', sp lim on frac's, sp p
210.3	8.9		2.62	93	.02				sp		.02		tr ser.	sp lim, patchy mag sp lim, mod magnetite	Qtz-xenolith bearing porph @ 209.7'	St silicif w/ patches 'Sp' quite fresh, sp py, vuggy in pla
217.3	7.0		2.60	96	.01				wk		.01					Rk mapped as granodiorite porph (Watson, 1963), patchy st silicif, sp Fe_3O_4, hem, py
218.4	1.1		2.64	94	.01				tr		.01			1		St silicif w/ massive magnetite-ilmenite? in patches.
E.O.H.		Aver rec'y = 97%														

Final Depth 386.9'
Collar Elevation 3149.37
Coordinates 28,572.38 N ; 27,716.10 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-46
Sheet No. 1 of 2
Date Completed 9/19/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
4.0	4.0	rockbit														Cover
13.6	9.6	NXWL	2.50	92	0.03			0.03					wk clay, mod ser.	mod lim, wk hem	Mz	wk alt, bleached, sp lim + LLm, epidote(?) vn's, st hem last 1'
23.4	9.8		2.45	90	.02			.02					mod clay, sp ser.	sp lim, wk hem, LLm		Mod alt, sp lim, st hem, wk LLm.
32.8	9.4		2.44	93	.04			.04					wk clay, tr ser.	sp lim, st hem		Mod alt, mod-st hem, sp LLm, becoming bleached at en
43.3	10.5		2.46	86	.03			.03					wk clay, ser.	Ditto wi wk LLm.		Mod alt wi mod-st hem → wk-mod alt, bleached, sp hem +
52.6	9.3		2.55	91	.03			.03					sp clay, wk-mod ser.	wk lim, hem, sp LLm		Wk-mod alt, bleached, sp hem → mod alt, mod-st hem, some qtz introduce epidote
62.1	9.5		2.25	100	.03			.04					mod clay	sp lim, mod hem		Mod alt, mod-st hem, sp LLm, minor qtz vnlets.
71.1	9.0		2.62	91	.04			.06					wk clay, ser.	mod-st hem wk LLm.		As above wi stronger addition of qtz.
80.0	8.9		2.62	92	.06			.06						sp lim, mod hem		Wk-mod alt, mod hem, wk lim on frac's, patchy silicif.
89.5	9.5		2.25	98	.06			.06					mod clay, sp ser.	wk lim, sp hem		Mod alt, mod hem, wk lim on frac's, sp LLm, rk crumbly last
99.0	9.5		2.22	98	.07			.07					sp clay, ser.			Wk-mod alt, bleached in places, wk lim, mod hem, patchy silic
108.6	9.6		2.14	98	.07			.06	wk		.01		wk clay sp ser.		Mixed cap + sulfs!	Generally wk-mod alt, wk hem, lim, py, sp cc, 1" thick alum vn, rk vuggy in pla
118.2	9.6		2.13	98	.19			.05	sp-wk		.14		wk-mod clay	sp lim	Mostly sulfs	Alt pretty wk, tr lim, wk-mod py, v. sp cc.
129.0	10.8		2.54	85	.05			.04	sp		.01			mod lim, wk hem	Mixed cap, sulfs	As above to 120.0', then cap wi mod alt, wk hem + lim.
138.5	9.5		2.45	98	.10			.03	wk		.07		wk-mod clay, sp ser	sp lim + hem		Wk-mod alt, patchy wk hem + sp lim, patchy wk-mod py, sp c
147.8	9.3		2.40	98	.32	.02		.02	sp		.30		mod clay		Sulfs	Generally mod alt, wk-mod py, sp-wk cc, sc qtz vn's.
156.8	9.0		2.39	100	.53	.03		.03	wk		.50		mod-st clay			Mod alt, wk py, sp-wk cc, incomplete conversion of py → cc.
166.3	9.5		2.36	100+1	1.00	.03		.03			.97					Wk-mod alt, wk-mod py, sp-wk cc, 2nd'ary feldspath.
176.4	10.1		2.33	82	.57	.04		.04			.53		st clay			Mod alt wi patches st alt, mod py, sp-wk cc.
185.1	8.7		2.40	95	1.00	.02		.02			.98		Mod-st clay			Mod alt, mod py, sp-wk cc, some py-cc vning at end of r
195.0	9.9		2.32	91	.52	.03	103.5' @ .57/.04	.03			.49					Mod alt, wk-mod py, wk cc. Rk alt getting st at end of r
205.4	10.4		2.28	90	.46	.02		.02			.44		st clay			Mod alt wi patches st alt, wk-mod py, cc wi py-cc vn's.
214.8	9.4		2.32	94	.51	.04		.04			.47					Mod alt → wk-mod alt, wk-mod py, sp-wk cc as coating on
224.3	9.5		2.43	91	.32	.02		.02			.30					Generally mod alt, min as above wi v. sp CuOx
233.4	9.1		2.38	92	.42	.13		.04			.38					Mod alt, wk-mod py, sp-wk cc.
242.0	8.6		2.42	95	.34	.03		.03			.31					Generally mod alt, 2nd'ary feldspath obvious, wk-mod py, sp-wk c v. sp chr
251.3	9.3		2.42	93	.57	.02		.02			.55					As above wi some alunite vnlets.
260.4	9.1		2.47	90	.17			.04			.13		Mod-st clay			Mod alt → wk-mod alt, v.sp. chrys, wk py, sp cc.
268.3	7.9		2.46	100	.23			.03			.20					Patchy mod + wk-mod alt, wk-mod py, sp cc, alun vn's, feldsp
277.8	9.5		2.45	99	.32	.02		.02			.30		Mod clay			Generally wk-mod alt, orthoclization, wk-mod py, wk cc, alun vn's.
287.1	9.3		2.43	97	.46	.01	28.8' @ .40/.01	.01			.45		mod-st clay			Mod-st alt, wk py, sp-wk cc, grn-stained felds.
296.8	9.7		2.45	94	.31	.01		.01			.30		mod clay			Wk-mod alt, patchy silicif, wk py, sp cpy, sp-wk cc.
306.6	9.8		2.47	87	.43	.01		.01			.42		wk-mod clay, sp ser			Wk-mod alt, wk-mod py, v. sp cpy, wk cc.
315.1	8.5		2.53	100	.31	.01		.01	sp-wk		.30		mod clay sp. ser.			Wk-mod alt, rk crumbly, wk py, tr cpy, sp cc.
323.7	8.6		2.50	100+3	.20					.03	.17		wk-mod clay			Wk alt, rk crumbly, tr hem, sp-wk py, v. sp cc.
332.8	9.1		2.50	96	.11				sp		.11		mod clay, tr ser			Wk alt, 2nd'ary feldspath, wk py, tr cc, cpy.
341.7	8.9		2.56	96	.16				sp-wk	.02	.14		wk clay sp ser.			As above.
350.4	8.7		2.55	94	.16					.02	.14	tr moly				V. wk, 2nd'ary feldspath, wk py.
356.2	5.8		2.59	97	.14				wk-mod		.14		sp clay, ser.			As above.

Final Depth 386.9'
Collar Elevation 3149.37
Coordinates 28,572.38 N ; 27,716.10 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-46
Sheet No. 2 of 2
Date Completed 9/19/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, Sericite	/1m	Rock Type	Remarks
364.6	8.4	NXwl	2.59	100	.09				wk-mod	.02	.07		sp clay, tr ser.		Mz	Sp-wk alt, spotty sil'n, incr 2ndary folds. st. Py @ end
371.0	6.4		2.57	86	.05				mod	.01	.04		wk clay, tr ser.			st. py, mod alt @ start, then wk alt, mod 2ndary folds, sp sulfs.
379.9	8.9		2.57	95	.09				wk-mod	.02	.07		1			W/K alt, sc. 2ndary folds, sp sulfs.
386.9	7.0		2.57	98	.10				1	.03	.07		1			As above in one st. s.l'd area. Tr cpy.
E.O.H.		Aver. rec'y =		94%												

Final Depth 328.7'
Collar Elevation 3077.40
Coordinates 30,368.12 N ; 28,505.79 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-45
Sheet No. 1 of 1
Date Completed 9/16/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
7.0	7.0	rockbit														Rockbit
16.2	9.2	NXwl	2.47	35	0.03			0.03					wk clay	mod lim	Dp	wk-mod alt, partial silicif wi some qtz vning, wk Fe
24.8	8.6		2.25	69	.05			.05					sp clay, ser.	wk-mod lim		As above
34.5	9.7		2.25	100	.04			.04					sp clay, wk-mod ser	mod lim		Mostly Dp wi included tectonic bx, wk FeOx, some boxwo
41.1	6.6		2.45	99	.04			.04					1	1		Rk still bxiated, questionable as Dp, wk-mod lim, some qtz vning after
50.6	9.5		2.49	95	.06			.06					v. sp clay, sp-wk ser	wk lim		wk alt wi partial silicif + mod qtz vning, wk lim, v. sp.
60.9	10.3		2.48	85	.05			.05					tr clay, sp ser	wk-mod lim		Mod-st silicif throuout, vuggy rock in places, v. sp hem, mod lim
71.4	10.5		2.49	79	.02			.02					1	mod lim		Rk crumbly, in part bxiated, in part silicif — wk lim, sp
82.2	10.8		2.57	76	.02			.02					1	1		Generally well silicif, sp hem, sp-wk lim wi boxwork af
91.3	9.1		2.51	95	.03			.03					sp clay tr ser	wk-mod lim		As above to ½-way, then wk-mod alt, partial silicif, v. wk
100.5	9.2		2.56	97	.26				sp		.26		wk-mod clay	sp lim	Sp ? Mostly	Mod alt, sp py, wk-mod cc diss + on fracs, tr lim. sp c
112.0	11.5		2.50	88	.32				v. sp		.32		1	1	sulfs @ 91.3	Mod alt, wk py, wk-mod cc, sp qtz vnlets, tr lim, t
121.4	9.4		2.55	94	.06			.06	—		tr		sp clay, ser.	mod lim, sp hem	Mostly cap	Rk type? Not Dp. Patchy st silicif, sp py-cc, mod hem,
128.3	6.9		2.51	100+1	.21				v. sp		.21		sp clay	wk lim	Mostly sulfs	Wk-mod alt, patchy silicif, wk-mod py, cc, wk lim.
137.6	9.3		2.58	90	.20				1		.20		wk clay, tr ser.	sp lim		Wk-mod alt, patchy silicif, wk py, wk-mod cc, sp lim
146.3	8.7		2.61	97	.13				wk-mod	.07	.06		1			Wk-mod alt → mod alt, patchy silicif, wk-mod py, v. sp cc,
155.0	8.7		2.61	89	.15				mod	.13	.02	tr moly	sp clay, ser.		Sp	Wk alt, considerable qtz vning, some bxiation, sp sulfs, tr
164.0	9.0		2.63	90	.06				1	.06			1	sp-wk lim		Wk-mod alt, mod qtz vning, wk-mod py.
173.3	9.3		2.62	90	.11				1	.08	.03		1	sp lim		Mod-st silicif throuout, rk type?, mod py, tr cpy, cc.
183.0	9.7		2.61	91	.05				wk-mod	.05			tr clay	wk lim		As above to 179.0', then wk alt of Sp wi sp lim, tr c
192.0	9.0		2.62	96	.05				v. wk	.05			1	wk-mod lim		V. wk alt, wk py, v. sp cpy, tr cc, sp lim.
201.4	9.4		2.64	92	.04				wk	.04			Sp clay	mod lim		v. wk alt, wk-mod py, tr cpy, patchy silicif first part
211.4	10.0		2.64	84	.05				1	.03	.02			sp lim		Wk alt, patchy qtz introduction, sp jar, wk py.
220.4	9.0		2.64	94	.05				wk-mod	.03	.02			1		Generally fresh rk, wk py, patchy qtz vning, sp jar.
229.5	9.1		2.64	92	.04				1	.02	.02		tr clay	tr lim		As above wi qtz xls in druses + no jar.
240.7	11.2		2.48	79	.04				1	.03	.01		tr ser	wk-mod lim		Rk generally well silicif, wk py on fractures, wk lim-jar.
250.2	9.5		2.69	83	.03				1	.02	.01		sp clay	wk lim		Generally well silicif wi wk-mod py, wk lim-jar.
255.8	5.6		2.49	44	.03					.01	.02		sp clay	1		As above.
268.0	12.2		2.67	70	.05			.01	tr		.04		wk clay, mod-st chlor.	1		Wk-mod alt, sp py, wk lim on fracs, patchy silicif
280.8	12.8		2.55	69	.05			.01	1		.04		1	sp lim	Ign qtz-bearing rk	Rk type? Generally wk alt wi patchy silicif, st chlor in places, bxia
293.0	12.2		2.65	73	.02				sp		.02		sp clay, mod chlor.	wk-mod hem		Apparently still "sp", alternate wk + mod alt, sp py. last
301.7	8.7		2.67	94	tr				tr		tr		sp ser	1		Ign. rock bears considerable qtz, mod silicif, hem + epidote in strea
310.7	9.0		2.64	93	.01			.01					sp clay, ser	1		As above. Proximity of Oxide flt (occupied by qtz on 12' thick fo 5) probably affecting rk wi res to amt of qtz conte
319.4	8.7		2.65	95	tr			tr.					1	1	Apparent Sp	Rk relatively fresh, some chlor, no sulfs.
328.7	9.3		2.63	92	.01			.01					wk clay, sp ser.	sp hem		Rk becoming crumbly wi wk + sometimes mod alt, considerable c
E.O.H.		Aver. rec'y = 85%														

Final Depth 383.4'
Collar Elevation 3155.05
Coordinates 28,688.34 N; 27,898.25 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-44
Sheet No. 1 of 2
Date Completed 9-11-64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	rockbit														Cover
6.0	2.0	NC	2.60	34	0.03			0.03					wk clay	Mod hem, usp LLm	M2	Mod alt, hem, sp lim (in part after py), partial silicif.
16.1	10.1	NX w/	2.38	84	.05			.05						Ditto w/ sp. lim		Mod alt → wk-mod alt, bleached in patches, mod hem, sp LL
24.9	8.8		2.49	93	.05			.05					wk-mod clay	mod lim sp LLm		Wk alt, generally bleached, wk lim mostly on frac's, sp LL
33.9	9.0		2.49	91	.05			.05					wk clay, sp ser	wk lim, sp hem		Generally wk alt + bleached, wk lim + patchy hem staini
43.3	9.4		2.59	89	.04			.04					sp clay, sp ser	wk lim + hem, wk LLm		Wk-mod alt, patchy silicif, wk lim on frac's, patchy hem, w
51.7	8.4		2.34	98	.04			.04					wk clay, tr ser			wk-mod alt, hem, wk lim + LLm, patchy silicif. LL
61.0	9.3		2.35	98	.04			.04					mod clay, wk ser	wk FeOx, st		Wk-mod alt → mod alt, wk-mod hem, sp lim, wk LLm.
69.9	8.9		2.35	97	.02			.02						wk. FeOx		Mod alt, mod-st hem, sp. lim, LLm.
79.5	9.6		2.31	92	.02			.02						mod LLm wk lim		As above.
88.7	9.2		2.48	95	.01			.01						mod lim		wk-mod alt, mod hem diss + staining felds, wk LLm.
100.2	11.5		2.56	74	.03			.03						wk lim mod.		M2 as above w/ sil'n along sc. vnlts incr to end of ru
108.2	8.0		2.39	91	.04			.04					wk-mod clay, sp ser.	mod-st lim + tr LLm		Mod. alt w/ spotty sil'n. Mod-st. lim, spotty LLm.
118.7	10.5		2.42	63	.03			.03					wk clay, tr ser.	wk hem, lim, sp LLm		Mod alt, mod hem staining of felds.
125.8	7.1		2.40	76	.03			.03								Mod-st alt, mod hem staining, LLm on frac's
133.9	8.1		2.37	74	.03			.03					wk-mod clay	mod lim, wk hem		As above for 1st half run. 2nd half sp hem, mod lim st.
143.8	9.9		2.39	95	.04			.04					wk clay, sp ser.	wk-mod lim + hem		Mod alt, mod-st lim stain & on frac's. Sp hem @ end.
153.3	9.5		2.51	85	.05			.05					mod clay tr ser.			Alt incr, lim decr, hem incr until @ end mod-st alt, st hem
162.8	9.5		2.26	96	.03			.03					wk-mod clay, tr ser	mod hem, sp lim, LLm		Mod-st. alt, st hem staining of felds.
171.9	9.1		2.36	97	.03			.03					wk clay, tr ser.			As above.
179.1	7.2		2.19	100+5	.06			.06					mod clay, sp ser.	mod lim		After 1st 1', mod-st alt, tr hem, mod lim stain & on frac's
190.5	11.4		2.20	93	.06			.06	tr		tr.				Sul zone @ 190.3'	Mod alt throughout, wk sulf last ~2', wk lim + hem, sp chrys.
197.8	7.3		2.39	96	.21			.05	wk		.16		wk clay, sp ser.			Mod alt w/ patches st alt, wk-mod py + cc, tr chrys.
206.3	8.5		2.39	99	.26			.04			.22		mod clay			Mod-st alt → st alt, mod py, wk-mod cc, tr chrys, lim.
215.9	9.6		2.39	93	.27			.04	wk-mod		.23		wk clay, tr ser.			St alt → mod-st alt after 3', min. as above, tr alunite
225.6	9.7		2.36	95	.24			.04			.20					Mod-st alt, wk-mod py + cc, tr CuOx, alun.
235.3	9.7		2.39	94	1.28	0.05		.05			1.23		wk-mod clay			Mod-st alt, wk py + cc w/ considerable cc coating py
244.8	9.5		2.46	95	.43	.03		.03			.40		mod 1st clay			Mod-st alt w/ patches st alt, wk-mod py, cc, grn-tinged felds
252.0	7.2		2.45	100+1	.34	.02		.02			.32		mod clay, tr ser.			Generally mod alt, wk-mod py + cc, sp chrys.
261.6	9.6		2.44	98	.41	.02		.02			.39					Mod-st alt, mod py, wk cc, sp chrys, 2nd'ary feldspath.
270.9	9.3		2.45	33	.39	.02		.02			.37		mod clay			As above.
275.6	4.7		2.45	98	.45	.02		.02			.43					Mod alt → wk-mod alt, mod py, wk cc, sc qtz vnlts, large orthoclase phenos
284.7	9.1		2.48	100+3	.37	.01		.01	wk		.36		wk-mod clay			Mod alt, 2nd'ary felds, wk cc coats mod py.
293.6	8.9		2.41	56	.65	.01		.01			.64		mod clay			Mod alt, wk pc coating wk-mod py.
298.3	4.7		2.49	96	.45	.01	133.0'	.01			.44					Mod-st alt, wk cc, wk-mod py.
306.5	8.2		2.53	100+1	.55	.01	@	.01	sp		.54					Mod alt w/ patches st alt, wk-mod py, wk cc.
315.2	8.7		2.53	99	.90	.02	.53/.02	.02			.88		mod-st clay			As above.
324.1	8.9		2.47	100	.40	.01		.01	wk		.39		mod clay			Mod alt → wk-mod alt, mod py, v. wk cc, tr CuOx.
332.2	8.1		2.47	96	.37	tr		tr	wk-mod		.37					Wk-mod alt w/ patches mod alt [illegible]

Final Depth 383.4'
Collar Elevation 3155.05
Coordinates 28,688.34 N; 27,898.25 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-44
Sheet No. 2 of 2
Date Completed 9-11-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
342.5	10.3	NXwl	2.55	91	.73	.01		.01	wk		.72		wk clay, sp clay		Mz	Generally wk-mod alt but w/ patches silicif. + others brxiated, sp-wk (+tr cpy)
350.1	7.6		2.81	100	.10				mod	.09	.01		sp clay, tr ser.			Rk type? Rk crumbly, pretty well silicif, mod py, cpy, v. sp cc.
358.6	8.5		2.44	98	.47	tr		tr	wk	.07	.40		wk-mod clay			Wk-mod alt, tr Cu Ox, cpy, wk cc, wk-mod py, patchy sili
368.7	10.1		2.52	82	.21				sp-wk	?	.21		1			wk alt, mod py, v. wk cc
377.8	9.1		2.50	95	.18				1	.06	.12		sp clay, tr ser.		Sp ca. 373.0	wk-mod alt becoming quite chloritic, sp cc, tr cpy, wk-mod
383.4	5.6		2.52	93	.25				1	.15	.10		wk clay			wk alt, patches mod alt, tr cc, wk-mod py.
E.O.H.		Aver. rec'y = 90%														

Final Depth 432.0'
Collar Elevation 3063.54
Coordinates 30,210.42 N ; 28,559.82 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-43
Sheet No. 1 of 2
Date Completed 9/3/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay - sericite	lim	Rock Type	Remarks
3.0	3.0	rockbit														Cover
6.0	3.0	NC comp.	2.39	71	0.13			0.07	tr		.06		tr clay, sp hem	wk lim, tr hem	Mz	wk-mod alt, wk lim + hem, sc qtz vnlets, tr CuOx
16.3	10.3	NXwl	2.46	84	.07			.06			.01		tr Ser	wk lim, sp hem		wk alt wi inclusions in Mz, v. wk hem + lim
25.4	9.1		2.45	87	.06			.06					tr clay, ser	wk lim	Mixed cap + suls.	wk alt, sc qtz vnlets, wk-mod hem, wk lim, sp cc-py in pat
33.9	8.5		2.54	91	.08			.08					1	wk lim, tr hem		As above wi occ patches st silicif. Rk is very soft
43.3	9.4		2.44	96	.05			.05					tr clay, sp ser.	wk lim		wk alt wi mod hem + wk lim, incomplete leaching, v. sp cc
53.0	9.7		2.43	96	.08			.08					sp clay, ser.	wk lim, sp hem + LLm		wk alt, wk hem, sp lim, tr cc, rk becoming more brittle @ e
62.3	9.3		2.44	92	.08			.08					1	1		Rk relatively fresh wi sp hem + lim, sp py + cc diss thruout
70.2	7.9		2.44	100+2	.11			.08			.03		wk clay	mod lim, sp tach		wk-mod alt, sc qtz vn's, mod hem wi wk lim
79.6	9.4		2.42	97	.19			.06	sp		.13		mod clay, sp ser.	1		wk-mod alt, wk hem + lim, 1/4" thick hem seams, sp cc + p
89.1	9.5		2.41	100	.05			.05					sp clay	wk-mod lim + hem		wk-mod alt, wk FeOx's, tr cc + py, sp CuOx.
95.4	6.3		2.52	95	.07			.07					sp-wk clay	wk-mod lim		As above wi sp LLm.
107.4	12.0		2.49	97	.49	.22		.22	wk		.27		sp clay	mod lim	sp @ 97.5' Mostly suls	Generally wk-mod alt, mod cc, wk py, wk lim stain, sp Cu
116.7	9.3		2.53	97	.49	.16		.16	1		.33		1	sp lim		Mod alt, wk py, mod cc, sp CuOx + lim, sc qtz vnlets.
126.2	9.5		2.58	96	1.75	.18		.18	1		1.57		sp clay, ser	wk lim		Wk-mod alt, wk-mod py + cc, sp CuOx, wk lim.
135.0	8.8		2.54	98	1.61	.14		.14	1		1.47		1	1		wk alt wi partial silicif → mod alt, wk py, mod cc
144.2	9.2		2.55	98	1.42	.08		.08	sp-wk		1.34		1	1	Mz ca. 136.0	wk-mod alt → wk alt @ 141.4', patchy silicif, wk py, cc, wk
152.6	8.4		2.56	100	3.20	.13		.13	sp		3.07		1	1		wk-mod alt wi sc qtz vnlets, wk py + cc, sp CuOx, wk
161.1	8.5		2.54	100+1	1.06	.10		.10	wk		.96		tr clay, ser	sp lim		As above wi v. wk cc + v. wk alt last 4'
171.3	10.2		2.53	93	1.10	.18		.18	1	.10	.82		1	1	Sp @ 169.5	wk-mod alt, wk py, v. wk cc on frac's, sp jar
180.3	9.0		2.57	99	1.47	.22		.22	1	.05	1.20		sp clay	wk lim		Generally mod alt, sc qtz vn's, wk py, v. wk cc, wk l
189.8	9.5		2.57	94	1.96	.10	175.1' @ 1.15/.11	.10	wk-mod	.15	1.71		sp clay, tr ser.	sp lim	Mz ca. 183.8	wk-mod alt wi sc qtz vn's, wk py, mod cc, sp jar
198.1	8.3		2.69	96	1.21	.05		.05	1	.10	1.06		wk-mod clay	tr jar		Bx fr 190.1 – 196.0. Then Mz wi wk alt. wk py, cc
207.3	9.2		2.69	87	.91	.05		.05	1	.05	.81		sp clay, ser.	1		Mz wi wk alt, wk py, tr cpy, v. wk cc on frac's.
216.7	9.4		2.62	92	.94	.05		.05	1	.15	.74		wk clay, tr ser.	sp jar		wk alt but patchy qtz vning + silicif thruout, wk py, cc
225.8	9.1		2.58	97	.63	.05		.05	wk	.05	.53		1	sp-wk jar	sp ca. 219.6'	Wk alt, num qtz vn's, rk type?, sp-wk cc + py, tr cpy,
234.8	9.0		2.58	95	.77	.05		.05	1	.05	.67		v. sp clay	sp jar		wk alt, various qtz vning, wk py, cc, tr cpy, jar.
243.9	9.1		2.55	98	.57	.05		.05	wk-mod	.10	.42		sp-wk clay	1		wk alt, some qtz vning + silicif thruout, sp-wk py, cc, sp jar
253.3	9.4		2.60	94	1.22	.11		.11	1	.15	.96		sp clay	1	Mz @ 251.0	wk alt, sc qtz vning, wk py, wk-mod (?) v. fine diss cc
261.8	8.5		2.61	93	.82	.04		.04	1	.10	.68		1	1		wk alt wi partial silicif → wk-mod alt last 2', v. wk py, wk
270.5	8.7		2.58	95	.48	.02		.02	1	.08	.38		1	1		WK alt for 3'1/2', then st silicif, sp py, sp-wk cc, tr cpy
278.8	8.3		2.52	100	.22				v. wk	.05	.17		tr clay	tr jar		Generally mod-st alt, v. wk py, sp cc, cpy.
288.3	9.5		2.51	96	.21				wk	.11	.10	tr moly	1			WK alt + mod silicif, mod py, wk cc, tr cpy, moly.
296.8	8.5		2.56	100	.21				sp-wk	.15	.06					Generally mod silicif thruout, wk-mod py, sp cc, tr cpy
307.2	10.4		2.55	86	.26				wk	.20	.06		tr clay			wk alt, patchy silicif, wk-mod py, sp cpy, cc.
318.0	10.8		2.55	92	.21				1	.18	.03		1			Generally mod silicif, wk py, cpy, tr cc.
330.0	12.0		2.49	67	.35				mod	.25	.10					Wk-mod alt, patchy silicif, wk-mod py, wk cc + cpy.
338.8	8.8		2.58	97	.67	.01		.01	1	.41	.25		tr clay			Wk alt, mod py, wk cpy, sp cc.
350.0	11.2		2.56	88	.31					.27	.04		tr clay	sp hem		wk alt

Final Depth 432.0'
Collar Elevation 3063.54
Coordinates 30,210.42 N ; 28,559.82 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-43
Sheet No. 2 of 2
Date Completed 9/3/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay/sericite	lim	Rock Type	Remarks
359.0	9.0	NXwl	2.57	98	0.31				mod	.25	.06			tr hem	Mz	As before, wi sp cc
364.8	5.8		2.63	98	.23				wk-mod	.20	.03		sp clay	1		wk alt, wk hem gives reddish cast throuout, wk-mod py, v.sp
374.0	9.2		2.53	98	.35	.01			1	.33	.02		tr clay			wk alt, wk py + cpy, v.sp cc, v.sp hem
382.9	8.9		2.49	100+2	.40	Tr	20.6' @	Tr	1	.30	.10		sp clay sp sec			wk-mod alt, wk-mod py + cpy, sp-wk cc, tr hem
394.6	11.7		2.59	85	.48	.01	.45/Tr	.01	1	.35	.12	Tr Moly	sp clay			wk alt, min as above
406.4	11.8		2.68	74	.27				1	.20	.07		sp clay sp sec			wk-mod alt, wk-mod py, sp cpy + cc, w/s chlor. partial sili
413.7	7.3		2.68	78	.19				1	.14	.05	tr moly	1			wk alt but crumbly rk, wk-mod py, sp cc + cpy, tr mo st. chlor.
423.1	9.4		2.65	95	.19				1	.19		tr moly	sp clay			wk alt + partial silicif, mod py, sp cpy, tr cc, tr mol mod chlor.
432.0	8.9		2.70	96	.20				1	.20	Tr ?	tr moly	1			Generally wk-mod alt, wk-mod py, sp-wk cc, cpy, tr
E.O.H.		Aver rec'y = 93%														

Final Depth 407.4'
Collar Elevation 3164.22
Coordinates 28,896.07 N ; 28,397.67 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-42
Sheet No. 1 of 2
Date Completed 8/26/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
8.0	8.0	rockbit														Cover
17.8	9.8		2.47	97	0.05			0.05					mod clay wk ser	wk lim, hem sp ltlm	Mz	Mod alt, partially bleached, wk hem + lim
26.8	9.0		2.51	96	.06			.06					1	wk-mod lim		Mod alt wi patches st alt, wk-mod lim, wk hem
36.1	9.3		2.46	98	.06			.06					1	1		As above wi stronger hem.
44.5	8.4		2.51	100+2	.04			.04					mod-st clay	wk lim, hem, sp ltlm		Mod alt, sc qtz vn's, mod hem, wk lim.
53.8	9.3		2.54	91	.03			.03					1	1		Mod alt wi patches wk alt, sc qtz vn's, tr CuOx, mod
62.1	8.3		2.46	93	.04			.04					1	1		Mod alt, mod lim + hem, wk crumbly
74.2	12.1		2.36	85	.06			.06					st clay, sp ser	1		Mod alt wi mod silicif last 1½', mod hem, wk lim
80.9	6.7		2.35	98	.18			.12	sp		.06		1	1	Mixed cap + suls, 74.2 suls @ 80.9	Mod-st alt, wk hem + lim, wk py, sp cc.
91.0	10.1		2.62	91	.50	0.06		.06	sp		.44		st clay			St alt, sp hem, mod cc, sp py.
101.3	10.3		2.44	92	.73	.03	26.9' @ .57/.05	.03	wk		.70		1			Mod-st alt, tr CuOx, wk-mod cc + py.
107.8	6.5		2.33	99	.43	.05		.05	1		.38		1	tr lim		As above wi sp chrys.
119.3	11.5		2.43	96	.05			.05					mod clay	wk hem, lim	Capping @ 107.8	Mod alt wi st alt most of last 3½', wk-mod hem + lim
128.4	9.1		2.39	94	.03			.03					st clay	wk lim, sp hem		Mod alt, st alt after 122' wi st clay — wk FeOx's tr c
136.4	8.0		2.40	99	.04			.04					mod clay	wk hem, lim, sp ltlm		Mod-st alt wi sc qtz vn's, wk-mod hem + lim.
145.0	8.6		2.50	96	.06			.03	tr		.03		1	1	Mixed cap + suls @ 143.0	Mod alt, wk-mod hem, wk lim, sp chrys, py, sp-wk
153.4	8.4		2.45	96	.20			.05	wk-mod		.15		sp clay	wk lim		Mod alt, wk-mod py + cc, sp chrys, st hem + lim last
162.4	9.0		2.45	93	.44	.04		.04	1	.06	.34		mod clay sp ser.	sp lim		Mod alt becoming st, wk-mod py + cc, ltlm + hem in one pa
171.7	9.3		2.39	100	.56	.03		.03	mod	.02	.51		mod-st clay			Mod alt, wk py + cc, sp chrys.
181.3	9.6		2.36	94	.53	.03		.03	wk-mod		.50		1			Generally st alt, wk py, wk-mod cc, v. sp chry
190.8	9.5		2.48	97	.49	.02		.02	1		.45	.02 cov.	wk clay tr ser.			St alt to 185.4, then mod alt, mod py, wk-mod cc.
199.4	8.6		2.47	97	.47	.03	82.2' @ .61/.03	.03	mod		.44		wk-mod clay			Mod alt, sc qtz vnlets, wk-mod cc, mod py.
207.6	8.2		2.52	95	.81	.03		.03	wk-mod	.10	.68		1			As above wi tr chrys, grn feldspar phenos.
216.0	8.4		2.46	93	.50	.03		.03	mod	.02	.45		wk clay, tr ser.	sp jar		Mod alt → st alt last 2', mod py, wk-mod cc, v. sp jar
224.7	8.7		2.49	97	.73	.03		.03	wk-mod		.70		wk-mod clay	tr jar		Alternate patches mod + st alt, mod py, wk cc, sp chr
235.6	10.9		2.52	92	.90	.04	183.5' @ .69/.03	.04	1		.86		mod clay	wk lim, hem, sp ltlm		Mod alt becoming st @ 227.0', wk py, wk-mod cc, sp chrys
243.6	8.0		2.46	96	.15			.04	sp		.11		1	mod lim, sp hem	Leached rk @ 235.6	Mod-st alt, st clay, mod-st hem, wk lim
252.3	8.7		2.49	97	.12			.02	1		.10		wk clay	mod lim	Mixed cap + suls	St alt wi mod-st hem to 250.1', then wk-mod alt wi wk py
260.5	8.2		2.57	97	.27	.04		.04	wk		.23		tr clay wk ser.	wk-mod lim		Wk alt, wk-mod py, v. sp cc + cpy, wk lim-jar on fr
269.2	8.7		2.55	93	.50	.04		.04	wk-mod		.46		1	wk lim		V. wk alt, wk py, tr cpy + cc, tr CuOx, wk lim-jar
277.6	8.4		2.52	81	.34	.04		.04	wk	.03	.27		tr ser	mod lim	Sp @ 274.7	Wk alt, wk hem + lim diss + in frac's, wk py, sp cc, tr cpy + Cu
288.3	10.7		2.65	93	1.21	.07		.07	1	.10	1.04		tr clay	sp lim	All suls	Wk-mod alt, occ. patches lim + qtz vnlets, mod py, wk cc, cpy, sp c
296.1	7.8		2.66	93	1.13	.05		.05	v. wk	.10	.98		1	sp-wk lim		Wk-mod alt, wk py, mod cc in places, sp CuOx + cpy, lim.
299.6	3.5		2.65	99	1.39	.03	76.4' @ .94/.04	.03	1	.15	1.21		sp clay	wk lim		Wk-mod alt, wk py, cpy, cc, lim on frac's, v. sp CuOx.
309.1	9.5		2.72	92	1.20	.04		.04	wk-mod	.20	.96		—	sp lim		Wk alt, wk py, sp-wk cpy + cc, tr CuOx, lim.
318.2	9.1		2.64	97	.88	.04		.04	1	.10	.74			tr lim		Wk alt, wk py, sp-wk cc, sp cpy, v. sp CuOx, lim
327.6	9.4		2.65	92	1.30	.04		.04	1	.20	1.06					Wk alt, sc vuggy qtz vn's, wk py, wk-mod cc, sp-wk cp
336.9	9.3		2.68	91	.68	.03		.03	1	.20	.45		tr clay	tr lim		Wk alt, several qtz vnlets, wk py, sp-wk cc + cpy, v. sp l
345.5	8.6		2.69	94	.37	.03		.03	mod	.25	.09		tr clay,	1		

Final Depth 407.4'
Collar Elevation 3164.22
Coordinates 28,896.07 N ; 28,397.67 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-42
Sheet No. 2 of 2
Date Completed 8/26/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
353.6	8.1		2.73	95	.27	.03		.03	mod	.20	.04	tr moly	–	tr lim	Sp	wk-mod alt wi patchy silicif, sc qtz vn's wi tr moly, sp-wk cc,
362.1	8.5		2.71	90	.24	.03		.03	1	.20	.01		sp clay, tr ser	wk lim		wk alt, sc qtz vn's, wk-mod py, sp-wk cpy + cc, sp lim
371.0	8.9		2.61	96	.16			.02	1	.12	.02		–	1		St silicif wi wk-mod alt + patchy silicif last 2', tr
380.3	9.3		2.58	44	.12			.01	wk	.10	.01		sp clay	sp lim		Mod silicif thruout, wk py, tr cc, wk chlor, brittle
387.7	7.4		2.63	90	.23			.02	1	.16	.05		1	tr lim		As above.
396.8	9.1		2.68	94	.27			.02	1	.20	.05	tr moly	1	v.sp lim		Mod silicif, wk-mod py, sp cpy + cc, tr moly
407.4	10.6		2.63	100	.13			.01	wk-mod	.11	.01	tr moly	tr clay, ser	wk lim	Mz @ 401.2	As above to 401.2, then wk alt of Mz wi wk py, tr c
E.O.H.		Aver. rec'y = 93%														

Final Depth 325.4'
Collar Elevation 2980.06
Coordinates 30,067.36 N ; 28,921.02 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-41
Sheet No. 1 of 1
Date Completed 8-20-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
28.2	28.2	rockbit														Fill
38.9	10.7	NXwl	2.52	78	0.05			0.05					sp clay, ser.	wk lim, sp hem	Dp	wk alt, sc qtz vnlets, generally bleached, wk lim, sp hem.
47.8	8.9		2.58	93	.04			.04					/	/		wk alt, num qtz vnlets, sp lim, mod hem w/ acc. sp bl
57.4	9.6		2.58	87	.08			.08					wk clay, tr. ser.	wk-mod lim + hem		As above. Good Dp text + rock is very hard.
66.5	9.1		2.50	94	.10			.08			.02		sp clay, wk ser.	mod lim, sp hem		wk alt, patchy silicif, wk hem + lim generally bleached.
76.2	9.7		2.42	95	.13			.10			.03		/	mod lim		wk-mod alt, increasing clay, wk hem, mod lim.
84.6	8.4		2.43	100+1	.13			.12			.01		wk ser + clay	/		wk-mod alt w/ patchy silicif, sp hem, mod lim.
92.8	8.2		2.53	95	.15			.12			.03		sp ser/clay	/		wk-mod alt w/ patchy silicif + included seds, wk-mod lim.
102.6	9.8		2.59	87	.18			.15			.03		sp clay, wk ser.	/		As above w/ lim on frac's only — and up to 1/4" thick.
113.3	10.7		2.55	90	.16			.06	v. sp		.10		wk clay sp ser.	/		wk-mod alt, rk quite firm, sp epidote, wk-mod lim on fr
120.0	6.7		2.74	100+2	.43	.07	15.4' @ .49/.04	.07	sp-wk		.36		sp clay, ser.	sp lim	Mixed cap + suls @ 113.3 Sp ca. 116.0 All suls - 116.0	wk-mod alt becoming st at end of run, mod py, wk cc, lim
128.7	8.7		2.62	94	.54	.01		.01	/	.15	.38		/	v. sp lim		Mod alt, mod py, v. wk cc, sp lim on fracs.
138.9	10.2		2.69	93	.16			.01	wk	.10	.05		/			Mod alt, some introduced qtz, sc epidote, wk-mod py, s
147.1	8.2		2.60	95	.16			.01	wk-mod	.05	.10		/			wk-mod alt, patchy silicif, wk-mod py, tr cpy. cpy,
155.9	8.8		2.61	94	.23				/	.20	.03	Tr moly	/			v. wk alt w/ patchy silicif, wk-mod py, tr cpy + cc
164.1	8.2		2.64	94	.18				/	.15	.03	Tr moly	/			As above.
173.6	9.5		2.66	95	.26				wk	.20	.06	Tr moly	wk clay, tr ser.			wk alt, mod-st silicif last 4', wk py, sp cc.
182.9	9.3		2.67	96	.17				/	.15	.02		/			wk alt w/ patches mod alt + patches silicif, wk py, v. sp
192.0	9.1		2.72	94	.26				mod	.18	.08		sp clay, ser.	tr jar		wk alt, patchy silicif, wk-mod py, v. sp cpy + jar, tr cc
200.7	8.7		2.55	95	.15				wk-mod	.12	.03		/			v. wk alt w/ patchy silicif, wk-mod py, v. sp cpy + cc.
209.9	9.2		2.63	94	.35				mod	.20	.15	Tr moly	tr clay			Mod silicif + qtz vning thruout, mod py, sp-wk cpy, tr
221.0	11.1		2.59	100+6	.18				/	.08	.10	Tr moly	sp clay			Mod silicif thruout, wk py, tr cc + cpy, tr moly
230.3	9.3		2.69	95	.26				st	.11	.15		tr clay			wk alt, patchy st silicif, st py, wk cpy, sp cc.
239.5	9.2		2.68	93	.25				mod	.10	.15		/			wk alt, patchy silicif, mod py, sp-wk cpy, sp cc.
248.5	9.0		2.66	94	.31				/	.16	.15		/			Mod-st silicif thruout, mod py, sp cpy, v. sp cc.
257.8	9.3		2.65	93	.32				mod-st	.18	.14		/			wk alt w/ mod silicif → mod alt w/ wk cc, cpy.
262.6	4.8		2.62	100+2	.36				/	.18	.18		/			wk-mod alt, some silicif thruout, wk-mod py, sp-wk
271.7	9.1		2.70	96	.27				mod	.09	.18		/	tr jar		wk-mod alt, mod py, sp-wk cc, tr cpy.
281.1	9.4		2.69	80	.42	.02		.02	mod-st	.10	.30		sp clay tr clay sp ser.			Generally mod alt, mod-st py, wk cc.
293.0	11.9		2.68	77	.26				mod	.05	.21		/			wk-mod alt, mod py, wk cc in places, sp epidote.
301.1	8.1		2.65	100+4	.39				/	.14	.25		/	tr jar		wk-mod alt, wk-mod py, wk cc, sp epidote, cpy.
310.6	9.5		2.65	91	.26				mod-st	.08	.18		/	/		wk alt, partial silicif, wk-mod py, v. wk cc, sp cpy.
319.8	9.2		2.64	93	.18				mod	.08	.10		sp clay	/		As above, good Sp text in places.
325.4	5.6		2.60	92	.15				wk-mod	.13	.02		/			Mod silicif thruout, wk py, sp cpy, tr cc, chlorite.
E.O.H.		Aver. rec'y = 93%														

Final Depth 353.0
Collar Elevation 3012.72
Coordinates 29,550.72 N ; 28,762.15 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-40
Sheet No. 1 of 2
Date Completed 8/7/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	rockbit														Dump
11.2	7.2	NC wl														Dump
16.4	5.2		2.13	97	0.12			.04	sp		.08		wk clay, sp ser	wk hem, lim, sp LLm	Mz	Mod alt, patchy silic, mod FeOx w/ sp LLm, sc alun vn's, tr CuOx
																6"-8" patch at start w/ mod py, wk-mod cc
25.0	8.6	NX wl	2.15	72	.05			.05					mod clay, wk ser	mod hem, wk LLm		Mod-st. alt, partly brecciated, rock type?, much clay, wk-mod FeOx,
33.0	8.0		2.51	43	.05			.05								Mod alt, patchy silicif, clay seams, wk hem, lim, LLm.
40.9	7.9		2.56	91	.05			.05					wk clay, sp ser	wk hem + lim		wk-mod alt, good Mz text in places, patchy silicif, mod hem, sp lim,
50.2	9.3		2.59	87	.10			.05	sp		.05		sp clay, mod ser	Ditto w/ sp LLm	Mixed cap + suls	As above w/ patches bleached + one 10' stretch w/ wk py, mod
59.3	9.1		2.55	96	.03			.02	wk-mod		.01		sp clay, wk ser	wk lim		wk-mod alt, sp lim, one patch w/ LLm, wk py, v. sp cc.
68.3	9.0		2.56	95	.04			.03	1		.01		1	mod lim		Continued mixed cap + suls as above. Boxwork in wk
76.9	8.6		2.49	99	.01			.01					mod ser, wk clay	wk-mod lim	Mostly cap	wk-mod alt, patchy silicif, sc qtz + alun vn's, wk hem, sp lim,
85.9	9.0		2.41	97	.25	0.03		.03	wk		.22		sp clay, ser.	wk lim, hem, sp LLm	Mixed cap + suls.	As above w/ patches of sulfide – mod py + wk cc.
95.0	9.1		2.46	100	.08			.03	tr		.05		1	1		wk-mod alt, several alun vn's, mod hem, wk lim, patchy s
104.0	9.0		2.43	99	.40	.02		.02	sp-wk		.38		1	1		2/3 suls w/ wk py + cc, 1/3 cap w/ wk hem, sp LLm – wk-m
112.9	8.9		2.41	100	.04			.01	tr		.03		wk clay, sp ser	mod lim, wk hem	Capping	wk-mod alt, various alun + qtz vn's, wk FeOx + wk LLm
119.2	6.3		2.50	98	.04			.02	1		.02		1	Ditto w/ sp LLm		wk-mod alt, various qtz vn's, wk hem, lim, sp LLm.
122.5	3.3		2.44	99	.20			.02	sp		.18		sp clay, tr ser	mod lim, wk LLm		wk-mod alt, sc qtz vn's, patch w/ sp py, wk cc, also mod he
128.8	6.3		2.79	98	1.40	.03		.03	wk		1.37		wk clay	tr lim	Suls @ 122.5	Mod alt, wk-mod py, cc, clay + alun in vnlets.
138.2	9.4		2.79	74	1.50	.02		.02	1		1.48		mod clay			Mod alt, wk-mod py, cc, patches w/ st qtz vning.
147.3	9.1		2.53	96	1.06	.03		.03	1	.07	.96		wk clay, tr ser.	sp jar	Sp @ 138.4	Mod alt → wk-mod alt w/ considerable femag. wk py, cc, sp lim, tr
154.5	7.2		2.64	94	1.39	.06		.06	1	.07	1.26		sp clay, ser	v. sp jar		wk-mod alt, st femag, wk-mod py, cc, CuOx, lim on frac's.
163.7	9.2		2.63	95	1.28	.11		.11	1	.02	1.15		1	wk jar		wk-mod alt, sc py + qtz vnlets, wk py, cc, tr CuOx,
173.0	9.3		2.61	98	.81	.05		.05	mod-st	tr	.76		tr clay	1	Mz ca. 163.7	wk-mod alt, mod silicif last 2', tr lim, min. as above. sp lim
182.0	9.0		2.55	95	.28	.02		.02	mod	.02	.24		sp ser	sp jar		wk alt, mod silicif, text vague, wk py, v. sp cpy, tr cc.
190.3	8.3		2.55	100+4	.29	.02		.02	1	.09	.18	Tr moly	1	tr jar		As above w/ tr moly, sp lim + good Mz text in places.
198.5	8.2		2.58	95	.38	.01		.01	wk-mod	.15	.22	Tr moly	tr clay, ser.	1		wk alt, patchy st silicif, wk py, sp cc, tr cpy, moly.
207.2	8.7		2.58	95	.55	.01		.01	1	.15	.39		wk clay	1		Mod alt, wk-mod py, sp-wk cc, tr cpy.
217.2	10.0		2.59	87	.88	.02	188.7' @ .89/.03	.02	mod	tr	.86	Tr moly	1			Mod alt w/ silicif last 2', mod py, sp cc, tr moly
226.9	9.7		2.56	92	.66	.01		.01	1		.65	Tr moly	1			wk-mod alt, patchy silicif + qtz vning, wk py, sp cc, tr cp
235.6	8.7		2.50	98	.79	.02		.02	wk-s		.77		1			wk alt, mod silicif, wk-mod py, wk cc.
243.9	8.3		2.44	98	.84	.02		.02	wk-mod		.82		wk-mod clay			wk-mod alt, patchy silicif + qtz vning, mod py, sp cpy, wk cc.
252.1	8.2		2.45	99	1.19	.02		.02	Mod	tr	1.17		1			wk-mod alt, patchy silicif, wk py, mod-st cc (diss + as vn's).
261.1	9.0		2.42	99	.75	.04		.02	1	tr	.73		Mod clay			wk-mod alt, patchy silicif, mod-st py + cc, sp cpy.
269.9	8.8		2.44	96	.77	.03		.02	1		.75	Tr moly	1			Generally wk alt, wk silicif throuout, patchy st cc + py (one 2/3 py-cc
278.8	8.9		2.40	100+2	1.35	.03		.02	1	tr	1.33		1			wk-mod alt, mod-st py + cc, tr cpy.
286.4	7.6		2.47	95	1.02	.03		.02	1		1.00		1			wk-mod alt, mod py, wk cc, num. tiny qtz vnlets.
293.8	7.4		2.55	94	.80	.02		.02	wk-mod	.05	.73		wk-mod clay			Generally wk alt w/ patchy silicif, mod py, wk cc + cpy.
302.7	8.9		2.51	97	.73	.01		.01	1	.10	.62		wk clay			wk alt, patchy silicif + qtz vning, wk py, sp-wk cc, tr cpy.
311.2	8.5		2.52	98	.62	.01		.01	1	.10	.51		sp clay			

Final Depth 353.0'
Collar Elevation 3012.72
Coordinates 29,550.72 N; 28,762.15 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-40
Sheet No. 2 of 2
Date Completed 8/7/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
322.0	10.8	NXwl	2.56	85	.28				wk	.20	.08		sp clay, sec	sp jar	Mz	wk alt, sc qtz vn's, wk py (diss + vn's), tr cc, cpy
331.2	9.2		2.57	97	.32				1	.24	.08		1	tr jar		wk-mod alt, qtz, py + chlor on frac's, tr cc.
340.5	9.3		2.57	98	.21				wk-mod	.20	.01	Tr moly	1			wk alt, sc qtz vnlets, wk py, v. sp cc, tr moly
349.1	8.6		2.67	98	.14				wk	.13	.01	Tr moly	tr clay, sp sec			wk-mod alt, occ qtz vnlets, wk py, tr cc.
353.0	3.9		2.68	96	.11				1	.11		Tr moly	1	tr jar		As above
E. O. H.		Aver	rec'y =	94%												

Final Depth 394.5
Collar Elevation 3159.86
Coordinates 28,976.10 N ; 28,518.73 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-39
Sheet No. 1 of 2
Date Completed 8/15/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
4.0	4.0	rockbit														Cover
6.0	2.0	NC wl	2.47	62	0.05			.05					sp ser, clay	mod lim wk hem	sp	wk-mod alt, wk silicif, wk lim + hem.
18.0	12.0	NX wl	2.48	78	.08			.08					mod clay	mod hem wk lim		Mod alt, num. alun unlets, mod hem, wk lim.
29.0	11.0		2.36	61	.04			.04					wk clay	wk-mod hem, lim		Mod alt, vague text, clay + alun in valets, patchy silicif, FeOx as
39.0	10.0		2.41	86	.04			.03	sp py		.01		sp clay, ser.	mod lim wk hem		Mod alt, several thick alun vn's, wk hem + lim.
51.0	12.0		2.35	80	.08	.04		.04	tr		.04		wk clay, sp ser.	mod lim sp hem		As above wi wk silicif, st alt last 2' wi mod lim
59.4	8.4		2.53	100	.32	.09		.09	sp		.23		st clay		Suls @ 51.0'	Mod alt, wk py, wk-mod cc.
67.7	8.3		2.53	97	.35	.06		.06	1		.29		1	tr lim		Mod-st alt, wk py, mod-st cc, clay + alun in frac's.
79.2	11.5		2.66	80	.11	.04		.04	tr-sp		.07		mod clay	mod lim, sp hem	Mixed cap + suls.	Wk-mod alt, wk py, wk-sp cc, wk hem + lim on frac's.
88.5	9.3		2.71	98	.20	.04		.04	wk		.16		wk clay	wk lim	Mostly suls.	Wk-mod alt, wk py + cc, sp lim on frac's.
97.6	9.1		2.70	97	.16			.04	1		.12		1	1		Wk-mod alt, wk py, v. sp cc, wk lim (up to 1/4" thick) on fr
106.2	8.6		2.71	92	.21	.01		.01	1	tr	.20		1	1		Mod alt, mod py, tr cc, sp lim-jar on frac's.
116.0	9.8		2.46	85	.29	.02		.02	1		.27		Mod-st clay & ser	tr lim		Mod-st alt, wk-mod py, sp-wk cc (picking up).
128.0	12.0		2.49	71	.23	.02		.02	1		.21		1	wk lim	Dp? ca. 116.0	Wk-mod alt wi wk py + cc to 121.8', then st alt, mod py + cc.
139.8	11.8		2.45	79	.26			.02	1		.24		1			St alt, very clayey, mod py, sp cc.
147.0	7.2	Bx wl	2.49	74	.11				1		.11		wk clay		Sp? ca. 139.8	"Sp?" Bx mod-st alt, silid in spots, wk chlor, sp cc, p
157.6	10.6		2.48	62	.24			.01	1	.05	.18		wk clay, sp ser.	tr jar		Bx has bx appearance to ≈153 then fresher, solid. wk py
163.6	6.0		2.74	91	.28			.01	mod	.05	.22		tr clay, sp ser.	sp hem		"Sp", solid, fr-wk alt, spotty silin wk chlor, py.
173.6	10.0		2.86	78	.12				wk-mod	.06	.06		1	tr jar		V. wk alt, num qtz vn's, wk-mod py.
184.8	11.2		2.69	70	.15				1	.09	.06		1	sp jar		Wk alt, mod in places, sc qtz unlets, mod py.
194.9	10.1		2.75	97	.25				1	.15	.10		sp clay tr ser.	1		Wk-mod alt, patchy silicif, mod-st py, v. sp cpy, tr c
200.6	5.7		2.75	51	.19				1	.10	.09		tr clay			Wk alt, patchy silicif, mod py, tr cpy.
210.0	9.4		2.86	80	.14				mod	.10	.04		sp clay			Wk alt, patchy silicif, mod py, sp cpy, tr cc.
220.2	10.2		2.64	82	.19				1	.14	.05		1			Wk-mod alt, occ. patch silicif, wk-mod py, sp cpy, cc
231.1	10.9		2.83	94	.19				1	.14	.05	Tr-sp mol	1			Wk-mod alt, wk-mod py, v. sp cc + cpy, tr-sp moly.
240.6	9.5		2.66	93	.16				1	.12	.04		tr clay	tr jar		Wk-mod alt, wk-mod py, v. wk cpy, tr cc, occ. qtz vn
249.9	9.3		2.67	90	.17				1	.13	.04		1	1		As above.
258.5	8.6		2.69	98	.20				wk-mod	.18	.02		1	1		Wk alt, wk-mod py, sp cpy, tr cc, Fe-rich clay on frac's
267.7	9.2		2.63	98	.25				1	.24	.01		1	1		As above wi occ. py + qtz vn's.
278.6	10.9		2.62	77	.21				1	.21			1	1		Wk-mod alt, several qtz unlets, wk py, sp cpy, wk quite dam
287.4	8.8		2.67	100+1	.24				1	.21	.03		1	1	Mz @ 286.0	Wk alt, sc qtz unlets, wk py, orthoclization in Mz, tr cpy.
296.6	9.2		2.67	99	.10				wk	.10			1			Wk alt, qtz xls in one vuggy vn, feldspathization, mod p
305.2	8.6		2.64	100+3	.07				1	.07				tr jar		As above wi considerable py in vn's.
314.0	8.8		2.67	100	.08				wk-mod	.08			tr clay	1		Wk alt, wk-mod py, tr cpy.
322.9	8.9		2.67	94	.09				mod	.09			1			Wk alt, wk-mod py, silicif along some frac's, tr cpy.
331.5	8.6		2.67	100+1	.09				1	.09						As above.
340.7	9.2		2.53	93	.09				wk-mod	.09		Tr moly				Wk alt, patchy silicif + qtz vn's, wk py.
349.1	8.4		2.51	92	.08				1	.08						As above wi sc qtz valets, sp cc.
359.6	10.5		2.55	92	.06				1	.06			tr clay			

Final Depth 394.5'
Collar Elevation 3159.86
Coordinates 28,976.10 N ; 28,518.73 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-39
Sheet No. 2 of 2
Date Completed 8/15/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
369.7	10.1	NXwl	2.54	92	0.04				mod	.04			sp-wk clay		Mz	wk alt wi mod alt last 1½', patchy silicif, wk py, sp
379.2	9.5		2.53	92	.05				1	.05			1	tr jar		Mod alt, clay along some frac's, wk py, tr cc.
388.0	8.8		2.47	99	.08				wk-mod	.08			sp clay			wk-mod alt, wk py, tr cc.
394.5	6.5		2.56	88	.06				1	.06			1			wk-mod alt, mod py, 2nd ary feldspathization
E.O.H.		Aver. rec'y = 87%														

Final Depth 325.0'
Collar Elevation
Coordinates
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-38
Sheet No. 1 of 1
Date Completed 7/27/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	rockbit	—	—	—	—										Cover
13.3	9.3	NXsb 4-8' NXwl	2.43	92	0.13			.10			.03		sp clay, wk ser	mod lim	Mz	wk-mod alt, sc leached unlets & frac's, sp epidote, v.w FeOx
23.0	9.7		2.43	92	.17			.15			.02		1	mod lim, sp LLm		As above wi sp LLm in patches & sc qtz unlets.
32.3	9.3		2.43	97	.18			.15			.03		1	st lim sp hem		Wk-mod alt, wk-mod diss hem & lim, sp. epidote.
40.6	8.3		2.54	60	.41	.17		.17			.24		1	mod-st lim		As above wi weaker alt & patches sp. LLm.
48.6	8.0		2.42	99	.74	.24		.24			.50		wk clay, sp ser	1		Wk-mod alt, wk lim, v. sp hem, sp-wk epidote.
60.0	11.4		2.56	78	3.59	1.27		1.27			2.32		sp ser	mod lim, sp LLm		Wk alt, wk lim, several qtz unlets, wk-mod mala-chr
69.1	9.1		2.51	97	.89	.65	66.4 @ 1.02/.42	.65			.24		sp clay, ser	1		Wk-mod alt, wk lim, sp hem, patchy wk CuOx.
78.9	9.8		2.47	90	.41	.19		.19			.22		wk clay, sp ser	Ditto wi sp hem		Mod alt wi patchy silicif, wk lim & hem, sp LLm, CuOx.
90.2	11.3		2.45	81	.19	.04		.04			.15		1	mod lim		As above wi felds absorbing Cu.
98.7	8.5		2.45	100	.40	.25		.25			.15		1	wk-mod lim	Sp' @ 98.5 Swls @ 98.5	Wk-mod alt, patchy silicif, wk lim, wk CuOx, tr cc.
107.4	8.7		2.68	95	1.21	.23		.23	wk	.10	.88		sp clay, ser,	wk lim		Mod alt, good 'Sp' text, wk-mod py, sp-wk cc, tr CuOx
116.5	9.1		2.79	93	1.30	.17		.17	1	.10	1.03		1	wk-mod lim		Wk-mod alt, wk py, wk-mod cc, wk jar on frac's.
125.7	9.2		2.61	95	1.53	.31	104.7 @ 1.06/.10	.31	1	.15	1.07		1	1		Wk-mod alt, wk py & cc, sp jar, 2' of Mz @ 119-121'
134.5	8.8		2.59	100	1.37	.33		.33	sp	.10	.97		1	wk lim-jar	Mz @ 125.7	Wk-mod alt, wk py, wk-mod cc, sp jar. KK type?
143.5	9.0		2.58	100+2	1.17	.24		.24	wk	.30	.64		sp ser	sp jar		Wk alt, wk py, sp-wk cc, several qtz un's, sp jar.
153.0	9.5		2.56	100	1.12	.17		.17	1	.15	.80		1	1		Wk alt, patchy silicif wi patches Mz text, wk py, sp cc, tr cpy
165.3	12.3		2.75	76	1.39	.18	171.1 @ 1.04/.36	.18	1	.20	1.01		sp clay, ser	1		Wk alt, patchy silicif, wk py & cc, tr cpy, sp jar.
174.1	8.8		2.58	100+2	1.20	.07		.07	1	.20	.93	Tr. moly		Tr Jar		Wk supergene alt wi considerable silicif, sp cpy, wk cc, mod py
183.0	8.9		2.60	99	.45	.01		.01	1	.25	.19			1		Wk alt wi patchy silicif, wk-mod py, sp-wk cc, tr cpy.
192.7	9.7		2.55	99	.45	.01			1	.40	.05	Tr moly	1			As above wi sp cpy, tr moly.
203.4	10.7		2.54	90	.47	.01		.01	1	.31	.15		1	Tr jar		Wk alt, sc qtz unlets, vggy wi qtz xls, wk py, wk cpy, cc.
213.9	10.5		2.54	91	.26				1	.21	.05	Tr moly	sp ser			Wk alt, partial silicif, sp lim on frac's, wk py, sp cpy, cc
222.8	8.9		2.56	99	.18				1	.09	.09	Tr moly	sp ser tr clay			Fresh Mz wi patchy silicif last 1'. Mod py, sp cpy, tr cc
231.5	8.7		2.57	98	.31				1	.21	.10		sp clay			Well silicif & chloritized, mod py, tr cpy, rk vggy in places.
241.5	10.0		2.63	88	.47	.01		.01	mod	.40	.06		1		Sp @ 231.5	"Sp", fresh-sp alt. chloritic. wk py, tr. cc.
251.9	10.4		2.58	98	.38	.01		.01	wk-mod	.34	.03		tr clay		Mz @ 242.8	Sp' as above to ct. Mz wk alt, mod-st sil'd, wk py. some vvgs.
259.1	7.2		2.61	96	.26				1	.16	.10	Tr moly	1			Mz as above w/ 1 small "sp" dike let. Tr chlor on frac
269.0	9.9		2.63	94	.37			.01	1	.28	.08	Tr moly				Alt decr, sil'n incr. Tr 2nd felds. wk py
279.3	10.3		2.57	80	.32				mod	.30	.02	Tr moly	tr clay			V. wk alt wi considerable qtz vning, tr moly, wk py, cpy.
288.6	9.3		2.60	97	.43	.01		.01	wk-mod	.40	.02		tr clay, ser			Wk alt, sc qtz vns, wk-mod py, wk-cpy (much along frac's)
298.0	9.4		2.54	98	.36			.01	wk	.20	.15	Tr moly	1			V. wk alt, 2 ages qtz vning, tr moly, wk-mod py, wk cpy.
307.7	9.7		2.53	94	.31				wk-mod	.30	.01		1			Wk alt, partial silicif, wk-mod py, v. wk cpy.
316.1	8.4		2.57	97	.37				1	.20	.17		sp ser			As above wi 2nd feldspath of Mz
325.0	8.9		2.52	100+1	.79	.01		.01	mod	.40	.38	Tr moly	sp clay			Wk-mod alt, vggy rk in places, wk py, cpy, v. sp cc.
E.O.H.		Aver. rec'y = 93%														Hole shut off Saturday night by sampler. Possibly in ore?

Final Depth 445.0'
Collar Elevation 3,184.95
Coordinates 28,803.60 N ; 28,271.47 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-37
Sheet No. 1 of 2
Date Completed 7/27/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
5.0	5.0	rockbit	—	—	—	—										Cover
12.9	7.9	NX sb to 7.0 NX wl	2.47	100	0.04			0.04					wk clay sp ser	mod lim wk hem	Mz	Mod alt, wk-mod hem & lim, patches bleached.
22.1	9.2		2.38	100^{+1}	.09			.09					1	wk lim sp hem		Generally mod alt, minor qtz introduction, wk hem,
31.2	9.1		2.49	91	.06			.06					1	Ditto wi sp LLim		Mod alt, patchy silicif & qtz uning, wk-mod FeOx's.
40.0	8.8		2.49	95	.05			.05					sp clay, wk ser	wk lim, mod hem		Generally wk-mod alt, sc qtz-lim vn's, mod hem, wk
49.0	9.0		2.40	96	.05			.05					1	Ditto wi sp LLim		As above wi tr CuOx & stronger lim.
58.0	9.0		2.41	98	.06			.06					mod clay	mod lim tr hem		Wk-mod alt wi 1' patch st alt, sp CuOx, mod lim, v. wk
67.1	9.1		2.39	98	.05			.05					mod clay sp ser	mod lim wk hem		Wk-mod alt, generally bleached, sc qtz uning, sp CuOx, mod lim
76.5	9.4		2.49	94	.06			.06					wk clay ser	1		As above.
85.9	9.4		2.47	96	.07			.07					1	1		Generally mod alt, vggy in places wi sp LLm, wk hem,
95.5	9.6		2.54	94	1.36	0.11		.11	wk	?	1.25		wk clay	wk lim	Sul zone @ 85.9, + 'Sp' @ 85.9	'Sp' has mod alt, wk-mod py, cc, sp grn CuOx, sp
103.7	8.2		2.71	100^{+1}	.80	.05		.05	mod-st	.10	.65		sp clay	wk lim + jar		Mod alt, v. wk cc, wk-mod py, v. sp grn CuOx, v. sp
112.9	9.2		2.67	95	.66	.02		.02	1	.15	.49		tr clay	1		V. wk alt, some qtz uning & patchy silicif, wk mod py, sp
121.9	9.0		2.57	97	.45	.02	57.7' @ .71/.04	.02	wk-mod	.10	.33		sp ser	1	Mz @ 115.6	Wk alt, sc qtz uning in 'Sp', wk py, v. sp cc, tr cpy. + c
131.7	9.8		2.57	87	.26	.02		.02	1	.10	.14		1	1	Sp @ 129.8	Wk-mod alt, sp lim-jar on frac's, wk-mod py, sp-wk cc, c
143.6	11.9		2.76	75	.74	.02		.02	mod	.30	.42		tr ser	tr jar		Wk-mod alt, sp jar on frac's, wk-mod py, sp cpy & cc
152.1	8.5		2.61	100^{+2}	.38	.01		.01	wk-mod	.25	.12		tr clay sp ser	sp jar	Mz @ 145.5	Wk alt, v. sp jar, wk py, sp cpy, tr cc, 2ndary feldspath in
161.0	8.9		2.60	97	.37	.01		.01	1	.25	.11		1	tr jar		Wk alt, several qtz vn's, wk py, sp cpy, jar. tr cc?
166.9	5.9		2.66	96	.36	.01		.01	1	.20	.15		tr clay	sp jar		Wk alt, silicif @ end of run, patches of 'Sp', mod py, sp-wk c
175.5	8.6		2.65	100	.24				1	.06	.18		1	1		Wk alt, mod silicif, patches Mz text, sc qtz vn's, min ass
184.4	8.9		2.65	100	.45	.02		.02	mod	.13	.30		sp clay			Mod silicif, patches wk-mod alt, mod py, wk cpy.
193.5	9.1		2.66	98	.21				wk-mod	.10	.11		1	tr jar		Wk-mod alt, patchy silicif, mod py, sp-wk cpy, tr ja
202.5	9.0		2.72	98	.30				mod	.10	.20		tr clay	sp jar		Mod silicif, wk py, cpy, tr jar, sc qtz vnlets.
211.8	9.3		2.66	90	.23				1	.18	.05		1	1		Mod silicif, tr jar, wk py & cpy.
221.0	9.2		2.61	92	.21				wk-mod	.15	.06		1	tr jar		Wk alt, patchy silicif, v. wk py, cpy.
230.3	9.3		2.53	93	.09				1	.02	.07		sp clay	mod jar		As above wi sp cc & wk lim-jar on frac's
239.5	9.2		2.52	93	.05				1	.02	.03		1	1		Wk alt, patchy silicif, wk lim-jar, sp py, cpy, cc.
248.7	9.2		2.76	88	.30				mod	.10	.20		1	tr jar		Wk-mod alt, text obscure, mod py, sp-wk cpy, cc.
257.2	8.5		2.75	92	.18				1	.15	.03	v. sp moly	tr clay, ser			Wk alt, patchy silicif, mod py (generally in vn's), tr cc,
265.9	8.7		2.57	100	.12				wk	.06	.06			v. sp jar		Wk alt, patchy silicif, wk py, sp cpy, tr cc, sp ja
275.8	9.9		2.53	95	.13				1	.08	.05			1		Wk alt, tr jar on frac's, wk py, tr cpy.
285.0	9.2		2.62	92	.13				1	.08	.05		tr clay	sp jar		Wk alt, sp jar, mod py, tr cpy.
293.9	8.9		2.66	92	.19				1	.10	.09		1			As above wi stronger cpy.
304.3	10.4		2.61	81	.27				1	.22	.05	tr moly	1	sp jar, lim		Wk alt, sc qtz vnlets, tr moly, wk py, sp cpy, tr cc
312.7	8.4		2.54	100^{+3}	.21				1	.21	Tr		sp clay	1		Wk alt wi sandy patches, sp py, tr cpy.
323.2	10.5		2.66	88	.14				sp-wk	.14	Tr		1	1		Brittle rock wi considerable silicif, sp py, tr cc?
332.0	8.8		2.68	99	.16				1	.16			tr clay	1		Wk alt, patchy silicif, sp-wk py, tr cpy.
341.5	9.5		2.66	95	.15				1	.15				1		Wk alt, wk py, some lim after py last 2'
350.8	9.3		2.66	90	.15				1	.15				1		Wk alt, wk py, tr cpy, cc? sp [illegible]

Final Depth 445.0'
Collar Elevation 3184.95
Coordinates 28,803.60 N; 28,271.47 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-37
Sheet No. 2 of 2
Date Completed 7/27/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
359.1	8.3	NXwl	2.61	97	.10				wk	.08	.02		tr clay, sp ser	Tr jar	Mz	wk alt, wk py, v.sp cpy.
368.5	9.4		2.63	96	.11				wk-mod	.09	.02		1	1		As above wi jar-stained felds, vggy patches wi partial filling by q
377.1	8.6		2.62	100+7	.13				wk	.09	.04	Tr moly	sp clay	wk lim + jar		wk alt wi wk py. Patchy st silicif wi mod py + lim last 4'
388.2	11.1		2.60	100	.08				sp-wk	.06	.02		1	1		sp-wk alt, sil'd, some qtz vnlg, wk py, sp li
398.2	10.6		2.59	93	.08				wk	.08			tr clay	sp lim-jar		As above lim on frac's up to 1/8" thick on 1 frac
407.9	9.7		2.58	98	.09				1	.08	.01			wk lim-jar		wk alt, mod sil'd, sp diss py. wk lim on frac's
417.2	9.3		2.60	98	.10				1	.09	.01			1		As above, almost all frac's have lim.
422.0	4.8		2.62	98	.12				1	.10	.02			wk-mod lim, jar		As preceeding.
431.6	9.6		2.62	91	.08			.01	mod	.07				1		V. wk alt, wk-mod py, tr. cpy, lim on frac's up to 1/8" thi
440.2	8.6		2.60	100	.08			.01	1	.07				wk-lim + jar		As above wi partial silicif + weaker lim.
445.0	4.8		2.62	87	.05			.01	1	.04				wk-mod lim-jar		V. wk alt, wk-mod py, tr cpy, sp lim after py, wk li on fra
E.O.H		Aver rec'y = 95%														

Final Depth 215.0'
Collar Elevation 2940.52
Coordinates 29,774.47 N ; 28,825.30 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-36
Sheet No. 1 of 1
Date Completed 7/16/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration		Rock Type	Remarks
5.0	5.0	rockbit														Alluvium
16.4	11.4	NXwl	2.44	70	0.07			0.07					sp clay, tr ser	wk hem, lim.	Mz	Mod. alt, bleached in places, wk lim, hem, tr. LLim at s
28.3	11.9		2.43	73	.04			.04					st clay sp ser	1		Mod alt, bleached, a few lim & LLim. vnlts.
37.7	9.4		2.46	93	.05			.05					1	mod lim wk hem		Mod. alt, bleached, mod. lim, sp LLim, bottom st
47.4	9.7		2.51	91	.07			.07					sp clay ser	1		mod. alt, now mostly stained w lim & ~~[illegible]~~ hem
57.0	9.6		2.39	97	.06			.05	sp		.01		wk clay	1		wk-mod alt, mod hem & lim. stain. ser. pods cc &
65.0	8.0		2.38	100+1	.09			.06	v. sp.		.03		wk clay, ser	1		wk-mod alt, mod-st hem & lim stain. / bleached po
74.0	9.0		2.45	97	.09			.05	sp		.04		1	wk lim, hem	sulct. 73.3	wk-mod alt, mostly bleached, spotty cc & cop to sulct
83.4	9.4		2.48	100+2	.23			.01	wk		.22		tr clay sp ser	sp-wk lim		wk alt, sp cc, sp. py. mainly diss. Frac's are leached.
93.2	9.8		2.63	91	.18				wk-mod	tr	.18		1	1		As above.
102.1	8.9		2.62	99	.28				wk	.18	.10		1	wk lim, jar		V. wk alt, tr cc, sp py, tr. lim after py.
110.4	8.3		2.61	97	.36				1	.10	.26		1	1		wk alt, tr cc, sp py, sp lim-jar.
121.0	10.6		2.62	86	.20				wk-mod	.10	.10		1	v. sp jar		As above wi v. sp py.
128.9	7.9		2.61	97	.06				1	.05	.01		1	tr jar		wk alt, sp py (diss.). Rk dead as they come.
137.4	8.5		2.66	100	.10				mod	.10			sp clay tr ser	sp jar		As above wi some py-qtz along frac's – 2nd ary feldspa
140.6	3.2		2.65	99	.07				1	.07				tr jar		Rk nearly Fresh. Subtle change to another (variety) phase of Mz. Sp,
149.7	9.1		2.61	100	.23				1	.20	.03		sp ser	1		Fresh-wk alt wi patchy silicif, tr-v. sp cpy, sp py
160.3	10.6		2.62	87	.27				1	.24	.03		sp clay, tr ser	1		wk alt, patchy silicif, sp-wk py, tr cpy
169.4	9.1		2.83	94	.30				1	.28	.02		tr clay	1		Mod-st silicif throuout, wk-mod py as vnlets, v.sp. cp
178.5	9.1		2.63	99	.25				1	.10	.15		1		sp ca 169.4	Wk alt, partial silicif throuout, sp cpy, wk py.
186.3	7.8		2.84	94	.35				wk-mod	.25	.10					Wk alt, partial silicif throuout, v.sp cpy, wk py.
195.3	9.0		2.60	97	.20				mod	.18	.02					V. wk alt partial silicif, wk py, sp cpy. Vuggy rk
206.3	11.0		2.64	84	.28				mod-st	.25	.03	tr moly				As above wi tr moly, jar.
215.0	8.7		2.68	92	.28				1	.25	.03					Almost fresh wi several qtz vn's, sp-wk cpy, mod py.
End of hole		Aver. rec'y = 92%														

Final Depth 400.6'
Collar Elevation 3137.21
Coordinates 28,785.66 N; 28,002.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-35
Sheet No. 1 of 2
Date Completed 7/15/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
6.0	6.0	R.B.														Cover
15.3	9.3	NXwl	2.28	94	0.04			0.04					wk clay sp ser	mod lim wk hem	M2	Mod alt, bleached in places, wk hem, lim, tr LLm
25.4	10.1		2.39	86	0.05			.05					mod clay sp ser	Ditto, wi wk LLm		As above wi clay along many frac's.
34.8	9.4		2.39	90	.03			.03					mod clay	wk hem, lim, sp LLm		Mod-st alt, bleached in part, wk hem, lim, sp LLm
43.9	9.1		2.39	92	.03			.03					/	/		As above wi generally mod alt.
53.4	9.5		2.50	89	.04			.04					mod clay sp ser	/		Mod alt, st clay on frac's, mod hem, wk lim.
62.4	9.0		2.35	93	.05			.05					wk clay sp ser	/		Mod alt, st clay on frac's, wk hem + lim, sp LLm.
74.2	11.8		2.39	75	.05			.05					/	mod lim sp hem		Mod alt → st alt last 2', wk hem, sp-wk lim, sp-wk L
83.5	9.3		2.34	98	.03			.03					mod clay	wk-mod lim + hem		Mod alt, bleached in places, wk hem, v. sp lim, wk LLm
92.5	9.0		2.34	100+2	.03			.03					mod clay wk ser	As above wi wk LLm		Mod-st alt wi partial silicif last 1½', mod hem, sp lim, wk LL
102.1	9.6		2.40	96	.02			.02					wk clay, ser	/		Mod alt, vgy in places wi st LLm, otherwise wk hem, LLm.
111.4	9.3		2.39	100+1	.03			.03					/	/		Mod alt, clay in vn's, wk hem, lim, sp. LLm.
121.0	9.6		2.46	97	.02			.02					wk clay tr ser	wk hem + lim		As above wi some alun in vnlets.
130.0	9.0		2.22	100	.02			.02					/	/		Mod alt, sc alun, sp-wk hem, wk lim, tr chrys.
139.4	9.4		2.36	95	.02			.02					wk clay + ser	As above wi sp LLm		As above wi sp chrys + wk hem Good M2 taxt
148.8	9.4		2.13	99	.03			.03					wk-mod clay, sp ser	/		Mod alt, sc alun + clay in vn's, mod lim, sp-wk LLm, wk he
158.0	9.2		2.34	95	.04			.04					wk clay sp ser	wk hem + lim		As above wi tr chrys.
161.0	3.0		2.37	100+4	.07			.04	v. sp		.03		/	/		Mod alt, mod lim, tr chrys.
168.5	7.5		2.41	88	.39			.02	wk-mod		.37	tr moly	wk clay tr ser		Sulls @ 161.0	Generally mod alt, wk-mod py, v. sp cc, 2ndary feldspat tr mol
176.3	7.8		2.38	97	.35			.02	1		.33		/			Mod alt, tr chrys + Cu-green felds, wk py, sp-wk cc
186.0	9.7		2.45	100	.45	0.03		.03	1		.42	tr moly	mod clay sp ser			Mod alt, wk py, cc, sp chrys, sc alun vn's.
195.8	9.8		2.48	95	53	.03		.03	1		.50	1	/			As above.
203.7	7.9		2.54	100	.49	.01	55.2' @ .45/.02	.01	1		.48		/			Mod alt, wk py, wk-mod cc, v. sp. chrys, sc alun
213.0	9.3		2.47	100	.35	.02		.02	wk		.33		/			As above.
222.6	9.6		2.45	96	.41	.01		.01	1		.40		/			Mod alt, wk py, wk-mod cc, v. sp chrys, sc alun
231.5	8.9		2.44	100+3	.47	.01		.01	1		.46		/			As above
240.9	9.4		2.47	93	.38	.01		.01	1		.37		/			Mod alt → st alt @ 238.0. wk py, mod cc, sp chrys.
249.5	8.6		2.41	97	.29			.01	sp-wk		.28		mod clay tr ser			Alternating mod + st alt, sp-wk py, mod cc, grn Cu-ob bent fela
257.0	7.5		2.42	96	.28			.01	1		.27		/			As above.
266.8	9.8		2.34	97	.35			.01	1		.34		/			St alt, 2ndary feldspath, sp-wk py, mod cc.
274.3	7.5		2.47	100+6	.31				wk		.31		/			Mod alt, cc on diss. py. cc on frac's. wk-mod. s to
284.0	9.7		2.47	97	.33				1	tr.	.33		/			As above but wk now more sol'd. cc incr. sc 2nd feld.
292.6	8.6		2.42	96	.30				1	.01	.29		wk clay tr ser			Mod alt, 2nd felds, wk cc, wk py, sp grn Cu Ox
301.9	9.3		2.50	88	.50	.04		.04	1	.02	.44		/			Wk-mod alt, wk cc, mod py, chrys on frac's.
310.2	8.3		2.51	96	.25	.02		.02	1		.23		wk-mod clay			As above wi weaker cc + py, 2ndary feldspath.
317.5	7.3		2.52	94	.28	.03		.03	1		.25		/			Mod alt, wk cc + py, still sp CuOx on frac's.
326.8	9.3		2.66	85	1.14	.03	25.1' @ 1.53/.04	.03	sp		1.11		wk clay	tr jar		Wk-mod alt wi patches st alt, sc qtz vning, min as abo
334.1	7.3		2.63	96	2.44	.05		.05	wk		2.39		wk-mod clay			As above wi v. wk cc + showing of native Cu.
342.6	8.5		2.64	98	1.17	.03		.03	mod		1.14		/			Mod alt, patches st alt, wk-mod py, v. wk cc, sc alun

Final Depth 400.6'
Collar Elevation 3137.21
Coordinates 28,785.66 N; 28,002.74 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-35
Sheet No. 2 of 2
Date Completed 7/15/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
351.4	8.8	NX wl	2.63	97	.28			.02	wk-mod	.02	.24		mod clay		Mz	wk-mod alt, mod diss py, tr py, sc qtz vnlets.
360.1	8.7		2.83	100+2	.08				st	.02	.06		wk clay			As above to 358.1', then st py & qtz to end of r
368.5	8.4		2.88	93	.28			.02	mod	.16	.10		sp clay			wk alt, partial silicif, st py at start, then wk py. R vvc
376.2	7.7		2.78	89	.32			.01	1	.27	.04		tr clay			wk alt w/ mod silicif, mod py.
383.6	7.4		2.73	95	.22			.01	wk-mod	.20	.01		sp clay			As above w/ one 1' patch of pyritic 'sand'-granu
393.3	9.7		2.76	92	.10				mod-st	.10			tr clay	tr jar		wk alt, mod silicif throuout, text vague, wk vggy, mod py.
400.6	7.3		2.71	98	.19				mod	.19			sp clay			As above w/ vggy white qtz in vn's.
End of hole		Aver. rec'y = 95%														

Final Depth 275.0'
Collar Elevation 2939.04
Coordinates 29,538.46 N; 28,914.30 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-34
Sheet No. 1 of 1
Date Completed 7/8-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
10.0	10.0	NC														Cover
16.2	6.2	NXwl	2.33	98	0.08			0.08					mod-st clay	mod hem wk lim, LLm	Mz	Mod alt, sc qtz vnlets, mod hem, wk lim, LLm.
25.2	9.0		2.33	88	.04			.04					/	/		As above wi st hem + mod LLm well diss.
35.1	9.9		2.41	88	.04			.04					mod-st clay sp ser	/		Mod alt wi patches st alt, wk lim + hem – mainly along frac's.
44.4	9.3		2.44	90	.04			.04					mod clay sp. ser	/		Wk-mod alt, patchy silicif wi qtz + alun vnlets, mod hem.
54.9	10.5		2.51	86	.06			.06					mod-st clay, wk ser	/		Wk-mod alt, num qtz vnlets, wk hem + lim wi wk LLm
64.2	9.3		2.50	96	.05			.05					sp clay wk ser	wk lim, sp hem	Mixed Suls sap	Wk-mod alt wi mod alt in middle, v. sp cc, wk lim.
73.4	9.2		2.43	100	.04			.04	sp				wk clay sp ser	wk lim		Wk-mod alt, wk lim, wk py + v. sp cc last 1½' of r
82.3	8.9		2.39	93	.07			.04	wk		.03		mod clay sp ser	wk lim sp LLm		Wk-mod alt, silicif at end of run, wk lim, sp hem, LLm, tr
91.3	9.0		2.79	91	.21			.03	mod		.18		mod clay	tr lim	Suls ca. 823	Wk-mod alt, patchy silicif, vgy in places, mod py, mod-st cc.
99.8	8.5		2.81	92	.87	.03		.03	wk		.84		/			As above 1st ½ of run, then st alt, sp py, mod-st cc, st cla
108.8	9.0		2.77	90	1.30	.03		.03	wk-mod		1.27		/			Mod-st alt wi patches partly silicif, wk py, mod cc.
117.7	8.9		2.77	88	.83	.03		.03	mod		.80		/			Mod-st alt, mod-st diss py, wk-mod py. RK type unce
126.4	8.7		2.65	87	.84	.02	79.4' @ .98/.02	.02	/		.82		/			Mod-st alt, mod cc, wk-mod py, patches good Mz text.
135.2	8.8		2.41	100+2	1.44	.03		.03	wk		1.41		/			Mod alt wi patches st alt, sp-wk diss cc, mod py.
144.4	9.2		2.45	100	1.03	.01		.01	wk-mod		1.02		/			Wk-mod alt wi patches mod alt, silicif along py vnlets, sp-wk
153.2	8.8		2.44	97	.92	.01		.01	/		.91		wk-mod clay			Wk-mod alt, sp chlor, tr jar, wk-mod py, sp diss c
161.8	8.6		2.43	96	.61	.03		.03	mod	?	.58		wk clay tr ser	sp jar		Mod alt, text obscured, wk cc, mod py, sp jar on frac
170.7	8.9		2.61	98	.93	.02		.02	wk-mod	.10	.81		/	tr jar		Mod alt becoming wk alt wi partial silicif, sp cc, wk py
179.8	9.1		2.57	100	.27				mod	.15	.12		tr clay, ser.	sp jar		Wk alt wi good Mz text, patchy silicif, v sp cc, wk
186.3	6.5		2.57	98	.09				/	.07	.02		/	/		Wk alt, patchy silicif + qtz vning, 2nd ary feldspath, tr
195.6	9.3		2.60	94	.10				/	.10			/	/		V. wk alt, silicif along py vnlets, v. wk py, v. sp cpy.
204.7	9.1		2.61	98	.09				/	.09				/		As above wi tr lim. 2nd feldspath + chloritization shown i every r
214.1	9.4		2.64	98	.09				/	.09			v. sp clay	/		As above.
223.2	9.1		2.64	100	.09				wk-mod	.09			tr clay	wk jar		V. wk alt, sp py, tr cpy.
230.9	7.7		2.62	98	.06				/	.06			/	/		Wk alt wi considerable 'bull qtz' vning at end of run. Sp
240.6	9.7		2.59	90	.21			.04	wk	.07	.10		sp clay	sp jar		Wk alt, consid qtz vning, one patch mod alt wi sp cc.
250.4	9.8		2.62	94	.05				wk-mod	.05				/		Relatively fresh, sp py along frac's.
258.8	8.4		2.61	100+2	.05				/	.05			tr clay	/		Relatively fresh, st qtz vning, sp-wk py on frac's, 2nd a feldsp
268.9	10.1		2.63	87	.05				/	.05			/	/		As above wi less qtz introduction.
275.0	6.1		2.63	85	.05				mod	.05			/	/		V. wk alt, vuggy rk in places, sc qtz + py vnlets.
E. O. H.		Aver. rec'y = 94%														

Final Depth 349.8'
Collar Elevation 3097.55
Coordinates 28,721.81 N; 27,774.24 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-33
Sheet No. 1 of 1
Date Completed
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay-sericite	lim	Rock Type	Remarks
6.0	6.0	rock bit														Fill
13.0	7.0	NX wl														Fill
22.5	9.5		2.44	45	0.04			0.04					st clay	wk lim	M2	Mod alt, bleached, wk lim, hem, sp CuOx's, mostly chr
31.0	8.5		2.43	75	.07			.07					mod clay	wk lim sp hem		Mod-st alt, mod brwn lim, wk hem, sp LLm, sp Cu
40.1	9.1		2.26	76	.07			.07					wk ser	sp LLm		Mod-st alt, wk lim, mod hem, sp LLm
49.9	9.8		2.29	60	.05			.05					st clay tr ser	sp lim, wk hem		Mod alt, wk lim, mod hem, LLm along frac's.
59.1	9.2		2.48	90	.05			.05					mod clay sp ser	As above wi sp LLm		wk-mod alt, patchy silicif wi some qtz vning, FeOx as a
67.7	8.6		2.34	100+3	.06			.06					wk clay sp ser	mod lim, hem, tr LLm		wk-mod alt, mod lim – mostly along leached frac's, wk h
78.4	10.7		2.48	80	.05			.05					/	/		As above but w tr hem
89.5	11.1		2.46	81	.05			.05					sp clay, ser	mod lim, wk hem		" " " sp hem
99.5	10.0		2.45	80	.05			.05					/	As above wi sp LLm		M2, wk-mod alt. A 2' dike of "Sp", mod alt. Mod lim, sp
108.2	8.7		2.53	99	.05			.05					/	/		wk-mod alt, mod lim, sp hem. B.O. leached. Tr. py
117.3	9.1		2.44	84	.07			.07					sp clay wk ser	mod lim sp hem		wk-mod alt, mod sil'n, st lim, st LLm @ end, gossan
128.6	11.3		2.47	66	.16			.06	tr		.10		wk clay sp-ser	As above wi wk LLm		Gen. mod alt, wk lim, sp-wk hem. Tr. cc
134.3	5.7		2.45	50	.11			.06			.05		mod clay	wk lim		Mod. alt, text. decr., wk lim, sp hem. No vis. sulfs.
146.7	12.4		2.27	76	.10			.06			.04		/	/		As above wi poss. tr cc.
158.4	11.7		2.27	82	.07			.07					st clay	wk lim, tr hem		Mod alt, mod hem, v. wk lim, sp alun.
167.7	9.3		2.43	93	.11			.07			.04		wk-mod clay	mod lim, hem		Mod alt, wk hem, lim, sp LLm + boxwork, tr chrys.
179.2	11.5		2.44	74	.10			.07			.03		/	As above wi sp LLm		M2 as above. Sp wi mod-st alt, wk lim, tr alun, chr
192.3	13.1		2.27	76	.13			.10			.03		Mod clay	Mod lim, sp LLm	Sp @ 176.0	Mod-st alt, wk-mod lim, sp cc, tr chrys, hem.
202.5	10.2		2.35	93	1.18	.08		.08	sp		1.10		/	/	M2 @ 191.0	St alt, mod-st cc, sp py, sp CuOx (mostly chrys), lim
211.5	9.0		2.47	93	1.08	.10		.10	/		.98		st clay	sp hem	Suls @ 192.3	Mod alt, wk cc, mod py, wk lim, sp hem, sc alun vn
219.2	7.7		2.48	98	.70	.11		.11	v. wk		.59		/	v. sp hem	Sp ca. 210.0	As above. Mixed cap + suls.
228.4	9.2		2.65	88	1.47	.15	61.4 @ .96/.09	.15	tr		1.32		mod clay	wk lim sp hem		St alt becoming wk-mod alt at end. Wk cc, mod py, wk
237.3	8.9		2.63	94	.69	.08		.08	sp		.61		wk-mod clay	mod lim		Wk-mod alt, patchy silicif + qtz vning, sp cc, jar, wk py, CuOx (diopta
244.8	7.5		2.65	100+3	.51	.06		.06	/		.45		wk clay	wk lim + jar		As above wi maybe a bit stronger cc.
253.7	8.9		2.67	97	.93	.05		.05	wk		.88		sp clay	/		Wk-mod alt, some qtz vning, wk cc, py, CuOx (diopta?).
259.2	5.5		2.66	94	.32	.03		.03	/		.29		/	wk jar		As above. Silicif obscures text
269.4	10.2		2.62	89	.33	.03		.03	wk-mod		.30		tr clay	/		Apparent 'Sp' text, wk-mod alt, wk-mod chlor, wk py, sp c
279.5	10.1		2.85	85	.47	.01		.01	mod		.46		/	/		As above. gra CuOx, ja
289.8	10.3		2.65	92	.30	.01		.01	/		.29		/	/		Wk-mod alt, vgy rk wi qtz vn's + xls, mod py, sp cc, CuOx, ja
299.2	9.4		2.60	89	.14				wk	?	.14		sp clay	/		Wk alt, vuggy rk wi wk py, sp cpy, tr jar on frac's
307.8	8.6		2.60	94	.18				wk-mod	.10	.08		/	sp jar		As above. Good 'Sp' text
317.6	9.8		2.60	88	.10				mod	.06	.04		/	/		Wk alt, several vgy qtz vn's, good 'Sp', v. wk py, tr cpy
327.4	9.8		2.60	94	.12				/	.08	.04		/	/		RK nearly fresh, wk py, tr cpy.
335.1	7.7		2.80	100+2	.21				wk	.20	.01		/	v. sp jar		Wk alt, patchy silicif wi vgy qtz vn's, Fe-rich clay fills frac's
343.6	8.5		2.79	95	.22				mod	.18	.04		/	/		RK mod silicif, very vgy, wi wk py, sp cpy. wk-mod py
349.8	6.2		2.65	100+1	.29				/	.27	.02		/	/		RK very brittle, rather st silicif, mod py, sp cpy.
													/	tr jar		

Final Depth 169.4'
Collar Elevation 2894.32
Coordinates 29,447.34 N ; 29,728.23 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property SILVER BELL

HOLE NO. F-32
Sheet No. 1 of 1
Date Completed 6/30/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
21.3	21.3	—	—	—											Fill	Rock bit & D.D. thru GAl and Caliche e.g.
27.5	6.2	NX	2.44	61	0.05			0.05					sp clay wk ser	mod lim	Sp (?)	RK badly broken in bits & pieces. wk alt, wk lim. Mod s
39.2	11.7		2.39	66	.05			.05					1	wk-mod lim, sp hem	Mz	Mod alt, patchy silicif & qtz vning, wk hem, sp lim, rk poss
49.2	10.0		2.39	84	.10			.07			.03		tr clay, ser	wk-mod lim		wk alt, mod silicif thruout, patches Mz text, wk FeOx's.
59.8	10.6		2.54	83	.07			.07					1	1		wk alt, mod-st silicif clouds text, wk-mod lim, sp hem.
71.1	11.3		2.54	78	.07			.07					1	mod lim, sp hem		As above. RK is evidently a coarse-grained porph, probably
80.0	8.4		2.52	97	.13			.07			.06?		sp clay, tr ser	mod lim	Sp Ca 71.1	sp, wk alt, scat pods sil'n, occas. dk xeno. wk-mod lim.
84.0	4.0		2.29	72	.24			.06	tr		.18?		sp clay, ser	1		Alt decr, "sp" becoming dk colored, sp sil'n, wk lim.
93.3	9.3		2.58	98	.20			.02	wk		.18		sp clay tr ser	wk lim + jar	Sp Ca 85	As above to sul. ct, then sp-wk py, wk clor on fracs, sp
101.8	8.5		2.63	100	.28			.01	1		.27		1	1		Fr-wk alt, wk-mod sil'n, sp-wk py & lim, tr. cc. sp chlor.
110.7	8.9		2.69	57	.17			.01	mod	.01?	.15		1	1		As above, sl. incr. in alt.
117.9	7.2		2.65	100+1	.47	.02		.02	mod-st	.05	.40?		wk clay, tr ser	1		Sp-wk alt, spotty sil'n. Mod py tr lim, wk chlor. Tr c
125.8	7.9		2.69	100+8	.13			.01	1	.02	.10		tr clay	wk jar		Wk-mod alt, patchy silicif, mod py, tr cc, sp jar on frac
135.2	9.4		2.68	88	.12			.01	mod		.11		sp clay	sp jar		Wk alt, mod silicif, mod py, tr cc, tr jar.
144.1	8.9		2.66	93	.13			.01	1		.12		tr clay	1		Sp in patches of seds, wk alt, patchy silicif, mod py.
153.1	9.0		2.66	96	.19			.01	1	.03	.15	tr moly	1	1		Wk alt, mod silicif thruout, mod py, sp jar.
161.7	8.6		2.67	91	.17			.01	1	.01	.15		1	1		Wk alt, patchy silicif & sc qtz vn's, mod py, tr jar.
169.4	7.7		2.68	98	.13			.01	mod-st	.01	.11		sp clay	1		Wk-mod alt, mod-st py, sp jar. RK very unexciti
End of hole		Aver. recy = 86%														

Final Depth 342.0'
Collar Elevation 3077.10
Coordinates 28,644.91 N; 27,548.17
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-31
Sheet No. 1 of 1
Date Completed 6/-3/64
Logged By BNW & CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Sericite	Lim	Rock Type	Remarks
6.0	6.0	NX sb			—											Cover
13.6	7.6	NX sb	2.39	100	.33			.15			.18		mod clay	mod lim	Sp	Mod alt, mod lim w/ dark lim + LLim on fracs.
23.0	9.4		2.54	85	.38			.18			.20		sp ser	sp LLim		As above.
32.9	9.9		2.56	83	.23			.15			.08		mod clay	/		Mod alt → wk mod. Mod lim staining w/ dark lim on
43.8	10.9		2.59	75	.32			.12			.20		/	/		Mod alt. mod lim, clay + dk lim on fracs, wk diss LL
55.4	11.6		2.58	73	.29			.10			.19		wk clay	/		As above w/ wk mod alt + sp LLim.
65.1	9.7		2.59	82	.24			.10			.14		tr ser	mod lim		Alternate mod + wk-mod alt, mod lim w/ sp LLim.
74.2	9.1		2.41	100	.39			.15			.24		wk clay ser	tr LLim		Mod alt, mod lim in Sp, wk-mod lim + lim in Mz
82.9	8.7		2.46	100+2	.27			.10			.17		/	mod lim sp LLim	Mz @ 68.5	Mod alt, text undistinguishable, mod lim stain + on frac
92.9	10.0		2.46	94	.19			.10			.09		/	mod lim tr LLim		As above w/ incr. of qtz phenos + unlets, + wk he
102.1	9.2		2.47	97	.12			.05			.07		/	/		Mod alt, patches mod silicif, mod lim, wk hem, patches
111.0	8.9		2.46	96	.05			.03			.02		/	wk lim, hem, mod LLim		Mod-st alt, definite Mz text, wk lim, LLim, mod hem.
119.6	8.6		2.57	93	.07			.04			.03		mod clay	wk lim wk LLim		wk-mod alt, patchy partial silicif, wk hem, sp lim, generally bleach
128.3	8.7		2.40	94	.10			.04			.06		/	wk lim mod hem		Mod alt. wk hem + lim, occasional told qtz w/ ads. Cu.
138.0	9.7		2.17	98	.05			.03			.02		/	/		As above w/ mod hem + lim.
148.0	10.0		2.31	93	.07			.03			.04		mod clay	sp lim, mod hem, LLim		As above w/ wk-mod LLim fr 145.5 on. A+ st rk lim
158.0	10.0		2.37	89	.07			.03			.04		tr ser	wk lim, hem		Mod alt, Fe-stained felds, st. hem w/ patches wk LLim.
166.2	8.2		2.37	100	.16			.01	tr		.15		mod clay	sp lim, wk hem	Mixed cap-sulfs @ 166.4	wk-mod alt, patchy silicif, mod hem, sp py + cc.
175.3	9.1		2.38	71	.64	.07	36.3' @ .55/.04	.07	sp		.57		/		Sul zone, 166.2	Mod alt, sp hem + lim, sp py, wk-mod cc.
183.3	8.0		2.38	100+1	.44	.03		.03	wk		.41		mod-st clay	sp lim		Mod alt, mod chlor last 1/2, sp-wk cc, sp py, wk lim
192.9	9.6		2.60	81	.67	.06		.06	/		.61		wk clay	wk lim		wk-mod alt, mod chlor, sc qtz unlets, sp-wk py, sp cc
202.5	9.6		2.59	98	.44	.01		.01	sp-wk		.43		sp clay			WK alt, v. wk cc, sp py.
208.6	6.1		2.59	56	.30	.03		.03	/		.27		/			WK alt, v. sp cc, sp py
214.6	8.0		2.59	94	.31			.03	wk-mod		.28		/			wk-mod alt, bleached in appearance, sp-wk cc, wk-mod
224.7	10.1		2.51	83	.33			.03	wk		.30		tr clay sp ser.			WK mod alt. wk py, cc
234.5	7.8		2.49	100+6	.23			.02	/		.21		sp clay tr ser			WK-mod alt, vuggy in places, wk py, sp-wk cc, sc alun
244.9	9.4		2.49	89	.27			.02	/		.25		/			WK alt, sc qtz vn's, wk py, v. wk cc, tr moly.
253.2	9.3		2.56	92	.22				wk-mod		.22		sp clay, ser			WK alt, wk py, sp cc
261.5	8.3		2.62	93	.28				/	.04	.24		/			WK alt w/ patches mod alt, sp-wk py, sp-wk cc.
270.4	8.9		2.61	89	.23				/	.07	.16		/			WK alt, sp-wk py, sp-wk cc (generally on frac's), tr j
279.3	8.9		2.64	91	.14				mod	.10	.04		tr clay sp ser			V. wk alt, wk py, tr cc, apparent orthoclization.
288.3	9.0		2.62	95	.08				wk-mod	.07	.01		/			As above.
296.2	7.9		2.64	100+7	.06				/	.05	.01		sp clay sp ser			V. wk alt, wk py.
304.8	8.6		2.58	97	.04				/	.03	.01		/			As above w/ sc qtz vns.
313.7	8.9		2.62	97	.09				/	.04	.05	tr MoS2	wk clay sp ser			V. wk alt, wk py, 2nd any growth of potash felds.
323.4	9.7		2.59	85	.03				/	.03	tr		/			As above.
333.3	9.9		2.58	87	.10				Mod	.02	.08	tr MoS2	/			V. wk alt, sp-wk py, one py unlet, cpy + tr cc in one path
342.0	8.7		2.60	100+2	.07				wk-mod	.03	.04		sp clay sp ser			As above.

Final Depth 202.0'
Collar Elevation 2920.35
Coordinates 29,676.48 N; 29,703.32 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-30
Sheet No. 1 of 1
Date Completed 6/22/6
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
24.0	24.0	NX														Alluvium
27.2	3.2	NX wl	2.15	76	.08			.06			.02		mod clay tr ser	wk lim sp LLm	Sp" ?	St alt, st clay, wk hem – some after cc, wk lim. Sp
36.2	9.0		2.51	82	.06			.05			.01		st clay	sp lim, wk hem		Mod alt becoming st, wk hem & lim, sp clay. Rk type Bell
48.5	12.3		2.48	41	.05			.05					mod clay	wk lim, st hem		Alternate mod & st alt, wk lim, mod hem + LLm
60.7	12.2		2.22	87	.08			.06			.02		st clay	mod hem wk LLm		Mostly st alt w/ patch partly silicif toward end. FeOx's as
72.2	11.5		2.22	95	.04			.04					mod-st clay	mod lim, wk hem		silicif at start, then st alt w/ st clay, wk lim, hem, LLm
82.6	10.4		2.27	90	.02			.02					1	wk lim, hem	Dp @ 79.5	Mod-st alt, much clay, qtz 'eyes' in Dp, wk-mod lim, hem, sp
90.4	7.8		2.38	99	.14			.02	wk		.12		mod clay	wk-mod lim	Silic + Mz @ 92.7	Mod alt, sc patches recognizable text, patches capping, wk py, cc
99.4	9.0		2.56	94	.10				wk-mod		.10		wk-mod clay	sp lim	Sp" ca. 90.5	Mod-st alt, st chlor, clay on vnlets, wk diss py, sp cc.
107.9	8.5		2.63	96	.06				1		.06		1			As above. Capping indicated better rock than this.
116.2	8.3		2.86	90	.09				wk	tr?	.09		wk clay			Alt varies fr wk – st, mod py, tr cc, patch hem @ 111.5
125.1	8.9		2.85	82	.08				1		.08		1			Generally wk-mod alt, mod py, tr cc. Qtz, py vnlets.
133.9	8.8		2.81	84	.09				wk-mod		.09		1			Wk-mod alt, mod-st py in vn's + diss, sp hem, no cpy on
142.1	8.2		2.61	93	.07				1		.07		1			Mod alt, mod-st chlor, min as above.
151.4	9.3		2.66	91	.05				1		.05		sp clay		Mz ca. 143.0	Wk-mod alt, patchy silicif, patches Mz text, mod py.
159.9	8.5		2.65	97	.05				mod		.05		tr clay	tr jar		As above.
168.4	8.5		2.66	97	.06				wk-mod		.06		sp clay			Wk alt, mod silicif, text unrecognizable, mod py.
176.3	7.9		2.58	99	.09				mod-st		.09		1			Well silicif rk w/ patches Mz text recognizable, st py.
184.7	8.4		2.72	98	.04				mod		.04		wk clay			Wk alt, patchy st silicif, mod py.
193.8	9.1		2.66	94	.04				1		.04		1			As above.
202.0	8.2		2.65	100+	.04				mod-st		.04		1			Well silicif rk, mod-st py.
E.O.H.			Aver recy: 89%													

Final Depth 367.1'
Collar Elevation 3033.00
Coordinates 28,699.41 N; 27,348.16 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-29
Sheet No. 1 of 2
Date Completed 6/16/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
9.5	9.5	NX sB	2.44	70	0.03			.03					wk ser mod clay	Mod Hem Mod lim	Mz	wk-mod alt, patchy silicif, mod hem, wk lim.
18.7	9.2	NX wl	2.42	89	.03			.03								As above.
28.1	9.4		2.38	97	.05			.05					wk. ser wk. clay	Mod lim M-st. Hem		Wk alt, mod silicif, LLm, wk hem, lim.
37.1	9.0		2.41	90	.05			.05					wk. ser w-m. clay	wk. lim Mod. Hem		Wk-mod alt, patchy silicif, lim. & alun along frac's, wk
46.3	9.2		2.41	95	.04			.04						M-St. lim wk. hem		As above wi mod hem, wk lim.
55.5	9.2		2.38	100	.02			.02						Mod. lim wk. hem		Wk-mod alt, patchy silicif, alun vn's, st hem, sp LL
61.0	5.5		2.45	86	.09			.02	v. sp		.07		wk ser, mod clay	mod lim at start	sul. c.t. @ 58.5	As above to sul. c.t. then mod. alt, spotty sil'n, sp cc
70.3	9.3		2.52	100	.30			.03	wk		.27					Mod alt, spotty sil'n, sp grn c
79.3	9.0		2.59	99	.46	.01		.04	wk		.42			v. sp jar		Mod alt, spotty sil'n, sc qtz vnlts. sp-wk cc mainly diss.
88.7	9.4		2.51	100+1	.44	.02		.04			.40					wk-mod alt, mod sil'n. wk cc, wk py. Tr. grn CuOx
98.5	9.8		2.53	82	.45	.01	56.1' @ .47/.01	.01			.44			tr jar		Mod alt, mod sil'n plus qtz vnlts. sp-wk cc, tr grn. C
105.4	6.9		2.38	96	.42	.01		.01			.41		mod-st clay, sp ser			Mod alt, spotty sil'n. wk-mod cc & wk sul qg. " "
112.0	6.6		2.37	100	.50	.01		.02	v. wk		.48		mod-st clay			Mod-st alt. sc. qtz vnlts. wk ~~cc~~ mod cc. sp Epidote
121.4	9.4		2.57	96	.54	.01		.01	wk		.53		mod clay sp ser			As above with wk cc. sp 2ndary pink folds near end, sc. lines 2nd. fold
128.5	7.1		2.59	98	.38	.01		.03	v. wk		.35			tr jar		1st & run very crumbly, 2nd & solid. wk-mod cc. Tr grn CuOx
136.0	7.5		2.53	88	.23	.02		.02	wk		.21		mod clay tr ser	sp jar	Cap @ 136.0	wk-mod alt, mod F.G. matrix, wk cc. sp lim on frac's near end
143.8	7.8		2.56	90	.05	.01		.01	tr		.04		mod clay	mod lim wk LLm		wk-mod alt, sp. cc., sp lim on frac's
153.4	9.6		2.40	92	.05	.04		.04			.01		wk-mod clay	mod lim sp hem, LLm		wk-mod alt, st. sil'n, mod lim & LLm. Vuggy vnlts.
161.5	8.1		2.49	92	.04	.02		.02	tr		.02		mod clay	wk lim, LLm, sp	sul's @ 156.8	Wk-mod alt, incr @ end. Mod lim & LLm. Mod hem. sta
171.1	9.6		2.49	93	.19	.02		.02	wk		.17		wk cldy ser	sp hem, wk lim		wk-mod alt, mod-st lim to ct. sp-wk sul's, mainly p
179.0	7.9		2.49	93	.26	.02		.02	1		.24		1	sp lim		wk-mod alt, sc areas of lim & above & hem. stain
188.3	9.3		2.54	93	.42	.02		.02	wk-mod		.40		1	tr jar		" " " , sp diss. sul's Cpy & cc & lim & hem stain
196.3	8.0		2.52	90	.38	.01		.01	1		.37		mod clay v. sp ser	sp lim		As above, sl. incr in total sul's.
203.0	6.7		2.55	96	.21	.01		.01	wk		.20		wk clay sp ser.	wk lim at start		" " , tr grn CuOx
212.2	9.2		2.55	92	.41	.01		.01	wk-mod		.40		1			wk-mod incr to mod alt bcmbd at start. sul's on fracs wk
221.3	9.1		2.58	94	.47	.01		.01	1		.46		1			wk-mod alt, grn clay along one frac, sp-wk py + cc.
230.2	8.9		2.58	95	.35	.01		.01	mod		.34					wk-mod alt, clay + qtz vnlets, wk py, sp-wk cc.
239.0	8.8		2.44	100+1	.75	.01		.01	1		.74		wk-mod clay, wk ser			As above wi clay, qtz, cc-py along frac's.
249.5	10.5		2.56	79	.28	.01		.01	wk-mod		.27		1			Fairly wk alt, wk cc + wk-mod py diss & along frac
258.6	9.1		2.61	94	.51	.01	150.0' @ .46/.01	.01	1		.50		1			Mod alt wi patchy silicif → wk alt wi alun, wk py, wk
268.2	9.6		2.54	95	.44	.02		.02	mod		.42		wk clay, ser			Wk alt wi wk py + sp cc. One patch mod cc-st py @ 256
278.1	9.9		2.64	90	.44	.01		.01	wk-mod		.43		mod clay			Wk-mod alt thruout, sc alun + qtz vnlets, wk-mod py, v. wk c
283.6	5.5		2.48	100+1	.76	.02		.02	mod		.74		1			wk-mod alt, patchy wk silicif, wk py, sc, tr CuOx sp Cu
292.9	9.3		2.45	95	.59	.01		.01	wk-mod		.58		st clay			wk-mod alt, patches st py-mod cc, otherwise wk py, sp cc
301.9	9.0		2.45	97	.35	.01		.01	1		.34		mod clay			wk-mod alt, rk shows bxiation, wk cc, mod py
310.4	8.5		2.46	100	.49	.01		.01	wk		.48		1			wk-mod alt, no more bx, patchy silicif, sp cc, wk-mod p
319.8	9.4		2.66	89	.30	tr		tr	wk-mod		.30		wk-mod clay			Generally wk alt, several alun. vnlets, sp-wk cc, wk py.
329.0	9.2		2.58	96	.78	.01		.01	1		.77		mod clay			Wk alt, sp cc on fracs, wk py, sc qtz vnlets
337.9	8.9		2.52	99	.26				1		.26		wk clay			Wk alt, patches mod alt wi mod cc-st py, otherwise wk cc, m

Final Depth 367.1'
Collar Elevation 3033.00
Coordinates 28,699.41 N; 27,348.16 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-29
Sheet No. 2 of 2
Date Completed 6/16/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	clay sericite	lim		
346.9	9.0	NXwl	2.74	90	.26				wk		.26		mod clay		M2	Wk-mod alt, partial silicif, wk cc, mod py, tr CuOx
356.5	9.6		2.71	88	.19				1		.19		1			wk-mod alt, patchy silicif w/ several qtz vn's, wk-mod py, w
367.1	10.6		2.78	76	.23				1		.23		wk clay, tr ser			As above w/ patchy wk cc, wk-mod py.
End of hole.			Aver. rec'y = 93 %													

Final Depth 197.0'
Collar Elevation
Coordinates
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-2B
Sheet No. 1 of 1
Date Completed 6-9-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, sericite	lim.	Rock Type	Remarks
4.0	4.0	NC st	2.46	59	.16			.10			.06?		mod clay sp ser	wk lim mod hem	Dp	Mod alt wi num qtz vn's. Mod hem, lim, wk LLm
14.5	10.5		2.30	78	.10			.06			.04		wk clay sp ser	wk lim, hem		Wk-mod alt wi several qtz + alun vnlets, mod lim on fr
24.8	10.3		2.19	96	.04			.04					1	mod hem, wk lim, LLm	Sp ca. 14.7	Mod alt wi sc qtz + alun vnlets, wk LLm, hem, lim.
32.2	7.4		2.51	95	.09			.06			.03		1	1		wk-mod alt, patchy silicif, mod hem, wk-mod LLm.
41.2	9.0		2.29	100+2	.06			.04	sp		.02		1	1		Wk-mod alt, qtz vn's, lim on fracs, sp LLm, wk FeOx's, sp p
51.0	9.8		2.16	99	.09			.02			.07		mod clay tr ser	tr hem, mod lim	Mixed cap-suls.	Good 'Sp' text. wk-mod alt, wk py, sp cc, sp qtz vnlets, mod
59.8	8.8		2.41	89	.08			.04			.04		mod clay wk ser	sp hem wk lim	Capping	Mod alt, no vis. suls, sc qtz, alun vnlets, wk hem, mod
64.0	4.2		2.41	98	.12			.04			.08		1	sp hem mod lim		Mod alt, sp cc, tr py, lim on a few frac's, wk-mod lim s
74.1	10.1		2.35	97	.24			.02	wk		.22	tr moly	wk clay, ser	mod lim sp LLm	Mostly suls after 64.0	Mod → wk alt, wk sp, wk-mod py, patchy lim, tr moly
83.4	9.3		2.54	98	.30			.02	sp-wk		.28		1	wk lim		wk-mod alt, wk-sp cc, wk-mod py, patchy lim wi lim on fr
86.3	2.9		2.54	99	.22			.02	wk		.20		1	wk lim		As above wi tr CuOx
95.5	9.2		2.64	95	.17			.01	1		.16		sp clay, ser	wk lim		wk alt wi mod-st silicif after 94.0. Sp cc, wk py, lim
104.5	9.0		2.65	95	.10				wk mod		.10		—	wk lim-jar	Mz ca. 96.0	wk alt, patchy silicif, spots wi Mz text, mod py, sp cc
115.1	10.6		2.60	82	.12			.01	1		.11		sp clay, ser	1		wk alt, partial silicif, mod py, v. sp. cc, sp lim.
124.0	8.9		2.65	97	.10				1		.10		sp ser, tr clay	mod lim-jar		As above wi 2 porph texts. Poss. c.g. 'Sp' here wi
133.0	9.0		2.64	98	.05				1	.01	.04		1	v. sp jar		wk alt, mod py, sp cpy, cc, tr moly, sp lim on frac
142.5	9.5		2.64	92	.06				1	.01	.05		1	sp jar		wk alt, wk py in vnlets + diss, v. sp cc, cpy, sp lim, qtz
151.4	8.9		2.62	100	.10				mod	.05	.05	tr moly	sp clay	1	Sp ? @ 150.5	wk alt, generally well silicif, v. wk py, v. sp cc, tr cpy,
161.2	9.8		2.68	87	.07				1	.04	.03		1	wk jar		wk alt, partial silicif + partially bxiated in places, tr cc, cp
173.7	12.5		2.68	67	.08				1	.04	.04	tr moly	tr clay	sp jar		As above wi stronger silicif, tr moly wk j
183.1	9.4		2.82	94	.09				1	.05	.04	tr moly	1	1		Generally well silicif, sp jar, py, tr cc?, moly
191.9	8.8		2.82	94	.06				1	.02	.04		1	wk jar		Good drk 'Sp' at end of run, patchy silicif, wk lim-jar,
197.0	5.1		2.77	62	.13				1	.10	.03		sp ser	v. sp jar		wk alt, several qtz + py vnlets, wk py, sp jar on frac's
	E.O.H.	Aver. rec'y = 90%														

Final Depth 400.0'
Collar Elevation
Coordinates
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-27
Sheet No. 1 of 2
Date Completed 6-8-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
6.0	6.0	NC st	2.50	84	.02			.02					mod ser wk clay	mod hem lim, wk lim	Mz	Bleached, wk-mod alt, mod lim, hem
16.1	10.1	NX wl	2.54	91	.02			.01	sp		.01		wk ser v. sp. clay	1	Cap-suls-12.5	Bleached, wk alt wi mod patchy silicif, wk FeOx, sp py-c
26.0	9.9		2.55	85	.02			.02	tr				sp clay, ser.	mod hem, wk lim,		Mod silicif, sp py, tr cc, wk hem, lim, sp
34.3	8.3		2.64	100+3	.03			.02	wk		.01	tr moly	1	wk lim, hem		wk alt, patchy silicif, sp-wk py, tr cc, moly sp hem,
44.3	10.0		2.49	87	.03			.03	tr				1	st hem wk lim		wk-mod alt sc qtz vnlets, tr py, mod-st hem, mod li
54.3	10.0		2.47	85	.01			.01					sp ser	1		wk alt wi num qtz vnlets, sp patches py, tr cc, mod hem,
64.5	10.2		2.59	88	.06			.01	wk		.05		sp ser, clay	wk hem sp lim	Mostly suls after 54.3	wk alt wi num tiny qtz vnlets, wk py, tr cc, patches he
75.6	11.1		2.51	94	.02			.01	sp		.01		1	mod hem wk lim		wk-mod alt, num qtz vnlets, alun vnlets, sp py, cc, mod he
84.6	9.0		2.66	94	.02			.01	wk		.01		sp ser	1		wk alt, occ. patchy silicif, wk lim on frac's, sp patches hem, wk
93.9	9.3		2.69	91	.03			.01	1		.02		wk clay sp ser	wk hem lim		wk alt, several qtz vn's, leached frac's, patches hem, wk py, sp cc.
102.9	9.0		2.68	96	.02			.01	v. wk		.01		sp clay	tr hem, wk lim		Mod-st silicif obliterates text, wk py, sp cc, patches hem, lim on f
112.2	9.3		2.80	83	.13				wk		.13		wk-mod clay	patchy hem		Wk alt, one patch hem @ end of run, wk py, v. sp. cc.
121.0	8.8		2.79	84	.10				1		.10		1	wk lim, hem		Wk alt, num qtz + lim vnlets @ end of run, sp cc, wk py, p
130.3	9.3		2.61	90	.06			.02	wk-mod		.04		wk clay sp ser	sp hem wk lim		wk alt, mod silicif last several ft, sp-wk py, tr cc, CuOx, wk
139.9	9.6		2.60	94	.04				wk		.04		sp clay ser	1		wk alt, py on vn's + weakly diss, tr cc, CuOx, lim on fr
148.6	8.7		2.67	96	.15				1		.15		1	sp lim		wk alt, partial silicif, vuggy frac's wi py + lim, wk py, v.
158.4	9.8		2.78	90	.12				mod		.12		1	1		Wk alt, clay-py in 1½" vn, wk-mod py, sp-wk cc, lim
167.6	9.2		2.71	96	.14			.02	1		.12		wk clay	v. sp. lim		wk alt, mod py in vn's + diss, sp cc, sp lim.
176.9	9.3		2.70	92	.06				wk-mod		.06		1	wk lim		wk alt, partial silicif, text generally destroyed, mod py, tr cc, sp
184.4	7.5		2.67	92	.12			.01	wk		.11		sp clay	mod lim		wk alt, partial silicif, vuggy rk wi wk lim, sp hem, mod py, wk
193.2	8.8		2.76	95	.07				mod		.07		sp clay, ser.	wk lim		As above wi wk-mod py, sp cc
203.0	9.8		2.65	91	.04				1		.04		tr clay sp ser.	wk lim, sp hem		wk alt, partial silicif, patches Mz text, mod-st py, sp cc, lim
211.6	8.6		2.69	96	.16	.01		.01	wk-mod		.15		sp clay	sp lim		wk alt, patches mod alt, partial silicif, wk-mod py, sp cc,
221.8	10.2		2.59	90	.61	.01		.01	wk		.60		mod clay			wk-mod alt, patchy silicif, sp-wk cc, mod py, tr CuOx
231.3	9.5		2.61	93	.26			.01	1		.25		wk clay tr ser			wk alt, good Monz text, several qtz vn's, wk py, sp c
241.0	9.7		2.59	53	.18			.01	1		.17		1			wk-mod alt → st alt. Sp py, wk cc, tr hem.
249.7	8.7		2.58	93	.46	.02		.02	1		.44		mod clay			wk-mod alt, sp py, wk-mod cc. Suls in vnlets +
259.2	9.5		2.58	96	.26			.01	1		.25	tr moly	wk-mod clay			Wk alt, patchy silicif, wk py, cc, tr moly, CuOx.
268.4	9.2		2.57	98	.22			.01	1		.21		1			wk alt, generally mod silicif wi num qtz vnlets, wk py,
277.0	8.6		2.53	62	.12			.01	sp-wk		.11		wk clay tr ser			As above wi sp-wk cc, v. sp CuOx.
286.0	9.0		2.54	50	.33			.01	1		.32	tr moly	1			wk-mod alt, sp-wk py, cc, tr moly, several qtz vn
294.9	8.9		2.55	100+2	.22	.01		.01	1	.03	.18	tr moly	wk clay sp ser			Wk alt, wk-mod py, sp-wk cc, tr moly, num qtz v
304.1	9.2		2.55	100	.24	tr		tr	wk-mod	.03	.21	tr moly	wk clay tr ser			As above.
313.2	9.1		2.57	99	.17				mod	.02	.15		1			wk alt becoming silicif last ½ of run, wk-mod py, sp-w
322.6	9.4		2.55	97	.31	tr		tr	wk-mod	.02	.29		1			wk alt wi several vuggy qtz vn's, wk py, sp cc, cpy.
330.7	8.1		2.56	96	.16				1	.01	.15	tr moly	wk clay sp ser			wk alt, one 1" qtz vn wi moly, wk py, sp cc, cpy.
340.0	9.3		2.56	99	.07				mod	.05	.02		sp clay ser			wk alt, wk py, v. sp cc, cpy.
349.4	9.4		2.58	99	.20	tr		tr	1	.05	.15	tr moly	1			wk alt, patchy silicif, mod py, v. sp cc, cpy.
357.3	7.9		2.53	100	.10	tr		tr	1	.02	.08		sp clay,			Mod silicif

Final Depth 400.0'
Collar Elevation
Coordinates
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-27
Sheet No. 2 of 2
Date Completed 6-8-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sericite	Clay	Lim	Rock Type	Remarks
367.0	9.7	NXwl	2.78	92	.19				wk-mod	.05	.14		sp clay tr ser.			M2	wk alt wi patches mod alt, sp-wk cc on frac's & diss, wk
379.2	12.2		2.78	60	.44	.01		.01	1	.05	.38	tr moly	wk clay				wk alt, patchy silicif, wk-mod py, sp diss cc, tr moly.
388.1	8.9		2.68	98	.25				mod	.03	.22		1				As above wi cc sometimes wk diss.
400.0	11.9		2.69	93	.41	.01		.01	1	.01	.39		1				wk alt wi mod silicif but for one patch mod alt, mo
	E.O.H.	Aver. rec'y = 90%															cc-py in patches, overall wk cc, wk-mod py. Cc
																	just will not quit.

Final Depth 227.8'
Collar Elevation 2837.70
Coordinates 29,209.67 N ; 29,626.57 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-26
Sheet No. 1 of 1
Date Completed 5/28/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	NC st			-											Cover
5.0	1.0	NX wl														Cover
15.4	10.4		2.34	69	.13			.08			.05		wk-mod clay, ser	wk-mod lim, sp hem	Sp?	Bleached, mod-st alt, some alun vnlets, wk-mod lim, sp h
25.3	9.9		2.56	86	.13			.03	sp		.10		wk ser mod clay	/	Mixed cap-sulf	wk-mod alt, sp py-cc, wk-mod lim, tr hem.
35.0	9.7		2.36	94	.12			.08	tr		.04		wk ser, clay	/	Silver Bell andesite bx?	Mod alt, bx text in places, mod lim-hem, sp-wk cc, sp py.
44.0	9.0		2.50	93	.17			.05	sp		.12		/	/		wk-mod alt, still bx text in spots, sp cc, sp-wk py, wk Fe
51.6	7.6		2.41	100	.55	.03		.03	wk		.52		wk clay sp ser	sp lim	Sp ca. 44.5 Sp seals @ 44.6	Mod alt, mod cc, wk py, wk hem, lim.
59.3	7.7		2.54	100	.49	.01	32.6' @ .46/.01	.01	/		.48		/			As above wi cc getting weaker at end of run, and no Fe
67.8	8.5		2.64	88	.41	.01		.01	wk-mod		.40		mod clay tr ser	tr lim		wk-mod alt, wk cc, wk-mod py, sc alun vnlets.
76.6	8.8		2.48	99	.40	.01		.01	mod		.39		/	v. sp lim		As above. Much of cc is probably coating of py.
85.8	9.2		2.60	95	.38			.01	/		.37		/			wk-mod alt, wk py, sp cc, sc alun-clay vnlets.
95.2	9.4		2.77	97	.17				st		.17		wk clay tr ser	sp jar		wk-mod alt, wk cc + py wi st py in large vn last 1' of ru
102.3	7.1		2.66	100	.07				/		.07		sp clay	/		wk-mod alt, patchy silicif, wk-mod py, v. sp cc, tr jar
110.3	8.0		2.88	92	.07				mod		.07		/			wk-mod alt, patchy silicif, mod py (much in vn's), v. sp cc, tr cpy
120.5	10.2		2.64	88	.13				wk-mod		.13		wk clay	tr jar		wk-mod alt, patchy silicif, wk-mod py, sp cc.
130.8	10.3		2.68	80	.37				wk		.37		mod clay			wk-mod alt, wk-mod py, wk cc
139.0	8.2		2.67	98	.19				sp-wk		.19		/			wk-mod alt, wk-mod py, sp-wk cc, clay in some v
147.0	8.0		2.73	94	.13				wk-mod		.13		wk-mod clay		Mz? ca. 149.6	wk alt, poss. Mz?, mod silicif wi qtz vns, wk-mod py, sp
156.6	9.6		2.69	99	.09				/		.09		wk clay sp ser			wk-mod alt becoming wk wi qtz + py vns. Sp cc, tr cpy. tr c
166.2	9.6		2.73	94	.05				/		.05		/		Mz	wk-mod alt, patchy silicif, wk-mod py, sp cc, tr cpy.
177.0	10.8		2.60	100	.10				/		.10		sp clay ser			Good Mz, wk-mod alt, wk-mod diss py, sp cc. 2nd-ary fel
186.9	9.9		2.59	96	.10				/		.10		/			wk-mod alt turning st @ 183.0 Mod-st py, sp cc, qtz vn.
197.0	10.1		2.76	100+5	.22				st		.22		sp clay wk ser			RK type? St alt, py, wk cc to 191.0 Then wk alt, mod silin,
206.3	9.3		2.73	99	.11				mod		.11	tr moly	wk-mod clay			Mz text. wk-mod alt, mod py, sp cc, felds grn (Cu-ads.).
215.1	8.8		2.72	98	.05				mod-st		.05		/			wk-mod alt, patchy st silicif wi vn's py, mod py, v. sp cc.
227.8	12.7		2.64	97	.12				/		.12		/		Sp(?) @ 226.8	As above. RK type? May be "Sp" last 1' of hole.
E.O.H.			Aver rec'y = 94%													

Final Depth 326.9'
Collar Elevation 2970.70
Coordinates 28,843.43 N; 27,262.41 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-25
Sheet No. 1 of 1
Date Completed 5/23/54
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	lim	Rock Type	Remarks
7.0	7.0	NC st	2.42	19	.04			.04					mod clay	mod lim hem	Sp ??	RK type obscure. Mod alt, st hem stain, wk lim, LLm
14.9	7.9	NX wl	2.26	92	.11			.06			.05					As above wi sc alunite vn's.
22.9	8.0		2.41	86	.06			.06					wk clay	st hem wk lim		Mod alt, st hem stain, wk lim, sp LLm, sc alunite vnl
32.5	9.6		2.23	93	.07			.07						mod lim hem		As above wi incr. lim + LLm. Wk-mod amt of alu
41.8	9.3		2.22	96	.06			.06					mod clay			RK type still obscure but probably Sp, st hem, mod lim, wk LL
50.7	8.9		2.49	90	.03			.03								Sp, mod alt. 1 small diplet of Mz. St hem stain, vuggy in
59.5	8.8		2.58	86	.03			.03						Mod-st LLm, Mod lim		Sp, mod alt, vlst hem stain. Mod LLm.
69.3	9.8		2.58	81	.07			.07								As above.
80.8	11.5		2.45	84	.06			.06								Sp, mod alt, half hem stain, & bleached. 1 small Mz dikelet
90.1	9.3		2.44	86	.06			.06						wk LLm, lim		Mod alt, spotty sil'n. Mostly bleached, tr LLm, sp lim. Wk-mod
97.6	7.5		2.49	83	.04			.04						wk LLm mod lim		As above but no visible grn Cu Ox. A few sc. Vug's.
107.0	9.4		2.37	100	.05			.05					mod clay sp ser	wk lim	Mz @ 99.0	Sp as above to ct. Mz mod alt. Sp LLm, mod lim & stain
116.0	9.0		2.41	93	.05			.05								Mz, mod. alt, st. lim staining. Tr LLm & lim on fr
125.0	9.0		2.26	95	.12			.05	tr		.07		mod clay	Mod LLm, lim.	Sp @ 116.8 Sulf @ 124.0	Mz w st. hem. stain to ct. Sp sc hem & lim st. All mod alt. Sp cc
135.0	10.0		2.41	82	.39	.01		.01	wk		.38		st clay			Sp in one Mz dikelet near cont. Mod alt, wk py, sp cc, mostly
143.2	8.2		2.65	88	.56	.01	27.8' @ .48/.01	.01	1		.55		mod clay wk ser			Sp in excess. thin Mz dikelet. Mod alt, wk py. sp-wk cc on & dis
152.8	9.6		2.62	93	.50	.01		.01	1		.49		1			Mixed Sp & Mz, mod. alt, mod spotty sil'n. Min as above
162.8	10.0		2.53	87	.25				1		.25		mod clay		Mz @ 161.0	Sp, st sil'd in spots & also qtz vnlts. Sp-wk cc. Mz mod
171.4	8.6		2.47	71	.14				1		.14		1			Mz, mod alt. wk-mod py., wk cc.
179.8	8.4		2.46	92	.27				1		.27		mod clay wk ser			" " " wk py, wk cc on vnlts & diss on
189.2	9.4		2.42	94	.22				wk-mod		.22		1		Sp @ 184.9	Mz as above to ct. Sp partly sil'd. cc thicker on vn
198.0	8.8		2.42	93	.14				wk		.14		1			Sp wk-mod alt. Mod-st diss py w sp cc on py.
208.5	10.5		2.45	94	.23				1	.04	.19		mod clay			Alt incr, becoming gg'y at end. Total sulf. st, cc. Sp.
217.6	9.1		2.58	44	.18				1	.01	.17		mod-st clay			Mod alt, wi wk py, sp cc, tr cpy.
226.9	9.3		2.63	100	.55	.01		.01	mod		.55		1			Mod alt but weakening, mod-st py, sp cpy & cc, tr mo
236.4	9.5		2.65	97	.10				wk		.10		1			Mod alt, mod-st clay, mod py, sp cc, cpy.
241.0	4.6		2.68	100	.14				1	.02	.12		1			Wk-mod alt, mod clay in spots, mod py, v. sp cc, cpy,
248.3	7.3		2.79	94	.43	.01		.01	1	.07	.35	mostly one vn	mod clay			Wk-mod alt, wk py, tr cpy-cc, sc alun, py vn's. some py vn's.
256.0	7.7		2.70	100+2	.18				1		.18		wk clay sp ser	sp jar		Wk-mod alt, mod py – diss + in valets, v. sp cpy, mod c
265.1	9.1		2.67	84	.25				1		.25		1	tr jar		Wk-mod alt, mod chlor, wk-mod py diss & valets, sp cpy, tr c
272.7	7.6		2.69	99	.38				1	.02	.36		1			As above wi sp cc.
281.6	8.9		2.48	100+2	.22				1		.22		mod clay, ser		Mz @ 275.2	"Sp" as above. Mz wi mod alt, mod-st clay, wk py, v. sp cc
289.5	7.9		2.66	98	.23				sp. wk	.10	.13		1			Mod alt becoming well silicif, sp py, tr cpy, cc.
299.1	9.6		2.55	95	.25				wk	.10	.15	tr moly	wk clay mod ser			Silicif → st alt → wk-mod alt. wk py, sp cc, tr cpy, moly
307.3	8.2		2.54	98	.24				1	.10	.14		1			Wk-mod alt, wk py, sp-wk cpy, sp cc Good Mz text.
315.7	8.4		2.56	100	.17				1	.03	.14		1			As above wi sp cpy.
326.9	11.2		2.57	92	.20				1	.05	.15	tr moly	1			Wk alt, wk-mod py, sp-wk cpy, v. sp cc, tr moly.
E.O.H.		Aver recy = 89%														

Final Depth
Collar Elevation 2855.65
Coordinates 29,343.24 N; 29,463.08 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-24
Sheet No. 1 of 1
Date Completed
Logged By CWH, BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	lim	Rock Type	Remarks
5.3	5.3	—	—	—	—	—										No sample. Stream fill.
13.3	8.0	NX	2.32	93	.13			.08			.05		mod ser, clay	Mod hem wk lim, LLm	Mz	Med gr. rk. mod alt, mod-st. silic'd, wk. lim.
21.4	8.1		2.39	82	.15			.08	V. sp		.07		st clay wk ser	/		As above w st. LLm 1st part of run. decr to barren
23.4	2.0		2.47	86	.07			.05	tr		.02		st clay	wk hem, mod lim		Good Mz, mod alt, bleached, wk hem-lim, patchy sp cc-py.
32.0	8.6		2.49	98	.66	.09		.09	sp		.57		mod clay	sp lim	Sp ca. 29.0	Mod-st alt, sp lim on frac's, sp py, wk-mod cc.
42.3	10.3		2.48	100	.49	.14		.14	sp		.35	tr moly	/	/		Mod → wk alt, sp lim-jar on frac's, wk py, cc, tr moly
51.4	9.1		2.49	100	.49	.02		.02	wk		.47		wk clay sp ser	/	Mz @ 49.6	wk-mod alt, tr jar, wk py, sp-wk cc, sc qtz vnl
59.4	8.0		2.68	100	.34	.02		.02	wk-mod		.32		/	v sp lim		Wk alt, becomes st at end, mod-st silicif, qtz + py vns, sp
68.1	8.7		2.65	95	.46	.01		.01	wk		.45		/	tr lim-jar		Varied wk-st alt w mod silicif, wk py, wk-sp cc.
77.1	9.0		2.56	97	.36	.01		.01	/		.35	tr moly	/	sp lim-jar		Mod alt, mod cc becoming sp at end, wk-mod py, tr mo
86.0	8.9		2.57	97	.45	.01	105.1 @ .52/.03	.01	/		.44	tr moly	mod clay			Wk-mod alt, partial silicif, wk py, cc, tr moly, sc qtz v
91.0	5.0		2.71	92	.24				/		.24		wk clay			Wk alt, partial silicif, wk py, v. sp cc, tr jar
100.1	9.1		2.66	98	.78	.03		.03	/		.75		Mod clay			Mz, wk alt w pods st. alt. One zone st blk. qg. Sp. cc
109.8	9.7		2.59	93	.90	.01		.01	/		.89		/			Mod alt, diss py w cc. coatings.
119.1	9.3		2.60	100	.50	.01			/		.50		/			As above plus sp cc on frac's.
128.5	9.4		2.58	96	.42	.02			/		.42		/			As above but poss. w stronger cc.
138.6	10.1		2.64	90	.31	.01			/		.31		/			Mz, mod alt. sp py. cc as coatings on py & on frac's
148.6	10.0		2.54	100	.35	.01			/		.35	Tr Moly	/			As above but sl. decr. in alt.
158.0	9.4		2.53	97	.32	.01		.01	/	Tr	.31		wk-mod clay	Tr. Jar	Sp @ 150.6	As above to ct. then sp wk-mod alt, decr. cc decr to tr-sp
166.0	8.0		2.69	100	.12	.01		.01	/	.05	.06		/	Sp Jar		Sp, fresh-wk alt. sc silic, sp-wk py, tr cpy. No visible cc
170.5	4.5		2.68	97	.14				/	.06	.08		/	/		As above
179.2	8.7		2.65	96	.22				/	.14	.08	tr moly	wk clay			Wk alt, sc qtz vnlets, sp-wk py, tr cc, tr moly
188.5	9.3		2.73	86	.20				/	.12	.08		/			As above w wk chlor and more num qtz vnlets
197.9	9.4		2.71	86	.11				/	.04	.07		sp clay, ser	tr jar		Wk alt, some qtz vnlets, wk py, tr cc.
207.7	9.8		2.65	100	.12				/	.08	.04		tr clay sp ser	sp jar		Sp alt, some inclusions, wk py, tr cpy.
216.0	8.3		2.64	100	.13				/	.08	.05		/	/		Wk alt, " " " " " sc. silin
225.0	9.0		2.68	98	.12				/	.08	.04		sp clay tr ser	v. sp jar		Sp-wk alt, mod silin, tr chlor. Wk py, tr cpy
234.4	9.4		2.70	100	.18				/	.10	.08		/	tr jar		Sp-wk alt, sc. silin, rest as above plus sp ep.
	END OF HOLE															
			Avg Rec'y	96%												

Final Depth 346.8
Collar Elevation 2974.95
Coordinates 28,845.68 N; 27,476.92 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-23
Sheet No. 1 of 2
Date Completed 5/12/64
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
5.0	5.0	rock bit	-	-	—											Cover
9.9	4.9	NXwl	2.54	56	.04			.04					sp clay, ser	mod hem wk lim	Dp	wk alt, mod silicif, wk hem, lim
19.4	9.5		2.47	90	.07			.07					wk clay sp ser	wk hem mod lim		wk-mod alt, patchy silicif, wk-mod hem, lim.
29.9	10.5		2.33	80	.04			.04					mod clay sp ser	sp hem mod lim	Mz? @ 28.0	Mod alt, many plag phenos in rk, also qtz eyes. tr cc, FeOx abc
38.8	8.9		2.43	92	.02			.02						wk hem mod lim		wk-mod alt, partial silicif, mod hem, wk lim.
47.9	9.1		2.47	93	.03			.03					wk clay sp ser	st hem wk lim LLm		Bleached, mod alt, st. hem, wk lim, LLm, qtz vn's, — Dp? Mz
57.5	9.6		2.46	90	.06			.06						st hem wk LLm	Defin	As above wi increasing LLm. Rk type obscured.
65.7	8.2		2.44	98	.16			.12	sp		.04				Definitely Mz at 61.0	Bleached wi st hem, mod LLm + lim. wk-mod alt, tr cc
74.7	9.0		2.51	94	2.86	.12		.12			2.74		st clay	wk hem + lim	Suls @ 65.8	Mod-st alt, mod cc, wk py, chlor. Patch of capping from 69.7-71.
85.8	11.1		2.54	72	2.42	.15		.15			2.27		st. clay	v.sp lim	sp ca. 85.0	Mod-st alt, mod chlor, wk py, cc, tr jar.
94.7	8.9		2.60	95	.82	.18		.18			.64			wk lim		Mod alt, mod chlor, sp py, wk cc, wk hem in patches
105.9	11.2		2.60	73	.63	.09	67.6' @ 1.29/0.11	.09	sp-wk		.54		mod clay			Mixed cap + suls. Mod alt, sp-wk py, cc along fracs, wk
114.6	8.7		2.56	95	1.17	.15		.15	sp		1.02		wk-mod clay	wk-mod lim		Good 'Sp' text, wk-mod alt, sp py, mod cc. All suls.
123.8	9.2		2.56	95	.49	.05		.05	wk		.44		wk clay			wk-mod alt, patches cap wi lim, sp-wk py, cc.
133.3	9.5		2.57	95	.61	.05		.05	sp-wk		.56		wk-mod clay	sp-wk lim		As above wi v. sp cpy. Some LLm, lim on frac's.
141.4	8.1		2.63	96	.19			.02	wk-mod	.02	.15		sp clay, ser			wk-mod alt, sp py, sp-wk cc on frac's, wk lim on frac's
150.7	9.3		2.68	98	.23			.01		.01	.21			wk lim		wk-mod alt, wk py + sp cc on frac's, 'Sp' matrix very da
160.4	9.7		2.65	84	.23			.01	wk	.02	.20		sp clay			As above wi sp jar on frac's.
169.7	9.3		2.65	86	.25				wk-mod	.04	.21		tr clay ser			wk alt, mod in patches, sc milky qtz vnlets, sp cc-p
177.5	7.8		2.64	100	.43	.01		.01	wk	.04	.38			mod lim		wk-mod alt, some leaching wi wk lim-jar, sp-wk cc, sp
185.5	8.0		2.65	100	.10			.01		.02	.07			mod-st lim		wk-mod alt, leaching + lim-jar as above, wk py, wk-sp c
194.5	9.0		2.61	98	.16			.01	sp-wk	.02	.13			mod lim		wk alt, wk py, tr cc, lim-jar on frac's.
203.3	8.8		2.75	98	.30			.01	wk	.15	.14			wk-mod		As above, wi sc qtz vnlets.
212.2	8.9		2.58	100	.36			.01		.07	.28		sp clay			wk alt, wk jar on frac's, sp-wk cc, py.
222.3	10.1		2.68	86	.16				wk-mod	.05	.11			wk lim		wk alt, sc silicif, sp jar on frac's, sp-wk py, v. sp. c
230.4	8.1		2.66	99	.23					.11	.12			wk lim, sp LLm		As above wi tr cc + sp cpy.
238.6	8.2		2.69	100	.23					.11	.12			sp lim		Nearly fresh wi v. sp jar on frac's, tr cpy, sp py.
247.0	8.4		2.69	95	.15				mod	.05	.10		tr clay			As above wi wk py.
255.5	8.5		2.70	91	.21				wk-mod	.11	.10					wk alt, some qtz vnlets, wk py, v. sp cc, tr cpy
263.8	8.3		2.69	96	.26				sp-wk	.08	.18					wk alt, sp-wk py, sp cpy, tr cc.
273.0	9.2		2.64	93	.18				sp	.10	.08					wk alt, sc qtz vnlets, wk py, sp cpy, cc.
282.4	9.4		2.69	88	.14					.06	.08					wk alt, partial silicif, rk becoming bx at end of run, wk py, s
293.4	11.0		2.70	77	.17				sp-wk	.08	.09					wk alt, wk py, sp cc, cpy
302.9	9.5		2.70	86	.15					.10	.05					wk alt 'Sp' rk is quite dark, wk py, tr cc?, tr cpy.
311.6	8.7		2.66	94	.12				sp	.10	.02					As above wi partial silicif.
318.2	6.6		2.67	99	.14					.12	.02?		sp clay			Mainly fresh w clay on frac's. Sc. blk sul gg. Sp py, tr cpy
327.1	8.9		2.72	91	.20					.18	.02?					Fresh-sp. alt, sc. s.l'n. wk-mod chlor'n. Sp py, tr cpy.
333.8	6.7		2.70	69	.50	.01				.20	.30		Tr clay			" " " " " cc v alt noted plus some blk sul gg.

Final Depth 346.8
Collar Elevation 2974.95
Coordinates 28,845.68 N ; 27,476.92 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-23
Sheet No. 2 of 2
Date Completed 5/12/64
Logged By BNW; CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	.			
346.8	5.6	NX	2.63	85	.25				Sp	.23	.02?		Sp clay		Sp	Sp, fresh w.sc. areas of wk alt. Poss. dk. incl. Clay on frac Sp-wk py. Tr. Cpy. No visible cc.
E.O.H.		Aver. rec'y = 90%														

Final Depth 229.7
Collar Elevation 2982.42
Coordinates 29,969.25 N ; 29,176.34 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-22
Sheet No. 1 of 1
Date Completed 5/8/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
7.0	7.0	NC			—											no core, dump.
17.0	10.0	NX wi	2.28	100	.08			.08			tr		mod clay	wk lim, hem, LLm	Dp	Mod alt, sc qtz vn's, sc patches cc, mod hem, lim, wk LL
24.9	7.9		2.33	100+1	.05			.05					wk-mod clay, sp ser	1		wk-mod alt, patchy silicif, mod hem, wk lim in frac's
34.0	9.1		2.42	96	.05			.05					1	1		wk-mod alt, partial silicif, mod hem, wk lim on frac's
45.3	11.3		2.28	89	.05			.05					mod clay sp ser	wk LLm, lim, mod hem		wk-mod alt, some qtz vning, sp LLm, wk hem, lim
54.6	9.3		2.28	98	.15			.10			.05		1	1		Mod alt, considerable clay, wk hem, lim on frac's
63.9	9.3		2.29	96	.06			.06					wk clay sp ser	wk hem, sp LLm, mod lim		Mod alt becoming wk, partial silicif, wk hem, lim.
74.4	10.5		2.27	98	.06			.06	v. sp		tr		1	1	Suls @ 74.0	wk alt, mod silicif thruout, FeOx's as above, sp py at en
84.6	10.2		2.43	97	.66	.05		.05	sp-wk		.61		wk-mod clay	sp-wk lim-jar	Sp @ 83.0	Mod alt, mod cc, wk py, tr jar
91.7	7.1		2.62	99	.69	.07		.07	wk-mod		.62		wk clay, sp ser.	1		Mod alt becoming wk, wk-mod py, wk cc, some qtz vning, sp
99.7	8.0		2.64	98	.42	.03		.03	wk	.02	.37		1	wk lim-jar	M2 @ 94.7	wk-mod alt, minor qtz vning, wk-mod py, cc, lim-jar on fr
109.5	9.8		2.79	89	.73	.03		.03	wk-mod		.70		sp clay ser	sp-wk lim-jar		wk alt, mod silicif, mod py, wk cc, sp CuOx, jar
117.4	7.9		2.66	100+2	.29	.02		.02	wk	.02	.25	tr moly	1	1		wk alt, patchy silicif, sc qtz vn's, wk py, v. wk cc, sp j
126.0	8.6		2.66	97	.38	.03	99.4' @	.03	wk	.02	.33		wk clay	wk lim		wk alt becoming mod, wk py, v. wk cc, sp jar.
136.7	10.7		2.62	83	.56	.03	.59/	.03	1	.03	.50		1	sp jar		Mod alt, wk py, cc, tr jar, CuOx
145.8	9.1		2.39	95	.54	.03	.04	.03	1	.02	.49		mod clay	1		Mod alt becoming st, good M2 text, wk py, wk-mod cc
156.0	10.2		2.32	95	.97	.12		.12	sp		.85		st clay	1		Mod-st alt, sp lim, chlor, sp-wk cc, tr py.
164.8	8.8		2.63	88	.62	.06		.06	wk	.02	.54		sp clay, ser	tr jar		St alt becoming wk @ 165.5. Wk-mod py, v. sp. cc.
173.8	9.0		2.69	91	.52	.08		.08	1	.04	.40		1	1		Wk alt, v. fresh in places wk py, tr cpy.
183.4	9.6		2.67	88	.02				1	.02			sp ser			Fresh wi sc qtz vn's, wk py.
191.2	7.8		2.69	100+4	.02				1	.02			tr ser			As above wi some silicif & some orthoclasation.
200.4	9.2		2.70	98	.02				mod	.02			sp ser			Nearly fresh, sp-wk py, v. sp. cpy
209.3	8.9		2.69	100+1	.02				1	.02			1			As above. Rk solid, biotite → chlorite
220.6	11.3		2.69	95	.07				1	.07			1			As above wi sp py.
229.7	9.1		2.65	99	.09				1	.07	.02		1			Nearly fresh, sp py, tr cpy.
E.O.H.		Aver rec'y = 95%														

Final Depth 273.2
Collar Elevation 2892.34
Coordinates 29,535.61 N; 29,489.06 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-21
Sheet No. 1 of 1
Date Completed 4/30/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	NC														Alluvium
15.5	11.5	NX wl														Alluvium
25.0	9.5		2.45	45	.13			.10			.03		mod clay, wk ser.	mod lim	Mz?	wk-mod alt, porphyry wi medium grey matrix, lim on frac's, sp cc.
31.1	6.1		2.44	75	.09			.04			.05		1	1		Mod alt, wk lim on frac's, occ patch wi cc, same rk as abo
39.9	8.8		2.44	69	.11			.11			tr?		1	mod lim @ p. 44.0		Wk-mod alt, st silicif at end of run, wk hem-lim stain, st lim on frac's, dun.
50.9	11.0		2.41	49	.08			.08					wk clay	1		wk alt, mod silic, mod lim. Tr. cc?
61.1	10.2		2.40	90	.12			.12			2		mod clay sp ser	As above wi sp hem	Sp? @ 53.5	wk-mod alt. Mod lim, wk Lhm. RK f.g. tr feldsp phe
69.1	8.0		2.53	78	.11			.11			?		wk clay, sp ser	1	Dp? @ 66.0	As above to ct, then decr in lim to sparse.
77.0	7.9		2.48	100	.10			.10	sp		tr		mod clay	mod hem lim, wk Lhm		Dp in patches of "Sp". Mod lim & Lhm. sp py & cc @ cr.
85.4	8.4		2.60	95	.30	.11		.11	sp		.19		1	1	Sp & sub CT @ 77.0	"Sp", wk-mod alt wi wk subs to 80, then incr. alt. Mod. cc @ cr.
90.1	4.7		2.52	100	.54	.07	13.3' @ .64/.06	.07	wk		.47		1	wk lim		~~Mod~~ alt, ~~wk-mod~~ Mod-st cc. Both cc & py as diss & veins
98.7	8.6		2.53	98	.70	.06		.06	1		.64		wk clay	tr lim		Mod-st alt. st chlor, st py, mod-st cc. Tr alunite & Ja
107.0	8.3		2.68	83	.32	.04		.04	wk-mod		.28		sp clay, ser	1		Py st. cc, wk? Mod-st alt in patches, at dense sil'd rk. Rk type obliterated
117.0	10.0		2.61	100	.06			.02	wk		.04		sp clay, ser			RK dk, f.g. st chlor, patches sil'n, badly brkn. St py. Mod cc?
126.1	9.1		2.66	96	.07				1	.05	.02		sp ser			"Sp", fresh-wk alt, some large feldsp phens. Sp py. Tr cc & cp
137.0	10.9		2.65	88	.06				1	.01	.05		tr ser			RK alt, & min as above. 1 zone of pass. "Silver Be
145.2	8.2		2.66	83	.13				mod	.03	.10		tr clay ser			As above. Occasional "ghost" of xenol. Alt & min (cc) incr slig
156.1	10.9		2.68	78	.11				1	.05	.06		1			Wk alt, considerable silicif, wk diss & vn py, tr cc.
164.9	8.8		2.70	100+2	.11				1	.03	.08		sp clay tr ser			As above wi py weakening slightly.
173.2	8.3		2.69	100	.08				1	.06	.02		1			Wk alt, wk py becoming mod. Much py in vn's.
180.4	7.2		2.65	100	.12				wk-mod	.08	.04		wk-mod clay			Wk alt, patchy silicif, py & clay on frac's, wk cc.
190.8	10.4		2.75	65	.09				1	.06	.03		sp clay			Wk alt becoming st at end, wk-mod py.
197.9	7.1		2.55	60	.08				wk	.03	.05		st clay			St alt wi st chlor, mod py, cc sp to non-existent
206.1	8.2		2.68	68	.11				1	.01	.10		mod clay			As above decr to wk alt, wk py. Tr 2nd feldsp. RK brkn
216.3	10.2		2.61	93	.17				sp-wk	.01	.16	Tr. Moly	wk clay			Fresh-wk alt. Sp sil'n. Wk py. Tr MoS2. RK badly brkn. Incr alt
227.0	10.7		2.55	100	.15				1	.01	.14		mod clay			Overall alt. st, but no wk patches. Wk py & chlor. No vis. cc.
235.4	8.4		2.63	100	.12				sp		.12		st clay			As above w sc. areas of sil'n. RK extremely brkn.
246.2	10.8		2.73	69	.11				sp-wk		.11		mod clay			Mod-st alt wi patches silicif, sp-wk py.
254.8	8.6		2.79	95	.09				sp		.09		st clay			St alt wi occ patch silicif, wk py.
265.3	10.5		2.60	59	.11				1		.11		mod-st clay			Wk-mod alt, partial silicif & some qtz vning, wk py.
273.2	7.9		2.65	52	.09				1		.09	tr moly	1			Wk alt wi mod silicif, sp py, few qtz vn's.
E.O.H.		Aver. rec'y = 82%														

Final Depth 373.0
Collar Elevation 3069.35
Coordinates 28,867.30 N ; 27,878.09 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-20
Sheet No. 1 of 2
Date Completed 4/30/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	Lim	Rock Type	Remarks
0.0	4.0	rockbit													Mz	
12.0	8.0	NXwl	2.53	57	.05			.05					wk clay, sp ser	Mod lim, sp hem		Mz, wk alt, lim on frac's, hem-lim staining, tr CuO,
20.7	8.7		2.50	90	.05			.05					/	/		WK-mod alt, lim on frac's, wk hem-lim staining, sc qtz
27.9	7.2		2.51	89	.04			.04					/	Mod lim, wk hem		As above wi minor silicif.
38.0	10.1		2.55	92	.04			.04					/	/		WK-mod alt, partial silicif, wk lim-hem stain, lim on fr tr c
46.6	8.6		2.47	94	.04			.04					wk-mod clay, sp ser	/		As above wi mod alt + st hem at end of run.
57.8	11.2		2.46	81	.04			.04					/	mod lim, sp LLm		WK-mod alt, silicif along frac's, tr LLm, wk hem, li
67.0	9.2		2.49	97	.05			.04	Tr		.01		/	Mod lim, Tr LLm		WK-mod alt, lim stained felds, lim on frac's.
74.3	7.3		2.48	100+	.04			.03	/		.01		/	Mod lim, Mod hem	Mixed cap + suls @ 67.0	WK-mod alt, silicif along frac's, hem + lim staining, patchy py-
84.8	10.5		2.50	84	.04			.04	/		Tr		wk-mod clay, wk ser	/		As above wi v. sp cc + py, tr CuOx.
95.5	10.7		2.46	96	.03			.03	/		Tr		wk-mod clay, sp ser	/		WK-mod alt, patchy silicif, mod hem stain, lim on frac's, patchy
105.1	9.6		2.52	97	.01			.01	/		Tr		/	mod lim, Mod-st hem		As above wi wk diss LLm, tr py + cc.
114.7	9.6		2.52	65	.02			.01	/		.01		/	Mod lim, wk hem		Wk-mod alt, wk lim + hem stain, lim on frac's, patchy wk p
122.9	8.2		2.35	58	.01			.01					mod clay, wk ser	/	cap @ 114.7	Mz, wk alt becoming mod alt, quite broken. Mod lim, wk
134.8	11.9		2.45	99	.02			.02					wk clay, ser	mod lim		wk-mod alt, mod lim, wk LLm. Tr py in one spo
142.3	7.5		2.47	96	.02			.02					/	/		As above plus tr py, tr cc.
153.1	10.8		2.48	88	.05			.03	sp		cc-cov .02		mod-st clay	wk hem, mod lim		wk-mod alt, mod lim & LLm, sc patches of suls
162.0	8.9		2.44	79	.03			.01	tr		.02		wk clay, ser	mod lim		As above wi deer suls.
170.3	8.3		2.63	93	.29	.01		.01	sp		.28		mod clay, sp ser	sp lim	Sul. ct ≈ 163.3 Sp ≈ 178.4	Mod. alt, varying grain size. Partial leaching on frac's wk
180.6	10.3		2.59	42	.47	.01		.01	wk	.02	.44		/	/		As above. More leaching (lim) on frac's. Mod diss. py + c
186.3	5.7		2.64	88	.76	.02		.02	wk	.02	.72		wk clay, sp ser	/		"Sp", mod alt, lim on frac's, tr cc. wk diss cc + py.
196.0	9.7		2.62	100+	.54	.02		.02	mod	.03	.49		/	/		wk-mod alt. wk-mod py + cc. Frac's mostly leached/li
203.5	7.5		2.70	90	.55	.01		.01	wk-mod	.02	.52		/	/		wk-mod alt, wk py + cc. Deer. lim & Jar on frac's.
212.5	9.0		2.57	83	.56	.02		.02	wk	.02	.50		sp clay, wk ser	/	Mz @ 203.5	wk-mod alt, mod py, wk cc. sp lim on frac's.
222.4	9.9		2.62	92	.34	.01	109.3' @ .53/.02	.01	/	.03	.30		/			wk alt, patches mod alt + silicif, sp-wk py, cc.
231.9	9.5		2.60	92	.29	.03		.03	/	.02	.24		sp clay, ser			wk alt becoming mod at end, wk py, mod cc.
241.2	9.3		2.52	75	.69	.02		.02	sp-wk		.67		wk clay		Sp ca. 237.0	wk-mod alt, qtz-py-cc vn's, wk py, cc (particularly on fr
251.7	10.5		2.59	91	.89	.04		.04	/		.85		/			wk-mod alt, silicif toward end, wk py, mod cc, sp CuOx
260.7	9.0		2.68	82	.71	.02		.02	WK		.69		/			wk-mod alt, mod cc for 1st half, then deer alt & mi
269.8	9.1		2.79	91	.22	.01		.01	/	.08	.13		tr clay			Fresh-wk alt, tr cc, tr apy, sp py. Tr. 2nd felds. sp Jar & lim tr-sp Cu.
279.6	9.8		2.65	97	.41	.01		.01	/	.10	.30		/	tr jar		"Sp" as above
288.1	8.5		2.65	99	.24				/	.10	.14		tr clay, ser			Almost fresh, sc. sil'n. Sp epidote. Tr. cpy, sp py, 2nd f
293.3	5.2		2.64	97	.21				sp-wk	.10	.11		/			As above, with tr jar +
301.3	8.0		2.63	99	.18				/	.15	.03		/			Mod-st silicif, probably "Sp", num small phenos, wk py, sp cpy, cc
310.8	9.5		2.64	79	.28				/	.20	.08		/	tr jar		As above wi mod chlor and no cc.
321.0	10.2		2.62	73	.19				/	.15	.04		sp clay	/		Soft spot at start, then wk alt wi some silicif, sp-wk py, v. sp cp
330.2	9.2		2.68	83	.22				wk	.18	.04		wk-mod clay	/		Possibly Mz obscured by mod silicif, wk py, sp cpy. Occ soft patche
338.0	7.8		2.77	99	.30				/	.20	.10		wk clay			WK-mod alt, partial silicif, mod chlor, wk py, sp cpy.
347.1	9.1		2.66	93	.23				/	.18	.05		sp clay			Re-chlor wi general st. wk's. Ok is possible Mz

Final Depth 373.0
Collar Elevation 3069.35
Coordinates 28,867.30 N ; 27,878.09 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-20
Sheet No. 2 of 2
Date Completed 4/30/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Sericite	lim	Rock Type	Remarks
354.7	7.6	NX	2.66	93	.30				Sp	.20	.10	Tr MoS2	wk clay	sp. var	Sp (?)	Wk-mod alt, wk chlor, py, sp-wk cpy, tr cc
363.0	8.3		2.70	93	.32				wk	.27	.05	|	|	|		wk alt, patchy silicif, mod py (much in vn's), sp cpy,
373.0	10.0		2.68	92	.51	.004			wk	.51?	Tr	|	Sp clay	|		wk-mod alt w patchy silicif, wk py, sp cpy, tr cc.
E.O.H.		Aver. rec'y =		87%												

Final Depth 276.2'
Collar Elevation 2890.81
Coordinates 29,650.85 N ; 29,290.23 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-19
Sheet No. 1 of 1
Date Completed 4/17/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
7.0	7.0	NC	—	—	—											Alluvium
16.0	9.0	NXwl	—	—	—											Alluvium
27.6	11.6		2.42	70	.11			.11					wk-mod clay-ser	mod lim wk. LLm	Dp	Wk-mod alt, partial silicif, wk lim, mod hem.
36.4	8.8		2.36	94	.06			.06					/	mod. lim mod. lim		WK-mod alt, sc qtz vns, mod lim + hem
45.5	9.1		2.43	94	.10			.10					mod clay-ser	mod. lim wk. LLm		Dp? wk-mod alt, partial silicif, wk hem, lim on frac
55.5	10.0		2.38	90	.10			.10					/	mod lim v.sp LLm	Sp?? ca. 45.5	Mod alt, patchy silicif, mod lim, hem. No LLm yet in ho
65.5	10.0		2.24	97	.12			.12					wk clay sp ser.	mod hem lim		As above. RK quite hard.
75.3	9.8		2.51	57	.09			.09					sp clay, ser.	mod lim wk hem		Wk-mod alt, patchy silicif, wk-mod lim, hem.
85.0	9.7		2.44	52	.15			.09	tr		.06		wk clay, ser.	mod lim	Suls @ 84.3	Mod alt, sc qtz vning, wk lim, mod hem, sp py-cc at end
94.0	9.0		2.74	93	.48	.03		.03	sp		.45		/	wk lim		WK alt, sc qtz vns, wk py, sp-wk cc, wk chlor. RK type?
103.8	9.8		2.69	98	.31	.02	46.6' @ .42/.02	.02	wk		.29		sp clay, ser	sp lim-jar	Definitely Sp at 99.0	wk alt, sc qtz vn's, sp-wk py, sp cc, tr cpy.
113.3	9.5		2.72	100+3	.47	.02		.02	sp-wk	.08	.37		/	/		WK-mod alt, wk py, sp cc, tr cpy. Good "Sp" rk.
122.0	8.7		2.67	85	.36			.02	/	.05	.29		sp clay	v.sp jar		WK alt, wk py, sp cpy, wk cc. Min is in bx in this ru
131.6	9.6		2.73	79	.49	.02		.02	wk	.07	.40		tr clay			Wk-mod alt, wk chlor, py, sp cc, v.sp cpy. No more
140.2	8.6		2.66	100	.14				sp-wk	.07	.07		/	tr jar		WK alt wi bxiation. Py, qtz, cc in bx filling. Qtz vning fo
150.3	10.1		2.74	90	.09				/	.06	.03		/	/	Mz ca. 141.0	wk alt, partial silicif. Thick py vn's wi cc, cpy. Tr moly. ed by qtz
159.0	8.7		2.65	91	.07				/	.05	.02		sp clay	sp jar		Fresh rk wi py + qtz vn's, tr cpy, cc.
167.4	8.4		2.66	100+4	.08				sp	.05	.03	tr moly	tr clay	sp lim, tr jar		Fresh Mz wi locally st silicif. Sc qtz, py vn's. wk py, tr
176.7	9.3		2.67	97	.06				sp-wk	.05	.01		sp clay	sp jar		As above. RK vuggy + bxiated at end of run. Cc in bx
186.3	9.6		2.64	100	.08				/	.06	.02		v sp clay			Fresh-wk alt wi py + qtz vning, partial silicif.
190.5	4.2		2.68	95	.05				/	.04	.01		tr clay			As above wi v.sp cpy, some chlor in Mz
200.8	10.3		2.64	95	.08				/	.06	.02		/	Tr Jar.		Fresh rk, sc qtz vning, sp py, tr cc, cpy.
210.7	9.9		2.63	100+5	.10				wk	.09	.01	tr moly	sp clay			WK alt, sc qtz vning, massive py in one vn, wk py, tr c
220.5	9.8		2.70	99	.11				/	.10	.01	tr moly	/			WK alt, partial silicif wi qtz vning, wk py, tr moly.
230.8	10.3		2.77	94	.16				/	.15	.01	tr moly	/			Wk alt partial silicif, tr moly assoc wi qtz vn's, wk py, sp
239.7	8.9		2.58	97	.19				/	.17	.02	tr moly	/			WK alt, vuggy rk wi text obscured by qtz, chlor, wk py, tr
244.8	5.1		2.85	86	.23				sp-wk	.23		tr Moly	wk. clay			As above, no moly visible.
252.0	7.2		2.75	98	.15				sp-wk	.14	.01	tr moly	/			WK alt, mod-st silicif, patchy Mz text, wk py, sp cpy, tr moly
261.3	9.3		2.83	98	.20				/	.15	.05	tr moly	patchy clay			wk alt, occ silicif patch + sc qtz vning, wk py, v.sp c
271.0	9.7		2.68	98	.11				/	.09	.02	tr moly	tr clay, ser	tr jar		As above wi tr moly
276.2	5.2		2.66	95	.10				wk	.08	.02	sp moly				WK alt, mod silicif, sp-wk py, v. sp cpy, sp moly.
End of hole		Aver. rec'y = 91%														

Final Depth 373.3'
Collar Elevation 3034.43
Coordinates 28,827.13 N ; 27,638.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-18
Sheet No. 1 of 2
Date Completed 4/17/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
7.0	7.0	NXsb	2.53	37	0.07			.07					mod clay sp ser	mod lim, sp LLm	Mz	wk-mod alt, mod qtz vning, mod lim, sp hem.
15.4	8.4	NXwl	2.54	70	.07			.05			.02		wk clay, tr ser	mod lim		Wk alt, mod qtz vning, tr cc, magnetite. Wk-mod lim.
25.0	9.6		2.59	70	.12			.05			.07		mod clay	st lim tr hem		Wk alt to 23.0, then bx text wi mod alt + st lim.
35.9	10.9		2.40	74	.15			.13			.02					Mod alt, st lim., no LLm.
44.0	8.1		2.52	93	.10			.07			.03		wk clay, ser		Sp. circa 43	Mz as above. CT grad. Sp F.G., no qtz eyes.
56.5	12.5		2.54	60	.11			.08			.03		sp clay, wk ser	Mod lim tr hem		Sp, wk-mod alt. Lim stained, no LLm.
65.2	8.7		2.50	82	.22			.12			.10		sp clay, ser		Mz @ 65.2	As above. Quite st in matics in spots.
74.7	9.5		2.55	99	.23			.10			.13		wk clay sp ser		Sp @ 71.0	Mz, f.g. to grad. CT wi sp; wk-mod alt. lim stain. No LL
84.0	9.3		2.53	91	.18			.08			.10			st lim tr hem		"Sp" mod alt. spots of "qtz eyes", qtz vnlts, tr LLm.
93.7	9.7		2.48	89	.09			.07			.02			st lim, wk hem	Dp at 84.0	f.g., scattered qtz eyes, mod alt, mod lim, wk hem, sp LLm.
103.5	9.8		2.43	92	.14			.10			.04		mod clay sp ser	As above wi sp LLm	Sp ca. 94.2	Mod-st alt, very patchy cc, mod lim, sp LLm.
111.0	7.5		2.44	96	.11			.08			.03		wk clay sp ser.			Mod alt, tr suls, rk type probably "Sp", mod lim, wk he
120.8	9.8		2.43	99	.12			.09			.03		wk clay ser	Ditto wi wk LLm		Mod-st alt, v. sp cc, mod lim, wk hem, rk generally bleac
130.2	9.4		2.58	94	.54	.08		.08	wk		.46		mod clay sp ser	mod-st lim	Mixed suls + capping	Mod-st alt, wk-mod diss cc, wk py, lim, sp hem.
139.9	9.7		2.58	56	.34			.08	sp-wk		.26					As above wi mod lim and very little suls at end of r
149.2	9.3		2.63	71	.12			.04	sp		.08		wk clay sp ser	mod lim, sp LLm		Wk alt, partial silicif, wk + patchy cc, sp py, lim, hem.
161.2	12.0		2.56	98	.14			.04	tr		.10		sp clay, ser		Dp @ 150.2	Wk alt, partly silicif wi occ qtz vn, sp cc, py, lim, wk hem
168.2	7.0		2.51	89	.03			.01	tr		.02		sp clay	mod lim sp hem		As above.
177.8	9.6		2.48	92	.03			.02			.01		sp clay, ser	As above wi sp LLm		Wk alt, partial silicif, qtz eyes occ visible, tr suls, wk FeO
185.3	7.5		2.54	98	.04			.02	tr		.02			wk lim, hem		Wk alt, num qtz vnlets, sp-wk py, v. sp cc, wk hem, sp li
194.8	9.5		2.56	94	.53	.01		.01	sp-wk		.52		wk clay mod ser	wk lim sp hem	Mz @ 188.7	Wk-mod alt, mod qtz vning, wk py, sp-wk cc, sp lim
201.3	6.5		2.55	98	1.09	.04		.04	1		1.05		mod clay sp ser	wk lim	Mostly suls from 188.0	Wk-mod alt, sc alun vnlets, sp-wk py, sp cc, lim on frac
210.4	9.1		2.62	95	1.55	.07		.07	1		1.48				Sp ca. 205.0	Mod-st alt, wk py, cc, chlorite, sp-wk lim.
219.7	9.3		2.57	98	.89	.07	77.5'	.07	sp		.82		wk ser sp clay	wk lim, jar		Mod alt, sp py, cc, mod chlorite, sp lim on frac's.
229.4	9.7		2.54	99	.56	.03	@	.03	1		.53		sp ser, clay			Mod alt, sp py, patchy wk cc, mod chlorite, sp lim on f
238.7	9.3		2.58	100+4	.46	.02	1.06 / 0.09	.02	1		.44		wk clay, sp ser			Mod alt, sp-wk py, cc, mod chlor, wk lim, jar, tr CuO
246.9	8.2		2.54	92	1.05	.04		.04	1		1.01		mod clay, sp ser.			Mod-st alt, wk py, cc, tr CuOx (mostly chrys), tr jar
255.5	8.6		2.57	89	2.44	.49		.49	1		1.95					Mod-st alt, wk py, cc, tr CuOx (mostly chrys), tr jar
262.5	7.0		2.63	98	1.12	.05		.05	1		1.07			tr. lim tr. Jar		Mod alt, wk py, sp cc, wk chlor, v. sp jar.
271.5	9.0		2.73	91	.21			.01	1		.20		wk. clay	tr. Jar		Wk-mod alt, wk-mod py, v. sp cc, wk chlor - partly in
279.1	7.6		2.76	90	.31			.01	1		.30		wk-mod clay			Wk-mod alt, wk py, sp-wk cc, tr jar.
290.1	11.0		2.89	92	.56	.01		.01	sp-wk	.30	.25	~~.30~~				Wk-mod alt, mod chlor, mod py, tr cc, v. sp cpy, sc
297.7	7.6		2.71	91	.30			tr	1	.20	.10					Wk-mod alt, chlor, py, tr cpy, cc, wk qtz vning.
306.5	8.8		2.70	88	.29				1	.19	.10		wk clay			Wk-mod alt, wk chlor, py, sp cpy.
313.8	7.3		2.75	83	.20				1	.15	.05		sp clay			Wk-mod alt, wk chlor, py, sp cpy, tr cc.
321.4	7.6		2.88	87	.15				1	.12	.03					As above wi mod chlor, v. sp cpy.
332.6	11.2		2.65	73	.25				1	.10	.15					Wk-mod alt, wk chlor, vuggy, wk py, sp cc, cpy.
341.0	8.4		2.73	81	.43	.01	15.8' @	.01	sp	.15	.27					As above wi partial silicif.
348.4	7.4		2.67	91	.97	.01	.69/.01	.01	sp-wk	.50	.46		tr cl			Wk alt, mod chlor, wk py, v. sp cc, wk

Final Depth 373.3'
Collar Elevation 3034.43
Coordinates 28,827.13 N; 27,638.86 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-18
Sheet No. 2 of 2
Date Completed 4/17/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim	Rock Type	Remarks
352.7	4.3		2.68	29	.37				sp-wk	.18	.19		tr clay		Sp	Probably as above. Core rec'y very poor.
361.9	9.2		2.68	80	.25				Sp	.15	.10		wk clay			Wk-mod alt, core a little vuggy, mod chlor, wk py, sp cp.
369.4	7.5		2.80	82	.17					.12	.05					As above. Cpy apparently decreasing. Tr cc?
373.3	3.9		2.77	94	.19					.10	.09		Sp clay			Wk alt, wk chlor, py. Sp cpy, tr cc?
End of hole		Aver rec'y = 86%														

Final Depth 256.3'
Collar Elevation 2917.55
Coordinates 29,774.82 N ; 29,231.99 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-17
Sheet No. 1 of 1
Date Completed 4/7/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sericite clay	lim	Rock Type	Remarks
7.0	7.0	NX sb	2.54	56	.11			.11					wk-mod clay, ser	Mod lim hem.	Dp? Sp?	Mod alt, some qtz eyes, mod silicif, mod lim, hem.
16.7	9.7	NX wl	2.26	92	.10			.10								Mod alt, num qtz vn's, mod hem, wk lim, sp LLim.
26.3	9.6		2.46	88	.08			.08						wk lim, mod hem		Mod alt, partial silicif, mod hem, wk lim, LLim.
36.4	10.1		2.58	71	.10			.08			.02		wk clay, ser			As above. Good LLim on frac's.
46.1	9.7		2.46	82	.11			.10			.01		st clay sp ser	mod FeOx's	Sp	Bleached text apparently Sp. Num seams w/ clay, lim. St hem (in)
55.1	9.0		2.41	94	.12			.10			.02			wk lim, st hem		As above w/ wk-mod amt of LLim throuout. St hem staining
63.8	8.7		2.53	87	.13			.11			.02		mod clay sp ser	mod lim, hem		Rk type? Mod-st alt, minor qtz vning. Wk LLim, mod hem,
72.5	8.7		2.48	89	.12			.10			.02		st clay tr ser	wk lim, mod hem		Possible Dp? Mod alt w/ sc qtz vnlets. Wk lim, LLim, st hem
81.3	8.8		2.47	96	.11			.10			.01					Mod-st alt, patchy silicif w/ some qtz vnlets. Fe alteration as
89.2	7.9		2.23	96	.12			.10			.02			wk hem, mod lim		Mod-st alt. Rk type? Wk LLim, lim, mod-st hem.
96.7	7.5		2.41	100	.12			.10			.02		mod clay tr ser			Mod alt, partly silicif, bleached, wk lim, hem on frac's.
103.9	7.2		2.52	98	.13			.07	tr		.06		wk clay sp ser	wk hem, lim		As above. Sp py, tr cc over last 2' of run.
113.6	9.7		2.57	100+4	1.05	.09	48.1' @ .90/.03	.09	sp		.96		mod clay	tr lim	Sul zone @ 103.9'	St alt, sp-wk py, mod diss cc, sp lim over 1st 2' of r
118.7	5.1		2.66	94	1.17	.07		.07	sp		1.10		wk clay			As above w/ sp jar throuout.
127.3	8.6		2.61	96	.96	.02		.02	sp-wk		.94		sp clay, ser			St alt becoming mod, definitely "Sp" – sp-wk py, wk-mod
135.1	7.8		2.62	99	1.10	tr			1		1.10					wk alt w/ sp cc in areas of st alt & mod-st cc, sp diss
143.6	8.5		2.63	99	.70	tr			wk		.70		tr clay sp ser.			wk alt, sc. sil'n, pyroxenes fresh, cc to bx vnlts & diss
152.0	8.4		2.62	98	.54	nil			sp-wk	.05	.49					Sp becoming "mottled" w/ chlor. wk py, tr-sp cc.
161.6	9.6		2.61	97	.31				wk	.02	.29			tr lim		Fresh – wk alt, tr cc on ~~vnlts~~ shears. Wk chlor on shears.
169.1	7.5		2.79	98	.18				1	.13	.05		wk ser			Wk alt. spotty sil'n. Vnlts of py & chlor. Tr. cc.
178.6	9.5		2.65	94	.10				1	.08	.02					Sp becoming fresh-Sev. dk inclusions (xenos) Rk dk at r
188.3	9.7		2.67	97	.10				1	.08	.02		tr clay sp ser	sp jar		Alt incr to wk. Rk once again bleached. Sp py & chlor. tr.
192.1	8.8		2.67	98	.19				1	.09	.10					Rk lt to dk, fresh-wk alt. sp py-chlor vnlts. Tr cc or
202.0	7.9		2.71	88	.47	.01			1	.10	.37?	tr moly	tr clay	tr Jar.	Mz ca. 198.0	Wk alt, partial silicif, wk py, tr cpy, cc, moly
213.7	11.7		2.73	90	.10				1	.04	.06					Generally strongly silicif, sp py (1/2 in vnlets), tr cc, cpy.
222.0	8.3		2.77	95	.10				1	.04	.06					As above. Went thru qtzt boulder, 217'-219'.
232.0	10.0		2.77	94	.09				1	.04	.05	tr moly	v. sp clay	sp jar		St silicif, text variable but rk is coarse phenocryst porphyry. Wk py, tr
242.0	10.0		2.73	94	.08				1	.04	.04			tr jar		St silicif, sp-wk py. Almost a bx text at times. Could this rock be the Silver Bell formation andesite porph breccia
251.3	9.3		2.60	97	.11				1	.04	.07		tr clay, sp ser			Vague bx @ start. v/st. sil'n. obliterating rk type. Sp.
256.3	5.0		2.65	92	.12				1	.04	.08					Sil'n decr. Rk poss. "Sp". One vague dk incl. Felds. sl alt
End of hole		Aver recy = 93%														

Final Depth 282.0
Collar Elevation 2920.75
Coordinates 29,802.11 N ; 29,083.76 E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-16
Sheet No. 1 of 1
Date Completed 3/28/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
3.2	3.2	RB														alluvial cover
7.2	4.0	NX st	2.42	77	.09			.07			.02		wk clay, sp ser	wk lim + hem	?	Silicif, bleached, text obliterated, wk hem + lim staining
12.6	5.4	NX wl	2.44	99	.46	.31		.31			.15?		/	wk lim, sp hem, mod lim, sp hem, LLm	Dp?	As above wi tr LLm, sp hem. One piece indicates Dp te
24.1	11.5		2.54	70	.14			.11			.03					wk-mod alt, st from 17.5-18.5, wk FeOx, sp LLm along frac
33.9	9.8		2.49	85	.12			.10			.02		sp-wk clay, ser	/		wk alt, partial silicif, sp hem, lim + LLm on frac's, several qtz v
43.0	9.1		2.51	91	.18			.15			.03		wk ser, sp clay	mod lim, sp LLm	Sp? 33.9?	wk-mod alt, silicif, mod FeOx, 38.0-39.0 has wk py-cc. Rk appar
51.7	8.7		2.49	95	.14			.11			.03		sp ser, tr clay	As above		wk-mod alt, some silicif, text vague, tr sulf's, mod FeOx.
62.0	10.3		2.54	70	.11			.09			.02		wk ser, tr clay	wi sp hem, wk hem, lim, LLm		As above. Text at times appears to be "Sp", at others Dp
71.6	9.6		2.49	89	.18			.15			.03		sp ser, tr clay	mod lim, wk hem		Bleached, mod alt, patchy silicif, wk hem, mod lim in vnlets, sp LLm
80.9	9.3		2.48	89	.12			.10			.02		sp clay, tr ser	/		wk-mod alt, patchy silicif, FeOx's as above. If Dp, qtz eyes of "de
89.8	8.9		2.48	93	.12			.10			.02		/	As above wi sp LLm	Dp @ ? 111.0?	Mod alt wi patchy silicif, mod hem + lim. Sp LLm on frac's.
98.4	8.6		2.46	98	.11			.09			.02		/	/		Mod alt wi silicif + qtz vn's. Mod FeOx's, sp LLm on frac's.
107.2	8.8		2.48	91	.09			.08			.01		wk clay	/		As above. Rk type uncertain in this run.
115.9	8.7		2.49	91	.17			.06	tr		.11		/	Mod lim, sp hem	Mz @ 111.0	All rk mod alt wi qtz vn's, wk-mod hem + lim. Sp py-cc at 1
125.9	10.0		2.55	85	.42	.11		.11	sp		.31		sp clay	mod lim, sp LLm	Mixed cap-sul "Sp"? cc. 127.0	Mod alt, chlor. Wk lim, LLm. Sp py-cc scattered thruout.
134.3	8.4		2.54	98	.37	.08		.08	sp		.29		/	wk lim, tr LLm		Apparent "Sp". Wk alt, mod silicif. Lim on frac's. wk py, v. sp cc.
143.7	9.4		2.66	89	.58	.07		.07	sp-wk		.51		sp clay, ser	wk lim		Generally mod alt, vn's of py-cc, lim after sulf, qtz. wk-sp py, v. sp c
153.2	9.5		2.65	75	1.47	.11		.11	1	.15	1.21		wk-mod clay	wk lim, tr LLm		As above to 149.0. Then mod alt wi wk lim, py, cc, + sp cpy. Last 1½' of probable ore grade from end of this run.
161.7	8.5		2.65	89	.77	.08	61.9' @ .81/.05	.08	1	.10	.59		sp clay, ser.	tr jar		Mod alt, sp jar, wk py, sp cc, tr cpy.
170.5	8.8		2.64	91	.50	.02		.02	1	.03	.45		/	v. sp jar		wk-mod alt, tr jar, one qtz vein, min as above.
179.3	8.8		2.56	97	.85	.02		.02	wk	.20	.63		tr clay ser.	tr jar		wk-mod alt, sp jar, few qtz vnlets, sp-wk py, v. sp cc, cpy
187.8	8.5		2.81	89	.99	.01		.01	1	.20	.78	tr moly	tr clay & sp ser	/	Mz @ 185.5	wk-mod alt, qtz + py vnlets, wk py, sp cpy, v. sp cc
196.2	8.4		2.64	97	.43	.02		.02	1	.05	.36		sp clay	/		wk-mod alt, sc qtz vnlets, wk py, sp cpy, v. sp cc.
204.7	8.5		2.60	93	.17	tr			sp-wk	.15	.02		/	v. sp jar		wk alt, sc qtz vning, sp-wk py, sp cpy, tr cc. Sp jar.
214.0	9.3		2.66	95	.18	nil			wk	.16	.02		sp clay, tr ser	/		wk alt, partial silicif, jar on frac's, sp py, v. sp cpy, tr cc
221.9	7.9		2.71	54	.23				1	.20	.03		tr clay	/		wk alt, mod silicif, wk-mod py, tr cpy, cc.
230.4	8.5		2.71	100+1	.25				1	.20	.05		sp clay	sp jar		wk-mod alt, sc qtz vnlets, wk py, sp cpy, cc.
239.3	8.9		2.66	100+2	.39				sp-wk	.20	.19	tr moly	wk clay	v. sp jar		Mod-st alt, st chlor, wk py, sp cpy, cc.
247.0	7.7		2.68	67	.09				wk	.05	.04		sp clay			V. wk alt, sc qtz vnlets, wk py, sp cpy.
257.4	10.4		2.57	98	.04				sp-wk	.03	.01		v. sp clay, ser			wk alt, min as above.
263.5	6.1		2.63	94	.09				1	.03	.06		wk clay	tr jar		Mod-st alt, wk-mod chlor, wk py, tr cpy, cc.
272.6	9.1		2.64	68	.12				sp	.02	.10		wk clay, sp ser			wk-mod alt -- wk at end of run, wk py, sp cpy, tr cc.
282.0	9.4		2.65	88	.10	.02		.02	1	.01	.07		/			wk-mod alt, patch of st alt, sp-wk py, tr cpy, cc.
End of hole		Aver recy = 88%														

Final Depth 426.6
Collar Elevation 3135.57
Coordinates 28,884.52 N; 28,098.61 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-15
Sheet No. 1 of 2
Date Completed 3-31-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
4.0	4.0	RB														Cover
13.5	9.5	NXwl	2.43	61	.05			.05					mod ser, wk clay	mod lim, sp hem.	M2	Bleached, silicif, wk alt, wk hem, hem stained felds. 13.5-14.5 is ground
21.0	7.5		2.43	52	.05			.05					wk clay, ser	/		wk-mod alt, patches silicif, st hem staining, wk lim.
30.0	9.0		2.34	93	.03			.03					wk clay sp ser	wk lim, sp hem		wk-mod alt, patches silicif + bleached, mod hem, lim, sp jar v
39.0	9.0		2.40	95	.04			.04					/	mod lim sp hem		wk-mod alt, some silicif + qtz vning, tr CuOx, wk FeOx.
46.6	7.6		2.35	93	.02			.02	Tr				/	mod hem, wk lim	Mixed cap + sulfs after 47.0.	wk-mod alt, some silicif, st hem-stained feids, wk lim.
55.8	9.2		2.24	100+5	.06			.03	Sp		.03		sp clay, ser	wk lim		wk alt, mod silicif, wk FeOx, sp CuOx, sp py-cc.
64.4	8.6		2.41	98	.08			.02	sp		.06		sp clay, tr ser	/		wk alt, mod qtz vning, lim + CuOx on frac's, sp-wk py, sp
74.0	9.6		2.35	97	.05			.01	sp	.01	.03		sp clay, ser.	/		As above wi wk py + cc, and sp-wk cpy.
82.8	8.8		2.51	96	.04			.01	V. sp		.04		/	wk lim sp hem		wk alt, mod silicif, hem-stained, wk lim, sp py, v. sp tr cu
92.1	9.3		2.52	91	.03			.02	tr		.01		/	As above wi sp LL	All capping	wk alt, mod silicif, some hem-stained felds, lim on frac's, tr CuOx
101.6	9.5		2.58	85	.05			.03			.02		wk clay, ser	mod lim. hem.		wk-mod alt, patchy silicif, mod FeOx, tr CuOx.
111.2	9.6		2.51	87	.04			.02	tr		.02		sp clay, tr ser	/		wk-mod alt, partial silicif, mod lim, hem, tr py, cc, CuOx.
119.4	8.2		2.49	99	.04			.03			.01		wk clay, sp ser.	wk-mod lim, sp hem		wk-mod alt (st at end of run), qtz vning, mod hem, wk lim, tr s.
129.7	10.3		2.38	71	.05			.04			.01		mod clay sp ser.	wk lim, sp hem.		wk-mod alt, qtz vning, mod-st hem, lim, considerable clay.
138.9	9.2		2.57	83	.14			.04	tr		.10		/	As above wi sp LLim	Sul zone @ 138.0	Mod alt, capping has st hem, mod lim, alun vnlets. Sulfs are sp. cc
149.0	10.1		2.45	76	.67	.01		.01	sp		.66		mod clay			Mod-st alt, wk py, sp cc. One 1/4" thick cc vn at start of r
158.4	9.4		2.53	83	.55	.01		.01	sp		.54		/		sp@ 157.8	Mod alt, sp py, v. sp cc. 152.4-154.4 has wk py, cc, sp cpy.
167.5	9.1		2.48	94	1.03	.02		.02	sp		1.01		/	tr jar		Mod alt, wk py, sp-wk cc, sp cpy, v. sp CuOx (chrys).
176.6	9.1		2.50	97	.96	.01		.01	sp-wk		.95		wk clay	sp lim, tr jar		Mod alt, v. wk py, cc, sp chrys. V. sp lim. Rk is intermed between M2 + sp.
185.3	8.7		2.52	92	.51	.01		.01	sp		.50		sp clay	tr lim	M2 @ 185.8	Mod alt, v. wk py, sp cc, chrys, tr lim. Patches chlor.
195.3	10.0		2.53	92	.68	.03		.03	wk	.02	.63		wk clay	/		wk-mod alt, sp py, wk cc (incl one vn), sp-wk CuOx.
205.2	9.9		2.43	54	.66	.02		.02	sp-wk	.02	.62		sp-wk clay			Mod alt, sp py, v. wk cc, sp CuOx. Losing too much core.
214.2	9.0		2.56	94	.50	.01		.01	sp	.01	.48		mod clay			Mod-st alt, core well-grounded much of run, wk py, sp-wk cc, tr
223.8	9.6		2.55	92	2.69	.06		.06	sp		2.63		st clay			Mod-st alt, core as above wi wk py, wk-mod cc.
233.1	9.3		2.77	90	2.47	.02		.02	/	.10	2.35		mod clay			Mod-st alt, wk py, mod cc
243.3	10.2		2.46	95	.90	.01		.01	/	.02	.87		/			As above.
252.8	9.5		2.47	100+2	.66	.01	251.5 @ 0.81/0.01	.01	V. sp		.65		st clay			Mod-st alt, sp-wk py, mod-st cc. Much clay.
259.4	6.6		2.47	100+4	.58	tr		.01	sp		.57		mod clay			Mod-st alt, wk-mod py, mod cc, tr CuOx.
267.5	8.1		2.60	96	.50	.01		.01	/		.49		/			As above.
275.5	8.0		2.59	99	.33	.02		.02	/		.31		wk clay			Wk-mod alt, wk py, cc, sp cpy, CuOx. Sc qtz vnlets.
285.1	9.6		2.58	95	.78	.02		.02	/	.10	.68		sp clay			Wk-mod alt, wk py, mod cc, tr chrys. Sc qtz vnlets.
294.0	8.9		2.78	85	1.08	.02		.02	sp-wk	.15	.91		sp-wk clay			Mod-st alt, wk py, cc, sp cpy (in part tarnished)
303.2	9.2		2.74	89	.56	tr			/	.15	.41		/	sp jar	sp@ 298.6	wk-mod alt, sp-wk py, sp cc, sp-wk cpy, wk chlor, tr lim
311.7	8.5		2.73	92	.56	tr			wk	.25	.31		sp clay			Mod alt, chlor, tr lim, jar sp-wk py, tr-sp cpy, cc, sc qtz
321.0	9.3		2.73	91	.66	.01		.01	/	.10	.55		v. sp clay	sp lim-jar		Wk-mod alt, mod-st chlor, wk-mod py, sp cc, sp-wk cpy
330.4	9.4		2.75	91	.70	.01		.01	sp-wk	.25	.44		tr clay, ser	/		Rk as above wi wk jar, lim. Wk py, sp cpy, tr cc.
339.4	9.0		2.70	97	.44	tr			wk	.30	.14		/	v. sp lim		Wk-mod alt, patchy silicif, wk-mod py, sp cpy, tr lim
344.7	5.3		2.70	84	.60	.03		.03	/	.10	.47	/	sp clay		M2 ca.	

Final Depth 426.6
Collar Elevation 3135.57
Coordinates 28,884.52 N; 28,098.61 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-15
Sheet No. 2 of 2
Date Completed 3-31-64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, sericite	lim	Rock Type	Remarks
353.4	8.7	NX	2.67	98	.61	.02		.02	wk	.10	.49		sp clay	sp lim, jar	Mz?	wk-mod alt, text vague, mod chlor, sc qtz vnlets, sp cc, py, jar
362.5	9.1		2.69	96	.47	.01		.01	wk	.10	.36		1	1	Mz	Mod alt, num qtz vn's, sp jar on frac's, sp-wk py, cc.
372.1	9.6		2.74	91	.51	.01		.01	1	.08	.42		tr clay	1		WK alt, patchy silicif, num qtz vn's, wk py, sp cpy, sp-wk cc.
381.5	9.4		2.71	92	.79	.02		.02	1	.25	.52		tr clay, sp ser.	tr lim		WK-mod alt, mod qtz vning, wk py, cpy, sp cc. Mod chlor
390.4	8.9		2.64	94	.93	tr		.02	wk-mod	.25	.66		1	v. sp lim		WK-mod alt, sc qtz vn's, wk py, v. wk cpy, tr cc.
399.1	8.7		2.68	94	.26	tr		.01	1	.15	.10		tr clay	1		WK alt, sc qtz vn's, sp py, tr cc, cpy. Good Mz test
407.9	8.8		2.58	97	.21	tr			wk	.06	.15		sp clay, ser.	sp lim.		wk-mod alt, sp py, tr cc, cpy, occasional qtz vn.
416.8	8.9		2.62	92	.15	tr			1	.10	.05		1	v sp lim		WK alt, sp py, v. sp cpy, tr cc.
426.6	9.8		2.62	94	.34	tr			sp-wk	.15	.19		1	tr lim		WK alt, wk py, v. sp cpy, tr cc, sc qtz vnlets
End of hole		Aver rec'y = 90%														

Final Depth 359.0
Collar Elevation
Coordinates
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F - 14
Sheet No. 1 of 2
Date Completed 3/20/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration sericite clay	lim.	Rock Type	Remarks
5.0	5.0	RB			—											Alluvium
16.5	11.5	NX wet	2.28	58	.39	.09		.09			.30		mod clay	mod lim, hem, LLm	Sp	Mod-st alt, text vague. St lim, mod hem, occ LLm.
26.3	9.8		2.35	77	.47	.16		.16			.31		1	1		As above wi poss tr cc, + wi occ qtz unlets.
36.4	10.1		2.33	63	.46	.24		.24			.32		wk clay, sp ser	mod lim wi LLm		Mod-st alt, rk crumbly from 29.2. Bleached, mod lim.
46.8	10.4		2.28	70	.19			.09			.10		st clay	1		St alt, rk v. crumbly, st clay, lim, wk hem. Rk text?
56.3	9.5		2.25	52	.12			.09			.03		mod clay	1		Mod-st alt. Rk type? Bleached, st lim, mod lim.
62.5	6.2		2.21	100+1	.16			.13			.03		wk clay	mod lim, wk hem		As above, FeOx weaker. Core very muddy.
70.2	7.7		2.42	76	.18			.15			.03		wk-mod clay	1		St alt, becoming mod. Mod lim. Rk may be Dp. Muddy co
77.4	7.2		2.13	96	.20			.17			.03		st clay	st hem, wk lim		St alt, st. hem, clay, mod lim, sp cc.
81.6	4.2		2.35	100+2	.15			.05	Sp		.10		mod clay, wk ser	Mod FeOx		Mod alt, mod FeOx, wk cc at end of run. Rk type?
91.3	9.7		2.53	91	.60	.05		.05	Sp-wk		.55		mod clay, ser.	wk lim	Sul zone @ 81.6	Mod-st alt, sp lim, CuOx, wk-mod cc, wk py. Num py-c unl
100.1	8.8		2.58	98	.48	.02		.02	wk		.46		wk clay, ser.	1		wk-mod alt, sp lim on frac's, wk cc, py. "Sp" coarser than in Oxide
109.2	9.1		2.64	85	.59	.02		.02	1		.57		sp clay, ser	sp lim, jar		wk-mod alt, mod chlor., sp jar, wk cc, py.
116.9	7.7		2.65	93	.80	.02		.02	1		.78		1	sp jar		Wk-mod alt, mod chlor, some qtz vning, sp jar, sp-wk cc, sp
126.1	9.2		2.53	93	.47	.04		.04	1		.43		1	sp jar, wk lim		Mod alt becoming wk, wk py, wk cc mostly in vn's, tr cpy.
135.5	9.4		2.81	97	.90	.03		.03	sp-wk		.87		1	sp jar, lim		Wk-mod alt, wk py, sp cc, sp jar. Good "Sp" texture.
139.1	3.6		2.88	94	.88	.03		.03	wk		.85		sp clay	sp lim		Wk alt, dark "Sp", wk py, cc (cc may be very finely diss)
148.3	9.2		2.85	91	2.10	.07		.07	1		2.03		1	sp lim, tr jar		As above wi a few qtz unlets.
156.9	8.6		2.78	89	.93	.02		.02	sp		.91		v. sp clay	wk lim		Mod alt, sp jar on frac's, few qtz unlets, wk cc, py.
166.0	9.1		2.59	93	.86	.02		.02	1		.84		sp clay	tr lim		As above wi tr jar. Some of cc is coating on py.
175.3	9.3		2.54	91	1.39	.03	185.0'	.03	v. sp		1.36		wk clay			Mod-st alt, very crumbly last ½ of run. Min as above.
183.3	8.5		2.50	100+5	2.25	.05	@	.05	tr		2.20		sp clay			Mod alt, occ silicif, wk py, cc. Most cc-py is in unlets. So epid
192.7	8.9		2.66	98	3.87	.07	1.19/0.03	.07	wk		3.80		1	tr lim		Mod alt, wk-mod py, sp cc is occ st over very short intervals
200.3	7.6		2.66	93	.72	.02		.02	1		.70		wk clay	1		Mod alt wi patchy silicif. Considerable epidote as cc weakens. Py mo cc v. u
209.3	9.0		2.75	87	.86	.02		.02	1		.84		1	1		As above wi st epidote. cc-py on frac's. 2nd ary felds.
219.0	9.7		2.67	92	.98	.03		.03	sp-wk		.95		sp clay, ser			Mod-st alt, patchy silicif, sp-wk py, wk cc + st epidote.
223.1	4.1		2.78	99	1.37	.03		.03	1		1.34		sp clay			As above wi wk py, cc + tr cpy.
232.6	9.5		2.80	80	1.62	.02		.02	1		1.60		1			Mod-st alt wi silicif patches, wk cc, py, mod epidot
240.9	8.3		2.75	90	2.14	.03		.03	1	Tr.	2.11		wk clay	Tr. lim		wk-mod alt wi patches st alt, sp cc – mod in places, wk p
250.3	9.4		2.67	93	.88	.02		.02	sp		.86		1	1		wk-mod alt, v. sp jar, wk py, sp cc.
258.3	8.0		2.67	92	.65	.03		.03	1		.62	Tr.	wk-mod clay	1		As above wi patches silicif. Cc dying out.
266.6	8.3		2.62	93	.68	.05		.05	1		.63		wk clay	sp lim		Wk-mod alt, patches silicif, sp jar, mod epidote, sp py, v. sp
275.4	8.8		2.57	90	.29				1	.02	.27		wk-mod clay	Tr. lim		Wk-mod alt, tr lim, jar, sp py, tr cc. Mod epidote, chlo
284.9	9.5		2.69	89	.32				Sp-wk	.02	.30		1	Tr. lim	Mz - 277.0 - 281.6	Mz is partly silicif. "Sp" mod alt. Sp py, tr cc, cpy.
293.4	8.5		2.62	100+1	.18				1	.08	.10		wk clay		Sp @ 281.6 Mz ca. 290.6	Wk alt, partly silicif. Sp py, tr cc.
302.1	8.7		2.56	100	.07				wk	.04	.03		1	tr jar		Wk alt, partly silicif. 2ndary feld. Sp-wk py, sp cc.
310.8	8.7		2.56	99	.10				sp-wk	.08	.02		sp clay			Well silicif, probably Mz, sp py + tr cc in unlets.
321.2	10.4		2.85	85	.31				mod	.10	.21		sp-wk clay			Well silicif, vague Mz text, sp-wk py + sp cpy mostly in v
330.5	9.3		2.87	88	.16				wk-mod	.10	.06		sp clay, ser			Wk alt mod silicif definitely Mz

Mo S2

Final Depth 359.0
Collar Elevation
Coordinates
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-14
Sheet No. 2 of 2
Date Completed 3/20/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration sericite clay	lim	Rock Type	Remarks
340.5	10.0	NX wl	2.70	93	.16				sp-wk	.10	.06	tr moly	sp clay, ser.	tr lim	Mz	Wk alt, partly silicif, vuggy in places. sp-wk py, tr cpy.
350.4	9.9		2.62	97	.21				1	.10	.11		wk clay, sp ser			Wk alt to 345.6, mod-st alt to end of run. wk py, sp cpy, tr c
359.0	8.6		2.64	92	.19				sp	.10	.09		mod clay			Fresh-wk alt, partly silif'd. Looks like Sp.
End of hole		Aver rec'y = 88%														

Final Depth 380.4
Collar Elevation 3028.46
Coordinates 29,264.59 N; 28,952.41 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-13
Sheet No. 1 of 1
Date Completed 3/19/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: clay sericite	lim	Rock Type	Remarks
45.4	45.4	rock bit + NC														Dump
55.0	9.6	NX st	2.24	91	.12			.12					mod clay sp ser	mod lim	Dp	Bleached, silicif wi some soft patches. St lim, wk he
64.8	9.8		2.42	87	.04			.04					/	mod lim wk hem		As above wi mod hem after 60.0. Sc clay seams, qtz
72.7	7.9		2.32	100	.11			.07	tr		.04		wk clay + ser	/	Mz? @ 69.0	Mod-st alt, text vague wi Mz from 69.0 - 72. Spotty c
80.5	7.8		2.38	94	.10			.08			.02	moly	mod clay + ser	mod lim		Patchy silicif + mod-st alt, text vague, mod lim, tr cc?
90.2	9.7		2.43	92	.09			.07			.02		wk ser + clay	mod lim sp hem		As above. Porph rk similar to upper part of F-7. Dp? Mz? Tr Cu
95.0	4.8		2.54	82	.16			.06	sp		.10		sp clay, ser	mod lim	Sp ca. 92.0 suls from 93.0.	Mod alt, patchy silicif, mod chlor, lim, tr py-cc.
104.7	9.7		2.65	91	.13			.02	sp-wk		.11		sp clay, tr ser	wk lim		Dark "Sp", wk alt, sp py wi sp-wk cc. Some qtz vning, lim.
114.3	9.6		2.72	94	.30			.02	wk	tr	.28		sp clay	wk lim, tr hem		As above wi wk + patchy cc. Qtz vning shows minor fit
124.0	9.7		2.61	96	.37			.04	sp-wk		.33		wk clay	wk lim sp hem		Dark "Sp", wk-mod alt, occ silicif, mod qtz vning, wk lim, sp py, cc.
131.0	7.0		2.63	93	.29			.02	wk		.27		sp clay	/		As above wi mod alt, suls mainly on frac's. Sp lim.
140.0	9.0		2.67	78	.17				wk	.05	.12		sp clay, ser	sp lim		Wk alt, num qtz vnlets, sp py (wi one py vn), tr cc., lim.
149.9	9.9		2.65	98	.21				sp-wk	.06	.15		sp clay	sp jar	Mz ca. 149.0	Ct is crumbly. Mz has mod-st alt, num qtz vnlets. Sp py, tr
158.0	8.1		2.59	98	.12				wk	.10	.02		wk clay	/		wk alt to 155.0', then st alt. In latter - wk py, sp cc.
169.7	11.7		2.62	92	.12				sp-wk	.10	.02		sp clay, wk ser	sp jar, lim		St alt to 161.0' wi min as above, then wk-mod alt wi 2nd ary feld
179.0	9.3		2.52	100	.11				wk	.03	.08	tr	sp clay, ser	sp jar		Wk-mod alt, sp-wk py (mostly in vn's), tr cc, moly.
188.0	9.0		2.61	94	.10				/	.03	.07		/	/		Wk alt, sp py, v. sp cc, tr cpy. 2nd ary feld's all thr
196.1	8.1		2.64	95	.20				/	.10	.10		sp clay	tr jar		Wk-mod alt, st alt Ser 6" @ 192.3, wk py (mostly vn's), sp cc.
205.1	9.0		2.65	89	.21				/	.11	.10		/	/		Wk-mod alt, patchy silicif, sp py, cc, tr cpy, jar.
213.7	8.6		2.67	97	.22			.01	wk-mod	.11	.10		/	/	Sp ca. 206.0 et grad.	Wk alt, partial silicif, wk py, tr cc, cpy.
221.9	8.2		2.73	84	.20				wk	.15	.05		v. sp clay	/		Wk alt, some qtz vning, sp-wk py, tr cc
231.1	9.2		2.62	90	.14				/	.11	.03		sp clay	tr lim		Wk alt, mod qtz vning + silicif. Maybe Mz? Wk py (vn's), v. sp
239.3	8.2		2.63	90	.23				/	.15	.08		/	tr jar		As above wi sp jar. Many steep-dipping frac's seen in co
248.7	9.4		2.58	87	.34				/	.15	.19		/			Mod-st alt, patchy silicif sp-wk py, v. sp cc, cpy, tr li
257.2	8.5		2.60	93	.30				/	.20	.10	tr	/	tr jar	Definitely Mz @ 252.0	Mod alt, large qtz vn's, wk py, sp cc, tr cpy, moly
266.5	9.3		2.61	92	.33				/	.23	.10		/	sp jar	Sp? ca 265.0	Wk-mod alt, qtz vn's + patchy silicif. Mz? Looks like "sp" at end
275.7	9.2		2.60	84	.29				/	.14	.15	v. sp	wk clay	tr jar		Generally silicif wi patches mod alt. Sp py, tr cpy, cc.
284.3	8.6		2.62	91	.15				/	.10	.05		sp clay	/		As above wi tr jar. Rk type?
293.3	9.0		2.61	86	.21				sp-wk	.06	.15		wk-mod clay			Mod-st alt, some qtz vning. Text trans Sp-Mz. Wk py, sp
302.2	8.9		2.61	87	.22				wk	.02	.20		mod-lt clay			Mod-st alt, cons clay, poss alun in vnlets, wk py, sp cc (cc picking
311.1	8.9		2.53	93	.36				/		.36		/			Mod-st alt, cons clay, wk py, sp-wk cc.
320.3	9.2		2.53	94	.12				/		.12		St clay			As above wi wk py, v. sp-sp cc.
329.6	9.3		2.27	91	.22				/	.02	.20		/			Mod alt, "Sp" dark at end of run, sp py, tr cc, cpy.
338.7	9.1		2.60	89	.12				sp	.02	.10		wk. clay	sp, Jar		Wk-mod alt, sp-wk py, tr cc, cpy. Tiny alun vnlets. Sp
347.6	8.9		2.54	95	.21				wk	.05	.16		/	/		Wk alt, sp py, tr cc, cpy, sp lim. One qtz vnlets has several minor offs
357.2	9.6		2.50	91	.20				/	.18	.02		/	/		Wk-mod alt, rk becoming brxiated over last 2', wk py, v. sp cc, tr cp
367.5	10.3		2.60	83	.15				sp	.10	.05		st. clay	/		Mod-st alt, rk broken, wk-sp py, v. sp cc, tr cpy.
375.5	8.0		2.50	96	.28				wk	.15	.13		/	/		Mod-st alt, sp lim + jar, sp py, tr cc, cpy. Rk brxiated
380.4	4.9		2.66	92	.20				/	.15	.05		wk clay	/	Mz ca. ---?	Wk alt [illegible]

Final Depth 385.7
Collar Elevation 2893.65
Coordinates 29,621.96 N ; 29,151.24 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

J. H. C.
APR 17 1964

HOLE NO. F-12
Sheet No. 1 of 2
Date Completed 3/12/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
4.0	4.0	NX conv.	2.35	57	.08			.08					mod clay, wk ser	mod lim	Sp	Mod alt, sp LLm, st lim, mod hem staining.
10.2	6.2	NX st.	2.41	50	.06			.06					sp clay, ser.	mod lim wk hem		Mod alt wi patchy silicif, lim + hem as above.
19.0	8.8		2.50	62	.22			.17			.05		mod clay	1		Sp, mod alt. 1 patch v/st LLm, rest wk.
27.6	8.6		2.42	89	.25			.20			.05		mod clay, sp ser.	As above wi wk LLm	Mz @ 27.0	Sp, mod-st alt. Mz mod-st alt, mod-st LLm.
35.1	7.5		2.44	88	.18			.14			.04		wk clay sp ser	1		Mz, as above.
44.7	9.6		2.42	91	.17			.14			.03		1	1	Sp @ 39.7	Mz as above to CT. CT brkn. Sp mod alt. Mod LLm
56.7	12.0		2.35	95	.33	.04		.04			.29?		sp clay, wk ser.	st lim, sp LLm		Sp wi some dk patches. Poss. tr. cc. RH gets brkn.
66.6	9.9		2.42	89	.42	.05		.05	tr		.37 dk		1	mod-st lim		Sp, mod alt DK. inclusions sc. throughout. Ben lim.
74.4	7.8		2.41	74	.42	.05		.05			.37?		mod clay, sp ser.	1		Sp, mod-st alt. Mod lim.
82.0	7.6		2.43	92	.16	.04		.04			.12?		1	1		Sp, mod alt wi some silif'n near end. Mod LLm
90.0	8.0		2.42	81	.49	.14		.14	sp		.35 dk		mod clay	mod lim		Sp wi sc dk inclusions. Mixed cc & leaching after 90.
98.1	8.1		2.53	94	.76	.11		.11	v. sp.		.65		1	wk lim		Sp as above. Mod alt, mixed leached cap & wk cc.
100.3	8.2		2.42	100+3	.57	.08		.08	sp		.49		1	1	Mz ca. 93.7	Sp as above. Mz mod alt, mixed cap + sul wi sp cc. Silicif at end
108.7	8.4		2.54	97	1.41	.10	126.7' @ .88/1.06	.10	Tr		1.31		1	1	Sp ca. 104.0	Mz as above. Capping ends ca. 102.0. "Sp" mod alt, wk py, sp cc +
117.7	9.0		2.70	96	2.03	.11		.11	1		1.92		1	1		Mod-st alt, patches silicif + clay. Sp lim, CuOx, wk py, cc.
126.8	9.1		2.55	90	1.17	.05		.05	1		1.12	Tr Mo S	1	sp lim		Mod alt, patchy silicif, wk-mod py, wk cc, sp lim.
135.2	8.4		2.75	96	1.37	.05		.05	1		1.32		1	sp lim sp jar		As above wi considerable chlorite, minor qtz vning, wk py,
144.9	9.7		2.63	88	.98	.04		.04	1		.94		1	1		Wk-mod alt, patchy silicif + qtz vning, wk py, cc, mod chlor, sp
153.3	8.4		2.61	80	1.17	.07		.07	sp		1.10		1	1		Mod alt, qtz vning, poss 2nd ary fld, wk py, sp cc, lim, chlor, CuOx, epid
161.4	8.1		2.57	92	1.35	.03		.03	Tr		1.32		1	Tr lim Tr. Jar	Mz @ 156.7	"Sp" as above wi some st alt. Ct partly silicif. Mz wk alt, wk py, cc
170.4	9.0		2.72	82	.40	.01		.01	Sp		.39		wk-mod clay	sp lim		Wk-mod alt, patchy silicif, wk py, sp cc, lim, still considerable ch
179.6	9.2		2.62	92	.53	.02		.02	Tr	.05	.46		1	1		Wk alt, sp diss py wi a number of py-cpy-cc vnlets.
183.4	3.8		2.75	56	.40	.01		.01	Sp	.05	.34		1	1	Sp @ 182.4	Mz as above. "Sp" wi more diss py but more cc or cpy. Wk alt, st chlor
191.4	8.0		2.65	80	.32	.01		.01	wk	.05	.26		wk clay	1		Wk-mod alt, lim on frac's, mod chlor, wk py, sp cpy, cc.
201.0	9.6		2.63	62	.15	.01			1	.07	.08		wk clay ser.	v. sp lim, jar	Mz @ 192.0	Wk alt, mod-st silicif, py in vnlets. Sp-wk py, sp cpy, tr cc.
213.4	12.4		2.62	71	.20	.01			sp-wk	.05	.15	tr	sp ser, clay	v. sp lim	Sp ca. 212.8	Wk alt, breccia text apparent in Mz? Sp py, wk cc as by met
222.8	9.4		2.70	97	.37	nil			1	.20	.17	tr	1	sp lim		Wk-mod alt, wk-mod py (diss + vn's), v. sp cc, tr cpy.
231.0	8.2		2.62	100+1	.22	.01			1	.07	.15	tr	1			Wk-mod alt, patchy silicif, mod chlor, sp py. Poss some c
240.3	9.3		2.75	96	.23	.01			wk	.07	.16	tr	1			As above wi wk py, sp cc, tr moly.
250.0	9.7		2.80	89	.21	.01			1	.10	.11	tr	sp clay			Wk alt, mod-st silicif, text vague — poss Mz? Wk py, v. sp. c
259.2	9.2		2.80	100	.10				1	.07	.03		tr clay			Sp, wk alt, mod silicif, mod py. spots of st. diss. sul
268.7	9.5		2.76	87	.25				1	.07	.18	tr	sp clay	tr jar		Sp as above. Wk py. Tr cc?
278.2	9.5		2.69	96	.13				1	.10	.03		1	1		As above. Sc. areas of diss. wk vnlts of py
287.8	9.6		2.64	95	.13				1	.06	.07		1			As above.
297.0	9.2		2.61	100	.30				1	.10	.20		1	tr jar		Sp, wk alt, mod-st silicif. Total suls wk-mod as diss & vnlts
306.7	9.7		2.76	59	.32				1	.15	.17		1			Sp as above w wk chlor alt. wk. py vnlts.
315.4	8.7		2.62	92	.30				1	.10	.20		1			Sp, st. silicif, wk alt. sp-wk total suls.
324.6	9.2		2.69	88	.22	tr			1	.12	.10	v. sp	1	tr jar	Mz @ 315.4 Sp? @ 316.5	Wk alt, st silicif destroying text after 316.5'. Wk py, sp cpy, mo
332.8	8.2		2.66	100+3	.33	tr			1	.20	.13	v. sp	1	1		

Final Depth 385.7
Collar Elevation 2893.65
Coordinates 29,621.96 N; 29,151.24 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-12
Sheet No. 2 of 2
Date Completed 3/12/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
341.7	8.9	NX	2.78	93	.24	tr			wk-sp	.12	.12		wk clay, sp ser	tr lim	Sp	Wk alt, mod-st silicif, good "Sp" text in places, sp py, cc, tr cp
349.0	7.3		2.69	97	.12	nil			1	.10	.02	tr moly	sp clay	tr jar		Wk alt, mod silicif, porph intermed. between "Sp" & "Mz". Min
357.8	8.8		2.60	96	.46	.01	17.8' @ .43/Tr		wk	.15	.31	sp moly	1			As above wi mod py, sp cpy, cc, moly. above wi
366.8	9.0		2.85	91	.40	tr			sp-wk	.10	.30	tr moly	1	tr jar		Wk alt, patchy silicif, wk py (mostly in vn's), sp cpy, tr mo
372.5	5.7		2.64	87	.36	tr			1	.20	.16	tr moly	1			WK-mod alt, occ silicif, sp py, v. sp cpy.
381.0	8.5		2.63	97	.38	nil			wk	.20	.18	tr moly	1			Wk alt, patchy silicif, sp-wk py, v. sp cpy, tr cc.
385.7	4.7		2.56	97	.25				1	.22	.03	tr moly	v. sp. clay			As above.
Bottom of hole		Aver. recy = 88%														

Final Depth 248.4'
Collar Elevation 2924.77
Coordinates 29,876.68 N ; 28,916.33 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-11
Sheet No. 1 of 1
Date Completed 3/4/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser	lim	Rock Type	Remarks
5.0	5.0	rockbit														
13.9	8.9	NX	2.49	88	.11			.11					wk clay	wk lim tr. LLm	Dp.	5.0-7.0 an ignimbrite boulder. Dp is mod silicif wi wk lim + hem
21.0	7.1		2.52	86	.61	.14	165' @ .50/.15	.14			.47?		/	sp lim tr. LLm	Sp ca. 17.8	wk-mod alt, patchy silicif. Wk lim, jar. No vis. suls. Tr ch
30.4	9.4		2.47	72	.42	.16		.16			.26?		mod clay	wk. lim sp. LLm		Mod alt, qtz vn's. Mod hem staining, wk lim.
40.1	9.7		2.47	91	.32	.11		.11			.21?		mod clay & ser.	/	Dp? @ 36.3	Mod alt, patchy silicif, text's are vague, st lim, sp hem stainin
49.6	9.5		2.40	85	.31	.12		.12			.19?	moly	wk clay mod. ser. wo clay & ser.	/	Mz @ 48.6	Dp? as above. Mz is st alt.
57.3	7.7		2.45	62	.20			.20						wk lim		wk-mod alt, biot is chloritic, hem-stained Felds, mod lim.
66.4	9.1		2.49	70	.22			.22					/	/		Mod-st alt, patches only wk alt, mod lim staining
75.8	9.4		2.56	81	.48	.11	18.4' @ .51/.08	.11	Tr		.37		wk-mod c.+s.	/	End leached rk @ 68.6	Wk-mod alt, sp suls (mostly py) afer 68.6
84.8	9.0		2.58	93	.55	.04		.04	sp		.51		wk-clay.	Tr lim sp. Jar		St alt wi sp cc evident at start, becoming wk alt wi v. sp py.
93.7	8.9		2.62	96	.28			.04	/	.10	.14		/	/		v. wk alt, sp-wk py, tr cc. Rk has but few frac's.
103.3	9.6		2.69	93	.33			.02	/	.02	.29		/	sp jar		As above but for one st alt patch at 101.5 (6" long)
112.7	9.4		2.64	97	.43	.02	18.4' @ .54/.02	.02	sp-wk	.02	.39		sp clay, ser.			wk alt wi wk py, becoming mod alt wi wk cc, sp py at end
121.7	9.0		2.81	86	.66	.03		.02	sp	.02	.62		sp. ser.			Alternate wk + mod alt, generally wk py, sp-wk cc in altered
130.3	8.6		2.62	99	.33	.01			/	.03	.30		sp ser. w. sp. clay			Wk-mod alt, st alt at end of run. V. sp cc, sp-wk py.
139.9	9.6		2.61	98	.16	.01			/	.10	.06		sp. clay	sp jar		wk alt wi mod alt patches. Occ sp cc, generally wk py.
148.0	8.1		2.68	98	.10	.01			/	.05	.05		sp clay, ser.	tr. jar		Alternate wk + mod alt, sp cc, wk py, silicif along py vn's, lim
157.3	9.3		2.59	94	.35	.01			/	.02	.33		wk ser.	jar-stained feld		St alt to 151.9, then wk alt. wk cc in st alt, tr in wk alt.
164.2	6.9		2.62	96	.23	tr			/	.05	.18	tr	sp ser	/		Wk alt, sp-wk py, v. sp cc.
173.7	9.5		2.66	90	.13				/	.03	.10	tr	sp, ser, clay	sp jar		Wk alt, becoming mod silicif towards end. Wk py, sp
182.4	8.7		2.66	99	.17				sp-wk	.07	.10	tr	sp clay	/		Mod silicif, text vague, sp-wk py, tr cc, moly
191.0	8.6		2.64	98	.24				/	.10	.14	tr	/			Mod silicif, definitely Mz, sp-wk py, sp cc, qtz xtl's
199.8	8.8		2.76	89	.12				sp	.10	.02		tr clay	sp. jar		Wk alt, patchy silicif, one patch st alt – 197.0 – 5. Min
209.3	9.5		2.71	92	.12				sp-wk	.06	.06	tr	sp clay	tr jar		Wk alt, wk py, v. sp cc. as abo
218.2	8.9		2.66	98	.07				sp	.07	.01		/	/		Wk alt, mod silicif, some py vn's, sp py, tr cc.
228.1	9.9		2.60	93	.15				sp-wk	.10	.05	tr-sp	/			As above wi wk finely diss py. Last ft is mod alt wi tr m
237.7	9.6		2.69	90	.20				/	.12	.08		/			Wk alt, patchy silicif, vuggy in places, wk-mod py, sp cpy.
243.7	6.0		2.61	100+17	.16				/	.11	.05		sp ser, tr clay			Wk alt, minor silicif, wk-mod py, sp cpy.
248.4	4.7		2.62	82	.12				wk	.10	.02		sp ser, clay			As above. Py both diss + in vn's.

End of hole. Aver rec'y = 90%

Final Depth 342.3'
Collar Elevation 2927.13
Coordinates 29,302.75N ; 29,259.47E
Inclination Vertical

ASARCO
GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-10
Sheet No. 1 of 2
Date Completed 3/8/64
Logged By BNW, LWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay ser.	lim	Rock Type	Remarks
1.5	1.5	NC conv														Deadman
2.0	0.5	"														
4.0	2.0	NX conv	2.26	87	.04			.04					mod clay sp ser	mod lim sp LLm	Dp	Bleached, mod silicif, tr CuO_x, wk LLm, mod lim + hem stain
13.5	9.5	NX st.	2.27	77	.04			.04					"	mod lim + LLm, wk hem		As above wi alun unlets
24.0	10.5		2.33	78	.04			.04				moly	"	"		wk-mod alt, bleached, patchy silicif, alun unlets, sp LLm, mod hem
33.3	9.3		2.43	81	.04			.04					st clay ser?	mod lim, wk LLm		wk-mod alt, patchy silicif, mod LLm at start, st hem.
38.5	5.2		2.60	99	.05			.05					wk clay + sp ser	mod lim + hem		wk alt, mod silicif, wk LLm, hem + lim staining.
46.5	8.0		2.47	98	.03			.03					wk clay	as above wi sp LLm		wk-mod alt, patchy silicif, sp LLm, mod hem-lim staining
57.2	10.7		2.42	84	.04			.04					"	"		As above wi tr suls (py-cc) at end of run.
66.0	8.8		2.28	89	.03			.03					st clay	mod lim + hem	Mz @ 47.5	Porph text recognizable at 47.5. Mod-st alt. Still mod lim, hem
70.9	4.9		2.14	91	.02			.02					"	patchy lim, hem		St alt, considerable clay, lim, wi hem staining.
79.6	8.7		2.27	91	.06			.06					mod clay sp clay,	as above wi sp LLm		wk-mod alt, rk type unrecognizable, mod-st lim, he
88.7	9.1		2.54	92	.03			.03					wk ser.	"		As above wi patchy silicif + wk LLm.
97.0	8.3		2.38	94	.08			.08					mod clay + ser	mod LLm, lim, hem		wk-mod alt, patchy silicif, sp LLm, mod lim-hem, sp py-cc tow end of r
106.1	9.1		2.58	90	.50	.02	27.4' @ .50/.01	.02	wk		.48		wk clay sp ser	patchy lim.	Sul zone @97.0	Mod silicif wi st alt at end of run. wk py, cc.
115.3	9.2		2.55	83	.58	.01			1		.58	sp	mod clay sp ser	tr jar		wk-mod alt, st in places, wk py, sp-wk cc.
124.4	9.1		2.36	61	.43	.01			1		.43	tr	1			Mod-st alt, text vague, wk py, sp cc.
133.0	8.6		2.59	83	.23	.01			1		.23		1			wk-mod alt, wk py, sp cc.
140.0	7.0		2.59	100+3	.21	X			1		.21		wk clay sp ser	tr jar, lim		As above. Text vague, possibly "Sp" rock?
147.4	7.4		2.63	83	.16	.01			1		.16		mod clay wk. ser.	sp jar		Mod alt, definitely Mz at end of run, wk py, sp c
154.9	7.5		2.45	100	1.54	.07	15.4' @ .99/.04		1		1.54		wk clay, ser.			Mod alt, quite a bit of qtz blebs, wk py, mod cc.
163.3	8.4		2.52	87	.50	.02			Sp		.50		wk. clay			As above. Text indistinguishable. Some qtz vning, py v
171.0	7.7		2.53	98	.29				1	Tr	.29		1	tr. Jar		Mod alt becoming wk. Partial silicif. Sp jar. Rk type? wk py, s
180.2	9.2		2.69	93	.14				wk.	.09	.05		Sp. clay	sp. Jar.		wk alt, mod silicif, rk is porph – either Mz or "Sp." wk py, sp c
188.9	8.7		2.67	96	.17				1	.07	.10		1	1		wk-mod alt, patchy silicif. Wk diss py wi num py unlets, sp.
197.9	9.0		2.64	91	.17				1	.07	.10		1	1		Wk-mod alt, patchy silicif + qtz vning. Wk py, sp cpy, tr c
206.6	8.7		2.68	94	.21				Sp	.10	.11	Tr	1	1		As above. Rk beginning to look like Mz.
215.2	8.6		2.64	95	.23				wk	.15	.08	Tr	sp ser tr clay	1		wk alt, patchy silicif, sp jar on frac's, wk py, sp cpy, v.sp
224.6	9.4		2.65	84	.14				1	.07	.07	v. sp	1	1		wk alt, mod silicif, sp jar, sp-wk py, v. sp. cc, cpy.
233.6	9.0		2.62	100+	.16				1	.08	.08		sp ser clay	1	Sp ca 232.0	As above to 232.0'. Then "Sp", wk alt, mod diss py, sp cp
242.8	9.2		2.70	97	.20				1	.08	.12	sp	1	v. sp jar		v. wk alt, wk-mod py, sp cpy, x moly, qtz + py unlets, sp jar
251.3	8.5		2.84	92	.35				1	.15	.20	tr	1	tr jar		As above wi but a tr of moly.
258.3	7.0		2.81	91	.29				1	.20	.09		1	sp jar		wk alt, mod-st py, tr cpy, sp jar on frac's.
268.0	9.7		2.71	93	.23				1	.15	.08		v. sp. clay	v. sp. jar		wk alt, patchy silicif, wk-mod py, sp cpy, cc.
276.0	8.0		2.73	91	.14				1	.10	.04		sp. clay	1		Sp, almost fresh, wi several dikelets of Mz. Sp py.
285.3	9.3		2.71	96	.21				1	.08	.13		1	sp. jar.	Mz @ 277.8	Sp as above to CT. CT not sharp. Mz fine-grained, st mo
294.9	9.6		2.67	91	.25				1	.12	.13		1	1	Sp 289.2	Mz, f.g., st mafics, to CT. Sp has patches silica. Sp. p
304.6	9.7		2.66	98	.14				1	.08	.06		1	v. sp. jar	Mz @ 301.0	Sp as above to CT. CT sharp. Mz fresh. Tr cc, Sp cpy, w
315.3	10.7		2.70	91	.20				1	.12	.08	Tr	v. sp. clay	1		Mz wk alt. Tr cc on fr[illegible]

Final Depth 342.3
Collar Elevation 2927.13
Coordinates 29,302.75 N; 29,259.47 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-10
Sheet No. 2 of 2
Date Completed 3/8/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu			Mineralization					Alteration		Rock Type	Remarks
					Total	Non-S	Average	Oxides	Pyrite	Cpy	Cc	Other	clay, sericite	lim		
324.5	9.2	NX	2.79	83	.38				sp	.28	.10	Tr moly	sp clay	Tr Jar.	M2	Wk alt, mod silicif, mod py, sp cpy, cc. Most suls in veinlets.
333.2	8.7		2.65	99	.15				1	.10	.05	Tr moly	1	1		Wk alt, patchy silicif + qtz vning, mod py (mostly in vn's), sp c
342.3	9.1		2.81	88	.22				1	.22	Tr?		1	sp Jar.		As above, but no moly visible.
End of hole.		Aver. rec'y = 90%														

Final Depth 312.0
Collar Elevation 2936.48
Coordinates 29,628.90 N ; 28,910.98 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-9
Sheet No. 1 of 1
Date Completed 2/26/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
9.0	9.0	NX	2.25	51	.03			.03					wk. clay sp. ser.	wk hem. sp. lim.	Dp	Mod alt, minor qtz vning, bleached wi wk lim + hem staining
17.0	8.0		2.41	83	.02			.02					wk-mod clay	mod. hem mod. lim		wk-mod alt, patchy silicif, bleaching + hem staining, mod lim
26.6	9.6		2.34	90	.04			.04						mod. hem wk. lim tr jar		Wk-mod alt, st alun + qtz vning, mod hem, lim, + sp lim.
33.4	6.8		2.56	84	.08			.08						mod-st hem mod lim		As above. Mz dklet (?) at 31.0 – several inches thi
41.9	8.5		2.39	73	.13			.13						sp. hem. wk lim.		wk-mod alt, patchy silicif, st bleaching, minor hem, li
49.3	7.4		2.58	97	.12			.12					wk-mod clay, sp. ser	mod hem & lim.		wk-mod alt, st silicif in places, st hem staining + sp LL
59.9	10.6		2.29	81	.03			.03								As above. Numerous qz vn's + unlets.
70.6	10.7		2.43	79	.03			.03					wk-mod clay	mod. hem wk lim. tr jar		wk alt, mod-st silicif, mod hem string, wk lim, few qtz unl
78.0	7.4		2.49	99	.03			.03					mod. clay wk. ser.	wk. hem wk. lim.	Mz @ 74.3	Strongly silicif to ct. Mz is mod alt, + either bleached or hem s
85.0	7.0		2.38	80	.05			.05					wk-mod clay	wk. hem mod. lim		wk-mod alt. Some hem string + qtz vning. Grn clay on one
94.3	9.3		2.44	100	.06			.06					wk-mod clay, sp. ser	tr jar.		As above wi a few alun unlets. Mz has scattered qtz phe
103.7	9.4		2.46	92	.03			03					wk-mod clay, wk. ser	mod. hem wk. lim tr. jar.		WK-mod alt, patchy silicif, qtz-alun vn's, patches hem staini
104.9	1.2		2.71	92	.06				sp		.06		1	wk lim, tr jar	Suls @ 103.7	Wk-mod alt, silicif at end of run, mod py (mostly in vn's), wk cc.
112.5	7.6		2.68	90	.23				1		.23		1	1		Mod-st alt, patchy lim, wk py, sp cc, v. sp chrys
122.0	9.5		2.43	68	.30	.01			1		.30		sp clay + ser	sp lim tr jar		Mod alt, lim at start of run, wk py, sp cc.
130.3	8.3		2.77	85	.44	.01			wk		.44		1			wk-mod alt, minor silicif in places, wk py, sp-wk cc, t
139.0	8.7		2.41	94	.44	.02		.02	wk		.42	Sp	mod clay + ser	tr hem		Mod-st alt, silicif along py unlets. $CuSO_4$ along fracs, wk py, wk cc.
148.3	9.3		2.47	87	.50	.01		.01	1		.49		mod clay sp ser			Mod alt, st in crumbly rk at start of run, wk-sp py, sp cc.
155.3	7.0		2.49	93	.21				sp-wk		.21		sp clay			Mod alt becoming wk, sp py, v. sp cc, CuO_x, sp hem after py
163.3	8.0		2.45	90	.35			.03	1		.32		1			WK-mod alt, wk py, sp cc., sp CuO_x (chrys, SO_4), hem-.
172.0	8.7		2.55	92	.35		93.3' @ .43/.04	.02	sp		.33		sp clay + ser	tr jar sp hem		WK alt, qtz + py unlets, wk py, sp cc, v. sp CuO_x, sphen
181.6	9.6		2.54	93	.40	.03		.03	sp		.37		tr clay, mod ser	sp jar		Wk-mod alt, sp py + cc, jar along some frac's, minor hem.
191.1	9.5		2.57	92	.55	.06		.06	1		.49		sp clay + ser	1		v. wk alt, v. sp py, tr cc, chrys., hem staining.
195.6	4.5		2.55	100+2	.44	.04		.04	1	.02	.38		1	1		As above.
206.6	11.0		2.60	96	.55	.05		.05	wk	.15	.35		v sp clay tr ser	mod jar sp lim		V. wk alt, minor silicif along sp py unlets, hem-stained feld
215.3	8.7		2.60	92	.42	.06		.05	sp	.05	.32		1	1		wk alt, hem + jar-stned felds, v. sp suls but for final 2" of py-cc
225.3	10.0		2.70	97	.29	.03		.03	wk-mod	.02	.24	Sp	sp clay tr ser	sp jar v. sp lim		Mod silicif but for patches of clay – mass. py. Mod py, sp cpy + cc.
234.8	9.5		2.64	95	.16	.03			wk	.08	.08		sp ser	1		v. wk-wk alt. 2nd ary K-spars (?) Sp py (mostly in unlets). Sp ja
243.3	8.5		2.63	97	.07				sp	.05	.02		1	sp jar		As above wi silicif along mass py vn's. Wk-mod py, tr cpy,
249.1	5.8		2.59	98	.04				1	.03	.01		v. sp ser	wk jar		WK alt, orthocl xls up to .4", sp-wk py + jar, tr cc, cp
255.0	5.9		2.67	98	.05				1	.04	.01			sp jar		Mz is fresh – v. wk alt. Sp jar + py.
264.6	9.6		2.60	90	.03				1	.03				1		As above wi tr cpy + 2nd ary felds.
271.5	6.9		2.61	100	.04				1	.04				1		Fresh – v. wk alt. Sp py, v. sp cpy + cc-cov. Most min on fra
281.0	9.5		2.67	87	.03				1	.02	.01			1		Fresh – v. wk alt. Sp-wk py mostly in vn's. Tr cc + cpy.
289.0	8.0		2.62	98	.04				sp-wk	.04				1		Alt. as above. Silicif at end of run. Wk py along frac's.
297.9	8.9		2.63	66	.02				wk	.02				wk jar		V. wk alt (chloritiz of biotite). Sp py along frac's.
307.6	9.7		2.64	97	.04				sp-wk	.04				sp jar		As above. Several qtz unlets. Numerous jar stained feld
312.0	4.4		2.88	94	.01				mod		.01			1		Silicif destroys rk text. Zones of massive py + py vn's. Sp cc.
End	of hole		Avg rec'y =	89%												

Final Depth 400.0
Collar Elevation 3007.27
Coordinates 29,091.32 N ; 29,233.40 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-8
Sheet No. 1 of 2
Date Completed 2/25/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Sericite, clay	Iron	Rock Type	Remarks
5.0	5.0	NC conu.	2.43	57	.02			.02					mod clay, sp ser	mod hem + lim	Dp	wk alt, mod silicif, qtz + alun vn's, mod hem staining.
14.3	9.3	NX	2.45	96	.03			.03	v. sp		Tr		Sp clay, ser.	1		wk alt, mod-st silicif, qtz + alun vn's, hem staining, occ patch su
22.5	8.2		2.45	97	.02			.02						mod lim + LLm		St silicif, text unrecognizable, st alun vning, mod brn lim, wk hem st
31.9	9.4		2.42	94	.03			.03					Sp clay	mod Lim, sp LLm		wk alt, mod silicif, Dp text after 28.5, alun + qtz vn's, wk-mod lim,
41.4	9.5		2.46	90	.04			.04					1	sp-mod lim, LLm, hem		As above wi good patches of LLm.
50.0	8.6		2.18	98	.01			.01					mod clay	mod lim, sp hem		Mod silicif, text of fg rk unrecognizable, mod LLm in places, alun + q
58.9	8.9		2.43	91	.01			.01					Sp clay	mod lim + hem		Dp? Mod-st silicif, qtz-alun vn's, mod-st lim + hem staining
65.5	6.6		2.35	94	.01			.01					1	mod lim sp hem		Fg silicified rk, occ qtz eye, qtz + alun vn's, mod lim + hem stain
75.5	10.0		2.48	72	.01			.01					1	mod lim		Rk type? Mod-st silicif, alun vn's, sp LLm, mod lim + hem stain
85.4	9.9		2.44	82	.01			.01					1	1		Wk alt, mod silicif, qtz + alun vn's, tr chrys, wk LLm + hem.
95.0	9.6		2.57	87	.10			.01	wk		.09		wk clay	1	Sul zone @ 92.1	As above to 92.1. Then pick up sp cc, wk py.
103.0	8.0		2.39	89	.23	.01			1		.23		mod clay			Mod alt. Text obscure but faintly porph at end of run. Wk py, cc.
112.2	9.2		2.54	96	.13	.01			1		.13		1			Rk type? Dp? "Sp"? Patchy silicif. Qtz + cc vnlets. wk-mod py, wk cc, sp
119.6	7.4		2.72	73	.27	.02			1		.27		1			Wk-mod alt, patchy silicif, definite Dp at 114.8, cc in shears, wk py, wk c
129.1	9.5		2.64	90	.30	.02			1		.30		1			Wk-mod alt, apparently Dp but indistinct, qtz vn's, wk py, cc.
134.8	5.7		2.67	100+1	.66	.09		.06	wk-mod		.60		mod-st clay			Wk-mod alt, definitely Dp, wk-mod py + cc, alun + qtz vn's.
141.0	6.2		2.60	88	.25	.01			wk		.25		mod clay, sp ser.			wk alt, mod silicif, jar + py-cc vnlets. Mod py + cc.
150.7	9.7		2.60	86	.33	.03			1		.33		st clay ser?			As above. Dp is quite porphyritic at 142.0. Patches of mod
160.3	9.6		2.87	87	.29	.02			wk-mod		.29		mod clay sp ser.			Wk-mod alt, patchy silicif, qtz + py + alun vnlets, mod-st py, sp-wk
169.1	8.8		2.50	90	.28	.01			mod		.28		1			Wk alt, patchy silicif, qtz + py-cc + alun vnlets, mod py, sp-wk
178.3	9.2		2.70	94	.43	nil		.01	1		.42		1			Wk alt, mod silicif, qtz-py-alun vnlets, wk py, sp cc-wk in patch
187.6	9.3		2.56	93	.41	.01	33.3' @ .40/.01		wk-mod		.41		sp clay + ser.			wk alt, patchy silicif, qtz + py vnlets, wk py, sp cc.
195.2	7.6		2.60	92	.33	.01			1		.33		1			As above, altho silicif pretty general
202.4	7.2		2.61	97	.41	.01			1		.41		sp clay			Wk alt becoming mod-st. Wk py, cc still pretty sp.
211.0	8.6		2.47	73	.32	.01			wk		.32		mod clay sp. ser.		M2 @ 204.2	Mod-st alt. In M2, py is sp-wk and cc quite sp.
219.7	8.7		2.35	100	.08	X			sp		.08		mod-st clay sp. ser.			Mod alt, sp py + v. sp to u. wk cc.
225.6	5.9		2.42	82	.22	.01			1		.22		1			As above wi a little better cc.
233.1	7.5		2.45	100+1	.39	.01			1		.39		mod. clay		Dp ca. 227.0	Wk-mod alt in Dp. Wk py + wk cc (cc picks up in Dp
240.1	7.0		2.56	76	.31	.01			1		.31		1			Mod-st alt becoming wk at end of run, some silicif, wk py, sp cc.
247.3	7.2		2.56	91	.44	nil			1		.44		1			Wk alt, mod silicif, text indistinct-possibly "Sp". Wk py, v. sp cc
253.3	6.0		2.65	84	.09				1		.09		wk-mod clay		M2 ? @ 248.0	Wk alt, fairly st silicif, porph text in places, sp py, v. sp. cc.
263.0	9.7		2.53	94	.08				1		.08		1			St silicif. Rk is not good M2 text. Wk py, sp cc.
269.1	6.1		2.57	95	.09				1		.09		wk. clay	Tr. lar.		Wk alt, mod silicif. Mod py (mostly vnlets), sp cc.
278.3	9.2		2.58	96	.04				wk		.04		1	1	Dp ca. 276.4	St silicif. Sp py + tr cc. Most py is in vnlets.
286.1	7.8		2.72	87	.10				1		.10		1	1	Sp? Ap? @ 284.0	Wk alt, mod silicif. Small pheno porph. Wk-mod py, tr cc.
293.6	7.5		2.63	86	.21				wk-mod		.21	moly	sp clay	Sp jar		As above. Py in vnlets + diss. Few alun vnlets.
300.5	6.9		2.62	96	.14				wk		.14		wk clay	1		St silicif., text vague. Mod py, tr cc.
310.5	10.0		2.69	94	.07				1		.07		sp clay + ser.	wk jar		As above, wi mod-st py vning + some hem after py.
319.6	9.1		2.69	94	.12				1		.12	tr	wk clay	sp jar	Dp? Sp?	Wk alt, mod silicif. Possible Dp [illegible]

Final Depth 400.0
Collar Elevation 3007.27
Coordinates 29,091.32 N; 29,233.40 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-8
Sheet No. 2 of 2
Date Completed 2/25/64
Logged By BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	~~Other~~ moly.	Alteration clay sericite	lim	Rock Type	Remarks
329.1	9.5	NX	2.70	91	.12				wk	.02	.10		sp clay	mod lim sp jar		wk alt, mod-st silicif, patchy FeOx, wk py (in vn's, mostly), t
338.5	9.4		2.64	90	.07				wk	.01	.06		1	sp lim + jar		As above. Too many phenocrysts for the usual Dp.
347.8	9.3		2.68	92	.28				wk-mod	.02	.26	tr	1	sp lim wk jar	Definite Sp	wk alt, patchy silicif, good "Sp" rk. Mod py, tr cc, c
357.1	9.3		2.74	92	.18				1	.05	.13		1	mod jar		As above wi sp cpy, occasional alun unlets, sp ja
366.5	9.4		2.70	90	.17				1	.02	.15	tr	v. sp clay	wk jar sp lim		Wk alt, mod silicif and qtz vning. Sp jar. Min as a
375.3	8.8		2.65	96	.16				1	.04	.12	tr	1	mod jar		Wk alt, qtz vning shows minor f/ting. Wk-mod py, s
383.6	8.3		2.69	98	.09				wk	.04	.05	v. sp.	tr clay	wk jar sp lim		Wk alt, patchy silicif + qtz vning. Wk py, mostly in unlets, sp cpy, tr cc?, moly coats one f
393.2	9.6		2.59	90	.19				sp-wk	.10	.09		tr clay	mod jar	Mz @ 290.0 ct is sharp	"Sp" as above. Mz is fresh-v. wk alt. Sp py, mostly
400.0	6.8		2.59	100	.09				1	.09		tr		1		wk alt, jar stained felds, sp py, tr moly.
End of hole			Avg. rec'y = 90%													

Note on rock type: Silicif too strong from 284.0 – 338.5 to allow confident rk type identification. Judging from the last portion of the hole, it is quite possible that this entire silicified interval was "Sp" (syenodiorite porphyry).

Final Depth 423.7
Collar Elevation 3024.30
Coordinates 29,407.76 N ; 28,784.33 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-7
Sheet No. 1 of 2
Date Completed 2/15/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	lim	Rock Type	Remarks
28.0	28.0	rock bit	—	Dump												Dump
32.0	4.0	NX 1.875	—	—												Boulders at base of dump
41.0	9.0		2.42	80	.05			.05					wk clay	Mod lim	Dp	wk-mod alt, lim staining + in frac's (sp). Num xenoliths, mostly of s
49.0	8.0		2.42	71	.05			.05								Mod alt wi patch st alt. Mod-st lim + jar staining. Xenoliths.
57.0	8.0		2.45	92	.06			.06								wk-mod alt, zones silicified, mod lim, RK has large felds, bio books, xe
66.0	9.0		2.35	80	.04			.04	Tr				wk-mod clay			wk alt, sp silicif, mod lim, tr. cc.
76.7	10.7		2.34	85	.10			.05	Tr		.05			mod lim tr hem sp jar.		wk-mod alt, large felds phenc., sc. xeno's. Mod lim, tr cc
85.0	8.3		2.30	88	.03			.03					mod clay.			As above
94.7	9.7		2.33	96	.09			.09							sul. ct @ 94.3	wk-mod alt, mod lim, wk LLm. Suls @ 94.3
102.6	7.9		2.62	97	.15			.03	sp-wk		.12		sp clay tr ser.	mod lim, sp. jar		wk-mod alt, mainly suls w some mixed cap.
112.0	9.4		2.60	93	.09			.02	wk		.07		Sp clay	sp LLm + jaro.		Mixed suls & cap. RK f.g., sil'd, sp suls.
121.5	9.5		2.54	94	.57	.01		.01	mod	.05	.51		sp ser.	Tr jaro.		wk-mod alt, sp-wk suls w tr lim on frac's. Sil'd.
130.2	8.7		2.47	87	.90	.01			1	.02	.88		1			wk alt w spots of mod alt, sp suls mainly cc or diss py
138.7	8.5		2.48	78	1.29	.01			1		1.29		sp ser + clay			Wk-mod alt, wk-mod py in vn's + diss, sp cc, mod in patches.
144.7	6.0		2.47	95	1.02	.03			wk		1.02					Wk-mod alt, wk-mod diss py, tr cpy, sp cc-mod in patches.
150.3	5.6		2.49	93	.34	.01			1	.02	.32		1			As above. No vis cpy. Rock still has num xenoliths + large felds
161.1	10.8		2.58	76	.63	.02			mod	.01	.62		mod clay, tr ser			Wk-mod alt, fewer xenoliths, wk-mod py, sp cpy, sp-wk cc.
170.8	9.7		2.47	80	.63	.02			1	.02	.61		1			Wk-mod alt. Is this Dp? Very strange text. wk-mod py, sp cc.
179.6	8.8		2.45	93	.79	.01	133.1'		1		.79		1			Wk-mod alt. Very little qz eyes, if any. wk-mod silicif. wk-mod py, w
182.0	2.4		2.60	95	.70	.01	@		1	.02	.68		1			Wk alt. Mod-st silicif, rock type unrecognizable, wk-mod py, sp
191.7	9.7		2.71	89	.56	.01	.68/.01		1	.04	.52		ser?			Wk alt. " " " , Dp? Wk py, sp cc, tr cpy
199.6	7.9		2.54	100	.40	.01			wk	.06	.34		sp clay ser?			Wk alt. St silicif. Dp text occ recognizable. Wk py, sp. c
209.0	9.4		2.70	88	.38	.01			1	.01	.37		1		M2? ca. 206.0	Wk alt. Mod. silicif. wk py sp-tr cc.
216.7	7.7		2.68	93	.56	.01			1	?	.56		mod clay			As above, wi wk-mod py and wk cc.
225.8	9.1		2.51	95	.49	.01			1	.10	.39		1		Dp? @ 216.8	Dp? is well-silicif wi sp py + tr cc. M2 is wk-mod alt, wk-mod py, s
235.2	9.4		2.54	98	1.14	.01			1	.05	1.07	.02 cov.	1		M2 @ 222.0 Dp? ca. 232	Ct grad. M2 as above. Dp? is wk-mod alt, wk py + sp cc.
245.1	9.9		2.61	83	.70	.01			1		.70		sp clay ser?			Mod alt, minor silicif, wk-mod py, sp cc (mod in patches), tr c
252.5	7.4		2.90	93	.36	.01			Sp		.36		1			As above wi patches of wk alt. Py-cc veins.
260.1	7.6		2.46	41	.19				1		.19		mod clay sp ser	tr lim	M2 @ 252.5	Mod alt, num felds phenocrysts, sp-wk py, tr cc. Tr. hem sta
264.2	4.1		2.44	100	.22				1		.22		1	1		As above.
273.7	9.5		2.70	90	.21				1		.21		1	tr hem		Mod-st alt. Wk-mod py, sp-wk cc. Grn-stained felds.
282.4	8.7		2.54	88	.22				sp-wk		.22		1	1		Mod alt. 1' of fg porphyry @ 278. Wk py, sp cc, tr cpy.
290.2	7.8		2.48	98	.17				Sp		.17		mod clay + ser			Mod alt, thin alun vnlets, sp lim coating wk py. Sp cc, tr cpy.
299.3	9.1		2.67	52	.53	nil			wk		.53		st clay ser?			Mod-st alt, very crumbly, mod-st py, wk cc. Considerable clay.
308.1	8.8		2.72	93	.37	.02			mod		.37		mod clay		Sp(?) @ 304.0	M2 wk alt, silicif, recognizable by bio books. Fg, silicif Sp(?) has patchy st. + c
314.4	6.3		2.73	86	.34	.01			wk		.34		sp clay ser?			St silicif, text unrecognizable. Mod py, cc ranges from sp to mod.
321.8	7.4		2.65	100	.55	nil			1	.10	.45		1		M2 recognizable @ 317.0	St silicif to 317, then M2 text recognizable. Wk mod py, sp-wk cc. Qtz vn's + vuggy texture.
							68.5'									
332.0	10.2		2.51	94	.43	nil	@		1	.10	.33		sp clay			

Final Depth 423.7
Collar Elevation 3024.30
Coordinates 29,407.76 N; 28,784.33 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-7
Sheet No. 2 of 2
Date Completed 2/15/64
Logged By B.N.W., C.W.H.

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu. Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay, ser.	lim	Rock Type	Remarks
341.5	9.5		2.72	96	.60	.02			mod.	.02	.58		Sp ser.		Mz grad'ts Sp @ 339.5	Both porphs wk alt + wk silicif, wk py diss + in vns, v. sp cc.
351.2	9.7		2.39	91	.42	nil			wk	.05	.37		Tr ser.	sp lim		Wk alt. "Sp" text becomes v. distinct at 347.0. Wk py, v. sp cc
358.7	7.5		2.53	100	.41	.01			1	.05	.36			Sp jar, tr lim		wk alt. Qtz + py vning. Sp to locally mod py, tr cpy + cc.
368.4	9.7		2.69	98	.32	.01			1	.12	.20			sp jar		As above.
376.4	8.0		2.57	95	.26	.01			wk-sp	.03	.23		sp clay	mod jar	Mz, sharp ct @ 370.8	Both porphs wk alt. Pieces of "Sp" in Mz. Sp, wk py, tr cpy,
384.7	8.3		2.67	91	.22	nil			1	.03	.19		Sp clay, tr. ser.	sp jar.		Wk alt, wk py in u compic py vnlets, sp cc, tr cpy.
393.7	9.0		2.64	100	.52	.01			wk-mod	.02	.50					Wk alt, mod silicif, text indistinct, wk py, v. sp cc.
403.3	9.6		2.60	99	.27	.01			wk	.01	.26		sp clay	tr jar		As above, w/ qtz + alunite vnlets. Min is patchy. Tr c
408.0	4.7		2.60	97	.28	nil			1	.03	.25		sp clay + ser.	sp jar		Wk alt, good Mz text. Qtz vnlets, wk-mod py, cc is sp + pat
417.4	9.4		2.60	94	.47	.01	15.7' @ .45/.01		1	.10	.37		tr clay, sp ser.	mod jar		Wk alt, minor silicif, wk py (much in vn's), v. sp cc, tr c
423.7	6.3		2.52	74	.43	.01			1	.10	.33		ser?	sp jar		As above.

End of hole

Aver. rec'y = 89%

Final Depth 475.0
Collar Elevation 3221.07
Coordinates 28,690.81 N; 28,020.53 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-6
Sheet No. 1 of 2
Date Completed 2/13/64
Logged By CWH, BNW

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	lim	Rock Type	Remarks
1.0	1.0	shovel	—	—	—										Talus	
3.0	2.0	rock bit	—		—											
7.4	4.4	NC – 2.750	2.25	32	0.04			0.04					mod clay	st. hem,		Mod alt, strong oxidation with st. hem, mod. lim., mod. clay.
16.7	9.3	NX 1.196	2.23	92	.03			.03					tr. ser	sp lim	M2	Mod-st alt, bleached + hem. stained. Minor qtz veining Mod-st.
26.6	9.9		2.28	84	.03			.03					mod-st clay	mod hem mod-st lim		Mod alt + clay, " " " " " " " Tr LL
35.3	8.7		2.20	97	.02			.02					mod clay	mod-st lim, hem		Mod-st alt, bleached, hem stained, qtz vn's.
40.3	5.0		2.29	95	.02			.02					mod-st clay			Mod alt, bleached, hem stained, lim in frac's, incr in qtz v
50.2	9.1		2.21	97	.03			.03					mod clay	mod lim st hem		Mod-st alt, ggy from 42-46', bleached, hem stained
60.2	10.0		2.56	79	.02			.02					mod-st clay	sp jaro, st hem		Mod alt, hem, stained, sc. sil'd areas. ? LLim vs Ht.
68.5	8.3		2.56	98	.03			.03					mod clay	mod jaro hem, lim		Mod-st alt, " ", sc. bleached areas. Mod LLim
78.3	9.8		2.36	91	.04			.04					wk-mod clay	mod LLim hem, jaro		Mod alt, hem stained. No LLim
87.0	8.7		2.31	94	.05			.05					wk clay	mod hem lim. sp jaro		Mod-st alt., wk hem stain, bleached in part.
95.6	8.6		2.43	91	.05			.05					mod-st clay	st lim, wk hem		Mod alt., sp hem staining, bleached, Tr. clays.
105.3	9.7		2.39	93	.03			.03					mod clay	st lim, jar-sp hem		As above. No visible clays
114.8	9.5		2.49	94	.03			.03					mod-st clay	st lim, jar mod hem		Mod alt, mod hem. stain. sc silic'n along fra
124.1	9.3		2.62	93	.03			.02	Sp		.01		mod clay	sp lim, jar st hem		As above plus an alunite unit (vuggy). Mod silic
133.6	9.5		2.30	100	.03			.03	Tr				wk clay mod ser	mod lim + hem		Mod alt, sp hem stain, mod lim, bleached, ggy areas
143.3	9.7		2.36	94	.04			.04			?		wk clay + ser			Mod alt, mixed hem, lim + bleached, sp sil'n
149.0	5.7		2.64	96	.03			.01	one vn		.02		wk clay sp. ser			As above w tr py + cc? last ½ of run, ggy.
159.0	10.0		2.46	87	.04			.04					wk clay + sp ser			Mod alt, wk hem + Lim stain, bleached sp silic'n
165.5	6.5		2.48	100	.05			.05								As above but brkn
171.0	5.5		2.62	92	.02			.02					mod clay + ser.	mod-st lim, jar		Mod alt, mod silic'n, sp hem + lim on frac's.
180.6	9.6		2.52	92	.03			.03						mod lim sp jar.		wk-mod alt, mod silic'n, lim in frac's, hem staining last 2', tr p
190.0	9.4		2.45	100	.13			.03	Tr		.10			wk lim sp hem		wk-mod alt, patch suls 181-186' w py + tr cc. Otherwise hem st
199.1	8.6		2.48	94	.13			.01	Sp		.12			sp. lim, jar.	All is sul zone after ca. 192.0	wk alt, minor silic'n, feldspathization, wk py + sp cc. Sp lim, hem
203.9	9.1		2.54	100	.08			CuSO4 Tr			.08			Tr lim, jar.		wk-mod alt, minor patches hem stain, feldspathiz., wk py + sp c
210.8	6.9		2.57	40	.34	.02		.02			.32					wk-mod alt, wk py + cc, chalcanthite on a few frac's.
217.0	6.2		2.47	96	.12			Tr			.12			sp lim + jar.		As above to 211.7 then leached, sp lim, vuggy frac's
225.9	8.9		2.48	93	.08			Tr			.08			wk. lim + jar.		wk alt, secondary felds, mixed cap + suls.
234.4	8.5		2.55	87	.28			Tr			.28			sp. lim + jar.		As above to 228.1 tr sul zone. wk-mod alt, wk cc
244.0	9.6		2.56	93	.57	.02		.02			.55					Mod alt, 2ndary felds (Pink). wk cc + py
253.7	9.7		2.60	95	.38	.01		.01			.37		mod clay wk. ser			wk-mod alt, 2ndary felds, wk. cc + py
262.2	8.5		2.53	100	.40	.02		02			.38					As above, a little more brkn.
271.8	9.6		2.54	98	.46	.02	67.7' @ .46/.02	.02			.44					wk-mod alt, decr in total suls. 2nd fold.
281.0	9.2		2.56	96	.34	.03		.03		.10	.23					" " " , st 2nd felds, sp gtz veining, sp suls.
290.7	9.7		2.55	92	.61	.03		.03		.10	.48		mod clay sp. ser			wk-mod alt, 2nd felds, sp suls, tr. lim.
298.0	7.3		2.52	100	.43	.03		.03		.05	.35					" " " " " , tr grn CuSO4(?)
302.1	4.1		2.55	98	.51	.02		.02		.05	.47		st + clay sp. ser.			As above w a ggy area (stronger alt?)
311.0	8.9		2.64	74	.35	.03		.03		.03	.29		mod clay			

Final Depth 475.0
Collar Elevation 3221.07
Coordinates 28,690.81 N ; 28,020.53 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-6
Sheet No. 2 of 2
Date Completed 2/13/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
317.4	6.4	NX 1.196	2.62	94	.32			.02	Sp	?	.30		mod clay sp ser	sp lim after py	Mz	wk-mod alt, wk-mod py, tr cpy, tr moly, green CuSO4 on fr
328.2	10.8		2.63	95	.29			.01	wk	.20	.08		sp clay + ser.	sp lim. jar.		Wk alt, tr jaro-stained felds, sp lim after py, wk py, tr cpy.
336.1	7.9		2.63	91	.70				1	.08	.02	Tr cov.	1	1		As above. Jaro stained felds becoming common.
344.1	8.0		2.62	88	.09				1	.07	.02		1	1		Wk-mod alt, sp lim, jaro-stained felds, orthoclization, wk py, tr cc,
354.0	9.9		2.63	88	.11				1	.03	.08		1	1		Wk alt, tr lim on fracs, jaro-stained felds, wk-sp py, sp cc.
363.5	9.5		2.62	95	.13				sp-wk	.08	.05		Tr ser?	1		wk alt, sp lim, jaro-stained felds, sp py, tr cc + cpy
371.2	7.7		2.59	100	.17				1	.15	.02			sp jar		As above w/ sp cpy. Rock is relatively fresh.
381.0	9.8		2.60	87	.11				1	.09	.02			1		Wk alt, jaro-stained felds, wk py, tr cc + cpy.
389.3	8.3		2.63	96	.07				wk	.03	.04			sp jar tr lim		As above. Cc a little stronger. Tr moly, lim.
397.6	8.3		2.60	94	.15				1	.10	.05			sp jar		Wk alt, wk-mod py, tr cpy + cc. Cc occ. sp. Sp lim, jar
407.2	9.6		2.59	71	.22				1	.10	.12	Tr moly	sp clay, tr ser.	sp lim + jar.		wk alt, feldspathization, sp py, tr cc. Jaro stained feld
417.3	10.1		2.59	90	.14				1	.05	.09		1	1		wk alt, sp qtz vning., feldspathiz., jaro staining, wk-mod py, sp cc tr.
425.3	8.0		2.61	97	.22				1	.10	.12		1	1		Wk alt, wk silicif, jaro staining, wk py, tr cpy, sp cc.
434.7	9.4		2.64	84	.17				1	.05	.12		sp ser	1	Sp @ 432.6	Mz as above. "Sp" is wk alt, mod silicif, py mostly in veins, tr cc.
441.8	7.1		2.65	94	.41	.01			1	.15	.26		tr ser	1		This rock is fairly fg; mafics have gone to chlor. Mod py in vns. Patches of cpy + cc. Rk is quite vuggy.
			2.70													
449.7	7.9		2.70	89	.29				wk-sp	.15	.14		tr ser	sp lim + jar		Wk alt, mod silicif, text vague. wk py, tr cc + cpy.
458.0	8.3		2.70	100	.31	.01			1	.21	.10		1	1		wk alt, wk silicif, wk py, tr cc. Some qtz vning.
465.8	7.8		2.68	89	.40	.01			wk	.30	.10		1	1	Mz @ 459.2 sharp ct.	Wk alt, both porphs mod silicif. Text's vague. Sp py, tr cc + cp
475.0	9.2		2.77	82	.32	nil			1	.22	.10		1	1		Wk alt, mod silicif, text vague, could be back in "Sp". Sp-wk py tr cc? and cpy?
End of hole			Avr. rec'y = 91%													

Final Depth
Collar Elevation
Coordinates
Inclination

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-5
Sheet No. 1 of 2
Date Completed 2/3/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay-sericite	lim.	Rock Type	Remarks
16.0	16.0	NC	—	—	—	—		—	—	—	—		—	—		Dump
25.3	9.3	1.875"	2.25	100	0.06			.06					mod-st.	lim, hem mod.	Dp	Wk. alt., bleached. Qtz. + alunite veins, hem. staining, no suls.
35.1	9.8		2.35	79	.06			.06					mod.	mod. lim, hem		As above. Stronger hem. staining, sp. in feldspars.
43.1	8.0		2.26	53	.04			.04					st. clay	sp. lim, hem.		Wk. alt., bleached, st. silicif. in places, qtz. v's, tr. hem + py.
51.5	8.4		2.63	80	.03			.03					sp-mod. clay	sp. hem. mod. lim		Wk. alt., bleached, silicif. in places, qtz. + alunite v's, sp. hem + lim
60.0	8.5		2.23	94	.05			.05					Mod. clay	Mod. Lim		Wk-mod. alt, bleached, " " " " " " " tr. mal., sp. hem,
65.0	5.0		2.25	87	.07			.05	Tr		.02		Mod-st clay	Sp Lim.	sul zone, at ca. 60'	Mod-st. alt, sul. zone at ca. 60', sp. lm., mod. py, sp. cc, qtz. v's.
70.3	5.3		2.40	86	.36			.01	Sp		.35		"	Tr. Lim		Mod-st. alt., minor qtz. veining, lots of clay, mod. cc + py.
76.4	6.1		2.31	85	.24				"	.10	.14		"			Mod-st alt, lots of clay, mod. cc + py. Both green + pink-stained fol
85.7	9.3		2.39	69	.20				"	.01	.19		"			Mod-st. alt., " " ", sp-mod cc, mod. py, rock fairly well bleach
93.8	8.1		2.47	93	.25	.01			"		.26		St. clay			As above. cc mod-sp. Occasional qtz. v's.
101.8	8.0		2.47	85	.49	.03			"		.52		"			" " cc sp-mod.
108.3	6.5		2.42	97	.24	.03			"		.27		mod-st clay			Mod.-st. alt. Considerable clay. Sp-mod. cc, mod. py.
116.8	8.5		2.37	64	.22				"		.22		"			St. alt. " " " " " " "
126.0	9.2		2.50	93	.16				"		.16		"			Varied mod-st. alt. Less clay. Sp-mod. cc + py.
135.7	9.7		2.50	93	.08				"		.08		"	Tr. hem.		Mod. alt., lots of clay, Sp-mod. py, sp. cc.
143.6	7.9		2.55	100	.26				"		.26		"			Mod-st. alt, " " ", mod. py (st. in places), tr. cc, cov.?
153.5	9.9		2.69	85	.11				sp-mod		.11		wk-mod clay, ser.			Wk-mod. alt, qtz. eyes v. sp. in this box. Ap? Mod. py (st. in places), sp. cc
162.7	9.2		2.70	90	.10				Sp.		.10		mod-st clay			Mod-st. alt, good dp. again, mod. py, sp. cc., considerable clay.
170.7	8.0		2.34	98	.18				"		.18		mod-st. clay			St. alt., much clay, mod. py, spotty mod. cc, otherwise tr. cc.
179.9	9.2		2.45	100	.27				"	.02	.25		"			St. mod. alt., clay, mod. py, generally sp. cc., some qtz. v's.
189.0	9.1		2.53	99	.09				wk		.09		mod. clay	Sp. lim	Sp @ 184.0	Dp as above to C.T. Sp wk-mod alt, fine gr.
199.3	10.3		2.60	83	.19				"	.02	.17		wk clay + ser.	"		Sp., f. gr., wk alt., sp cc, py
207.9	8.6		2.55	91	.09				"	.02	.07		"	"	Dp @ 206.7	As above, become mod alt towards end., ppy.
216.3	8.4		2.46	100	.14				Sp.		.14		mod-st. clay	Tr. lim		Dp, mod-st alt., wk cc & py.
226.0	9.7		2.61	93	.11				"		.11		mod-wk. clay	"		St. alt. decr to mod., ppy in sc. areas, wk cc on py.
234.8	8.8		2.71	98	.09				"		.09		wk. clay + ser.	Sp. lim		Mod. alt, sp cc as coatings on py. Tr cpy?
243.4	8.6		2.72	94	.10				wk-mod		.10		"	"		wk-mod alt, wk intro. qtz. & qtz veins, wk py, sp cc.
251.9	8.5		2.55	95	.19				"	.02	.17		wk ser, mod clay	"		wk-mod. alt., mild intro. qtz., few qtz. v's, sp. py, tr. cc.
260.4	8.5		2.67	100	.21				"	.05	.16		wk ser. sp. clay	"	Iq. porph. @ 252.2. Sp.	Qz.-bearing dark porph. w. euhedral felds. + ferromags. Wk. alt. Mod. py, tr. cpy
268.5	8.1		2.80	92	.17				mod	.03	.14			"		wk-mod. alt, considerable qtz. intro., qtz-py v's. Sp-mod. py.
277.5	9.0		2.64	97	.36	.01			"	.10	.27			"	Dp. @ ca. 276.0	Iq. porph. wk. alt., almost indisting. unkable from qtz. intro. – Ct. trans. – mod. p
287.2	9.7		2.58	97	.49	.01	28.3' @ .40/.02		"	.02	.48	mdly	sp. clay	"		wk-mod. alt., qtz. v's + mild qtz. intro, sp. py, tr. cpy + cc.
296.2	9.0		2.57	97	.24	.01			Wk-mod	?	.25		mod-st. clay	"		mod-st. alt, qtz. v's lacking, mod-sp. py, tr. cpy + cc.
305.8	9.6		2.56	96	.46	.03			"	.04	.45		"	Tr. lim	Sp @ ca. 300.5	Dp as above to ca. 300.5. Sp mod. alt., sp. py, tr. cc. Contact transitio
314.9	9.1		2.58	91	.15				"	.03	.12		Tr. ser.	"		Sp is pyrox.-bearing type. Alt. wk. Qtz. unlets. Sp. py, tr. cpy.
323.8	8.9		2.60	100	.18				mod	.15	.03		"	Sp lim, jaro		Wk alt, tr. lim. staining. Qtz + py unlets. Wk py.
333.1	9.3		2.63	93	.22				"	.15	.07	sp.	"	"		Generally wk alt, mod alt spotty, Qtz. unlets, wk. py, sp moly. in
341.1	8.0		2.89	99	.13				"	.10	.03		"	"		Wk-mod alt (Qtz. unlets. Sp. lim. Py stronger but still w

Final Depth
Collar Elevation
Coordinates
Inclination

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-5
Sheet No. 2 of 2
Date Completed 2/3/64
Logged By BNW, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay, Sericite	lim.	Rock Type	Remarks
352.0	10.9	NX	2.69	70	.19				mod	.15	.04	Moly		Tr-sp lim, jaro	Sp	WK-mod alt. Rock type almost indistinguishable from qtz. intro. WK-mod
361.8	9.8		2.69	86	.31	.02			mod-st	.15	.18			sp lim & jaro		V. wk alt. Considerable qtz. vning & intro. WK-mod py, tr. cpy.
365.0	3.2		2.71	96	.40	.01			"	.20	.21			1		WK-fresh alt. Jaro & qtz. vnlets. Qtz. intro. Mod py, sp. cpy.
374.5	9.5		2.81	86	.21				mod	.18	.03	Tr		1		WK alt, mod in patches. Int. qtz. intro & vning. WK py, tr.
379.4	4.9		2.73	94	.16				"	.15	.01			1		As above, qtz. intro. not so int.
Bottom of hole			Aver. rec'y = 90%													

* Note on rock type: This pyroxene- and qtz.-bearing ~~monzonite~~ syenodiorite porphyry (s when altered or well silicified could easily be construed as dp or ap. A large swarm of these lamprophyric dikes strike in the direction of Oxide pit from the E and ENE.

Final Depth 364.2
Collar Elevation 3082.31
Coordinates 29,027.54N ; 28,245.66E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-4
Sheet No. 1 of 2
Date Completed 1/24/64
Logged By FTG, CWH, RG, BNL

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
9.0	9.0	---	-													Alluvium
19.2	10.2	NX 1.875	2.29	83	.05			.05					25	Tr lim S hem	M_2	Leached, mod clay alt, mod hem. staining.
29.2	10.0		2.40	76	.09			.09					40	Tr lim sp hem		" " " ", sp alun vning, st hem stainin
39.0	9.8		2.34	84	.05			.05					1	1		Leached, mod grad to st clay-ser alt. Sp hem sta
48.3	9.3		2.36	85	.07			.07					1	Sp lim tr hem		Leached, st clay alt, sp hem stain
57.4	9.1		2.46	98	.07			.07	Tr				20	tr lim + hem		Part leached wi tr py, $CuSO_4$. Mod clay alt wi mod qtz
66.7	9.3		2.45	100	.18			.08	Sp		.10		25	tr lim		Sp clay-ser alt. Mod qtz vning partly silicifies M_2. Tr
75.8	9.1		2.72	84	.40	.01	11.6' @ .43/.01	.01	1		.39		30			Mod alt. Sp diss py + cc. Tr Cu Ox.
84.3	8.5		2.70	83	.46	.02		.02	1		.44		20	tr lim		Sp-mod alt. Sp py + cc. Tr Cu Ox. Tr leaching
93.4	9.1		2.50	94	.07	nil		Tr	1		.07		30	tr lim + hem		As above to 86.5, then leached. Sp diss hem.
102.7	9.3		2.50	93	.26	nil		Tr	1		.26		25	1		Mixed cap + suls to 96.0, then mod alt, sp py + cc, tr
110.8	8.1		2.53	89	.51	.01		.01	1		.50		35			Mod clay alt wi ggy patches. Sp py + cc, tr Cu Ox.
116.3	5.5		2.49	58	.44	.01		.01	1		.43		1			As above.
121.5	5.2		2.21	100	.51	.01		.01	1	Tr	.50		30			Mod alt. Sp suls.
130.3	8.8		2.55	93	.40	.01		.01	1		.39	Tr	25			Mod alt wi ggy patches. Sp diss + vn py, cc. Tr Cu
139.0	8.7		2.55	89	.44	.01	65.5' @ .42/.01	.01	1	Tr	.43		1			As above.
146.8	7.8		2.57	53	.25	.01		.01	1	Tr	.24		30			Mod clay alt. Sp silic'n Sp suls.
152.7	5.9		2.53	98	.48	.01		.01	1	Tr	.47		1			Mod alt wi tr feldspathic on frac's. Sp suls.
158.7	6.0		2.58	89	.27	.02		.01	1	.02	.23		1			As above.
168.2	9.5		2.61	93	.46	.02		.02	1		.44	Tr	25	tr lim		Mod alt, sp suls, malachite on frac's.
176.8	8.6		2.52	100	.21	.03		.02	1		.18		30	Sp lim + tr hem		" " , leached from 174.0
179.7	2.9		2.46	100	.08			.01+	1		.07		25	S lim tr hem		Stained wi lim, minor hem. Some py + cc presen
190.1	10.4		2.45	69	.14			.02	Tr		.12		1	1		Mod alt wi sp suls grad to mix cap-sul wi patches volc? incl.
199.0	8.9		2.49	89	.06			.02	1		.04		30	Sp lim + hem		Text vague. Mix cap-sul. Mod-st alt wi silicif patches.
207.6	8.6		2.62	86	.15			.04	Sp		.11		40	1		Mod silicif'n. Mod py wi st lim in ggy patches.
212.3	4.7		2.55	96	.13			.03	1		.10		30	Sp lim		Mod alt wi sp feldspathic. Sp diss suls, chry.
216.0	3.7		2.66	93	.25			.02	1		.23		1	Tr lim		Mod-st alt wi mod qtz vning + py. Sp hem stain.
223.5	7.5		2.60	91	.20			.02	1		.18		20	Tr lim + hem		Mod alt wi feldspathic. Sp suls. Tr chry., + leach on fr
232.7	9.2		2.65	98	.25	.03		.02	Tr		.23		25	Sp lim		As above wi ggy patches. Patches silicif'n.
240.8	8.1		2.62	96	.58	.07		.05	Sp		.53		30	1		Sp silic'n wi sp lim vning grad to mod alt, decr lim. Sp su
248.9	8.1		2.69	80	.28			.02	1	.02	.24		25	1		Wk alt, lim vning, sp suls.
257.3	8.4		2.62	95	.06			.02	1		.04		20	Tr lim		Wk alt, mixed suls + lim. Lim on frac's. Sp suls (mainly cl
264.7	7.4		2.54	87	.15				1	.07	.08		15	Sp lim		As above.
272.2	7.5		2.60	76	.11			.02	1	.05	.04		1	1		As above wi tr suls. Tr jar + adsorbed Cu in clay.
280.1	7.9		2.63	90	.22				1	.22		Tr	10 clay	1		Wk alt, mostly leached.
286.7	6.6		2.62	96	.24				5	.24			1	Tr lim		As above. Sp suls, mainly py.
294.5	7.8		2.60	86	.25				5	.25			1			Generally wk alt, tr cpy. + py. Feldspathic on frac's, jar-staine
304.1	9.6		2.74	71	.05				Sp	.05			15			Wk alt, tr py, iron-stained felds, chloritic biotite. Feld
313.4	9.3		2.61	82	.07			.01	1	.06			10 clay	Tr lim		

Final Depth 364.2
Collar Elevation 3082.31
Coordinates 29,027.59 N; 28,295.66 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-4
Sheet No. 2 of 2
Date Completed 1/24/64
Logged By F+G, CWH, RG, BN

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay Sericite	Lim	Rock Type	Remarks
321.7	8.3	NX	2.68	77	.05					.05			10 clay	Tr lim	M2	Wk alt, 2nd'ary feld, tr py, sm. gg. zone
326.6	14.9		2.61	95	.23					.23		moly	5+	1		Wk alt, but stronger on frac's. Tr py.
337.4	10.8		2.67	73	.14					.14			sp clay + ser	1		Wk alt, minor ser spreading from frac's, feld is jar
346.6	9.2		2.61	76	.06					.06		Tr	10	1		Wk alt, tr moly, py on frac's, feld is jar-~~stained~~ ~~staine~~
356.3	9.7		2.65	74	.04					.04		Tr	10			As above.
364.2	7.9		2.92	49	.04					.04			sp clay			Wk alt, st. py vning, some silic'n.
End of hole			Aver. rec'y =		85%											

Final Depth 484.2
Collar Elevation 3247.84
Coordinates 28,744.55N; 28,455.01 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-3
Sheet No. 1 of 2
Date Completed 1/31/64
Logged By RG, CWH, BNu

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay Sericite	lim	Rock Type	Remarks
3.5	3.5	--	--	—	—										—	Alluvium
5.7	2.2	NX std 2.125	2.30	94	.04			.04					20	5 hem tr lim	Dp@ 3.5	Leached, mod-st alt, st hem stain, tr. LLm. Text. vague
12.1	6.4	NX 1.875	2.42	94	.05			.05					25	1	M2 @ 5.7 (ct. broken)	Leached, mod alt, st porph texture wi hem stained felds.
21.0	8.9		2.31	96	.04			.04					35	Tr hem + lim		Leached, mod alt wi ggy areas. Spotty hem stained fe
29.7	8.7		2.35	98	.04			.04	Tr				30	Tr lim sp hem		Leached, mod alt, sp LLm, diss + seams
38.5	8.8		2.40	96	.05			.05					30	Tr lim 5 hem		As above, wi hem stained felds. Mixed volc incl?
47.6	9.1		2.28	94	.03			.03					30	Tr lim sp hem		Leached, mod-st alt wi sp hem stain.
56.9	9.3		2.27	92	.05			.05					45	Tr lim + hem.		Leached, " " ", sp hem stain, sp clay vns, tr LL
66.0	9.1		2.28	96	.05			.05					40	1		Leached, " " " wi wk hem stain.
74.7	8.7		2.48	90	.12			.12					30	Tr lim sp hem		Leached, as above.
83.3	8.6		2.33	98	.05			.05					40	Sp lim Tr hem		Leached, mod-st alt wi sp hem stain grad to mod lim after
91.9	8.6		2.33	92	.05			.05					40	1		Leached, st clay alt wi mod brn lim.
99.8	7.9		2.36	100	.02			.02					30	1		Leached, mod clay alt wi ggy patches. Incr hem stain
108.9	9.1		2.40	98	.04			.04					40	Sp lim + hem		" " " " " mod brn lim-hem stain.
117.9	9.0		2.44	97	.05			.05					35	Sp lim Tr hem		Leached, mod alt, sp. hem stain. Incl st silicif dk. Vo
126.4	8.5		2.44	97	.04			.04					35+	1		Leached, mod-st alt. wk hem stain.
134.9	8.5		2.36	97	.05			.05					40	Sp lim + hem		Leached, st clay alt grad to mod clay-sp silicif. Lim grad hem
143.7	8.8		2.41	98	.06			.06					40	1		Leached, mod clay alt. Sp lim-hem flood.
152.8	9.1		2.42	94	.04			.04					35	1		" " " " wi patches st. ser – LLm.
159.8	7.0		2.62	84	.06			.06	Tr				35	1		Leached, patches st. ser.
164.2	4.4		2.33	98	.01			.01					25	Tr lim Sp hem		Leached, mod-st clay alt.
172.8	8.6		2.44	94	.07			.07					35	Sp lim Tr hem		Leached, mod-st clay alt, patches st ser- LLm
179.6	6.8		2.41	93	.06			.06					35	1		Leached, " " alt, sp ads Cu.
186.9	7.3		2.36	96	.06			.06					30	5 lim Tr hem		Mixed. Dk volc text vk intr M2? Mod-st alt.
190.5	3.6		2.41	98	.07			.07					50	5 lim Sp hem		St hem stain grad to st alt wi mod bxiation. Mixed volc
196.3	5.8		2.42	92	.03			.03					35	1		Leached, mod-st alt. Mod lim vning.
200.9	4.6		2.70	84	.05			.05					30	5 lim 5 hem		As above, grad to st clay alt wi mod hem stain.
207.6	6.7		2.54	90	.02			.02					35	Sp lim 5 hem		Int ser alt. Text vague. Wk LLm. Tr py.
212.1	4.5		2.56	98	.03			.03					35	Sp lim + hem		Leached wi sp diss py. St alt. Tr LLm in seams, vug.
220.0	7.9		2.61	88	.03			.01	Tr		.02		30	5 lim Sp hem		Mod-st alt. Part leached. Tr suls, LLm. Patches of bx
224.8	4.8		2.53	99	.12				1	.04	.08	.01 barn.	20	Tr lim + hem		Mod alt, leached wi sp diss suls in dense patches.
231.4	6.6		2.79	94	.30				Sp	.02	.28		30	1		Mod alt, sp py, tr cc.
240.3	8.9		2.55	97	.20				Tr	.04	.16		35	Tr lim Sp hem		As above to 234.2, then st hem st, minor suls.
245.8	5.5		2.37	92	.25			.04	1		.21		40	Tr lim 5 hem		Mod alt, leached, wi sul-bearing patches.
254.5	8.7		2.36	99	.04			.04					50	1		Mod-st clay alt, strong hem stain, tr. LLm.
263.2	8.7		2.59	94	.03			.01	Tr		.02		50	Tr lim + hem		Mixed, v. st ser from 256.1, tr suls.
272.9	9.7		2.56	90	.08				1		.08		55	Tr lim sp hem	Sul zone at 270.0	St ser, then st hem-jaro to 270.0. Then st clay alt wi diss sul
280.6	7.7		2.73	92	.43	.01		.01	1	.01	.41		45	Tr lim, hem		Mod-st alt, scattered leached patches, mainly mod suls.
288.2	7.6		2.37	98	.64	.02			1	.04	.60	Tr molu	35			Mod alt, sp suls

Final Depth 484.2
Collar Elevation 3247.84
Coordinates 28,744.55 N; 28,455.01 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-3
Sheet No. 2 of 2
Date Completed 1/31/64
Logged By RG, CWH, BNL

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration clay sericite	lim	Rock Type	Remarks
294.4	6.2	NX	2.38	99	1.19	.02	43.3' @ .73/.02		Tr		1.17	.02 born.	50		Mz	Mod alt, sp suls, minor pink felds.
298.8	4.4		2.96	94	.89	.05			10		.89		30			Mod alt, 5" vn massive py-cc.
307.7	8.9		2.54	100	.66	.02			Sp		.66		35			Mod alt, mod cc diss + in unlets. A 1" mass. py-cc
316.2	8.5		2.77	99	.72	.03			1	.03	.69		40			As above, but no large vns.
326.5	10.3		2.74	83	.35	.02		.02	5		.33		35	Tr lim, 5 hem		Mod alt, wi hem + cc. Incr py. Vuggy hem-py sea
334.0	7.5		2.50	100	.32	.03			Tr	.02	.30		40	Tr lim		Mod alt, wk cc + py, tr lim.
342.6	8.6		2.46	96	.36	.02		.02	1		.34		35			Mod alt wi patches st alt, tr cc + py.
350.0	4.3		2.43	87	.39	.03		.02?	Sp	.04	.33		40	Tr lim + hem		Mod-st alt, st gg, tr sul, entering leach at bottom.
358.1	6.8		2.34	98	.02			.02					25	Tr lim 5 hem		Mod alt, hem staining, alun vn's parallel core mark ct with si material
363.1	4.4		2.51	93	.03			.01	Tr		.02		20	Sp lim + hem		Bx, v. silic cement, Mz frags st alt, tr sul + hem.
369.8	6.7		2.56	67	.01			.01					15	Tr lim Sp hem		Qtz bx wi silic frags Mz, tr hem stain.
376.9	7.1		2.57	60	.04	nil					.04		15	Sp lim + hem	Dp@373.3 (grad.)	" " grad to Dp(?) Silic frags in bx, tr hem stain
384.4	7.5		2.46	92	2.16	.05		.05	Sp-wk	.06	2.05		35	Tr lim + hem		Dp? Sp? Rk is non-porphyritic. St cc, minor hem.
390.1	5.7		3.00	91	3.88	.15		.15	wk-mod		3.70	.03 cov	30			As above. wi mod py. Heavy suls for 1½'.
399.5	9.4		2.54	79	1.42	.04	45.0' @ 1.57/.05	.04	1	.10	1.28		25			as above. Few qtz "eyes" suggest Dp. Mod-st cc, py. Qt
407.8	8.3		2.52	99	1.42	.04		.04	1	.01	1.37		1			Sc qtz eyes. Mod alt. Mod-st cc, py.
416.0	8.2		2.52	96	.41	.02			1	.09	.32		1			Mod alt, mod cc + py. Some silic'n along unlets.
421.9	5.9		2.48	95	.63	.02			1	.10	.53		1			Mod-st. alt, cc, py.
431.0	9.1		2.64	90	.26	.01			Sp-wk	.10	.17		20	Tr lim	Mz @ 427.0 (broken)	Rapidly changing from above to wk alt. Wk py, tr cc. Ja
434.5	3.5		2.60	89	.33	.02			1	.10	.25		25	Sp lim		Wk alt, sp py, tr cc. Clay + jaro on frac's.
442.8	8.3		2.72	96	.40	.03			1	.25	.17	.01 cov.	10	1		Wk alt, sp py, sp cpy, tr cc. Qtz vn's. Jaro-stained fe
451.0	8.2		2.62	98	.58	.06		.06	wk-mod	.37	.15		10	Tr lim		Wk alt, mod py, sp. cpy, tr cc? " " Jaro. Suls maini along frac
457.4	6.4		2.68	95	.62	.03	49.7' @ .46/.03		1	.55	.07		15	1		Broken, wk alt, mod py, cpy, tr. cc. St qtz vning.
466.7	9.3		2.81	89	.30	.02			1	.10	.22		5	Sp lim		Wk alt, st silicif. + qtz vning. Mod py, sp cpy, tr cc
473.9	7.2		2.73	72	.43	.02			1	.20	.25		5	1		Silicif at top, wk alt at base. Sp py, cpy, tr cc. Jaro, g
479.1	5.2		2.66	91	.57	.02			1	.15	.37			1		Wk alt, mod silicif toward base, mod py, tr cpy + cc. Qt
484.2	5.1		2.71	84	.40	.01			1	.25	.16		5	1		" " " " , tr lim, jaro. Suls mostly py. Tr cpy.

Bottom of hole. Aver. rec'y = 93%

Final Depth 425.1
Collar Elevation 3195.62
Coordinates 28,698.82 N, 29,043.75 E.
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-2
Sheet No. 1 of 2
Date Completed 1/4/64
Logged By CWH, RG

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration Clay-Sericite	lim.	Rock Type	Remarks
3.5	3.5	NC	–	–	–										Dump	
10.0	6.5	stand. 2.750	2.55	44	.21			.21					20+	Sp. Lim.	Mz	Mod. alt. Bio weathered out. Wk leaching + staining. Tr. chrys.
20.0	10.0	NX (1.875)	2.46	89	.07			.07					20+	Sp. Lim. + tr. hem		wi bio. Mod alt, wk-mod LLm. Qtz vning. Tr. chrys.
29.1	9.1		2.48	97	.04			.04					15+			Mod alt, st hem. staining, wk LLm, Tr chrys.
37.0	7.9		2.55	73	.03			.03					1	Sp Lim, Sp hem		As above
43.0	6.0		2.46	84	.03			.03					1			Mod alt, st hem. staining, mod LLm
54.0	11.0		2.41	91	.02			.02					1			" " " " " , wk LLm
60.3	6.3		2.59	94	.20			.20					1			As above, Tr chrys.
69.1	8.8		2.49	91	.25			.02	Tr		.23		20	Tr Lim Tr hem		Mod alt, Sul. zone fr 60.3 to 68.0, sp py, tr cc
78.2	9.1		2.48	98	.02			.02					15	Sp Lim Sp hem		" " , spotty hem. staining, wk LLm
86.8	8.6		2.62	88	.16			.16	Tr				15+			" " , hem stain, wk. LLm, tr. py.
96.0	9.2		2.32	98	.14			.12	Tr		.02		15			As above, but no vis. py.
104.0	8.0		2.45	97	.17			.17					15			Mod alt, hem stain, wk LLm, several +¼" alunite uns
115.2	11.2		2.70	90	.17			.05	Tr	.02	.10		15	Sp. lim Tr. hem		As above to 108.3, then diss suls wi lim on frac's. One py
122.2	7.0		2.32	81	.02			.01	Sp		.01		15			WK-mod alt. Mixed cap + suls. Tr cc. Sp py.
131.6	9.4		2.51	97	.02			.01			.01		15	Sp. lim + hem		Mod alt wi suls at start, then cap wi hem stain
140.0	8.4		2.49	99	.32	.03		.03			.29		25	Tr. lim + hem		Mod alt. Mainly sul zone, some leaching, wk cc, py
150.3	10.3		2.50	100	.41	.02	27.7'	.02			.39		25	Tr lim		Mod alt. Sul zone, wk cc, py. Sp grn-stained felds
159.8	9.5		2.55	87	.41	.04	@	.03			.38		20	Tr lim + hem		Mod alt wi a few weaker areas. Alun. veinlets. Sul zone, Tr
167.7	7.9		2.59	100	.55	.01	.45/02	.01			.54		20+	Sp		wk-mod alt. Sp-wk. cc, sp py. Tr chalcanthite.
172.0	4.3		2.70	61	.06			.04	Tr		.02		15	Sp lim + hem		WK-mod alt. ½ sul, last ½' leached cap wi hem stain
180.0	8.0		2.40	100	.02			.02					1			wk-mod alt, leached with hem stain. 1.2' pickup.
188.2	8.2		2.35	100	.05			.03	Tr		.02		1			As above wi a 1½' pod of suls.
197.3	9.1		2.52	97	.11			.05			.06		20			As above wi capping – sul zone, ct at 196.2'
204.5	7.2		2.52	85	.58	.03		.03	Sp		.55	Moly	20			Mod alt, wk cc + py as diss + hairline frac's.
213.2	8.7		2.60	99	.58	.03	35.1'	.03			.58		25+			As above wi sl incr in cc.
220.0	6.8		2.59	93	.85	.04	@	.04			.81		25			As above, tr. chalcanthite.
228.6	8.6		2.50	96	.55	.02	.63/.03	.02			.53		30			" " " " , decr. in cc.
232.4	3.8		2.60	93	.62	.03		.03			.59	Tr.	1			" " " " incr. in cc.
243.2	10.8		2.53	97	.34	.02		.02			.32		20			Mod alt, tr. chlor on frac's. Wk cc, py, tr chalcant
252.3	9.1		2.58	97	.27	.01		.01			.26		1			As above, sl. incr in alt near end.
261.8	9.5		2.70	81	.91	.03	160.4'	.03		.02	.86	Tr	20+			As above, alt mod.
270.4	8.6		2.44	90	.56	.03	@	.03			.56		25			Gen st alt wi sc mod alt areas. Wk py, cc. Tr chalcant
277.7	7.3		2.59	98	1.08	.02	.65/.03	.02			1.04		30			Mod alt wi sc areas of st alt. Min as above.
285.9	8.2		2.84	82	.74	.02		.02			.72	Tr. barn.	25			" " , wk cc, py. Tr. chalcanthite. Mod silic'n (st. ½ re
294.8	8.9		2.83	85	.67	.01		.01			.66		1			" " " " " " " sl. incr in py.
301.4	6.6		2.51	93	.87	.01	105.4'	.01		.02	.84		25+			As above.
306.2	4.8		2.66	93	.78	.01	@	.01		.05	.72		25			Mod alt, wk py, cc, tr. chalcanthite.
312.3	6.1		2.51	98	.46	.02	.72/.03	.02		.04	.40	Tr. moly	1			As above

Final Depth 425.1
Collar Elevation 3195.62
Coordinates 28,698.82 N, 29,043.75 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell

HOLE NO. F-2
Sheet No. 2 of 2
Date Completed 1/4/64
Logged By CWH, RG

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay – % Cu Total	Non-S	Average	Mineralization Oxides	Pyrite	Cpy	Cc	Other	Alteration sericite clay	lim	Rock Type	Remarks
320.3	8.0	NX	2.67	89	.65	.07		.03	Sp	Tr	.62		30		M2	Mod alt, wi strongly alt areas. Tr chalcanthite, wk. cc + p.
329.0	8.7		2.54	92	.66	.06		.01	1	Tr	.65	Mo/y	20			" ", wk. cc + py.
338.6	9.6		2.79	90	.74	.03		.02	1	.02	.70		1			Mod alt, py content low, cc still present.
347.0	8.4		2.59	98	.82	.04		.02	1	.02	.78		15			Mod alt, mod silic'n 1st ½ run, sl incr. in py, low
357.7	10.7		2.54	89	.48	.04			1		.48		1			Mod-wk alt (bio alt to chlor), wk cc + py.
365.3	7.6		2.59	91	.26				1	.02	.24	Tr	20			Mod-wk alt, sp. cc + py.
377.8	12.5		2.54	73	.20			.01	1	.02	.17		10		Sp @ 373.4	As above to ct. Then Dp, fresh-wk alt, tr sulfs.
385.1	7.3		2.66	85	.31				1	.05	.26		5		(ct. broken)	Fresh-wk alt, tr py, tr jaro + chlor.
392.8	7.7		2.66	95	.54	.01			Tr	.30	.24		5+			Fresh-wk alt, some silic'n, wk py + cpy.
401.0	8.2		2.68	100	.39	.01			1	.24	.15	Tr	Sp			" " ", brecciated appearance, sp. py, tr. cpy
410.4	9.4		2.70	99	.37	.01			1	.27	.10		1			Fresh, sp py, tr cpy diss + in veinlets.
417.2	6.8		2.67	96	.30	.02			1	.30			1			Wk alt, patches wi porphyritic texture, qtz veining, tr.
425.1	7.9		2.75	97	.50	.02			1	.50			1			Wk alt, minor porphyritic patches. Tr py, cpy.

End of hole Aver. rec'y = 91%

Note on rock type: Sp = syenodiorite porphyry

Final Depth 314.7
Collar Elevation 3153.95
Coordinates 28,894.32 N ; 28,904.18 E
Inclination Vertical

ASARCO

GEOLOGIC – ASSAY LOG

Property Silver Bell (Oxide Pit)

HOLE NO. F-1
Sheet No. 1 of 1
Date Completed 12/31/63
Logged By FTG, CWH

Depth	Interval	Core Size	Sp Grav	Core Rec %	Core Assay - % Cu: Total	Non-S	Average	Mineralization: Oxides	Pyrite	Cpy	Cc	Other	Alteration: Clay-Sericite	Lim.	Rock Type	Remarks
6.4	6.4	2.125" NX(Con)	2.50	78	0.06			.06					20%	Sp	Dp?	Mod alt, mod LLm. Rk shows poss. frag's.
15.3	8.9	1.875 NX(WL)	2.13	97	.06			.06					1	1		As above
25.8	10.5		2.24	100	.05			.05					1	1		1st ½ wk alt, wk LLm, 2nd ½ as preceding run
35.6	9.8		2.35	100	.10			.07	Tr		.03		1	1		Leached w tr cc, py. Mod-st clay-ser. Tr LLm.
43.0	7.4		2.43	94	.17			.12	1		.05		25	Tr		Text. obscur. but suggest Ap. Leached, mod clay-ser. Tr chrys
51.0	8.0		2.72	86	.09			.07			.02		1	Sp		Leached, mod-st alt, sp alunite vnlts. Tr porph. text.
61.0	10.0		2.47	88	.03				Tr		.03		1	1		Partly leached w pods suls. cc coating py on diss. & vnlt.
64.7	8.7		2.68	93	.17			.04	1		.13		1	Tr		Mod alt, sp alun. Sp. cc. as py coatings. Leached patch
78.7	9.0		2.47	100	.06			.04	1		.02	Molybdenite	30	Sp		DK, w/ mod alt. sp. suls to 72.7 then leached. Agy patch
87.9	9.2		2.46	82	.06			.04			.02		25	1		Leached, mod alt. Tr LLm on frac's & diss.
96.9	9.0		2.34	98	.05			.05			.01		20	1		As above w pseudo Ap text., alunite veining
105.6	8.7		2.56	95	.41	.06			Sp		.41		25	Tr		No leaching, sp-mod alt. Mod diss. & vn py w cc coating
114.3	8.7		2.36	99	.06			.02	Tr		.04		1	Sp		As above to 106.8 then mod alt, st hem staining
121.6	7.3		2.37	100	.05			.04			.01	Tr	20	1		Leached w diss. hem specks. Mod alt. Tr dk incl.
130.7	9.1		2.59	94	.25			.01	Sp		.24	1	25	Tr		As above to 124.0 then st-mod alt, sp cc, sp. py.
140.1	9.4		2.47	99	.31				1		.31	1	1			Mod alt. Diss & vnlt py w spotty cc coatings
149.7	9.6		2.42	94	.22				1		.22	1	1			As above. No gte "eyes".
157.7	8.0		2.64	100	.32				1		.32	1	30			Mod alt, mod py w cc restricted to agy pods & vnlt
166.1	8.4		2.54	93	.32				1		.32	1	25			Mod clay alt. esp. along seams. Sp. cc, py.
174.5	8.4		2.34	99	.35				1		.35	1	50			Mod clay alt. w. 4 ft of int. clay alt. Sp. cc, py.
181.8	7.3		2.66	98	.11				1		.11	1	30			Mod clay alt w. 2 ft. st. clay alt sp cc, py
191.0	9.2		2.86	89	.12				1		.12	1	25	Tr		Mod alt, decr toward end. Wk py, sp. cc
200.3	9.3		2.72	98	.05				1	.01	.04		15	1		Wk-mod. alt. Sp. lim & tr. chlor. beginning on shear
209.0	8.7		2.73	98	.09				1	.04	.05	Tr.	5	1		Wk alt. Sp. lim. & tr. chlor. on shears. Wk. py, sp. cc
217.8	8.8		2.80	95	.06				1	.06			Sp.	1		As above.
227.4	9.6		2.66	98	.08				1	.08			5	1		As above, with alt. incr towards end.
236.5	9.1		2.83	92	.05				1	.04	.01		5	1		Wk.-mod. alt. Lim decr on shears to tr. Some gte. sm
247.0	10.5		2.70	94	.08				1	.07	.01	Tr.	5			Wk alt. Sp. py. No visible Cu.
258.7	11.7		2.70	100	.12				1	.11	.01		5	Tr		Fresh-wk alt. Sp. py. Tr. lim.
268.0	9.3		2.63	100	.10				1	.10		Tr. born.	Sp.	1		As above, becoming wk. alt at end. Spotty chlor
272.6	4.6		2.69	99	.10				1	.10		Tr. born.	5	1		Wk alt, tr chlor. Sp py.
280.2	7.6		2.62	98	.03				1	.03			5			Wk alt, w. spots of mod. alt. Sp chlor on frac's. sp. py
289.4	9.2		2.63	97	.05				1	.05			5	Tr		As above.
297.4	8.0		2.61	97	.06				1	.06			5	1		As above or considerable clay (¼") on some frac's.
306.5	9.1		2.69	95	.07				1	.07			5	1		Wk alt. Tr. chlor. on frac's. Sp. py.
314.7	8.2		2.69	98	.07				1	.07			5	1		As above.
End of		hole	Aver. rec'y - 96%													

Note on rock type: Called dp because of fine-grained text. Qtz. phenos usually absent. Rock may be Sp (syenodiorite porphyry)
Note on mineralization: Cc mainly as thin coating on py.