area contains anomalous bismuth and tin along with gold and silver values typical of porphyry copper environments elsewhere. Copper values of from 100ppm to 600ppm are reported from drilling in this zone of extremely high metal values. Minor chalcocite was noted in DDH S-5 and in validation drill hole, V-2, along the western margins of the phyllic alteration and turquoise coats a few fractures in a prospect pit along the southern edge of Kerr-McGee's claims.

MINERALIZATION

Primary copper mineralization occurs in the Hancock Wash area, associated with the favorable potassic alteration exposed there. Copper oxides fill fractures with copper pitch after disseminated chalcopyrite exposed in several prospect pits. A grab sample of unoxidized rock containing disseminated chalcopyrite taken from an adit assayed .38 percent copper and grabs of oxidized material ran between .04 and 1.14 percent copper. Hancock's drill holes in the bottom of the wash reportedly intersected values greater than 1.0 percent copper.

This zone of strong copper mineralization exposed at the surface covers a triangular shaped area 3000 feet long, reaching a maximum of 800 feet in width and enclosing 1,200,000 square feet. An area this size would contain 10,000,000 tons of rock for each 100 feet of depth. Although the actual copper values reported by Hancock may be in error, they do indicate the presence of a zone of intense disseminated copper mineralization down to a depth of at least 150 feet, which would indicate 15,000,000 tons of ore-grade copper mineralization exposed at the surface and amenable to open pit mining methods. This zone, together with the presence of scattered copper prospects in the adjacent potassic block of alteration,

strongly suggest the presence of a much larger zone of primary copper mineralization within shallow to moderate drilling depths. The potassic block measures 2000 by 3000 feet in plan, giving a target of 48,000,000 tons per hundred feet of thickness. The potassic block is bounded on three sides by faults, so additional targets exist along the direction of fault offset and their presence may be inferred from surface alteration features.

GEOPHYSICS

Congdon and Carrey had McPhar conduct an extensive Induced Polarization survey over their claims and, while McIntyre held an option on the prospect, they extended the survey somewhat and positioned two drill holes on the basis of that work. The opinion of a Kerr-McGee geophysist who reviewed this work concurred with the McPhar people, who felt that the major anomaly near Sugarloaf Peak is the reflection of a broad near-surface feature with decreasing sulfides below. The presence of the broad pyritic area could have been mapped by visual inspection and the shallow nature inferred from the six drill holes completed prior to doing the I. P. survey. McIntyre's work repeated the process but did not lead to any significant new ideas. Of interest however, are the weak anomalies in the Hancock Wash area at the west end of the map (Lines "H" and "H"12E) which indicate moderate sulfide content in an area of visible chalcopyrite.

Minex conducted a ground magnetometer survey which showed that their claims in Section 34, Township 4 North, Range 20 West generally overlie a magnetic low reflecting a very structurally complex area, possibly the regional schist-granite contact. Congdon and Carrey contracted an

aeromagnetic survey, which showed the pyritic area of alteration as a pronounced trough flanked by magnetic highs on both the north and south. These magnetics also show a regional gradient to the east of Kerr-McGee's claims under alluvial cover which has been interpreted to be the magnetic reflection of a regional contact between granite and schist.

A ground magnetometer survey was conducted by Company personnel over the ZALES Claims area in an attempt to locate faults and to get some information on the downdropped potassic zone covered by part of this claim group, however the results are generally inconclusive.

CONCLUSIONS AND RECOMMENDATIONS

The Sugarloaf Peak prospect is an area of porphyry copper type alteration and mineralization which exhibits favorable potential for a large tonnage of ore-grade copper mineralization, at least part of which would be amenable to open-pit mining methods. The most favorable target is the block of potassic alteration near the west end of Kerr-McGee's claims, on ground presently controlled by Burton Hancock of San Jose, California.

Results of surface sampling and values reported from shallow drilling on Hancock's claims indicate the presence of at least 15,000,000 tons of ore-grade copper mineralization at or near the surface in Hancock Wash. Projection of this zone beneath the adjacent potassic block gives a target potential of 48,000,000 tons per 100 feet of thickness.

A drill hole collared in Hancock Wash near the center of stronger copper mineralization would yield the most useful geologic information with regard to structure and alteration, as well as giving a third dimension to our estimate of potential copper mineralization. A 1000 to 1500 foot drill

hole is recommended to test this prospect, however, since the hole would be located on the Hancock Claim group, it will be necessary to obtain control of these claims prior to doing the work. The estimated cost of this drilling project is $20,000, which would be more than enough to cover our annual work requirements for the 1973-74 assessment year.

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-1
Spudded 7-8-74
Completed 7-24-74
Total Depth 700'
Driller L. Moore
Logged By B. Riederer

County Yuma State Arizona
Claim Zales #33 Sec. 31 T. 4N R. 20W
Elevation 1175'
Hole Size NX
Core Size NX
Hole Angle
Collar Coords.

GROSS VALUE IN SULFIDE MINERALS*

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag oz/t	Au oz/t		~~Gross Value~~
5	5	[redacted]							
10	5	0.38							
15	5	0.37							
20	5	0.29							
25	5	0.48							
30	5	0.26				0.09	.001		
35	5	0.44							
40	5	0.18							
45	5	0.41							
50	5	0.36							
55	5	0.41							
60	5	0.23							
65	5	[redacted]							
70	5	[redacted]							
75	5	1.21							
80	5	1.47							
85	5	[redacted]							
						0.08	.004		
90	5	[redacted]							
[illegible]	5	[redacted]							
100	5	0.42							

*Gross value calculated from copper ¢/pound; lead ¢/pound; zinc ¢/pound; molybdenum $ /pound; silver $ /ounce; and gold $ /ounce.

KERR-McGEE CORPORATION

Assay Log

District Quartzite

Hole Number C-1

Page 2

Hole Depth	Inter-val	Cu	PPM Zn	PPM Pb	PPM Mo	Ag OZ/T	Au OZ/T		Gross Value
105	5	0.32							
110	5	[redacted]							
120	10	[redacted]	36	11	22				
130	10	0.47	35	9	23				
140	10	[redacted]	53	13	21				
150	10	[redacted]	56	20	73	0.16	.002		
160	10	[redacted]	59	17	36				
170	10	[redacted]	41	7	9				
180	10	1.20	62	16	43				
190	10	[redacted]	60	17	83	0.05	.005		
200	10	0.20	68	22	16				
210	10	0.18	92	21	13				
220	10	0.07	101	28	13				
230	10	0.07	88	27	8	0.01	.003		
240	10	0.19	26	30	15				
250	10	0.08	< 5	43	21				
260	10	0.03	30	40	43				
270	10	0.02	18	19	9				
280	10	0.009	6	12	4	0.01	.003		
290	10	0.005	15	8	2				
300	10	0.024	21	7	5				
310	10	0.009	27	15	8				
320	10	0.01	51	23	43				
330	10	0.02	66	15	11	0.04	.001		
340	10	0.003	82	20	12				

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-1

Page 3

Hole Depth	Inter -val	Cu PPM	Zn PPM	Pb PPM	Mo PPM	Ag	Au		Gross Value
350	10	535	22	16	418				
360	10	416	33	14	15				
370	10	497	22	9	29				
380	10	574	28	6	21	0.04	.002		
390	10	303	19	12	24				
400	10	413	36	20	17				
410	10	[redacted]	58	31	45				
420	10	[redacted]	35	105	34				
						0.18	.002		
430	10	[redacted]	30	19	82				
440	10	1125	19	13	38				
450	10	369	27	18	21				
460	10	285	24	13	18				
470	10	129	36	9	14				
						0.04	.001		
480	10	59	43	22	17				
490	10	37	40	21	22				
500	10	33	49	28	28				
510	10	44	38	26	23				
520	10	40	51	13	23				
530	10	37	50	17	23				
540	10	46	43	15	22				
550	10	69	54	24	19				
						0.04	.002		
560	10	304	52	46	14				
570	10	221	47	26	19				
580	10	66	45	9	18				
590	10	84	50	10	16				

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-1

Page 4

Hole Depth	Inter -val	Cu PPM	Zn PPM	Pb PPM	Mo PPM	Ag	Au		Gross Value	
600	10	77	22	12	14					
610	10	46	43	35	17					
620	10	36	29	15	17					
630	10	47	39	7	16					
640	10	107	28	18	20					
650	10	31	35	16	25	0.01	.001			
660	10	42	31	17	18					
670	10	34	40	13	15					
680	10	28	35	11	16					
690	10	29	37	10	14					
700	10	39	36	11	18					

COPY

KERR-McGEE CORPORATION

COPY

District Quartzsite
Hole Number 0 - 1
Spudded July 8, 1974
Completed July 24, 1974
Total Depth 700'
Driller Leo Moore
Logged By B. Riederer

County Yuma State Arizona
Claim Zales #33 Sec 31 T.4N R.20 W
Elevation 1150
Hole Size NX
Core Size NX
Hole Angle Vertical
Collar Coords. N.
E.

Depth	Int.	%Core Rcvy	Samp. No.	Assays % Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
5	5	100%	30001	0.58					0'-3': fine grained granular quartz in a silicified and sericitized matrix.	Minor sericite	Chrysocolla on fractures; limonite on fractures
									3'-4': very fine grained clay and sericite	Moderate sericite	Completely oxidized
									4': fine grained granular quartz in a silicified and sericitized matrix.	Minor sericite	Limonite, chrysocolla and malachite on fractures; minor disseminated malachite.
10	5	100%	30002	0.38				Fault Zone (?)	10'-18': Ground material with short (<1') intervals of the above.		Completely oxidized.
15	5	100%	30003	0.37					18': fine grained granular quartz in a very fine grained quartz rich matrix.	Minor sericite	Limonite, brochantite, chrysocolla and malachite on fractures; minor disseminated Cu minerals as above; very minor quartz veins.
20	5	100%	30004	0.29					Same as above except more intense fracturing below 23'	Minor sericite	Abundant malachite and limonite on fractures 22'-23' hematite rich.
25	5	100%	30005	0.48				Fault Zone (?)	25'-27': fault gouge and ground material		Completely oxidized.
									27': fine grained granular quartz in silicified and sericitized matrix.	Minor sericite	Limonite and chrysocolla on fractures.
30	5	100%	30006	0.26					Same as above	Minor sericite	Chryscolla on fractures; up to 3% malachite both disseminated on fractures.
35	5	100%	30007	0.44					32': granular quartz in an extremely quartz rich matrix	Minor sericite 35': intense sericite for one inch.	3% to 10% malachite both disseminated and on fractures; limonite on fractures.

District ___ ·tzsite ___ COPY Hole Number ___ 0 - 1 ___ COPY Page Nu. ___ 2 ___

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu %	Mo			Rock Type	Rock Description	Alteration	Mineralization
									schistosity approx.		
									normal for core.		
40	5	100%	30008	0.18					36': fine grained gran-	Weak sericite	Chrysocolla and limonite on
									ular quartz in a silica		fractures.
									rich and weak sericite		
									matrix, unit		
									becoming more schistose		
									with increase in sericite.		
45	5	100%	30009	0.41					Fine grained granular	Weak sericite.	Chrysocolla both disseminated and
									quartz in a weak sericite		on fractures, limonite on fractures,
									and quartz matrix.		41': hematite rich.
50	5	100%	30010	0.36					Same as above.	Weak sericite.	Chrysocolla, malachite and brochantite
											on fractures.
											46'; hematite rich
											below 46' light yellow green soft
											mineral along fractures (jarosite
											limonite, clay and sericite).
55	5	100%	30011	0.41					50'-52 1/2':fine grained	Strong sericite	Limonite with disseminated and on
									granular quartz in a		fractures; chrysocolla.
									strong sericitized and		
									quartz matrix with		
									minor clay.		
								Fault Zone(?)	52 1/2': fault gouge		
									53':fine grained	Weak sericite	53': hematite rich
									granular quartz in a		minor disseminated chrysocolla
									silicified and weak		
									sericitized matrix.		
60	5	100%	30012	0.23					55': fine grained	Weak sericite	Completely oxidized
									granular quartz in a		
									quartz and weak sericite		
									matrix.		
								Fault Zone(?)	55 1/2'-56: fault gouge		
									56':fine grainge granular	Weak sericite	Minor malachite and chrysocolla
									quartz in a quartz and		both disseminated and on fractures
									weak sericite matrix.		light yellow green soft mineral
											(jarosite, limonite, clay and sericite)
											on fractures.
65	5	100%	30013	~~0.59~~					Fine grained granular	Weak sericite	60': hematite rich, limonite on
									quartz in a quartz and		fractures.
									weak sericitized matrix.		

District Quartzsite COPY Hole Number 0 - 1 COPY Page No. 3

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu %	Mo			Rock Type	Rock Description	Alteration	Mineralization
									63'-67': fine grained granular quartz in a strong silica and minor sericite matrix.	Minor sericite	2% to 4% chrysocolla both disseminated and on fractures.
70	5	100%	30014	[redacted]					67'-fine grained granular quartz in a silicified and weak sericitized matrix schistosity near norman.	Weak sericite	68'-69': hematite rich malacnite on fractures.
75	5	100%	30015	1.21					75': very fine grained granular quartz in a silicified and strong sericitized matrix.	Strong sericite	Limonite on fractures; malacnite on fractures and along schistosity 72': azurite (?)
80	5	100%	30016	1.47					Very fine grained granular quartz in a quartz rich and strong sericite matrix.	Strong sericite	Limonite on fractures Malachite along fractures and schistosity
								Fault Zone (?)	77'-78½': fault gouge		
									78½': very fine grained quartz in a quartz sericite matrix unit has become much more schistose due to sericite.	Strong sericite	Malachite and limonite on fractures
85	5	100%	30017	[redacted]					Fine grained granular quartz in a quartz-sericite matrix. Below 82½' rock has become highly fractured also trace of feldspar laths	Moderate to strong sericite	Malachite on fractures, limonite along fractures. Below 82½' completely oxidized
90	5	100%	30018	[redacted]					Fine grained granular quartz in a weak quartz sericite matrix with minor feldspar laths.	Weak to moderate sericite	Completely oxidized
95	5	100%	30019	0.50					Fine grained feldspar laths (2-5mm), scattered biotite clots in a quartz rich matrix. Highly fractured.	Weak to moderate sericite , biotite along some fractures	Limonite on fractures malacnite along fractures
100	5	100%	30019	0.50					Fine grained feldspar	Weak to moderate	Limonite on fractures

District rtzsite COPY Hole Number C 1 COPY Page Num 4

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu %	Mo PPM			Rock Type	Rock Description	Alteration	Mineralization
									laths (2-5mm), scattered	sericite, biotite	Malachite along fractures
									biotite clots in a quartz	along some fractures	
									rich matrix. Highly		
									fractured.		
100	5	100%	30020	0.42				Fault Zone	98'-100': fault gouge		
105	5	100%	30021	0.32					Fine grained feldspar	Weak to moderate	Limonite disseminated and on fractures
									laths (2-5mm), scattered	sericite	104'-105' - Native Cu
									biotite clots in a		Malachite on fractures
									quartz rich matrix.		
110	5	100%	30022	[redacted]					Fine grained biotite	Sericite on fractures,	3-5% disseminated chalcopyrite
									and granular quartz in	Strong biotite	10:1 chpy: py ratio
									a quartz rich matrix	below 109' to 113'	105' - pyrite-sericite veinlet
									Unit is schistose	moderate sericite and	109' - chalcopyrite-anhydrite(?)
										weak biotite	on fracture.
											113' - 3/4" pyrite-sericite vnlt.
120	10	100%	30023	[redacted]	22				Fine grained biotite,	Strong biotite	2-4% chalcopyrite disseminated
									quartz, blue quartz eyes		and vnlt 10:1 chpy:py ratio.
									(scattered)		
									121-123 fractured	Moderate sericite	
									sericitized zone.		
130	10	100%	30024	0.47	23				Biotite, quartz, blue	Strong biotite	2-5% chalcopyrite both disseminated
									quartz eye schist. Well		and vnlt; 10:1 chpy:py ratio
									developed schistosity		135': 1/8" chpy vnlt.
140	10	100%	30025	[redacted]	21				Fine grained biotite,	Strong biotite	3 to 5% chalcopyrite both disseminated
									quartz, blue quartz		and vnlt; 10:1 chpy:py ratio
									eyes (to 4mm) schist.		137'-138': limonite on fracture
150	10	100%	30026	[redacted]	73				Fine grained biotite,		
									quartz, scattered	Strong biotite	3 to 5% chalcopyrite both disseminated
									blue quartz eyes		and vnlt; 10:1.5 chpy:py ratio
									(to 3mm) schist		
									158'-159': fractured	Moderate sericite	
									sericitized zone		
160	10	100%	30027	[redacted]	36				Biotite, quartz,	Strong biotite	3 to 5% chalcopyrite both disseminated
									scattered blue quartz		and vnlt; 1.5 chpy:py ratio
									eyes(2-3mm) schist		
170	10	100%	30028	[redacted]	9				Biotite, quartz schist	Strong biotite	2% chalcopyrite both disseminated
									with scattered blue		and vnlt; 10:1½ chpy:py ratio
									quartz eyes to 4mm.		161': chalcopyrite- chlorite vnlt
									Chlorite on fractures		167': ½" sericite-pyrite vnlt

District [illegible]tzsite COPY Hole Number [illegible] 1 COPY Page Num [illegible] 5

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu %	Assays Mo PPM			Rock Type	Rock Description	Alteration	Mineralization
180	10	100%	30029	[illegible]	43				Fine grained biotite quartz achist. Quartz decreasing and schistosity less well developed than above; more highly fractured chlorite scattered on some fractures.	Strong biotite	2 to 4% chalcopyrite, 10:1.5 chpy: py ratio 171': chalcopyrite=chlorite vnlt 177': ½" chalcopyrite unlt along fractured part of core
190	10	100%	30030	[illegible]	83				Biotite, quartz schist with scattered blue quartz eyes (to 3mm) 182'-187': increase in sericitization	Strong biotite Moderate sericite	4 to 6% chalcopyrite both disseminated and vnlt; 5:1 chpy:py ratio 185'- chalcopyrite anhydrite (?) vnlt
200	10	100%	30031	0.20	16				Fine grained biotite quartz schist chlorite on some fractures	Strong biotite	1 to 2% chalcopyrite both disseminated and vnlt. 2:1 chpy:py ratio 193'-194': strong magnetite pyrite cubes scattered along fractures Numerous chalcopyrite-chlorite vnlt
210	10	100%	30032	(PPM) (1800)	13				Biotite, quartz well developed schist Chlorite increasing along fractures	Moderate biotite and chlorite	1 to 2% chalcopyrite 2:1 chpy:py ratio.
220	10	100%	30033	695	13				Biotite-chlorite, quartz schist - minor feldspar laths to 3mm	Moderate biotite Moderate chlorite on fractures	~2% sulfides 2:1 chpy:py ratio 213': chalcopyrite-chlorite vnlt 219': pyrite-chlorite vnlt 216': magnetite crystals cluster
230	10	100%	30034	700	8				Biotite-chlorite quartz schist minor feldspar laths to 3mm.	Moderate biotite Moderate chlorite on fractures	~1% sulfides both disseminated and vnlt, 1:1 chpy:py ratio
240	10	100%	30035	1900	15				Same as above 236': quartz-sericite schist; well developed schistosity	Same as above Strong sericite	Same as above. ~1% sulfides on fractures and disseminated 1:1 chpy:py ratio Below 236' 1% sulfides on fractures and 1:5 chpy:py ratio
250	10	100%	30036	273	21				Quartz-sericite schist 242-244 increase in quartz and decrease in schistosity	Strong sericite	<1% sulfides on fractures 1:5 chpy:py ratio
260	10	100%	30037	296	43				Quartz - sericite schist with well developed schistosity	Strong sericite	<1% sulfides on fractures 1:10 chpy:py ratio

District [illegible]tzsite COPY Hole Number - 1 COPY Page Number 6

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Assays Mo PPM			Rock Type	Rock Description	Alteration	Mineralization
									255'- biotite-chlorite quartz schist, well developed schistosity with minor feldspar laths along schistosity	Strong chlorite	<1% sulfides on fractures 1:10 chpy:py ratio
270	10	100%	30038	161	9			Fault Zone(?)	261-262½' fault zone 262½: quartz-sericite schist	Strong sericite, minor chlorite on fractures	<1% sulfides negl. chalcopyrite below 256": abundant limonite on fractures and disseminated
280	10	100%	30039	90	4				Same as above	Same as above	Same as above
								Fault zone (?)	274-277 fault zone 277: mixed zone of quartz sericite schist and chlorite biotite-quartz schist with the quartz becoming more granular	Calcite on fractures minor calcite on fractures moderate chlorite and biotite	limonite on fractures and and disseminated 289: pyrite vnlt
290	10	100%	30040	51	2				Same as above	Same as above	Same as above
300	10	100%	30041	43	5				297:fine grained quartz schist	moderate beotite	<1% pyrite both disseminated and vnlt, negl. chalcopyrite 296: limonite on fracture
310	10	100%	30042	93	8				Biotite-quartz schist	Moderate biotite	301: ¼" pyrite vnlt, negl. chalcopyrite 305: hematite rich
								Fault zone (?)	304-309: Fault zone 309: chlorite-sericite biotite-minor quartz schist.	Strong sericite-chlorite calcite on fracture	309: Trace cholcopyrite disseminated and on fracture
320	10	100%	30043	1009	48				Chlorite-biotite quartz minor sericite schist	Moderate chlorite and biotite	314:chalcopyrite-pyrite-calcite on fracture <1% sulfides 1:1 chpy:py ratio Sulfides both disseminated and vnlt.
330	10	100%	30044	172	11				Chlorite-biotite quartz minor sericite schist 324: chlorite minor biotite-clay-sericite schist: well developed schistosity	Moderate chlorite and biotite Moderate chlorite-sericite	<1% sulfides 1:1 chpy:py ratio 1% sulfides 1:1 chpy:py ratio
340	10	100%	30045	34	12				Chlorite-minor biotite-clay-sericite schist	Moderate chlorite -	≪1% sulfides 1:1 chpy:py ratio
350	10	100%	30046	535	48			Fault zone (?)	340'-341':fault zone 341': quartz sericite	Strong sericite	345': pyrite-chalcopyrite-quartz

District___ [illegible] COPY Hole Number___ [illegible] COPY Page Num 7

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Mo PPM	Rock Type	Rock Description	Alteration	Mineralization
							minor chlorite		sericite vnlt
							schist. Schistosity		<1% sulfides
							more massive		
360	10	100%	30047	416	15		Light grey very fine	Strong Sericite	<1% sulfides 1:2 cnpy:py ratio
							grained matrix of		354': 3/8" pyrite-sooty chalcocite vein
							quartz, sericite and		357':pyrite-sooty chalcocite along
							minor chlorite		fractures
							Well developed schist-		358': ¼" chaleopyrite-chalcocite vnlt
							osity and moderately		359½':pyrite-sooty chalcocite vnlt
							fractured.		
370	10	100%	30048	497	29		White sericite minor	Intense sericite	1% sulfides, negl. chalcopyrite
							clay schist		sulfides along schistosity and minor
									vnlt.
380	10	100%	30049	574	21		White sericite minor	Intense sericite	371: 1/8" horizontal quartz vnlt
							clay schist		372:hairline pyrite-chalcopyrite vnlt
									375:increase in cnpy:py ratio
									(3:1), oxidation along vnlts and ends
									at 376'.
							376':clear quartz eyes,	Strong sericite	<1% sulfides, negl chalcopyrite
							sericite, minor clay		minor disemminated specularite
							in a fine grained		380': ¼" pyrite-chalcopyrite-
							quartz matrix schist		chalcocite-calcite vnlt
									hematite along fractures.
390	10	100%	30050	303	24	Fault zone (?)	380-381½ Fault zone		
							381½ quartz; sericite	Moderate sericite	minor oxidation,
							black silicate(one direction		<1% sulfides, negl chalcopyrite
							of leavage, H~6-possibly		387' - pyrite along schistosity
							tourmaline) schist		
							386½-387-above black		
							silicate increases to		
							make up most of matrix		
							388: quartz sericite	Moderate sericite	Disseminated magnetite crystals make
							schist-dark color due	Strong magnetite	up to 10% of rock.
							to disseminated magnetite		
400	10	100%	30051	413	17		390: quartz sericite	Moderate sericite	392: ½" pyrite-chalcocite(?) vnlt
							magnetite schist		disseminated magnetite
							dark color due to		<1% sulfides, negl. chalcopyrite
							magnetite		394: 1/16" magnetite vnlt.
							395: magnetite		395: 1% pyrite
							decreases to trace and		398: <1% pyrite

District ctzsite COPY Hole Number - 1 COPY Page No. 8

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Assays Mo PPM			Rock Type	Rock Description	Alteration	Mineralization
									schistosity and		
									sulfides increase		
									398: magnetite		
									minor, low sulfides.		
410	10	100%	30052	[redacted]	45				403:magnetite decreases	Moderate sericite	1% sulfides, negl. chpy
									to near zero, quartz-		below 406' magnetite increases
									sericite-tourmaline		along fractures
									(?) schist		
								Fault zone (?)	407½-408½: fault zone		
									408½: quartz-sericite	Strong sericite	2-3% sulfides, 5:1 cnpy:py ratio
									schist.		
420	10	100%	30053	[redacted]	34				411: Near horizontal		
									white quartz vein		
									with closts of chalcopyrite		
									to ½"		
									412½: clear quartz eyes	Weak sericite	1-2% disseminated chalcopyrite
									-sericite-rare K-spar		
									weakly schistose.		
									413':broken interval-		
									quartz-chalcopyrite vein.		
									414: quartz-sericite	Strong sericite	1% chalcopyrite-disseminated
									schist.		
									415': contact:vertical		
									white quartz vein		
									with clots of chalcopyrite		
									to ½" and clear quartz	Moderate sericite	
									eyes- sericite-minor		
									feldspar laths 3 to 4mm		
									-weakly schistose		
									417: quartz eye-	Moderate sericite	2-3% disseminated sulfides
									sericite, feldspar		5:1 chalcopyrite:pyrite ratio
									laths to 3mm in a		
									quartz matrix-weakly		
									schistose.		
430	10	100%	30054	[redacted]	82				425: white quartz		423: bornite scattered among
									vein with clots of		chalcopyrite
									chalcopyrite to 1".		
440	10	100%	30055	1125	38				431: fine grain quartz	Moderate sericite	<1% disseminated chalcopyrite
									sericite schist		
									432: white quartz		

District Q[illegible]zsite COPY Hole Number 1 COPY Page Numb 9

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Mo PPM	Rock Type	Rock Description	Alteration	Mineralization
							vein barren of sulfides		
							437: fine grain quartz	Weak sericite	<1% disseminated sulfides
							minor sericite -		negl. chalcopyrite
							feldspar rich(40%)		
							very weak schistosity.		
450	10	100%	30056	369	21		449:fine grain quartz	Moderate sericite	<1% sulfides negl chalcopyrite
							sericite - K-spar		
							schist (granulite?)		
460	10	100%	30057	285	18		454: fine grain	Strong sericite	451-oxidation
							quartz-sericite		<1%sulfides negl. chalcopyrite
							weakly schistose		
470	10	100%	30058	129	14		460:fine grain	Moderate sericite	Very minor disseminated pyrite
							quartz-sericite		
							feldspar laths to		
							4mm schist		
480	10	100%	30059	59	17		473: fine grain	Moderate sericite	thin (1/16") pyrite veinlets.
							quartz sericite		
							schist-minor		
							feldspar laths		
						Fault zone (?)	478: Fault zone (?)		
490	10	100%	30060	37	22		482: very fine grain	Strong to moderate	<1% pyrite
							quartz-sericite schist	sericite	486-487: oxidation
							very minor biotite,		
							feldspar laths, minor		
							epidote along schistosity		
500	10	100%	30061	33	28		Very fine grain quartz	Moderate sericite	<1% pyrite
							sericite schist		
							with feldspar laths		
							increasing below 491		
							493: same as above	Strong sericite	<1% pyrite-clays coating some
							except sericite has		pyrite vnlts.
							increased.		
							497: very fine grain	Moderate sericite	<1% pyrite
							quartz, sericite -		498: ¼" epidote vnlt
							quartz eyes to 4mm		
							minor epidote- minor		
							feldspar laths schist.		
510	10	100%	30062	44	23	Fault zone (?)	506½:Fault zone (?)		
							508: very fine grain	Moderate sericite	<1% pyrite
							quartz-sericite		

District 1 tzsite COPY Hole Number 1 COPY Page Num 10

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Assays Mo PPM	Rock Type	Rock Description	Alteration	Mineralization
							quartz eye, minor		
							epidote and feldspar		
							lath schist.		
						Fault zone (?)	509-509½:fault zone(?)		
							509½:same as above 508'	Moderate sericite	oxidation
520	10	100%	30063	40	23	Fault zone (?)	514: Fault zone (?)		
							516:very fine grain	Moderate sericite	partial oxidation along fractures
							quartz-sericite, quartz		
							eye, minor epidote and		
							feldspar lath schist		
						Fault zone (?)	517: Fault zone (?)		
							518: very fine grain	Moderate sericite	Partial oxidation along
							quartz sericite-quartz		
							eye, minor epidote and		
							feldspar lath schist.		
530	10	100%	30064	37	23	Fault zone (?)	527: Fault zone (?)		
540	10	100%	30065	46	22		531:fine grain quartz	Strong sericite	Minor pyrite along fractures
							sericite-quartz eye	grading into moderate	
							minor biotite clots	sericite	
							to 2 mm, minor epidote		
							very minor feldspar		
							lath schist.		
550	10	100%	30066	69	19		549:very fine grain	Strong sericite	Hairline pyrite-chalcocite(??)
							quartz-sericite, minor		unlts along schistosity
							quartz eye schist		
560	10	100%	30067	304	14	Fault zone (?)	551: Fault zone (?)		
							557:very fine grain	Moderate sericite	<1% pyrite both disseminated and
							quartz-sericite		vnlt
							minor chlorite-minor		559- hairline magnetite unlt
							quartz eye schist.		
570	10	100%	30068	221	19		562:fine grain quartz	Moderate sericite	1% disseminated and vnlt pyrite
							sericite-minor		563 - hairline magnetite vnlt
							biotite (?) - chlorite-		567 - oxidation along vnlts
							quartz eye (to 2mm)		
							minor feldspar		
							lath schist.		
580	10	100%	30069	66	18		Same as above	Moderate sericite	1% pyrite disseminated vnlt
590	10	100%	30070	84	16		Very fine grain quartz	Moderate sericite	Pyrite along fractures.
							sericite - minor		581 - oxidation along verticle fracture
							biotite - chlorite		585- pyrite-epidote-calcite vug

District rtzsite COPY Hole Number Q COPY Page Num

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu PPM	Assays Mo PPM			Rock Type	Rock Description	Alteration	Mineralization
									quartz eye- Kspar		disseminated radiating tourmaline
									lath schist - minor		
									epidote vnlts		
									589-very fine grain	Strong sericite	1-2% disseminated fine grain pyrite
									quartz - sericite -minor		disseminated tourmaline
									quartz eye schist		595-unidentified blue-gray H~4½ mineral
600	10	100%	30071	77	14				595-very fine grain	Moderate sericite	597-1/8" tourmaline vnlt
									quartz - sericite schist		negl. pyrite
									with minor quartz eyes		
									to 4mm-minor K-spar		
									-very fine grain		
									biotite matrix (??)		
									minor epidote		
610	10	100%	30072	46	17				Same as above	Moderate sericite	Below 602 -minor disseminated
									except increase		magnetite
									in epidote vnlts.		606 - 3" epidote-pyrite vnlt.
620	10	100%	30073	36	17				Same as above	Moderate sericite	612 - 1/8" magnetite vnlt.
											614 - 3/8" magnetite vnlt.
											616 - disseminated magnitite
											<1% pyrite
630	10	100%	30074	47	16				Very fine grain quartz	Moderate sericite	620 - ¼" magnetite vnlt.
									sericite-quartz eye-		627 - ½" epidote vnlt.
									epidote vnlt.- K-spar		630 - oxidation along vert. fracture
									schist.		
640	10	100%	30075	107	20				631-white sericite	Intense sericite	<1% disseminated pyrite
									fine grain quartz schist		disseminated tourmaline
									633-fine grain	Moderate sericite	pyrite along fractures with epidote
									quartz-sericite-very		disseminated magnetite
									fine grain biotite-K-spar		634-oxidation on vert fractures
									laths to 3mm - quartz		
									eyes to 4mm epidote		
									vnlt schist.		
650	10	100%	30076	31	25				Same as above	Moderate sericite	<1% disseminated pyrite
											642 - ½" epidote vnlt.
											646-647 - oxidation on vert fractures
											648-650- oxidation on vert fractures
											minor disseminated magnetite
660	10	100%	30077	42	18				Same as above	Moderate sericite	651 - 1/16" magnitite vnlt.
											653 - oxidation on vert fracture
											652 - 1/8" magnetite vnlt.

District ___ tzsite ___ COPY Hole Number ___ 2 - 1 ___ COPY Page Num 2

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Assays Mo			Rock Type	Rock Description	Alteration	Mineralization
											pyrite along schistosity
670	10	100%	30078	34	15				Fine grain quartz-	Moderate sericite	Minor pyrite on schistosity
									minor sericite		665 - 1/8" epidote vnlt.
									minor K-spar - fine		
									grain biotite schist.		
680	10	100%	30079	28	16				Same as above except	Moderate sericite	Minor pyrite
									increase in intensity		
									of epidote vnlts. and		
									increase in K-spar.		
								Fault zone (?)	681-682-Fault zone(?)		
									682-fine grain quartz	Moderate sericite	Up to 1% pyrite confined to
									minor sericite- K-spar		schistosity
									fine grain biotite -		negl. magnetite
									epidote vnlt. schist.		
690	10	100%	30080	29	14				Same as above	Moderate sericite	<1% pyrite
700	10	100%	30081	39	18				Same as above	Moderate sericite	692-intense epidote vnlts.
(EOH)											

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-2
Spudded 7-29-74
Completed 8-14-74
Total Depth 779'
Driller Leo MOORE, Joy Mfg Co
Logged By B Riederer

County Yuma State Arizona
Claim ZALES #33 Sec 31 T. 4N R. 20W
Elevation 1060
Hole Size NX 0-779'
Core Size NX
Hole Angle Vertical
Collar Coords. _____ N.
_____ E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	~~%~~Cu PPM	~~%~~Zn PPM	~~%~~Pb PPM	~~%~~Mo PPM	oz.Ag	oz.Au		~~Gross Value~~ Sample No.
0 - 10	10	62	11	17	9				28763
20	10	51	10	14	5				28764
30	10	39	21	13	7				28765
40	10	70	12	29	8				28766
50	10	45	45	26	6				28767
60	10	253	13	33	13				28768
70	10	183	5	19	5				28769
80	10	62	4	15	8				28770
90	10	256	21	38	8				28771
100	10	81	8	11	7				28772
110	10	63	22	14	7				28773
120	10	141	26	16	17				28774
130	10	78	20	7	16				28775
140	10	LOST SAMPLE - NO RESULTS							28776
150	10	15	37	8	7				28777
160	10	27	15	10	11				28778
170	10	52	5	17	7				28779
180	10	43	32	21	7				28780
190	10	44	16	17	5				28781
200	10	40	18	12	6				28781

*Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

Assay Log

District Quartzsite
Hole Number Q-2

Page 2

Hole Depth	Inter-val	Cu PPM	Zn PPM	Pb PPM	Mo PPM	Ag	Au		Gross Value	Sample Number
200-210	10	42	21	7	9					28783
220	10	42	8	13	3					28784
230	10	41	16	15	8					28785
240	10	36	37	21	9					28786
250	10	27	28	28	6					28787
260	10	35	25	22	9					28788
270	10	42	22	15	11					28789
280	10	80	18	16	9					28790
290	10	43	20	18	18					28791
300	10	44	16	24	14					28792
310	10	41	25	19	11					28793
320	10	32	28	11	9					28794
330	10	54	28	12	20					28795
340	10	80	21	14	23					28796
350	10	61	18	6	7					28797
360	10	58	16	24	10					28798
370	10	43	16	19	7					28799
380	10	82	12	9	9					28800
390	10	94	23	9	14					28801
400	10	87	23	8	14					28802
410	10	103	12	10	9					28803
420	10	86	24	19	8					28804
430	10	51	22	7	10					28805
440	10	66	19	22	9					28806
450	10	46	30	28	11					28807

Assay Log

District Quartzsite

Hole Number Q-2

Page 3

Hole Depth	Inter -val	Cu PPM	Zn PPM	Pb PPM	Mo PPM	Ag	Au		SAMPLE NUMBER Gross Value
450-460	10	25	12	27	9				30808
470	10	36	23	18	10				30809
480	10	51	58	10	4				30810
490	10	43	27	11	11				30811
500	10	40	13	8	21				30812
510	10	32	17	23	10				30813
520	10	51	21	15	9				30814
530	10	43	22	13	14				30815
540	10	50	19	18	25				30816
550	10	95	17	11	19				30817
560	10	69	18	42	12				30818
570	10	44	15	23	33				30819
580	10	41	10	21	7				30820
590	10	61	19	28	7				30821
600	10	33	17	30	14				30822
610	10	41	25	28	5				30823
620	10	56	36	27	9				30824
630	10	84	54	52	6				30825
640	10	40	26	33	5				30826
650	10	48	38	29	7				30827
660	10	49	37	24	3				30828
670	10	37	28	38	7				30829
680	10	42	44	27	5				30830
690	10	34	19	26	4				30831
700	10	37	20	23	2				30832

Assay Log

District Quartzsite

Hole Number Q-2

Page 4

Hole Depth	Inter-val	Cu	Zn	Pb	Mo	Ag	Au		Sample Number ~~Gross Value~~
700 - 710	10	26	24	33	5				30833
720	10	27	16	44	14				30834
730	10	28	21	41	5				30835
740	10	32	18	52	11				30836
750	10	34	19	46	7				30837
760	10	22	16	45	5				30838
770	10	30	14	47	7				30839
779	9	27	10	28	2				30840

COPY

KERR-McGEE CORPORATION

District Quartzsite
Hole Number Q - 2
Spudded July 29,1974
Completed August 14,1974
Total Depth 779'
Driller Leo Moore
Logged By B. Riederer

County Yuma State Arizona
Claim Zales #33 Sec 31 T. 4N R. 20W
Elevation 1060
Hole Size NX
Core Size NX
Hole Angle 90°
Collar Coords. N.
E.

Depth	Int.	%Core Rcvy	Samp. No.	Assays Cu PPM	Assays Mo	Rock Type	Rock Description	Alteration	Mineralization
0						Quartz-Monzonite	Very minor plag.up to 70% K-spar with laths to 5mm, generally<1% mafics altered to chlocite and sericite	Moderate sericite	Sulfides completely oxidized
						GY size 3 to 5. MM eqigranular			
10	10	100%	28763				Negl. plag.up to 65% K-spar with laths to 3mm.<1% mafics altered to chlorite-sericite	10-11:intense sericite and kaolin 11-18:strong sericite and moderate kaolin 18: moderate sericite	Sulfides completely oxidized 18: minor fresh pyrite
20	10	100%	28764				Negl. plag. to 75% K-spar with laths to 6mm.<1% mafics. to 25% quartz.	Moderate sericite Kaolin along fractures	21: chalcorite (?) coating vnlt. 25: chalcorite (?) coating vnlt. sulfides oxidized.
30	10	100%	28765				to 5% green plag. with pheno to 5mm to 70% K-spar with laths to 3 up to 25% quartz.<1% mafics altered to chlorite and sericite	Moderate sericite Kaolin along fractures Plag. altered to green sericite	to 33'-sulfides oxidized below this only partial oxidation on fractures <<1% disseminated pyrite
40	10	100%	28766				to 3% green plag. with pheno. to 3mm. to 70% K-spar with laths to 4mm, 3-5% mafics altered to chlorite sericite to 22% quartz.	Kaolin along fractures Moderate sericite Plag. altered to green	Partial oxidation on fractures 1% disseminated pyrite 49- 3/8" pyrite vnlt.
50	10	100%	28767				1-2%green plag. to 75% K-spar with laths to 5mm.<1% mafics altered to chlorite and sericite.	Moderate sericite Kaoline along fractures plag. altered to green sericite	1% disseminated pyrite 57-62-minor light green brittle AUTUNITE occuring along fractures in thin micacous flakes

District rtzsite Hole Number (COPY Page Numt 2

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
									to 22% quartz.		
60	10	100%	28768						Negl. plag. to 75% K-spar with laths to 7mm. <<1% mafics altered to sericite and chlorite to 25% quartz.	Moderate sericite Kaoline along fractures	1% disseminated pyrite with chalcocite (?) tarnish.
70	10	100%	28769						5-9% green plag. with pheno to 5mm. to 65% K-spar with laths to 8mm. 3to 5% mafics altered to chlorite and sericite. to 20% quartz	Moderate sericite Kaoline along fractures Plag. altered to green sericite.	1% disseminated pyrite 75': trace magnetite octahedral
80	10	100%	28770						Same as above 87- 1to 3% green plag. with pheno to 4mm to 70% K-spar with laths to 5mm. 1-2% mafics altered to chlorite and sericite to 25% quartz	Same as above Moderate sericite 89-91 intense kaoline along fractures plag altered to green sericite	<1% disseminated pyrite <1% disseminated pyrite with chalcocite (??) coating partial oxidation along fractures and disseminated.
90	10	100%	28771						3 to 6% green plag with pheno to 4mm. to 70% K-spar with laths to 8mm 2-4% mafics altered to chlorite. to 20% quartz	Moderate sericite Kaoline along fractures plag altered to green sericite.	<1% disseminated pyrite partial oxidation along fractures
100	10	100%	28772						Same as above	Same as above except increase in coarse grain sericite (muscovite)	1-2% disseminated pyrite with chalcocite (??) coating
110	10	100%	28773						1-3% green plag. with pheno to 3mm. to 70% K-spar with laths to 5mm 3-5% mafics altered to chlorite and sericite; below116'sericite becomes coarse	Moderate sericite plag altered to green sericite	1-2% disseminated pyrite 115- vert. chalcocite (?) vnlt. 118 - partial oxidation on fracture
120	10	50% (120'-124')	28774						1% green plag with pheno to 3mm, to 65% K-spar with laths to 8mm, 3-5% mafics altered to chlocite and sericite, 50% recovery to 120'-124'	Moderate sericite plag altered to green	1% disseminated pyrite 120-124 - thin chalcocite (??) vnlts.

District rtzsite Hole Number 2 COPY Page Numt 3

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
130	10	100%	28775						Same as above	Moderate sericite	1% disseminated pyrite
									131: 1-2% green plag with pheno to 3mm, 65-70% K-spar with laths to 8mm, 5-8% mafics altered to chlorite and sericite, to 20%quartz	Moderate sericite plag altered to green sericite.	<1% disseminated pyrite
									133: 1-2% green plag with pheno to 3mm, 70% K-spar with laths 10mm 2-3% mafics altered to chlorite and sericite, to 25% quartz.	Moderate sericite plag altered to green sericite.	<1% disseminated pyrite
140	10	100%	28776						1-2% green plag with pheno to 3mm, 65-70% k-spar with laths to 5mm, 1-2% mafics altered to chlorite and sericite, to 26% quartz.	Moderate sericite plag. altered to green sericite.	1% pyrite 148-149 thin chalcocite (??) vnlts.
150	10	100%	28777						Same as above	Same as above	1% pyrite
160	10	100%	28778						Negl. plag. 50-60% K-spar with laths to 4mm, negl. mafics, 30-33% anhedral quartz	Moderate to strong sericite. 166-K-spar almost completely destroyed - intense sericite 168- moderate sericite	1% disseminated pyrite with minor chalcocite (??) coating and vnlts.
170	10	100%	28779						1-2% green plag 60-65% K-spar with laths to 4mm, 1-2% mafics altered to chlorite and sericite.	Moderate sericite 176- strong to intense sericite	1% disseminated pyrite
180	10	100%	28780						1% green plag with pheno to 3mm, 60-65% K-spar with laths to 4mm, negl mafics altered to chlorite and sericite. 183- core broken- possible fault zone	Strong to intense coarse sericite 183 - moderate to strong sericite.	1% disseminated pyrite 183-186: partial oxidation
190	10	100%	28781						Same as at 180'	Strong to intense sericite.	1% disseminated pyrite Minor chalcocite (??) vnlts. 198- trace chalcopyrite.

District rtzsite Hole Number - 2 COPY Page Numb 4

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
200	10	100%	28783						1% green plag with pheno to 3mm, to 65% K-spar with laths to 6mm,1-2% mafics altered to chlorite and sericite, to 30% quartz	Strong to intense sericite. 203-moderate sericite 206-moderate to strong sericite. plag. altered to green sericite.	1% disseminated pyrite trace chalcopyrite.
210	10	100%	28783						Negl. plag.,65-70% K-spar with laths to 7mm 1-2% mafics altered to chlorite and sericite, to 35 % quartz.	Strong sericite. 212-moderate sericite	1% disseminated pyrite very minor chalcocite (??) coating
220	10	100%	28784						Same as above	Moderate sericite	1% disseminated pyrite 219-1/8" pyrite-chalcocite (??) vnlt.
230	10	100%	28785						Negl. plag. 65% K-spar with laths to 7mm,<2% mafics, <35% quartz.	Moderate sericite 224-226½-intense coarse sericite 226½ moderate sericite.	1% disseminated pyrite 229- near vert. chalcocite(??) vnlt.
240	10	100%	28786						Negl. plag. to 65% K-spar with laths to 10mm 4-6% biotite(chlorite?) to 30% quartz.	Weak sericite	1% disseminated and vnlt. pyrite negl. chalcopyrite minor to weak disseminated magnatite below 238. 239- strong magnetite.
250	10	100%	28787						Negl. plag. 65-70%K-spar with laths to 5cm,3-5% mafics altered to chlorite and sericite to 25% quartz, core is cut by thin near vert. pyrite-chlorite vnlts. 245-246-strong sericitized zone.	Weak to moderate sericite and chlorite	1% sulfides 1:15 chalcopyrite: pyrite 245: epidote
								Schist	250:2" unit of fine grain quartz-sericite-chlorite schist	Strong sericite	2% sulfides 1:10 chalcopyrite:pyrite <1% disseminated tourmaline.
									250:3" negl. plag. 65-70% K-spar with laths to 4mm, 3-5% mafics altered to chlorite and sericite, to 30% quartz	Weak sericite	
								Schist	255-very fine green quartz	Strong sericite	

District ·tzsite Hole Number · 2 COPY Page Numl 5

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
									sericite rock - not highly schistose		
									256- negl. plag.60-65% K-spar with laths to 3mm.1-2% mafics altered to chlorite	Moderate sericite	
270	10	100%	28789					Schist	262-263 very fine grain quartz sericite schist contact at 55° to core	Strong sericite	<1% pyrite
									263: negl. plag. 60-65% K-spar with laths to 10mm,(mostly 3-6mm), 3-6% mafics altered to chlorite and sericite to 30% quartz.	Weak sericite	1% pyrite Core is intermit. cut by hairline tourmaline vnlts. 267-2" sericitic zone with bornite and chalcopyrite
									269 very fine grain quartz sericite rock cut by hairline tourmaline vnlts at 35° to core.		
280	10	100%	28790					Fault zone(??)	270-274 Fault zone		
									274: negl. plag. 60% K-spar with laths to 3mm 2% mafics altered to chlorite and sericite to 40% quartz below 275 sericite is coarse.	Weak to moderate	1-2% sulfides 1:15 chalcopyrite:pyrite 276: 3/8" radiating tourmaline
290	10	100%	28791						285-286-increase in green plag altered to sericite	281-282moderate to strong sericite 283-284 same as above	2-3% sulfides 1:15 chalcopyrite:pyrite Minor disseminated tourmaline
300	10	100%	28792						291-293negl. plag 30-40% K-spar altered to sericite>50% quartz	Strong sericite	1% pyrite 291-pyrite-rutile or tourmaline cluster 292-296:3% pyrite negl. chalcopyrite
									293:5%plag. altered to sericite, 50% K-spar with laths to 7mm, 1%mafics altered to chlorite and sericite,40% quartz	Weak to moderate sericite 297-298 orthoclase flooding (?)	293-1/8:pyrite vnlt. 296-½" pyrite vnlt. 299: brown red hem along fractures and disseminated
310	10	100%	28793						5-8% plag. altered to green sericite, 50-60% K-spar with laths to	Weak to moderate coarse sericite.	2% pyrite

Hole Number Q - 2

COPY

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Assays Mo	Rock Type	Rock Description	Alteration	Mineralization
320	10		28794				10mm. 1% biotite and chlorite, to 40% quartz fractures at 60° to core. Plag. <2% altered to green sericite 60-65% ortho with laths to 8mm. 2% mafics altered to chlorite1-3% disseminated tourmaline.	Weak sericite	1½% pyrite 316-pyrite-quartz-sericite-tourmaline vein
330	10		28795				<1% altered to green sericite.45% ortho 50% tourmaline vnlts cutting core at all ∠ and disseminated	Weak sericite	324- pyrite-quartz-sericite-tourmaline vein at 45° to core axis 330- ½" pyrite-tourmaline vein 1½% pyrite.
340	10		28796				1% altered to green sericite 45% ortho 50% tourmaline vnlts cutting core at all ∠ and disseminated. 331-334 increase in sericite.		1% pyrite disseminated
350	10		28797				336- very fine grain quarts sericite, minor feldspar altered to sericite. 340.5- 1-2% plag.altered green sericite, 40-50% ortho with laths to 6mm 1% mafics to chlorite disseminated tourmaline coarse sericite., silica content varies from 30-50% with corresponding increases of feldspar A gradual increase in quartz to 50% below 350 and feldspar altered to sericite.	Moderate sericite Weak sericite	<1% pyrite disseminated and vnlt. 2-3% pyrite disseminated 349-3/8" pyrite-quartz vein 351- quartz-tourmaline vnlt disseminated tourmaline

District artzsiet Hole Number Q - 2 COPY Page Num. 7

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
360	10		28798						>50% quartz sericite minor to feldsparth laths to 3-4mm, 2-3% disseminated tourmaline	Medium to strong sericite. 365-368 Strong sericite	2-4% pyrite disseminated and vnlt. 365-368 - 5% pyrite disseminated
370	10		28799					Schist	>50% quartz, sericite minor feldspar laths. 373- 2" unit of quartz sericite pyrite schist.		2-3% pyrite disseminated and vnlt.
380	10	100%	28800						<50% quartz, sericite minor disseminated tourmaline, minor K-spar laths to 4mm, negl. mafics altered to chlorite and sericite.	Moderate sericite 386-391 strong sericite	2-3% disseminated and vnlt. pyrite
390	10	100%	30801						Same as above	Moderate sericite	2-4% disseminated pyrite
400	10	100%	30802						Same as above	Moderate sericite	1-3% disseminated pyrite 400'- 1/8" tourmaline vnlt at 70° to core. 405' - near vert. tourmaline-quartz vnlt.
410	10	100%	30803						Same as above	Moderate sericite	2-4% pyrite
420	10	100%	30804					Fault zone(?)	415-418 fault zone 418:<50% quartz sericite minor K-spar laths to 4mm, negl. mafics.	Moderate sericite	1% pyrite
430	10	100%	30805						420: 40% K-spar laths 3-5mm, < 50% quartz, 5% mafics altered to chlorite and sericite. 421: < 50% quartz sericite minor mafics to chlorite and K-spar laths.	Weak sericite Moderate sericite	2-4% disseminated pyrite negl. chalcopyrite
440	10	100%	30806					Schist	432-433 very fine grain sericite quartz schist. 433-434 > 60% quartz sericite, 10% mafics altered to chlorite. 434-> 50% quartz coarse sericite, minor disseminated tourmaline	Strong sericite Moderate sericite Moderate to weak sericite.	Negl. sulfides 1% pyrite 3-5% sulfides 1:20 chalcopyrite:pyrite

District ___ artzsite ___ Hole Number ___ -2 ___ COPY Page Num 8

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
									minor feldspar laths		
									and mafics altered to		
									chlorite and increasing		
									below 435'.		
450	10		30807						441- feldspar laths	Weak to moderate	2-4% sulfides 1:25 chpy:py.
									(2-6mm) 30-40%,quartz	sericite	442 - 1/8" pyrite vnlt.
									to 50%, mafics to		447- black pyrite quartz tourmaline(?)
									chlorite 5-8%, coarse		fine grain vnlt.
									sericite		450- 7" quartz pyrite tourmaline vnlt.
460	10		30808						451-452- sub. quartz in		2-5% pyrite
									a very fine grain quartz		
									sericite schist.		
									452- quartz 50%	Weak sericite	2-4% pyrite
									sericite, negl. mafics		454- pyrite, quartz,tourmaline vnlt.
									to chlorite, minor		at 55° to core.
									feldspar laths to 3mm.		
									454-feldspar laths to	Weak sericite	2% pyrite
									5mm 30-40%, quartz 50%,		455- pyrite tourmaline quartz vnlt.
									mafics to chlorite 5-8%		457½-½" pyrite quartz tourmaline vnlt.
									459-fine grain quartz		at 80° to core.
									> 50% sericite, minor		460- near vert quartz vnlt.
									feldspar laths to (2mm)/		
470	10		30809						461-very fine grain	Strong sericite	<1% pyrite
									quartz sericite schist		
									462-fine grain quartz	Weak to medium sericite	2-4% pyrite
									50% sericite, minor		464-pyrite,quartz,tourmaline vnlt
									feldspar laths to 2mm,		466- 2" bull quartz vein with a ½-1"
									trace mafics to chlorite,		quartz sericite, chlorite schist on
									minor disseminated tourmaline		each side of quartz vein.
480	10		30810					Schist	471- very fine grain	Strong to intense	3-6% disseminated pyrite cubes
									grey-green clay quartz	sericite	473- 2" bull quartz vein
									sericite schist, schistosity		
									not well developed at		
									50% to core.		
									473-color becomes almost		
									black.		
									474-474½-quartz 40-50%		2% pyrite
									minor feldspar laths to		
									(2mm), minor hematite(?)		
									stains ,disseminated		

District Q. zsite Hole Number Q - 2 COPY Page Numl 9

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
									and vnlt. tourmaline to		1-2% disseminated pyrite trace
									10%. 474½ same as 471		chpy. weak magnetite.
									and 473.		
									479- quartz 30-40%,K-spar	Strong sericite	4-6% pyrite disseminated
									40-50%, reded quartz,		
									hematite stain.		
490	10		30811						483- normal contact	Intense sericite	<1% pyrite cubes
									schist-very fine grain		Weak magnetite
									quartz, sericite		
									biotite or tourmaline.		
									484-quartz 30-40%,K-spar	Strong sericite	3-5% pyrite disseminated
									minor laths to 5mm.		484-tourmaline vnlt at 75° to core
									35-40% tourmaline		487- pyrite-tourmaline vnlt. at 70% to core
									disseminated vnlt.		
									485-very fine grain	Intense sericite	<1% pyrite disseminated
									quartz,sericite,biotite,		
									or tourmaline schist.		
								Fault zone	487- fault plane at		
									45° with 1½" quartz		
									pyrite, sericite		
									Quartz> 50% sericite	Strong sericite	4-6% pyrite disseminated
									pyrite rock show minor		497- 1/8" pyrite vnlt.
									schistosity, trace relict		
									K-spar, weakly dessimated		
									tourmaline.		
500	10		30812						Ditto, below 505' rock	Medium sericite	4-6% pyrite disseminated
									increases with K-spar		505- calcite on fault
									to 30% laths to 7mm		509-thin tourmaline vnlts at 70° to core
510	10		30813						Quartz>50%, sericite, K-spar		4-6% trace chpy.
									20-30%, minor disseminated		517- pyrite, quartz, tourmaline vein
									tourmaline minor mafics		519-¼" pyrite-quartz vein
									to chlorite		
								Fault zone	514-515- fault zone		
									515- quartz>50% sericite	Medium strong sericite	3-5% sulfides 1:10 chpy:py
									relict K-Spar, minor		chpy. on fractures
									K-spar to 20%, minor		
									disseminated tourmaline		
									hematite stains.		
520	10		30814						Same as above	Same as above	4-6% pyrite

District tzsite Hole Number 2 COPY Page Numl 10

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
530	10		30815						530-quartz > 50% coarse sericite, disseminated tourmaline, minor feld-spar	Strong sericite	3-6% pyrite disseminated
								Schist	538½ very fine grain quartz sericite, minor tourmaline vnlt. Shist below 539-vntl very broken possibly fault zone	Intense sericite	1% pyrite weak magnetite
540	10		30816						546-quartz > 50%, sericite disseminated fine grain tourmaline, unit is weakly schistose also minor relict K-spar	Medium strong sericite	2-4% disseminate pyrite 546- ½ quartz pyrite vein
550	10		30817						Same as above	Medium strong sericite	2-3% disseminated pyrite
560	10								563-quartz sericite disseminated and vnlt tourmaline schist	Strong sericite	4% pyrite
								Fault zone	565-567 fault zone Quartz sericite minor tourmaline	Medium sericite	<1% pyrite
570	10		30818						Same as above relict K-spar		
								Fault zone	562 - fault zone Quartz sericite	Medium sericite	
									563-Quartz sericite minor tourmaline vnlt. schist	Medium to strong sericite	<1% pyrite
								Fault zone	565-567 fault zone		
									567-Quartz coarse sericite dark color due to disseminated tourmaline and dark quartz.	Medium sericite	<1% pyrite
580	10	30819						Granite	572-Quartz, sericite trace K-spar laths to 2mm.minor disseminated tourmaline, dark quartz	Weak to medium sericite	<1% pyrite disseminated minor cubes 579- 1/8" pyrite vnlt.
590	10		30820					Granite	Very fine grain quartz sericite, K-spar laths to 2mm.(increase in these from above)	Weak sericite	<1% pyrite and disseminated minor cubes 585-Quartz, tourmaline, pyrite vnlt. at 75° to core 587- Quartz,tourmaline, pyrite vnlt. 589-Quartz, tourmaline pyrite vnlt.

District ctzsite Hole Number J - 2 COPY Page Num 11

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
600	10		30821						Same as above.	Weak sericite	<1% pyrite
									595- Bull quartz 2"then		
									8" broken interval.		
									596- Quartz, coarse	Weak to medium sericite	<1% pyrite
									sericite, dark fine grain		Neg. oxidation
									sericite, minor K-spar		600- Quartz, sericite, tourmaline,
									laths (2mm), minor		pyrite vnlt.
									calcite on fractures.		
610	10	100	30822					Schist	601-Quartz, sericite,	Medium sericite	<1% pyrite
									fine grain schist		Quartz, tourmaline, pyrite vnlts.
											along schistosity.
								Granite	601½-Fine grain quartz	Weak to medium sericite	1% pyrite chalcopyrite
									sericite, K-spar laths		Negl. oxidation
									to 2mm.		603-Quartz, pyrite, tourmaline, sericite
											vnlt., at 45° to core.
									604-605-fine grain quartz	Weak to medium sericite	2% pyrite along schistosity and quartz
									sericite schist		sericite, tourmaline, pyrite along schist.
									605- Very fine grain	Weak sericite	1% pyrite
									quartz sericite, K-spar laths		607- Chlorite on fractures
									to 2mm, weakly schistose.		
									minor tourmaline dark		
									color due to tourmaline		
									and dark quartz.		
620	10	100	30823						Very fine grain quartz		
									sericite, K-spar laths		
									to 4mm, minor mafics to		
									chlorite below 619	Weak sericite	1% sulfides disseminated and vnlt.
									above rock becomes more		Minor chpy. on fractures
									schistose		615- ½" pyrite vnlt.
630	10	100	30824					Schist	622-Very fine grain quartz	Medium sericite	2% sulfides disseminated and vnlt.
									sericite-chlorite-biotite		1:15 chpy:py Chpy. on fractures
									trace K-spar laths to		Minor pyrite cubes along schistosity
									to 3mm. schist.		625- Calcite along fractures
								Granite	628--629-Fine grain	Weak sericite	1% pyrite
									quartz sericite, K-spar		Minor oxidation
									laths to 3mm.		Quartz, pyrite, tourmaline vnlt.
									629-Very fine grain	Weak to medium sericite	1% pyrite, trace chpy. on fractures
									quartz sericite, minor		
									K-spar laths, rock		
									weakly schistose, dark		

District artzsite Hole Number -2 COPY Page Numb 12

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
									color due to dark quartz		
									and mafics to chlorite		
								Fault zone (?)	632-633 fault zone		
									633-Fine grain quartz		1% pyrite
									sericite, K-spar laths		Traces oxidation on some fractures
									to 4mm, minor mafics		640-Trace disseminated magnetite
									to chlorite		640.5- 1mm. pyrite chpy. quartz tour-
											maline vnlt.
640	10	100	30825						Same as above.		
									643-Fine grain quartz		1% pyrite minor chpy. on fracture
									sericite, K-spar laths		
									to 4mm, minor chlorite,		
									light color due to		
									decrease in dark quartz		
650	10	100%	30826					Schist	656:Very fine grain	Moderate sericite	<1% pyrite
									quartz sericite, biotite		
									chlorite schist with		
									relict K-spar laths and		
									minor calcite on fractures.		
									657: Fine grain quartz	Weak sericite	1-2% pyrite, trace chalcopyrite
									sericite, trace chlorite		on fractures
									K-spar laths to 3mm		Trace of oxidation
									dark quartz.		
660	10	100%	30827						665-Dark gray extremely	Moderate sericite	2-3% pyrite
									fine grain quartz,		
									sericite, mica(chlorite		
									and biotite) non		
									schistose, trace K-spar		
									laths to 2mm.		
670	10	100%	30828						275½-Fine grain quartz	Weak sericite	1-2% pyrite
									sericite, K-spar laths		677- ½" pyrite vnlt at 5° to core
									to 3mm, minor chlorite		Minor oxidation along some fractures
									biotite and tourmaline		
680	10	100%	30829						Same as above	Weak sericite	1% pyrite
690	10	100%	30830						Same as above	Weak sericite	1-2% pyrite
700	10	100%	30831						Same as above	Weak sericite	1% pyrite
											700'-Quartz, tourmaline, pyrite vnlt.
											at 70° to core.
710	10	100%	30832					Fault zone(?)	716-716½-Fault zone		702: Ditto
									716½-Fine grain quartz	Weak sericite	707: 1/16" pyrite chalcopyrite vnlt.

District tzsite Hole Number 2 COPY Page Numt 13

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
											at 30° to core.
									sericite, K-spar laths		715½: 1" pyrite vein
									to 4mm, minor chlorite		715: Trace chalcopyrite on fractures
									biotite, trace magnetite		
720	10	100%	30833						Same as above	Weak sericite	1% pyrite
730	10	100%	30834					Schist	Below 336 unit is		739: Thin pyrite chalcopyrite vnlt.
									becoming distinctly		1% pyrite with trace of chalcopyrite
									schistose due to increase		
									in micas and grades into		
									fine grain quartz		
									sericite, minor K-spar		
									laths, biotite, chlorite		
									schist - core highly		
									broken.		
740	10	100%	30835						747: Fine grain quartz	Weak sericite	1-2% disseminated pyrite
									sericite, K-spar laths		Trach chalcopyrite on fractures
									to 2mm, minor mafics		Kaoline on fracture
											Trace magnetite.
750	10	100%	30836						Same as above	Weak sericite	1-2% disseminated pyrite
760	10	100	30837					Schist	760: 6" broken interval	Moderate sericite	
									of fine grain quartz		
									sericite schist		
									760'6"-fine grain	Weak sericite	1-2% disseminated pyrite
									quartz sericite, K-spar		
									lath schist.		
770	10	100%	30838						Same as above		
780	10	100%	30839					Fault Zone (?)	775-776 fault zone		
									776- Fine grain quartz	Weak sericite	<1% disseminated pyrite
									sericite trace chlorite		
									biotite grading into		
									a very fine grain quartz		1-2% disseminated pyrite
								Schist	Sericite minor		779- Bull quartz vein at 40° to core
									disseminated tourmaline		
									schist at 40° to core.		

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-3
Spudded
Completed
Total Depth 529'
Driller L. Moore
Logged By

County YUMA State Arizona
Claim Zales #46 Sec 31 T. 4N R. 20W
Elevation 1070
Hole Size NX
Core Size NX
Hole Angle
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu	%Zn	%Pb	% Mo	oz.Ag	oz.Au		Gross Value
0 - 30	30								NOT SAMPLED
30-35	5	.11							30082
40	5	.02							30083
45	5	.02							30084
50	5	.03							30085
55	5	.05							30086
60	5	.06							30087
65	5	.06							30088
70	5	.09							30089
75	5	.05							30090
80	5	.06							30091
85	5	.07							30092
90	5	.06							30093
95	5	.02							30094
100	5	.01							30095
105	5	.01							30096
110	5	.01							30097
115	5	Tr							30098
120	5	Tr							30099

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

KERR-MCGEE CORPORATION

Assay Log

District Quartzsite

Hole Number Q-3

Page 2

Hole Depth	Inter -val	Cu PPM	Zn PPM	Pb PPM	Mo PPM	Ag	Au		Gross Value
120-125	5	Tr							30100
125-130	5	100							31201
140	10	25	27	18	7				31202
150	10	995	30	31	17				31203
160	10	54	21	30	7				31204
170	10	148	19	37	9				31205
180	10	452	28	48	6				31206
190	10	1200	60	83	7				31207
200	10	2800	68	27	43				31208
210	10	3100	42	20	43				31209
220	10	4900	35	13	14				31210
230	10	3600	37	47	9				31211
240	10	500	75	20	12				31212
250	10	2500	52	26	27				31213
260	10	2800	89	24	18				31214
270	10	3100	50	39	15				31215
280	10	[illegible]	56	49	11				31216
290	10	4100	43	47	33				31217
300	10	4300	42	42	26				31218
310	10	3700	55	61	29				31219
320	10	4200	36	52	69				31220
330	10	[illegible]	65	35	72				31221
340	10	[illegible]	76	26	114				31222
350	10	[illegible]	67	43	165				31223
360	10	3400							31224

Assay Log

District Quartzsite

Hole Number Q-3

Page 3

Hole Depth	Inter -val	Cu PPM	Zn	Pb	Mo	Ag	Au		Gross Value
360 - 370	10	1880							31225
380	10	1485							31226
390	10	615							31227
400	10	3200							31228
410	10	498							31229
420	10	460							31230
430	10	90							31231
440	10	38							31232
450	10	49							31233
460	10	23							31234
470	10	153							31235
480	10	162							31236
490	10	181							31237
500	10	46							31238
510	10	95							31239
520	10	985							31240
529	9	212							31241

COPY

KERR-McGEE CORPORATION

District Quartzsite
Hole No. Q - 3
Spudded
Completed
Total Depth 529'
Driller L. Moore
Logged By

County Yuma State Arizona
Claim Zales #46 Sec. 31 T. 4N R. 20W
Elevation 1070'
Hole Size NX
Core Size NX
Hole Angle
Collar Coords.

0-30 Alluvium Cemented boulders of mixed rock from outside altered area.

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu ?	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
30 5	72		30082	.11				Quart-monzonite	Intensaly fractured;	Quartz-sericite-pyrite	Oxidized: Few thin sones perserved
45	10		30083-84	.02					egi-granular quartz-	numerous thin darker gray	fresh pyrite; scattered brochantite
-55	10		30085-86	.04					K-feld with ±5%	Quartz-tourmaline vnlts;	along fractures limonite after
65	10		30087-88	.06					plagioclase; (albite)	kaolin and sericite on	chalcopyrite; Very minor covellite;
75	10		30089-90	.07					no ferro mags; grain	fractures; serocite on	minor chalcacite coating pyrite grains;
85	10		30091-92	.07					size approx. 1-3 mm.	fractures	sulfides disseminated.
95	10		30093-94	.04					(Quartz-K-feld)		
									Plagioclase ± 5mm.		
									Possible fault zone		
									42' - 46'		
102	10		[illegible]	[illegible]					"	"	Partially oxidized
105-105	5		30095-96	.01							
112	74								"	"	Unoxidized; total sulfides ±4% py:cpy
105-115			30097-98	.01							ratio. ±20:1; Disseminated sulfides;
125			30099-30100	Trace							fine grained. Partial oxidation
135			31201-02	Trace	7	18	27				160-180 feet.
140-145			31203	.1	17	31	30				
150-155			31204	.01	7	30	21				Calcite veinlet at 138'
160-165			31205	.015	7	17	19				168'-1" gouge zone
170-175			31206	.045	6	48	24				
179					7	[illegible]	[illegible]		Same	Same	Same
180-190			31207	.12	7	53	60	Quartz-monzonite	Introduction brownish		Slight increase cpy assco. with
									biotite		introduction biotite
186								Sericite Schist	Mineralogically	Quartz-sericite-pyrite	Fine grain pliss. py. and larger
190-200			31208	.28	43	27	65		similar to granite		disseminated 3mm. cubes pyrite. No cpy.
200-210			31209	.31	43	20	42		material described		

District C tzsite Hole Number 0-3 COPY Page Num. 2

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu%	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									Rhyolite dike (?) Normal contact relationships.		
186.5								Quartz-monzonite	Intensely fractured-eqi-granular quartz-K-feld with 5% (albite) plagioclase, little or no biotite.	Quartz-sericite-pyrite	Increase in cpy. 1:2 py:cpy ratio ±2% total sulfides.
191			See page					Sericite shist	Same as 186	"	Same as 186
198								Quartz-monzonite	Similar to unit described 30-186 with development of shistose texture	"	Unozidized cpy. to py. 1:1 total sulfides ±2%
199.5								Probable fault zone			
202-216	16		31209	.31%	34	20	72	Quartz-monzonite	Intensely fractured granular quartz-K-feld with 10% plagioclase albite. Minor biotite scattered through interval.	Quartz-sericite-pyrite	Unoxidized cpy to py ratio 2:1 Total sulfides ±2%
216-220	16		31216	.49	14	13	35				
220-230	16		31211	.36	9	47	37				
230-240	16		31212	.49%	12	20	75				
240-260	20		31213+14	.27%	22	35	20				
260-276	16		31215	.31%	15	38	50		Assumes crude schistose texture in places below 250'. Few thin calcite vnlts.		
276-292	16		31216	[redacted]	71	49	56				
292-300	20		31217+18	.42%	20	45	42				
300-320	20		31219-20	.40%	47	56	45				
322-330	16		31221	[redacted]	72	35	65		Albitization decreases below 275'		
~~320-330~~	~~2~~		~~31211~~	~~.36~~	~~9~~	~~47~~	~~37~~	Quartz-monzonite	Quartz-K-feld. No albitization noted. Increase in poorly developed biotite Minor calcite filling granular intersities	Quartz-pyrite-sericite	Unoxidized ±2% total sulfides very fine grained. Py:cpy ratio approx 2:1 Cpy. along few fractures 80° calcite and quartz vnlt.with py. and cpy at 326' Massive cpy at 329 filling fracture at 60° to vert.
330-340	10		31222	[redacted]	144	26	76		fractured. Grain size ±2mm. scattered quartz vnlts.		
~~330-340~~			~~31212~~	~~.50%~~	~~12~~	~~20~~	~~75~~				

District Quartzsite Hole Number 0 - 3 Page Numb 3

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu %	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
344								Shear zone	Intensively fractured	Quartz-sericite-pyrite	Unoxidized pyrite and minordisseminated
340-350	10		31223	[illegible]	165	43	67		serpentized shear zone		epy in chudely schistoze rocks
350-360	10		31224	.34%					slip planes. Crudely		362-373 oxidation on serpentized
360-370	10		31225	.19%					schistoze		slip planes.
370-380	10		31226	.15%							
380-390	10		31227	.16%				Biotite schist	Quartz eyes:calcite in	Quartz-sericite-pyrite	Unoxidized. Minor cpy ±1% total sulfides.
390-400	10		31228	.32%					shist planes		1:2 cpy to py ratio
400-410	10		31229-30	.05%							
425								Shear zone	Intensively fractured		Minor oxidation of serpentized slip
420-430	10		31231	40					fault gouge 443-445		planes 453-455.
430-440	10		31232	.38					serpentized slip planes		
440-450	10		31233	.49					crudely schistose with		
									blocks of granitic		
									textured rock noted in		
									upper portion hole.		
									Fault gouge 462-464		
450-460	10		31234	2.3					472-474		
460-470	10		31235	153					Slip planes 60-70°		
470-480	10		31236	.162							
481								Biotite schist	Dark gray quartz-K-feld	Quartz-sericite-pyrite	Unoxidized pyrite along fractured
480-490	10		31237	131					±5% albite biotite		Minor pyrite in shist planes.
490-500	10		31238	46							Little or no calcopyrite noted.
500-510	10		31239	25							
513								Probable fault zone			
510-520	10		31240	855							
525 - TD(529)								Shist	Quartz eyes, limonite	Minor epidote-clay	Partially oxidized on fractures
520-529	9		31241	212					after probable specular	alteration	Minor pyrite <1% disseminated on shist
									hematite		planes and on fractures

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-4
Spudded 3-14-75
Completed 3-31-75
Total Depth 514'
Driller L. Moore
Logged By R. Leedy

County Yuma State Arizona
Claim Zulas #44 Sec 31 T. 4N R. 20W.
Elevation 1110'
Hole Size NX
Core Size NX.
Hole Angle -90° S50°W.
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu ppm	%Zn ppm	%Pb ppm	% Mo	oz.Ag	oz.Au		Gross Value
0 - 26	26	60	66	23					
- 40	14	128	55	24					
- 50	10	86	156	63					
- 60	10	90	108	66					
- 70	10	108	86	59					
- 80	10	105	84	46					
- 90	10	180	30	27					
- 100	10	134	98	58					
110	10	85	52	46					
- 120	10	173	84	30					
130	10	314	51	74					
140	10	.06%	86	96					
150	10	.05%	76	98					
160	10	.08%	102	88					
170	10	.10%	62	144					
180	10	[redacted]	136	96					
190	10	222	44	14					
200	10	342	28	18					
210	10	310	17	10					
220	10	.13%	24	42					
230	10	.12%	22	55					
240	10	.06%	23	24					
250	10	.19%	18	14					
260	10	.20%	34	10					
270	10	200	10	12					
280	10	104	34	16					
290	10	61	20	18					
300	10	49	21	5					
310	10	306	36	60					
320	10	74	48	18					
330	10	85	49	20					
340	10	92	57	30					
350	10	41	45	16		0.08	.002		
360	10	43	45	18					
370	10	35	64	20					
380	10	45	34	8					
390	10	153	54	8					

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-4

Page 2

GROSS VALUE IN SULFIDE MINERALS*

Hole Depth	Inter -val	Cu ppm	Zn ppm	Pb ppm	Mo	Ag	Ag		Gross Value
390 - 400	10	94	54	18		0.02	.001		
410	10	176	68	26					
420	10	60	89	16					
430	10	54	62	10					
440	10	49	51	10					
450	10	36	46	16		0.13	.001		
460	10	43	52	24					
470	10	22	49	14					
480	10	37	50	12					
490	10	33	48	16					
500	10	22	50	12					
510	10	35	61	20					
514	10	47	62	36		0.05	.003		

*Gross value calculated from copper ¢/pound; lead ¢/pound; Zinc ¢/pound; molybdenum $ /pound; silver $ /ounce; and gold $ /ounce.

Assay Log

District Quartzsite
Hole Number Q-4
Spudded
Completed
Total Depth 514
Driller L. Moore
Logged By R. Ahern

County Yuma State Ariz
Claim Gale #44 Sec 31 T. 4N R. 20W
Elevation 1110'
Hole Size NX
Core Size NX
Hole Angle
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu	%Zn	%Pb	% Mo	oz.Ag	oz.Au	ppm U_3O_8	Gross Value eU	Gross Value eTh	
0 - 10	10										
20	10										
30	10										
40	10										
50	10							48			33903
60	10							24			33904
70	10							22			33905
80	10							32			33906
90	10							102	46	28	33907
100	10							22	8	37	33908
110	10							19			33909
120	10							10	11	32	33910
130	10							12			33911
140	10							22			33912
150	10							19			33913
160	10							29			33914
170	10							37	64	34	33915
180	10							80	64	34	33916
190	10							34			33917

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

Assay Log

District Quartzsite
Hole Number Q-4

Page

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag oz/T	Au oz/t	PPM lbs	Gross Value	
190 - 200	10							10		33918
210	10							10		33919
220	10							10		33920
230	10							8		33921
240	10							12		33922
250	10							16		33923
260	10							10		33924
270	10							12		33925
280	10							19		33926
290	10							20		33927
300	10							26		33928
310	10									33929
320	10									33930
330	10					0.08	.002	15		33931
340	10									33932
350	10									33933
360	10									33934
370	10									33935
380	10					0.02	.001	13		33936
390	10									33937
400	10									33938
										3

Assay Log

District Quartz site
Hole Number Q-4

Page 3

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag oz/t	Au oz/t	PPM U_3O_8	Gross Value	
400 - 410	10									33939
420	10									33940
430	10					0.13	.001	14		33941
440	10									33942
450	10									33943
460	10									33944
470	10									33945
480	10									33946
490	10					0.05	.003	11		33947
500	10									33948
510	10									33949
514	4									33950

COPY

KERR-McGEE CORPORATION

District Quartzsite
Hole No. Q - 4
Spudded 3-19-75
Completed 3-31-75
Total Depth 514'
Driller Joy Mfg. - Leo Moore
Logged By B. Leedy

County Yuma State Arizona
Claim Sec. 31 T. 4N R. 20W
Elevation Approx. 1100'
Hole Size
Core Size NX
Hole Angle -57° S. 20° W.
Collar Coords.

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu %	Mo %	%	%	Rock Type	Rock Description	Alteration	Mineralization
0-26	26		33901	66		33	66	Overburden			
26-28		100						Quartz-sericite shist	Oxidized-highly fractured-fine grained schistose	Quartz-sericite-pyrite	Pyrite - strong goethite and jarosite short intervals of hematite after pyrite.
26-40	14		33902	128		24	55				
28-55		80						Quartz monzonite	Oxidized-highly fractured-fine grained intrusive coarser grained and weakly biotized 47'-49'	Quartz-sericite-pyrite with tourmaline on fractures and veinlets clay on open fractures	Pyrite-strong goethite with jarosite after pyrite Bright yellow-green tetrag. platy. mineral on fractures 42'-48'
40-50	10		33903	86		63	156				
50-66	16		33904	96		66	165				
55-77		100	~~33905~~	~~[illegible]~~		~~[illegible]~~	~~[illegible]~~	Quart-monzonite	Partially oxidized medium grained quartz orthoclase-plagioclase monzonite with disseminated pyrite. Oxidized on fractures with heavy geothite, and jarosite	Quartz, sericite, pyrite with tourmaline on fractures and vnlts. Clay on open fractures	Pyritic- Blue-black tarnish on py-fig. black mineral (-cc(?)) and bornite 55-60, 65-73
66-76	6		33905	25		38	56				
76-92	16		33906	105		46	54				
77-78		70						Quartz-monzonite	Rubble		
78-100	26		33907-08	157		42	64				
78-114		95						Quartz-monzonite	Partially oxidized rocks remain highly fractured with mylonized and slickenside zones. Heavy goethite	Quartz, sericite, pyrite weak clay on fractures Much less tourmaline	Pyritic- some weak cp. 84-90 Bornite tarnish on py-cp. Yellow-green tetrag. mineral 55-90'
	(102-108 30% Recy.)										
100-110	10		33909	55		46	52				

District rtzsite Hole Number 4 COPY Page Num 2

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									72-79; 90-114		
114-123		100						Quartz-monzonite	Totally oxidized, highly sheared and fractured. Heavy goethite and clay on fractures.	Quartz, sericite, pyrite, tourmaline vnlts.	Pyrite
[illegible]	10		339 10	123		20	58				
						74					
123-127		100						Quartz, sericite, schist, shear zone	Oxidized highly sheared with heavy goethite jarosite and clay on fractures. Schistosity inclined 60°	Quartz, sericite, pyrite, with tourmaline vnlts.	Pyrite
[illegible]	10		339 11	114		74	51				
[illegible]	10		339 12	[illegible]		91	86				
[illegible]	10		339 13	[illegible]		58	16				
127-158		90						Quartz-monzoniet	Oxidized-highly fractured with heavy goethite, jarosite and clays on fractures shear zone 143-158 with heav y clay and mylonite	Quartz, sericite, pyrite with tourmaline disseminated and as vnlts.	Pyrite. Weak dendritis Neotosite on fracture 68. yellow oxide on fractures 139-140-148 possible nonironite
[illegible]	10		339 14	[illegible]		85	102				
[illegible]	10		339 15	[illegible]		144	62				
[illegible]	10		339 16	[illegible]		96	136				
[illegible]	10		339 17	[illegible]		14	44				
158-192		50						Fault zone	Partially oxidized highly sheared with much rubble, mylonized sulfides. Heavy clay and serpentine (tele)	Quartz, sericite, pyrite with tourmaline disseminated and in vnlts.	Pyrite- Neot. on fractures
	(no core 177-181)										
[illegible]	10		339 18	342		15	28				
192-201		100						Quartz-monzonite	Partially oxidized continues fractured but not as highly sheared. Hu., goethitite-Neo8 on fractures.	Quartz, sericite, pyrite,	Pyritic - weak cu ox 194-198
[illegible]	10		339 19	310		10	17				
201-218		90						Quartz-monzonite shear zones	Totally oxidized rocks highly fractured and sheared. Mylonized 201-202, 206-209, heavy goethite and clay, chacolote	Quartz, sericite, pyrite	Pyritic - Neot. on fractures

District [illegible]tzsite Hole Number - 4 Page Num. 3

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
[illegible]	10		339[illegible]	.13%		[illegible]	24		brown earthy material at 210-211.		
220-230	10		339 21	.12%		22	22				
218-231		90						Quartz-monzonite	Oxidized-rocks fractured but not as highly sheared. Weak goethite Neot. on fractures.	Quartz,sericity,pyrite with tourmaline disseminated and in vnlts. Hu.,quartz tourmaline,pyrite at 223.	Pyritic - Neot. on fractures
[illegible]	10		339 22	.06%		24	23				
231-241		95						Quartz-monzonite	Oxidized-rocks highly fractured and with heavy clay moderate goethite	Quartz, sericite,pyrite with tourmaline disseminated and in vnlts. Quartz and calcite vn. at 232.	Pyritic - Neot. on fractures
[illegible]	10		339 23	.18%		14	18				
241-258		90						Quartz-monzonite	Oxidized to 250 - partially oxidized below. Continues fractured- and sheared 244-250. Hi clay on fractures.	Quartz,sericity,pyrite with tourmaline dissemin- and in vnlts. Calcite units 251.	Pyritic- weak chrysocolla and Neot. 243-248. Weak disseminated cp and fibrous malachite and neotocite 252-255
[illegible]	10		339 24	.20%		10	34				
258-268		90						Quartz-monzonite	Totally oxidized to 265, partially oxidized below - rocks highly fractured but not sheared. Heavy eoethite and clay.	Quartz,sericite,pyrite with tourmaline disseminated and in vnlts.	Pyritic, Neot. on fractures 5-10% py 266-267
[illegible]	10		339 25	[illegible]		12	[illegible]				
[illegible]	10		339 26	[illegible]		16	34				
[illegible]	10		339 27	[illegible]		18	20				
[illegible]	10		339 28	[illegible]		5	21				
268-300		100						Shear-zone	Rocks highly sheared and mylonized.	Sericite, clay, serpentine quartz,tourmaline,pyrite vnlts. areal the rocks somewhat.	Pyritic-disseminated and vnlts. Much mylonized
300-310	10	100	339 29	[illegible]		[illegible]	36	Quartz-tourmaline,pyrite, breccia. Quartz sericite,schist	Fine grained schistose rocksbrecciated and arealed with quartz-tourmaline.	Silicic with tourmaline-pyrite	5-10% disseminated and vn.py.
310-320	10		339 30	74		18	48				
310-330		100						Quartz-eye schist	Fine grained quartz chlorite,sericite, schist, with quartz eyes 1-5mm. plagioclase	Quartz veins with weak quartz, sericite halos 1-3mm.	Disseminated vn. py. (approx. 2%) Magnetite clost, weak disseminated at 328.
320-330	10		339 31	85		20	49				

District rtzsite Hole Number 1 - 4 Page Num' 4

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
330-339		100						Quartz eye schist	"	Quartz veins and weak biotized vnlts.	Disseminated and vein pyrite (1-2%) Vein weak disseminated cp. Spec. hematite unit at 339.
[illegible]	10		33932	82		[illegible]	57				
[illegible]	10		33933	41		12	45				
[illegible]	10		33934	41		13	45				
339-377		100						Quartz eye schist	Quartc chlorite,sericite schist. Rocks sheared with clay and hematite 341-342-sheared with mylonized sulfides 353 rocks quite fractured but well arealed	Chloritic-weak biotite on fractures. Moderate magnetite to 340, 351-356, weak magnetite 366-368 from 368 increase in quartz,sericite with disseminated and vnlts. of magnetite and weak chlorite. Breccia zones with quartz tourmaline, pyrite.	Weak disseminated pyrite thin quartz pyrite veins. (up to ½") with moderate-strong quartz sericite halos.
[illegible]	0		33935	35		26	46				
[illegible]	0		33936	45		5	14				
[illegible]	10		33937	153		5	56				
377-399		100						Quartz eye schist	"	Increase in sericite. Less chlorite-377-384, then increase in chlorite, quartz, pyrite vns. with halos continue. Some with late stages tourmaline. Rocks weak magnetite	Weak disseminated and vein pyrite
[illegible]	10		33938	64		15	54				
[illegible]	10		33939	176		26	68				
[illegible]	10		33940	61		16	58				
[illegible]	10		33941	54		16	62				
[illegible]	10		33942	69		18	51				
[illegible]	10		33943	36		16	46				
399-450		100						Quartz eye schist	Quartz,chlorite,sericite eip.schist. Rocks remain weak magnetic. Breccia zone (up to 6") with quartz,tourmaline, pyrite. Rocks sheared weak erg at 440. Strange shear and rocks highly arg. and chlorite 447-449. Strong quartz-tourmaline at 400'.	Fractures and vnlts. become increasingly chlorite,epi,pyrite with chlorite rather than quartz,sericite halos. A few quartz, tourmaline pyrite vnlts. remain with quartz sericite, halos. Weak hematite on open fractures	Weak disseminated and moderate to strong vein pyrite
[illegible]	10		33944	43		24	52				
[illegible]	10		33945	22		14	49				
450-574		100						Quartz eye schist	Rocks increase in chlorite and epi. Weak shear zone 500-501, 504-505.	Fractures and vnlts. with quartz, chlorite,epi, pyrite continue. Epi flooding with strong chlorite,pyrite on fracture	Pyrite predominantly on fractures and vnlts.
[illegible]	10		33946	31		12	56				
[illegible]	10		33947	13		16	48				
[illegible]	10		33948	22		12	56				

District Quart e

Hole Number - 4

COPY

Page Numb 5

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Mo	[illegible]	Zn	Rock Type	Rock Description	Alteration	Mineralization
[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]			and veins. begins at 478	
[illegible]	4		[illegible]	[illegible]		[illegible]	[illegible]			continues to end of hole.	
										Tourmaline continues on	
										late fracture.	

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-5
Spudded 4-2-75
Completed 4-25-75
Total Depth 269'
Driller L. Moore
Logged By B. Leedy

County Yuma State Arizona
Claim Zolos #33 Sec 31 T. 4N R. 20W.
Elevation 1040'
Hole Size NX
Core Size NX.
Hole Angle -45°
Collar Coords. _____ N.
_____ E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu ppm	%Zn ppm	%Pb ppm	% Mo ppm	oz.Ag	oz.Au		Gross Value
0 - 30	30	420	24	30	12				
40	10	228	22	16	14				
50	10	146	8	10	6	0.08	—		
60	10	160	10	12	12				
70	10	134	28	12	6				
80	10	98	14	8	6				
90	10	88	26	10	6				
100	10	96	19	10	4	0.11	.001		
110	10	98	12	6	8				
120	10	112	11	4	8				
130	10	100	12	6	7				
140	10	100	10	8	12				
150	10	58	32	22	10	0.07	.001		
160	10	62	20	10	8				
170	10	66	28	14	11				
180	10	70	22	74	44				
190	10	74	21	42	16				
200	10	70	19	70	11	0.06	—		
210	10	82	21	48	12				
220	10	700	35	120	14				
230	10	190	34	22	12				
240	10	200	54	20	13				
250	10	252	72	32	22				
260	10	184	66	28	12				
269	9	200	68	14	15	0.09	.002		

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number G-5
Spudded
Completed
Total Depth
Driller L. Moore
Logged By R. Ahern

County Yuma State Ariz.
Claim Collet #33 Sec 31 T. 4N R. 20W
Elevation 1040'
Hole Size
Core Size
Hole Angle -45°
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu	%Zn	%Pb	% Mo	oz.Ag	oz.Au	[illegible]	~~Gross Value~~	
0-20						T		T	—	33951
									—	
						0.08	Tr	18	—	33952
-50	10					—	—	—		33953
60	10									33954
70	10									33955
80	10					0.11	.001	13		33956
90	10									33957
100	10									33958
110	10									33959
120	10									33960
130	10					0.07	.001	26		33961
140	10									33962
150	10									33963
160	10									33964
170	10									33965
180	10					0.06	Tr	39		33966
190	10									33967
200	10									33968

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

Assay Log

District Quartzsite

Hole Number Q-5

Page 2

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag oz/T	Au oz/T	PPM U_3O_8	Gross Value	
210	10									33969
220	10									33970
230	10									33971
240	10					0.09	.002	11		33972
250	10									33973
260	10									33974
269	9									33975

COPY

KERR-McGEE CORPORATION

COPY

District Quartzite
Hole No. Q-5
Spudded 04/02/75
Completed 04/16/75
Total Depth 269'
Driller Joy Manufacturing
Logged By W. P. Leedy

County Yuma State Arizona
Claim Sec. 31 T. 4 N. R. 20 W.
Elevation
Hole Size
Core Size NX
Hole Angle
Collar Coords.

Depth	Int.	Core Rcvy %	Samp. No.	Assays ppm Cu	Assays ppm Mo		Rock Type	Rock Description	Alteration	Mineralization
25	25							Overburden		
30	5	80	33951	420	12		Quartz-Monz.	Oxidized=meta-stable ortho- (30-40%) over short intervals. 1-3% dissem. & un.tourmaline-2' of rubble-clay on fractures		
40	10	95	33952	228	14			Oxidized-pred. lens of pyrite - hem halos. short intervals of stable ortho. 1-2% dissem. tour. White clay on fractures 2" silic at 38'.		
50	10	95	33953	146	6			As above-jar a/pyrite 40-44-Rubble 42-46- Increase in clay on fracture.		
60	10	80	33954	160	12			2" qtz sericite w/15% voids of hem a/pyrite. Remainer of interval as above-except highly fracture-Rubble 52-60'		

District rtzite COPY Hole Number 5 COPY Page Numt 2

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Assays Mo	Rock Type	Rock Description	Alteration	Mineralization
70	10	80	33955	134	6	Quartz-Monz.	Rubble to 66'. 66-67' hem. relics a/py. (10-15%)Rock has 40% musco-vite/sericite w/stable ortho-fresh enhedral py less frac.(10-15/ft)py- & qtz. tour.on frac. Less clay on open frac.		
80	10	100	33956	98	6		Strong qtz-ser-py-alt. to 75'-QM is fresher - stable ortho(30%)-chlor-ite(5-10%)1-2% dissem py most in mafic sites-Qtz tour on frac. Occassional Mu dendrites on frac.		
90	10	100	33957	88	6		Highly frac. w/increase in clay 82-87',totally oxid. w/hem & goe a/py some jarosite-less oxid below 88', goe&nontronite on frac. Py dissem in mafic sites-now chloritized		
100	10	100	33958	96	4		Incr.in sericite making rock wkly schistose to 95', Below 95' incr.in chlor-(10%)less dissem py-stable ortho(30%)		
110	10	100	33959	98	8		Wkly py-chlor-QM contin to 105',105-109' qtz.py vnlts. up to 1/4"-Oxid hem a/py.(10% py-10% ser in vns)Below 109' incr.qtz-ser-clay - dissem tour.		

District Quartzite COPY Hole Number Q-5 COPY Page Num 3

Depth	Int.	% Core Rcvy	Samp. No.	Assays ppm Cu	Assays ppm Mo			Rock Type	Rock Description	Alteration	Mineralization
120	10	100	33960	112	8			Quartz-Monz.	Continues qtz-ser-clay to 116',Heavy py frac & vns 112-115',w/hem a/py Frac 116' inc chlor (5-10%) dissem py stable orthoclase (30%)		
130	10	100	33961	100	7				Chloritized(5-10%)QM continues to 125',less than 1%py.wk goe on frac.from 125'inc.frac clay-inc goe a/py.		
140	10	80	33962	100	12				Rubble-interval highly frac w/hv goe a/py Heavy clay.		
150	10	90	33963	58	10				Rock highly frac but w/fresh py-qtz-ser-chlor py w/qtz py tour units.		
160	10	90	33964	62	8				Continues as above w/ more intense shearing-inc. in sericite & clay from 154' less chlor.		
170	10	100	33965	66	11				Continues as above-frac & sheared to 166', from 166' rock more massive w/intrusive character-but remain qtz-ser-py-assemblage-2/2-3% chlor locally heavy py on frac-occassional cp grains-incr. in tourmaline.		
180	10	100	33966	70	44				As above-less chlor-incr. in tour.		

District Hartzite COPY Hole Number -5 COPY Page Nur 4

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Assays Mo			Rock Type	Rock Description	Alteration	Mineralization
190	10	95	33967	74	16			Quartz-Monz. alteration	As above-tour halos on py vns-mylonized sulfides 184,186-187'-inc.in clay.		
200	10	90	33968	70	11				Same as above-rubble 191-193', mylonized 198' less py on vns-more dissem. white clay on frac.		
210	10	100	33969	82	12				Rock continue w/intrusive character but altered to qtz-ser-py-tour.		
230	10	100	33970	700	14				Same as above w/strong-somewhat vuggy qtz-tour py wwl-wle'. Rock incr. sheared-becoming mylonized below 217'.		
230	10	90	33971	190	12				As above-mylonized & strongly sheared to 229' Euhedral py cubes(to 5mm) in qtz-ser-tour-sch @ 225'. Intrusive character below 228' alt.to qtz-ser-tour-py w/1-2% chlor.		
240	10	100	33972	200	13				As above from 228-235' Rubble 235-237'. From 237' dark chlor-"tectonic" schist w/dissem pyrite 2-3%.		
250	10	100	33973	252	22				Tectonic fabric through out. Highly chloritic to 243'w/dissem & vn py-wk.hem on frac. From 243'-qtz-ser-chlor-py-schist. Locally 10% dissem. pyrite.		

District ___ Quartzite ___ COPY Hole Number ___ 2-5 ___ COPY Page Num 5

Depth	Int.	% Core Rcvy	Samp. No.	Assays Cu	Assays Mo			Rock Type	Rock Description	Alteration	Mineralization
260	10	80	33974	184	12			Schist	Entire interval strongly mylonized to chlorite-sericite and mylonized pyrite.		
269 T.D.	9	100	33975	200	15				As above-Sericite below 266' - 8" white qtz. vn @ 261', & 4" white qtz-chlor @ 265'.		
TOTAL DEPTH											

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-6
Spudded 4-26-75
Completed 5-30-75
Total Depth 1440'
Driller L. Moore
Logged by B. Leady

County Yuma State Arizona
Claim Zalco #13 Sec. 31 T. 4N R. 20W.
Elevation 1075
Hole Size NX
Hole Angle ~~45~~ -45° S 50°W.
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu ppm	%Zn ppm	%Pb ppm	%Mo ppm	oz. Ag.	oz. Au		Gross Value
0-20	20	180	54	24	10				
30	10	168	18	16	14				
40	10	164	24	128	14				
50	10	188	14	25	8	0.04	—		
60	10	138	18	16	6				
70	10	140	16	16	8				
80	10	640	32	32	40				
90	10	284	26	18	10				
100	10	176	24	16	6	0.04	.001		
110	10	132	34	17	5				
120	10	434	56	15	6				
130	10	442	14	18	6				
140	10	166	46	18	6				
150	10	540	58	14	4	0.04	.002		
160	10	122	24	20	10				
170	10	182	50	20	8				
180	10	104	24	18	8				
190	10	106	26	22	8				
200	10	146	42	22	5	0.05	.001		
210	10	128	36	19	7				
220	10	238	34	24	5				
230	10	150	28	26	3				
240	10	162	36	22	4				
250	10	112	36	36	4	0.06	—		
260	10	136	20	16	8				
270	10	290	54	74	8				
280	10	328	32	30	9				
290	10	260	24	20	12				
300	10	412	16	22	22	0.11	—		
310	10	120	16	20	24				
320	10	140	28	22	10				
330	10	128	32	16	10				
340	10	166	20	20	10				
350	10	148	20	18	8	0.10	—		
360	10	92	34	16	8				
370	10	116	42	12	6				
380	10	112	36	12	8				
390	10	86	30	12	8				
400	10	140	24	16	20	0.04	.001		

*Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum per pound; silver per ounce; gold per ounce.

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-4

Page 2

GROSS VALUE IN SULFIDE MINERALS*

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag	Ag		Gross Value	
400 - 410	10	94	54	16	8					
420	10	148	48	32	9					
430	10	130	24	28	6					
440	10	146	34	24	4					
450	10	126	28	20	6					
460	10	150	20	19	6					
470	10	142	38	34	6					
480	10	112	36	54	6					
490	10	115	40	58	8					
500	10	124	24	23	10	0.07	.003			
510	10	104	48	16	6					
520	10	258	82	26	7					
530	10	110	54	30	4					
540	10	204	28	17	12					
550	10	120	10	16	12					
560	10	184	10	16	16					
570	10	194	14	16	10					
580	10	320	10	14	6	0.08	.001			
590	10	1980	10	14	80					
600	10	428	12	22	12					
610	10	1800	8	13	10					
620	10	3800	22	23	4					
630	10	1800	14	27	14	0.17	.002			
640	10	304	10	17	6					
650	10	160	9	20	12					
660	10	98	9	6	8					
670	10	104	6	8	14					
680	10	126	8	14	8					
690	10	144	10	8	8					
700	10	120	6	4	14					
710	10	82	17	12	14					
720	10	404	26	18	34					
730	10	96	20	14	4					
740	10	86	18	12	4					
750	10	86	20	14	4					
760	10	88	12	8	4					
770	10	154			3					
780	10	298			6					
790	10	252			6					
800	10	100			2					
810	~~10~~	~~100~~			~~4~~					
820	10	122			4					
830	10	92			-1					
840	10	78			2					

*Gross value calculated from copper ¢/pound; lead ¢/pound; Zinc ¢/pound; molybdenum $ /pound; silver $ /ounce; and gold $ /ounce.

KERR-McGEE CORPORATION
Assay Log

District Quartzsite
Hole Number Q-6

Page 3

GROSS VALUE IN SULFIDE MINERALS*

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag	Ag		Gross Value	
840-850	10	62			5					
860	10	84			4					
870	10	114			2					
880	10	102			12					
890	10	98			10					
900-910	10	76			-1					
920	10	86			-1					
930-940	10	96			-1					
950	10	104			-1					
960	10	88			-1					
970-980	10	88			-1					
990-1000	10	88			-1					
1010	10	1400			12					
1020	10	112			18					
1030	10	32			10					
1040	10	64			10					
1050	10	38			8					
1060	10	30			10					
1070	10	44			12					
1080	10	36			14					
1090	10	78			10					
1100	10	20			12					
1110	10	28			13					
1120	10	62			14					
1130	10	34			20					
1136	6	38			24					

*Gross value calculated from copper ¢/pound; lead ¢/pound; Zinc ¢/pound; molybdenum $ /pound; silver $ /ounce; and gold $ /ounce.

Assay Log

District Quartzsite
Hole Number Q-6
Spudded
Completed
Total Depth
Driller L. Moore
Logged By R. Ahern

County Yuma State Arizona
Claim Gilles #33 Sec 31 T. 4N R. 20W
Elevation 1075'
Hole Size
Core Size
Hole Angle -45° S.50°W
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu	%Zn	%Pb	% Mo	oz.Ag	oz.Au	PPM U3O8	Gross Value	
										33976
										33977
						0.04	Tr	21		33978
50										33979
60	10									33980
70	10									33981
80	10					0.04	.001	23		33982
90	10									33983
100	10									33984
110	10									33985
120	10									33986
130	10					0.06	.002	26		33987
140	10									33988
150	10									33989
160	10									33990
170	10									33991
180	10					0.05	.001	46		33992
190	10									33993
200	10									33994

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

KERR-McGEE CORPORATION

Assay Log

District Quartzsite
Hole Number Q-6
Spudded
Completed
Total Depth
Driller L. Moore
Logged By R. Ahern

County Yuma State Arizona
Claim Patent #33 Sec 31 T. 4N R. 20W
Elevation 1075'
Hole Size
Core Size
Hole Angle -45° S.50°W
Collar Coords. N.
E.

Gross Value in Sulfide Minerals*

Hole Depth	Interval	%Cu	%Zn	%Pb	% Mo	oz.Ag	oz.Au	PPM U3O8	Gross Value	
										33976
										33977
						0.04	Tr	21		33978
50										33979
60	10									33980
70	10									33981
80	10					0.04	.001	23		33982
90	10									33983
100	10									33984
110	10									33985
120	10									33986
130	10					0.06	.002	26		33987
140	10									33988
150	10									33989
160	10									33990
170	10									33991
180	10					0.05	.001	46		33992
190	10									33993
200	10									33994

* Gross value calculated from copper ¢ per pound; lead ¢ per pound; zinc ¢ per pound; molybdenum $ per pound; silver $ per ounce; and gold $35.00 per ounce.

Assay Log

District Quartzsite
Hole Number Q-6

Page 2

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag OZ/T	Au OZ/T	PPM U_3O_8	Gross Value	
200 - 210	10									33995
220	10									33996
230	10					0.06	Tr	18		33997
240	10									33998
250	10									33999
260	10									34000
270	10									34601
280	10					0.11	Tr	19		34602
290	10									34603
300	10									34604
310	10									34605
320	10									34606
~~330~~ 350	10					0.10	Tr	17		34607
340	10									34608
350	10									34609
360	10									34610
370	10									34611
380	10					0.04	.001	16		34612
390	10									34613
400	10									34614

Assay Log

District Quartzite

Hole Number Q-6

Page 3

Hole Depth	Inter -val	Cu	Zn	Pb	Mo	Ag oz/T	Au oz/T	PPM U_3O_8	Gross Value	
400-410	10									34615
420	10									34616
430	10									34617
440	10									34618
450	10									34619
						0.07	.003	23		
460	10									34620
470	10									34621
480	10									34622
490	10									34623
500	10									34624
510	10									34625
520	10									34626
530	10									34627
540	10									34628
						0.08	.001	12		
550	10									34629
560	10									34630
570	10									34631
580	10									34632
590	10									34633
600	10									34634
610	10					0.17	.001	17		34635
620	10									34636
630	10									34637

Assay Log

District Quantzsite

Hole Number Q-6

Page 4

Hole Depth	Inter -val	Cu PPM	Zn	Pb	Mo PPM	Ag	Au		Gross Value	
										34638
										34639
										34640
										34641
										34642
										34643
										34644
										34645
										34646
										34647
										34648
										34649
										34650
		156			3					34651
		298			6					34652
		252			6					34653
		100			2					34654
		122			?				?	34655
		122			4					34656
		92			<1					34657
		78			2					34658
		62			5					34659
		184			4					34660
		[illegible]								34661
										34662

KERR-MCGEE CORPORATION

Assay Log

District Quartzsite

Hole Number Q-6

Page 5

Hole Depth	Inter -val	Cu PPM	Zn	Pb	Mo PPM	Ag	Au		Gross Value	
		114			2					34661
		102			12					34662
		98			10					34663
		?			?				?	34664
		76			<1					34665
		86			<1					34666
		?			?				?	34667
		96			<1					34668
		104			<1					34669
		88			<1					34670
		?			?				?	34671
		88			<1					34672
		?			?				?	34673
		88			<1					34674
1000 - 1010	10	1400			12					34675
1020	10	112			18					34676
1030	10	32			10					34677
1040	10	64			10					34678
1050	10	38			8					34679
1060	10	30			10					34680
1070	10	44			12					34681
1080	10	36			14					34682
1090	10	78			10					34683
1100	10	20			12					34684
										34685

Assay Log

District Quartzsite

Hole Number Q-6

Page 6

Hole Depth	Inter -val	Cu PPM	Zn	Pb	Mo PPM	Ag	Au		Gross Value
1100 - 1110	10	28			13				
1120	10	62			14				
1130	10	34			20				
1136	6	38			24				

COPY

KERR-McGEE CORPORATION

COPY

District Quartzsite
Hole No. Q - 6
Spudded
Completed
Total Depth 1142'
Driller Joy Mfg.
Logged By W. P. Leedy

County Yuma State Arizona
Claim Sec. 31 T. 4N R. 20W
Elevation
Hole Size
Core Size NX
Hole Angle
Collar Coords.

Depth	Int.	Core Rcvy	Samp. No.	Assays PPM Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
0-19	19		33976	110	10	24	54		Overburden		
19-30	11	100%	339787	168	14	16	18	Quartz Monzonite Alteration	Schistose quartz monzonite strongly silicified with heavy development of muscovite (sericite, hematite boxwork and relics on pyrite. (10-20% from 26'-29'). Rocks totally oxidized.		
30-40	10	100%	33978	168	14	125	26		As above with increase in clay. Rocks totally argillized 31', 38' and 39'. Chlorite clay rubble 32'-35'.		
40-50	10	100%	33979	188	8	25	14		As above, rocks more strongly silicified, clay remains on open fractures but less dessimination. Partially oxidized, some fresh pyrite (2-5% disseminated)		
50-60	10	100%	33980	138	6	16	18		As above, jarosite, hematite, and pyrite on fractures. Strong clay 48-51', 59-60'.		

District Quartzite COPY Hole Q - 6 Page 2 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									Rocks partially oxidized and pyrite grained, corroded and embayed occasional bornite tarnish on pyrite.		
60-70	10	100%	33981	140	8	16	16		Rocks less silicified, but strongly sericitic 63'-68'. Stable orthoclase (10-20%) clay continues on open fractures. Weak disseminated tourmaline (1-2%)		
70-80	10	100%	33982	640	40	32	32		As above to 75'. Shear zone 75'-77' with rocks mylonized. From 77' rocks less fractured denser with fresher feldspar (stable orthoclase 20-30%) No hematite weak goethite in fracture. Decrease in pyrite (1-2%) Very weak copper oxide at 77'.		
80-90	10	95%	33983	284	10	18	26		Dense quartz monzonite, with stable (grey) feldspars. From 84' increase in chlorite (disseminated 1-2% and on fractures). Weak bornite tarnish and disseminated pyrite. Bornite with pyrite (1:4) on fracture 89'		
90-100	10	100%	33984	176	6	16	24		Quartz monzonite with increase in chlorite		

District Quartzite COPY Hole Q - 6 Page 3 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									and weak epidote on		
									fractures. Weak (2-3%)		
									chlorite and very weak		
									(<1% disseminated cp		
									and cc. Copper sulfides		
									locally stronger on quartz		
									pyrite vein at 93'.		
									Quartz monzonite appears		
100-110	10	?	33885	132	5	17	34		fresh, with stable		
									feldspars (possibly some		
									relic orthoclase)		
									Disseminated chlorite in		
									what appears to be mafic		
									sites. Most sulfides with		
									chlorite.		
110-120	10	100%	33886	434	6	15	56		Quartz monzonite, quartz		
									sericite, pyrite, stable		
									orthoclase (30%) weak		
									clouded chlorite mafics-		
									2% disseminated tourmaline		
									in mafic sites. Quartz,		
									sericite micro veinlets		
									continue 40-50'. Irregu-		
									lar quartz, pyrite,		
									tourmaline veins (½-2")		
									at 113'-116'-117' and		
									118'. Weak cc tarnish		
									on pyrite. Partially		
									oxidized from 114' with		
									clay and sericite on		
									open fractures.		
120-130	10	100%	33887	442	6	18	14		Quartz monzonite highly		
									fractured and sheared/		
									oxidized with goethite		
									and jarosite and pyrite		
									Heavy clay on fracture		
									and throughout rock		
									Occasional specks of		

District Quartzite COPY Hole Q-6 Page 4 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									Cu Ox in fractures and very weak ce tarnish on few remaining pyrite xlc.		
130-140	10	95%	33488	166	6	18	46		Broken and oxidized as above to 135'. Then less fractured, non-oxidized quartz monzonite as above, with stable orthoclase, weak chlorite and quartz, sericite veinlets with bleached haols.		
140-150	10	100%	33489	540	4	14	58		As above, hairlike quartz, sericite veinlets continue. Rock increase silifiel and increase in disseminated tourmaline from 146'. Heavy quartz, sericite, pyrite (10%) 149'-150'.		
150-160	10	100%	33490	122	10	20	24		Very heavy pyrite (20-30%) with quartz, sericite 150-151'. Then as above, quartz monzonite with stable orthoclase, weak chlorite 1-2% disseminated pyrite, thin quartz, sericite veinlets (10-20')		
160-170	10	100%	33491	182	8	20	50 8		As above to 162'. 162'-166' Strongly sericitic 40-50% schist with quartz, m. (1-2%) Trace Cu Ox at 164'. From 166' quartz monzonite as above but increased		

District Quartzite COPY Hole 0 - 6 Page 5 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									silification-less chlorite		
									increase in clouded		
									feldspars, Increase		
									fractures and sheared		
									169'-170' with increase		
									in clay.		
170-180	10	100%	33982	104	8	19	24		Strongly fractured and		
									sheared mylonized, increase		
									in tourmaline on veinlets.		
180-190	10	100%	33983	106	8	22	26		Continues sheared, increase		
									in clay, slight decrease		
									in pyrite, fragments of		
									quartz monzonite as above.		
190-200	10	90%	33984	146	5	22	42		Continues sheared,		
									mylonized. Fragments of		
									quartz monzonite-quartz		
									sericite.pyrite. Oxidized		
									with much rubble from		
									196' increase in clay.		
200-210	10	95%	33985	128	7	19	36		Sheared, rocks clay		
									(sericite and goethite		
									and pyrite) Shear falls		
									40°-60° from axis of core.		
210-220	10	90%	33986	138	5	24	34		Continues sheared as above.		
220-230	10	90%	33987	150	3	26	25		Sheared almost total clay		
									and sericite with quartz,		
									tourmaline, goethite and		
									pyrite.		
230-240	10	70%	33988	162	4	22	36		As above, some larger		
									coherent fragments of		
									quartz monzonite-clay		
									sericite. Mostly rubble.		

D. .ict Quartzite COPY Hole Q - 6 Page 6 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
240-250	10	90%	33899	122	4	36	26		Less sheared but still highly fractured. Fragments of quartz monzonite with stable orthoclase, weak chlorite (3-5%) Oxid-sulfides. Weak clay sericite on fractures.		
250-260	10	95%	34000	136	8	16	20		Highly sheared, mylonized again, with heavy clay sericite.		
260-270	10	80%	34001	290	8	24	54		Less sheared but continues highly fractured. Pebbly rubble in quartz-clay matrix. 260'-262'. Fragments include quartz and silicified quartz monzonite 263'-267' quartz, chlorite, wericite, feldspar (argillized) schist. From 267' silicified and argillized quartz monzonite.		
270-280	10	100%	34002	328	9	30	32	Schist and Quartz Monzonite	As above to 273'. Then quartz, chlorite, sericite schist, with feldspar relics. From 276' increased silicified with less chlorite. Interval partially oxidized.		
280-290	10	95%	34003	260	12	20	24	Schist	Increase in fractures and shearing. Rocks have quartz monzonite texture to 284'. Rubble 284-285' From 285' rocks become sericitic (40-50%) schist with quartz porphroblacts		

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									and disseminated pyrite		
									(1-3%) Totally oxidized.		
290-300	10	95%	34604	412	22	22	16	Schist	Sericitic schist continues		
									Increase in pyrite (oxid)		
									and tourmaline veinlets.		
									Considerably broken with		
									much rubble. Highly		
									silicified 299'		
300-310	10	95%	34605	120	24	20	16		Strongly silicified rocks		
									continue to 303' then rocks		
									almost wholly sericite-		
									pyrite. Increase in pyrite		
									(5-7%) Locally 20-30%		
									Rocks strongly sheared		
									with mylonized sulfides		
									below 307'. Total quartz		
									tourmaline, pyrite 309'-310'		
310-320	10	100%	34606	140	10	22	28		Rocks become less schistose		
									but continue as strong		
									quartz, sericite, pyrite		
									altered with tourmaline		
									disseminated and fractured.		
									Weak sericite halos on		
									quartz, tourmaline		
									pyrite veinlets.		
320-330	10	100%	34607	128	10	16	32		As above, less fractured		
									and increase silicified		
									from 328'.		
330-340	10	100%	34608	166	10	20	20	Quartz	Continue strong quartz,		
								Sericite	sericite pyrite altered		
								Pyrite	with tourmaline disseminated		
									and as veinlets. Disseminated		
									zone outward from veinlets.		
									Sheared 336'-337' original		

D ·ict Quartzite COPY Hole 0 - 6 Page 8 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									rock was probably quartz monzonite		
340-350	10	70%	346 07	148	8	18	20		As above. 345'-346' mylonized zone fig. sericite schist with euhedral cubes of pyrite (1-2%) Less tourmaline this interval. (3' of core lost 340'-345')		
350-360	10	95%	24610	92	8	16	34	Quartz, Pyrite Tourmaline Calcite	Quartz, sericite, pyrite as above but rocks become increasingly sheared and mylonized with thin $CaCO_3$ veinlets 357' Dark sericite or chlorite 358' Fragmented sericite schist as above Follows incline of 55°		
360-370	10	100%	346 11	116	6	12	42		Continues quartz sericite pyrite Strongly schistose (45°) 360'-363'. 364'-366' granular, other intervals (quartz, monzonite?) weak chlorite (1-2%). Decrease in tourmaline (<1-2%)		
370-380	10	100%	346 12	112	8	12	36		Quartz, sericite, pyrite with increase in clay. Dark green sericite on shears. Increas in pyrite on fractures Tourmaline 3-5%		
380-390	10	100%	24613	86	8	12	30		As above, clay somewhat heavier on fractures. Less pyrite on fractures.		

District Quartzite COPY Hole Q - 6 Page 9 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
390-400	10	100%	34614	140	20	16	24		As above, increase in tourmaline fractures, some shearing and mylonization. Heavy pyrite (20-30%) over 2" intervals at 398' and 400'. Muscovite, quartz, tourmaline with pyrite at 400'.		
400-410	10	100%	34615	94	8	16	54		Quartz, sericite, pyrite as abovd. Irregular quartz orthoclase, chlorite margins, veins ½ to 2" at 400'-401'. Increase in pyrite, tourmaline on fractures Tourmaline veinlets with quartz, sericite halos at 410'. Chlorite disseminated and on shears.		
410-420	10	100%	34616	148	9	32	45		Rocks become fig. granular with quartz, orthoclase (untwinned feldspar) and weak chlorite with pyrite and tourmaline disseminated and on fractures. Tourmaline veinlets with quartz sericite halo at 412'. ¼" calcite vein at 416' Increase in quartz sericite, pyrite from 417'.		
420-430	10		34617	130	6	25	24		Continues predominantly quartz, sericite, pyrite decrease in chlorite. Increase in silicification. Quartz, pyrite veins ½" at 425' and 430'.		

District Quartzite Hole 0 - 6 Page 10

COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									Quartz, tourmaline, pyrite (4") at 429'.		
430-440	10	95%	346 15	146	4	25	34	Quartz Sericite Pyrite	Quartz, sericite, pyrite slight increase in chlorite from 435'. Increase in disseminated pyrite (2-3%) Decrease in tourmaline veinlets.		
440-450	10	90%	346 19	126	6	20	28		Quartz, sericite, pyrite more fractured and sheared. Dark sericite on shears. Tourmaline veinlets with quartz, sericite, pyrite halo 440' ½" quartz, pyrite, tourmaline vein at 448' Strongly silicified from 448'with disseminated pyrite (<1%) and tourmaline (1%) shears Incline 40°		
450-460	10	100%	346 20	150	6	14	20		Continues strong slicification with quartz veins 1/16" to 2" and tourmaline veinlets. Light green waxy clay on fracture at 457'. Decrease in pyrites.		
460-470	10	100%	346 21	142	6	34	38		Rocks continue strongly silicified with thin quartz calcite, pyrite, veinlets. Decrease in tourmaline. Dark sericite in shears.		

District Quartzite Hole Q - 6 Page 11

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
470-480	10	100%	34622	112	6	54	36	Schist	Rocks strongly sheared and mylonized, from 472' with increase in sericite, clay, tourmaline, veinlets. Shear follows 40°-20° from axis of core		
480-490	10	100%	34623	115	8	58	40		Rocks continue strongly sheared 3" irregular quartz, orthoclase vein at 485'. Quartz, sericite, pyrite schist 485'-487' chaotic shearing below 487'.		
490-500	10	95%	34624	124	10	23	24		Sheared as above, somewhat more silicified. Less pyrite. Calcite on fractures and irregular pods.		
500-510	10	100%	34625	104	6	16	48		Continues sheared, considerable rubble to 505' from 505'-509' rocks fig. granular quartz, or 2-5% chlorite, 3% pyrite, occasional flakes of cp. Increase silic from 509'.		
510-520	10	90%	34626	258	7	26	82		Rocks strongly sheared again with increase in sericite and chlorite.		
520-530	10	100%	34627	110	4	36	54		As above, occasional relic fragment of fig. granular rocks.		
530-540	10	100%	34628	204	12	17	28		Continues sheared with heavy clay, sericite. 2-6" white "bull" quartz		

District Quartzite COPY Hole Q -6 Page 12 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	%	%	Rock Type	Rock Description	Alteration	Mineralization
									veins purple fluorite		
									with white quartz at 535'		
540-550	10	100%	34629	120	12	16	10		As above becoming increas-		
									ingly silic, from 543'.		
									Breccia with quartz,		
									tourmaline matrix at		
									544'. Rocks have granular		
									texture with strong		
									quartz, sericite, pyrite		
									alteration. Strong		
									sericite from 548'.		
550-560	10	100%	34630	184	16	16	10	Quartz,	Continues granular and		
								Sericite,	strongly sericitic (quartz		
								Pyrite	sericite pyrite) to 557'		
									then increased silicification		
									and increase in tourmaline		
									with quartz calcite veins		
									1/8" to ⅓" with cp		
									clots and occasional blebs.		
560-570	10	100%	34631	194	10	16	14		Quartz sericite pyrite		
									with heavy clay and quartz		
									calcite cp vein to 562'		
									Then rocks become granular		
									with stable orthoclase		
									(30-40%) very weak.		
									chlorite (1-3%) disseminated		
									pyrite (2-3%) and tourmaline		
									(1-2%) to 565'. Then increased		
									argillized with increase		
									in quartz tourmaline.		
570-580	10	100%	34632	320	6	14	10		Increased sheared 568'-		
									571' then granular as		
									above with slight		
									increase in cp.		

District Quartzite Hole 0 - 6 Page 13

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Zn		Rock Type	Rock Description	Alteration	Mineralization
580-590	10	100%	34633	1880	80	14	10	Quartz, Monzonite ?	Granular rocks, quartz, sericite, pyrite with 1:1 cp pyrite ratio. Quartz, tourmaline veinlets at 582' and vuggy ½" quartz, calcite at 583'.		
590-600	10	100%	34634	428	12	22	12		Continues quartz, sericite pyrite, but with decrease in cp 1:5 ratio.		
600-610	10	100%	34635	1800	10	13	8		Quartz, sericite, pyrite with cp continues, short intervals of stable orthoclase (600'-604') Decrease in cp slight increase in pyrite.		
610-620	10	100%	34636	3500	6	23	22		As above increase in fracturing, more mineralization on fractures.		
620-630	10	100%	34637	1800	14	27	14		As above, higher fracture continues, stable orthoclase somewhat less cp (1-2%)		
630-640	10	100%	34638	304	6	17	10		As above, increase in stable orthoclase. Decrease in cp (<<1%) Increase in calcite and clay on fracture especially from 635'-640'.		
640-650	10	100%	34639	160	12	20	9	Quartz Sericite Pyrite	Strong quartz, sericite pyrite, tourmaline disseminated and fractured decrease from		

District Quartzite COPY Hole Q-6 Page 14 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
									643' Increase clay		
									645'-649', predominantly		
									on fracture. Almost no cp.		
650-660	10	100%	34040	78	8	6	8		Quartz sericite pyrite		
									as above. Little or no		
									tourmaline. Increase in		
									fracture and shear from		
									652'. Intense shearing		
									and mylonization from		
									658'. Slight decrease		
									in pyrite. Shear follows		
									incline of 70°		
660-670	10	100%	34041	104	14	8	6		Continues strongly sheared		
									and mylonized to 665'		
									then strong quartz		
									sericite, pyrite. Decrease		
									in disseminated pyrite		
									(<1%) none on fracture.		
670-680	10	100%	34042	126	8	14	8	Quartz Monzonite ?	Strong quartz sericite		
									pyrite to 678'. Then		
									increase in stable		
									orthoclase and tourmaline		
									on fracture and		
									disseminated. Weak hematite		
									halos on disseminated		
									pyrite.		
680-690	10	100%	34043	144	8	8	10		Strong schistose quartz		
									sericite pyrite with		
									tourmaline on fracture		
									and disseminated. Increase		
									sheared 686'689' with		
									strong clay sericite		
									at 688'.		

District Quartzite COPY Hole Q - 6 Page 15 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
690-700	10	100%	34644	120	14	6	6		Continues strong quartz sericite pyrite with 1% disseminated pyrite. Moderately sheared from 698'.		
700-710	10	90%	34645	32	14	12	14		Continues sheared with rubble to 706'. Rocks are granular with quartz orthoclase chlorite (2-5%) with increase in calcite veinlets. Weak hematite with pyrite.		
710-720	10	100%	34646	404	34	18	20		Quartz, chlorite, sericite orthoclase. Rocks granular to weak schistose. cp on fracture at 718'-720'. Calcite vein at 715' with weak hematite and pyrite.		
720-730	10	100%	34647	96	4	14	20		As above with very weak epidote veinlets. Much less pyrite (1%)		
730-740	10	100%	34648	56	4	12	18		As above, increase in pyrite 1-2% on fracture.		
740-750	10	100%	34649	56	4	14	20		As above		
750-760	10	100%	34650	88	4	8	12		Decrease in chlorite (1-3%) Increase in quartz sericite stable orthoclase (10-30%) Quartz vein ½" flanked by chlorite pyrite at 752'.		

District Quartzite COPY Hole Q-6 Page 16 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	%		Rock Type	Rock Description	Alteration	Mineralization
760-770	10	100%	34651	120	3				Quartz monzonite with 1-3% chlorite. Increase in fractures with quartz tourmaline quartz veinlets with quartz sericite halos.		
770-780	10	100%	34652	388	6				As above, somewhat less chlorite orthoclase, quartz, sericite. Increase in quartz veinlets.		
780-790	10	100%	34653	252	6				Quartz monzonite with increase in chlorite (5-10%) Stable orthoclase 10-30%. Slight increase in pyrite with weak hematite halos.		
790-800	10	100%	34654	100	2				Increase fractures with rocks increas silic and sericite. Quartz, tourmaline clay, sericite on fractures at 792'. Open fractures with calcite at 790'-794'-797'-798'. Heavy quartz, calcite, pyrite on vein (1") at 799'.		
800-810	10	95%	No Results In Assay Sheets					Quartz Monzonite	Quartz, sericite, pyrite with stable orthoclase, no mafics, quartz-pyrite veinlets with quartz, sericite halos cut by quartz veins. (Latest) tourmaline cut, quartz pyrite is cut		

District Quartzite COPY Hole 0 - 6 Page 17 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	%	Zn	Rock Type	Rock Description	Alteration	Mineralization
									by calcite which is cut		
									by quartz. Weak hematite		
									halos around pyrite cp.		
810-820	10	90%	34656	122	4				As above, increased		
									silification with increase		
									of pyrite on fracture		
									Less silification with		
									stable orthoclase, weak		
									chlorite from 816'. Weak		
									hematite halos around		
									sulfides.		
820-830	10	100%	34657	92	<1				Quartz monzonite with		
									weak chlorite. Quartz		
									pyrite and tourmaline		
									veinlets. with weak		
									quartz, sericite haols.		
									Weak hematite halos		
									around sulfides.		
830-840	10	100%	34658	78	2				Quartz monzonite-quartz		
									sericite, pyrite Increased		
									fracture and shear with		
									increase in silic. Increase		
									of pyrite on fracture.		
									Highly sheared and		
									mylonized from 839'.		
840-850	10	90%	34659	62	5			Schist	Interval continues		
								Breccia	highly sheared and		
									mylonized. Brecciated		
									and vuggy zones have		
									quartz, calcite vein		
									and calcite lining		
									cavities. Shear follows		
									incline of 55°- 80°.		
									Heavy quartz, soft		
									chlorite from 845'		

District Quartzite COPY Hole Q - 6 Page 18 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
850-860	10	100%	34660	54	4			Breccia	Breccia with quartz chlorite matrix. Soft vuggy vugs and fractures lined with calcite.		
860-870	10	100%	34661/78	114	2				Breccia with quartz chlorite matrix as above. Occasional flakes of cp. Very small (20x to 5cc) Clots of yellow green mineralization possibly autunite.		
870-880	10	100%	34662	102	12				As above ½"-½" pyrite vein parallel to core 874' -876'		
880-890	10	100%	34663	48	10				As above- calcite pyrite vein 887' parallel to core.		
890-900	10	100%	34664	No	Results				Quartz pyrite (20%) Tourmaline vein 890'-891' then as above with fewer breccia fragments and less pyrite.		
900-910	10	100%	34665	26	<1			Schist	As above to 903' then increasingly sheared and more sericitic. Mylonized 904-907'.		
910-920	10	100%	34666	86	<1				Schistose fragmented rock with quartz chlorite sericite matrix. Very weak epidote end of interval. Weak hematite and pyrite.		

L .rict Quartzite Hole Q-6 Page 19

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo			Rock Type	Rock Description	Alteration	Mineralization
920-930	10	100%	34667	No Results					As above rocks less fragmental more schistose (80%)		
930-940	10	100%	34665	96	<1				As above little or no pyrite. Rock becomes increasingly magnetic. Occasional cp.		
940-950	10	100%	34668	104	<1				As above fragmental volcanics with quartz chlorite sericite matrix Very weak magnetite calcite on fracture and in vugs. Most fragments quartz sericite with occasional magnetite.		
950-960	10	100%	34670	58	<1				Rocks as above increase in epidote on fracture ½" calcite vein with very weak epidote and bornite at 954'		
960-970	10	100%	34671	No Results					As above sheared at 974' Increase in epidote (5%)dessiminated and fractured. Decrease in chlorite. Rocks more siliceous from 977'		
970-980	10	100%	34672	88	<1				As above Increase in fractures continue more siliceous.		
980-990	10	100%	34673	No Results					As above Slickenside fracture with hematite at 987'.		

District Quartzite COPY Hole 0-6 Page 20 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Ag	Zn	Rock Type	Rock Description	Alteration	Mineralization
990-1000	10	100%	346 74	88	4			Schist	As above Increase in epidote with local flooding occasional pyrite.		
1000-1010	10	100%	346 75	1700	12				As above High epidote flooding. High chlorite		
1010-1020	10	100%	346 76	112	18				Strong sericite 1011'-1013' with weak (<1%) cp and cc tarnish on pyrite. Then increase chlorite as above. Increase in epidote from 1010'. Calcite in late fractures. Continues moderately sheared.		
1020-1030	10	100%	346 77	32	10				Strong epidote flooding (40-50%) with disseminated euhedral pyrite occasional epidote calcite hematite on late fractures. Massive tourmaline epidote at 1028'. (From TS weak biotite along fractures)		
1030-1040	10	100%	346 78	64	10				Rocks increaslingly sheared. Increase in calcite hematite strong epidote continues. Tourmaline pyrite veins at 1036' increase in sericite below 1036' Vuggy open fracture with quartz pyrite calcite epidote cp at 1037'		

District Quartzite Hole Q-6 Page 21

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	%	Zn	Rock Type	Rock Description	Alteration	Mineralization
1040-1050	10	100%	34679	.38	8+2				Quartz sericite chlorite schist with heavy epidote flooding (to 40%) Tourmaline in veinlets and irregular patches Pyrite (.1-2mm) 1-3% disseminated and in open cavities associated with quartz calcite and epidote tourmaline. Larger clots euhedral Occasional cp. Few open fractures with hematite goethite		
1050-1060	10	100%	34680	30	4+10				As above strong epidote tourmaline to 1054' then decrease in epidote slight increase in quartz sericite. Less pyrite cp. Weak hematite on fractures.		
1060-1070	10	100%	34681	44	12				Weak biotite along fractures and in patches Strong epidote 1060'-1065'. Then decrease with increase in silic Increase in pyrite end of interval cp on fractures 1069'.		
1070-1080	10	100%	34682	36	4+14				Rocks continues strongly fractured and sheared up 1076-1080' Beginning of interval strong epidote flooding as above.		

District Quartzite COPY Hole Q-6 Page 22 COPY

Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Ag	Zn	Rock Type	Rock Description	Alteration	Mineralization
1080-1090	10	100%	346 83	25	10				Rock increse silicified Strong epidote flooding to 1083'. Massive quartz tourmaline pyrite at 1084'. Strongly sheared below with clay hematite on shears. Decrease in pyrite calcite continues on late fractures.		
1090-1100	10	100%	346 84	20	12				Strongly silicified highly sheared Rock continues very weak epidote chlorite.		
1100-1110	10	100%	346 85	25	13				As above Intense shearing 1104' Slight increase in epidote 1" quartz pyrite vein at 1107' with sericite halo. Weak hematite continues on fractures.		
1110-1120	10	100%	346 86	62	14			Schist ?	As above. Strong quartz sericite alteration with weak (1-3%)epidote chlorite. Rocks tend to be more massive than schistose. Very weak pyrite (<<1%) Hematite on fractures. 2" calcite vein at 1101'.		
1120-1130	10	100%	346 87	37	20				Continues strong silicified Increase in epidote chlorite below 1125' Hematite on fractures Sheared from 1129'.		

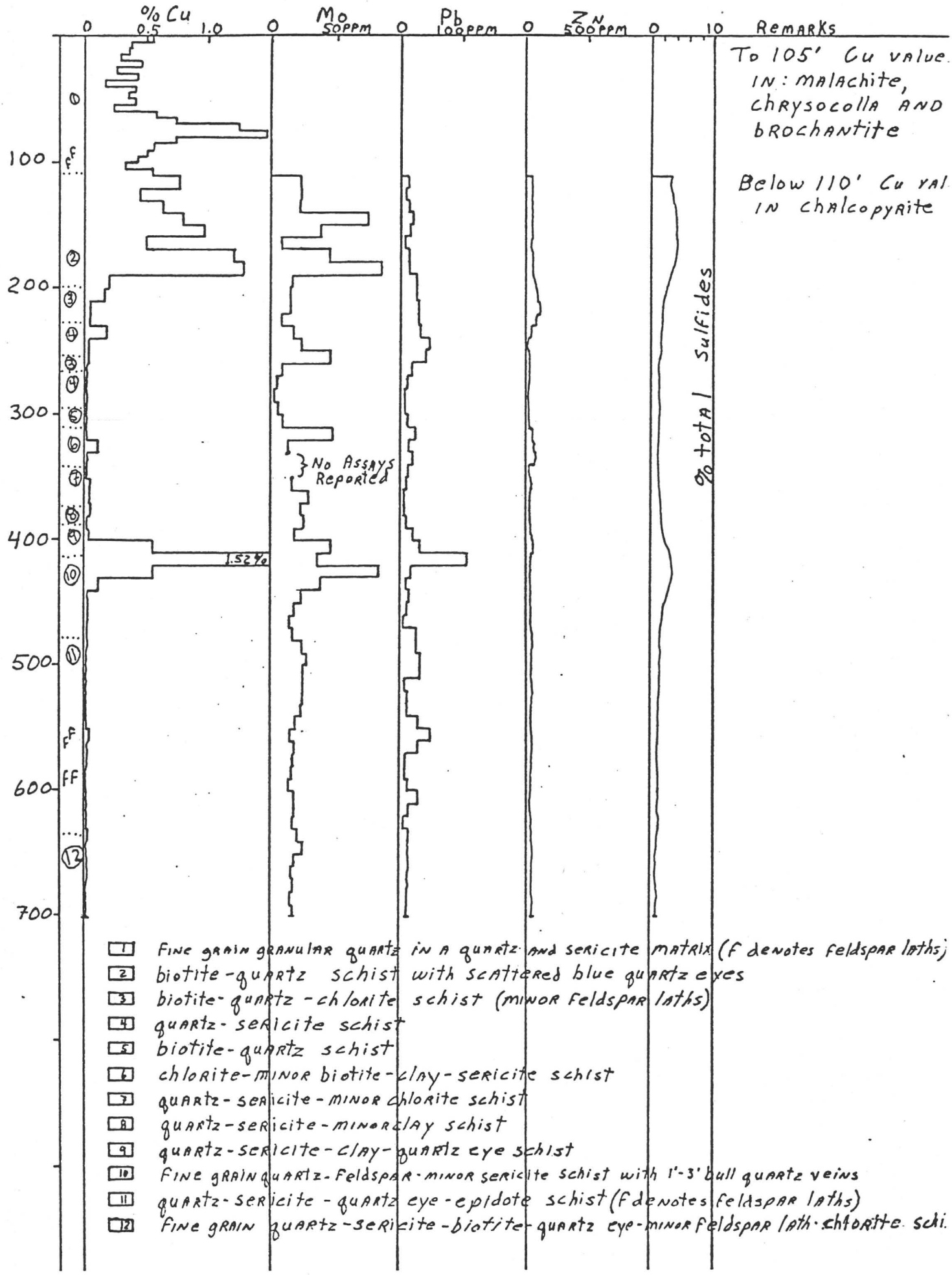
Depth	Int.	Core Rcvy	Samp. No.	Assays Cu	Mo	Pb	Zn	Rock Type	Rock Description	Alteration	Mineralization
1130-1142	12	95%	34688	35	24			Schist	Strongly sheared with much rubble. Increase in sericite clay. Quartz veinlets with epidote halos. Hematite on fractures.		

KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG
SCALE 1 inch = 100 feet

PROJECT Quartzsite
LOCATION Yuma County Arizona

DRILL HOLE NO. Q-1
BEARING
TOTAL DEPTH 700'

DIP 90°
BY B.E.R.



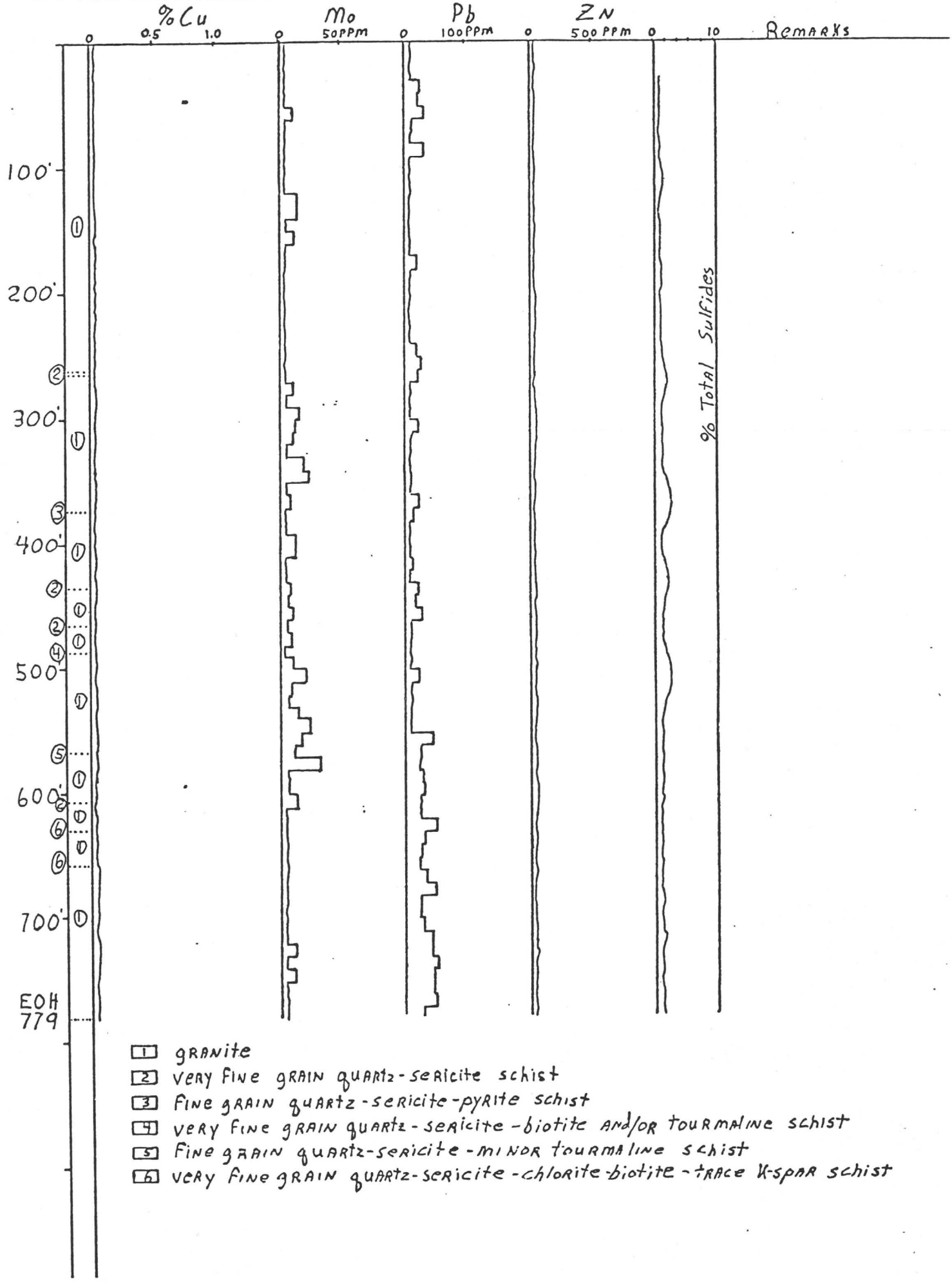
1. Fine grain granular quartz in a quartz and sericite matrix (f denotes feldspar laths)
2. biotite-quartz schist with scattered blue quartz eyes
3. biotite-quartz-chlorite schist (minor feldspar laths)
4. quartz-sericite schist
5. biotite-quartz schist
6. chlorite-minor biotite-clay-sericite schist
7. quartz-sericite-minor chlorite schist
8. quartz-sericite-minor clay schist
9. quartz-sericite-clay-quartz eye schist
10. Fine grain quartz-feldspar-minor sericite schist with 1'-3' bull quartz veins
11. quartz-sericite-quartz eye-epidote schist (f denotes feldspar laths)
12. Fine grain quartz-sericite-biotite-quartz eye-minor feldspar lath-chlorite schi.

KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG
SCALE 1" = 100'

PROJECT Quartzsite
LOCATION Yuma County
Arizona

DRILL HOLE NO. Q-2
BEARING
TOTAL DEPTH 779

PAGE 1 OF 1
DIP 90°
BY B.F.R.

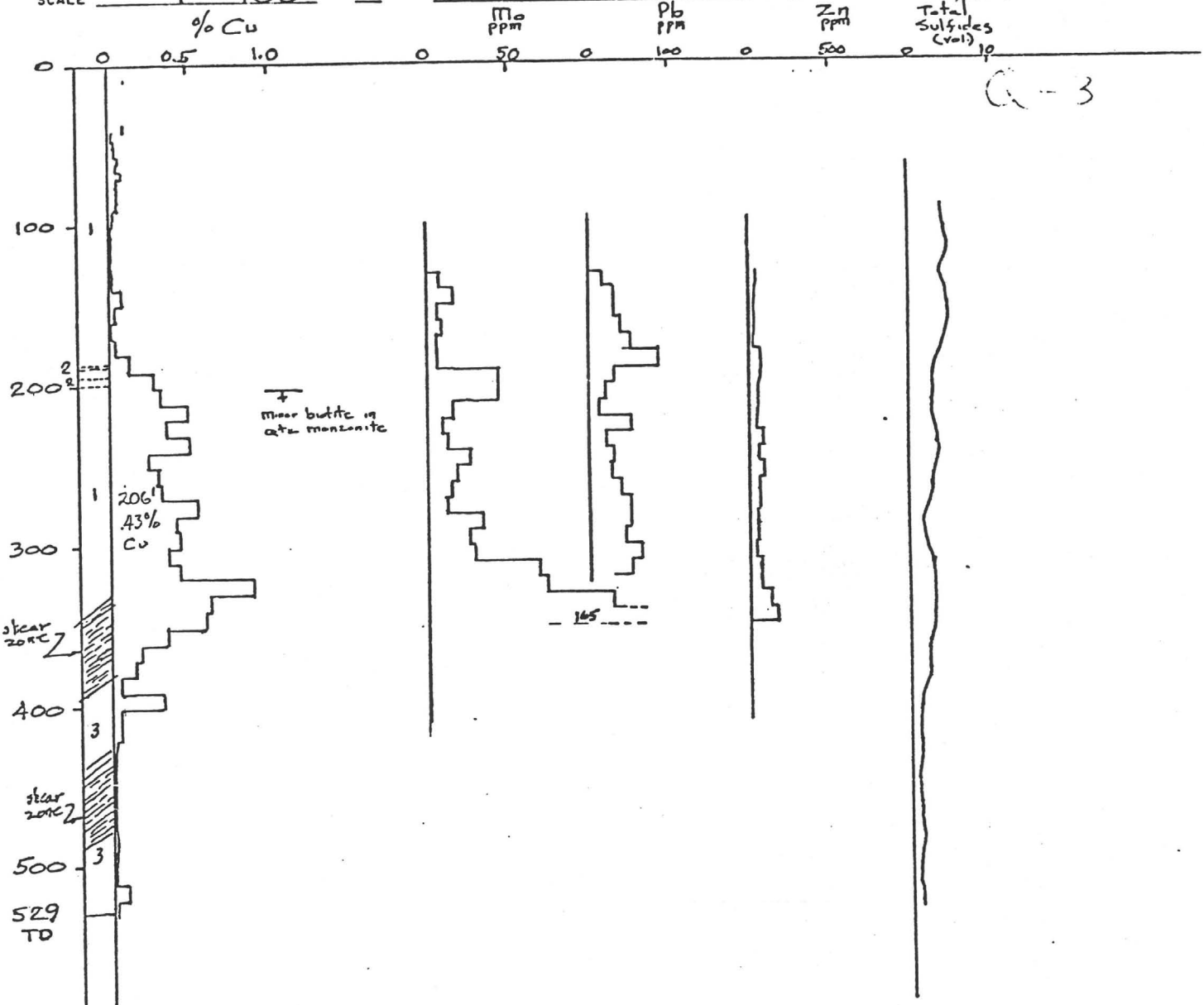


KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG

SCALE 1" = 100'

PROJECT Quartzite
LOCATION Yuma Co. Az.

DRILL HOLE NO. [illegible] PAGE 1 OF 1
BEARING
DIP
TOTAL DEPTH [illegible]
BY



1) Quartz Monzonite - QSP alteration ±2% total sulfides (vol.)
10% albite Crudely shistose

2) Sericite Shist - Rhyolite dices & sills (?)

3) Biotite shist Qtz-K-feld ±5% albite

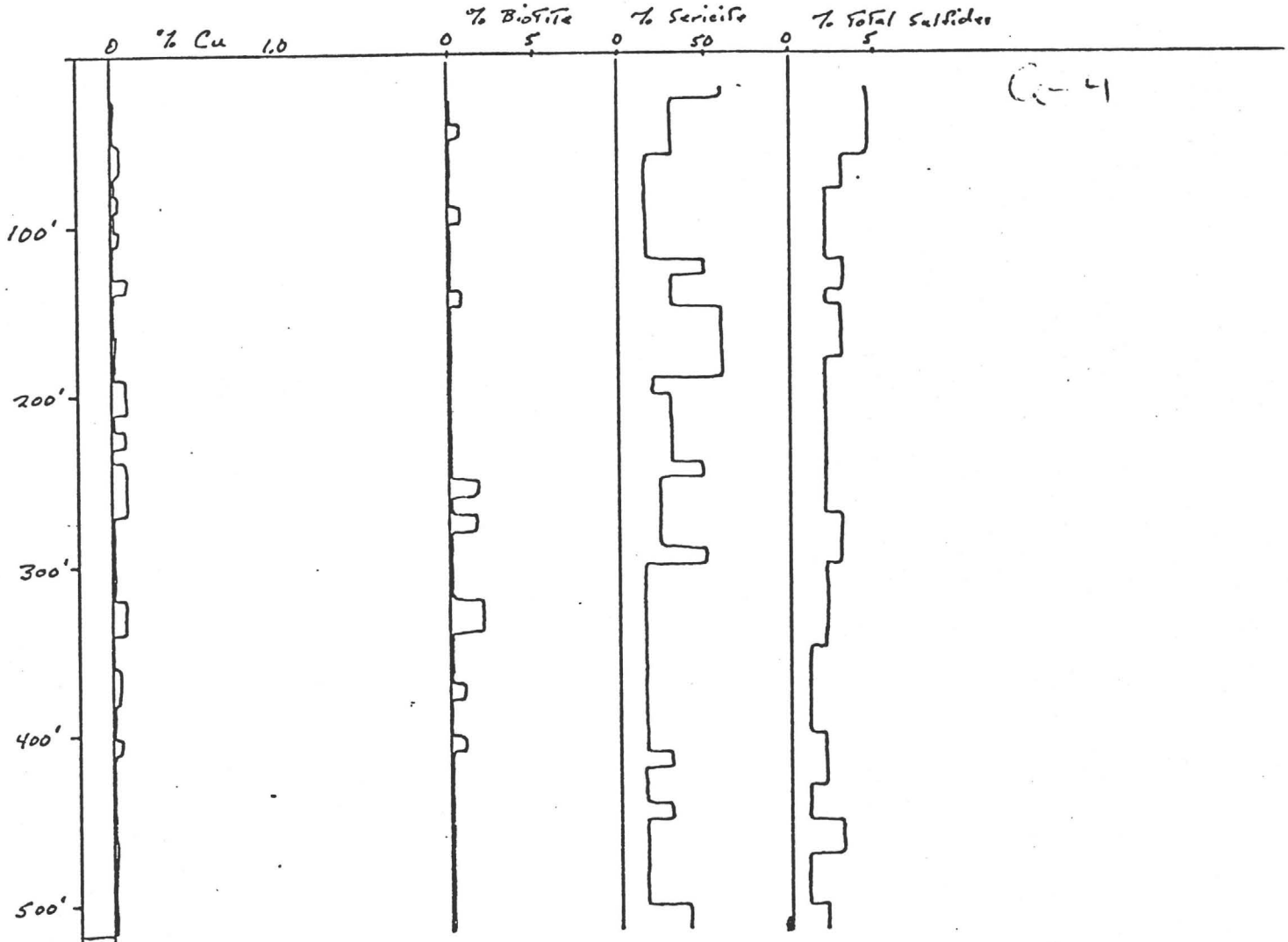
4)

KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG
SCALE 1" = 100'

PROJECT Quartzsite
LOCATION Yuma Co. Az.

DRILL HOLE NO. W-4
BEARING S 20° W
TOTAL DEPTH 514

PAGE 1 OF 1
DIP -60
BY WPL

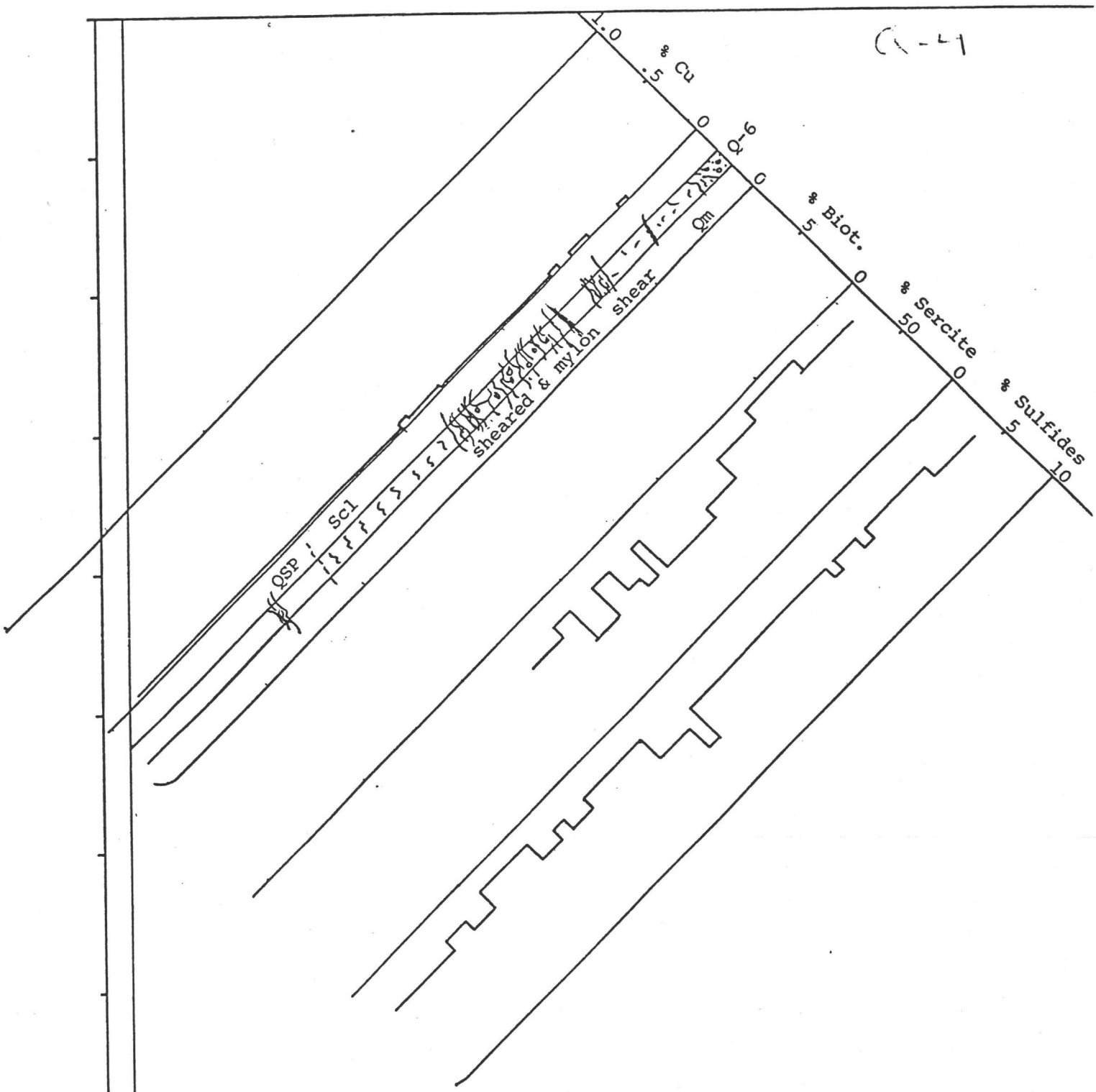


KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG
SCALE 1"=100'

PROJECT Quartzite
LOCATION Yuma County
ARIZONA

DRILL HOLE NO. V-4
BEARING S.50°W.
TOTAL DEPTH 514'

PAGE 1 OF 1
DIP -45°
BY W.P.L.



KERR-McGEE CORPORATION
SUMMARY DRILL HOLE ' 5

SCALE 1" = 100'

PROJECT QUARTZITE

LOCATION Yuma Co, Arizona

DRILL HOLE NO. Q-5

BEARING

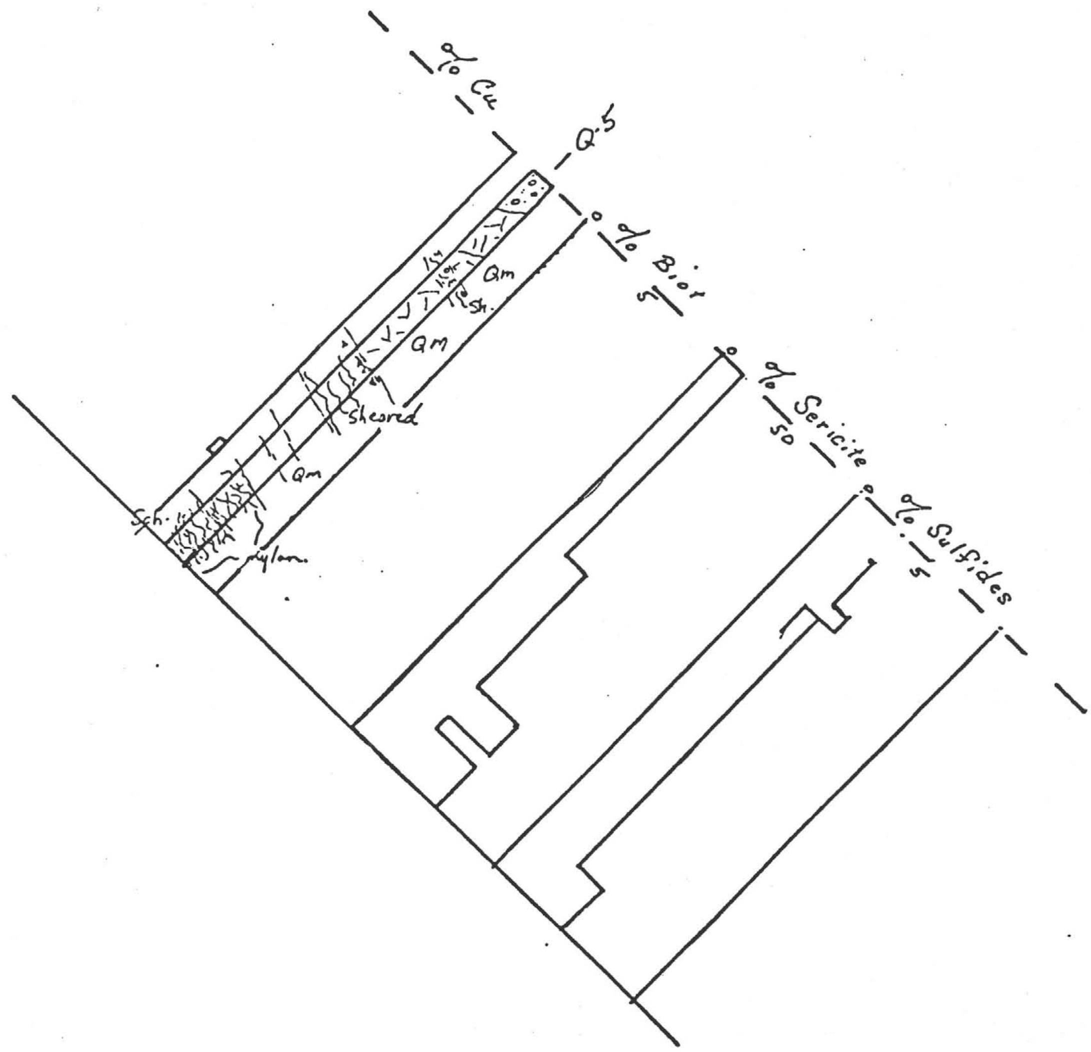
TOTAL DEPTH 269'

PAGE 1 OF 1

DIP -45°

BY WPLeed

Q-5

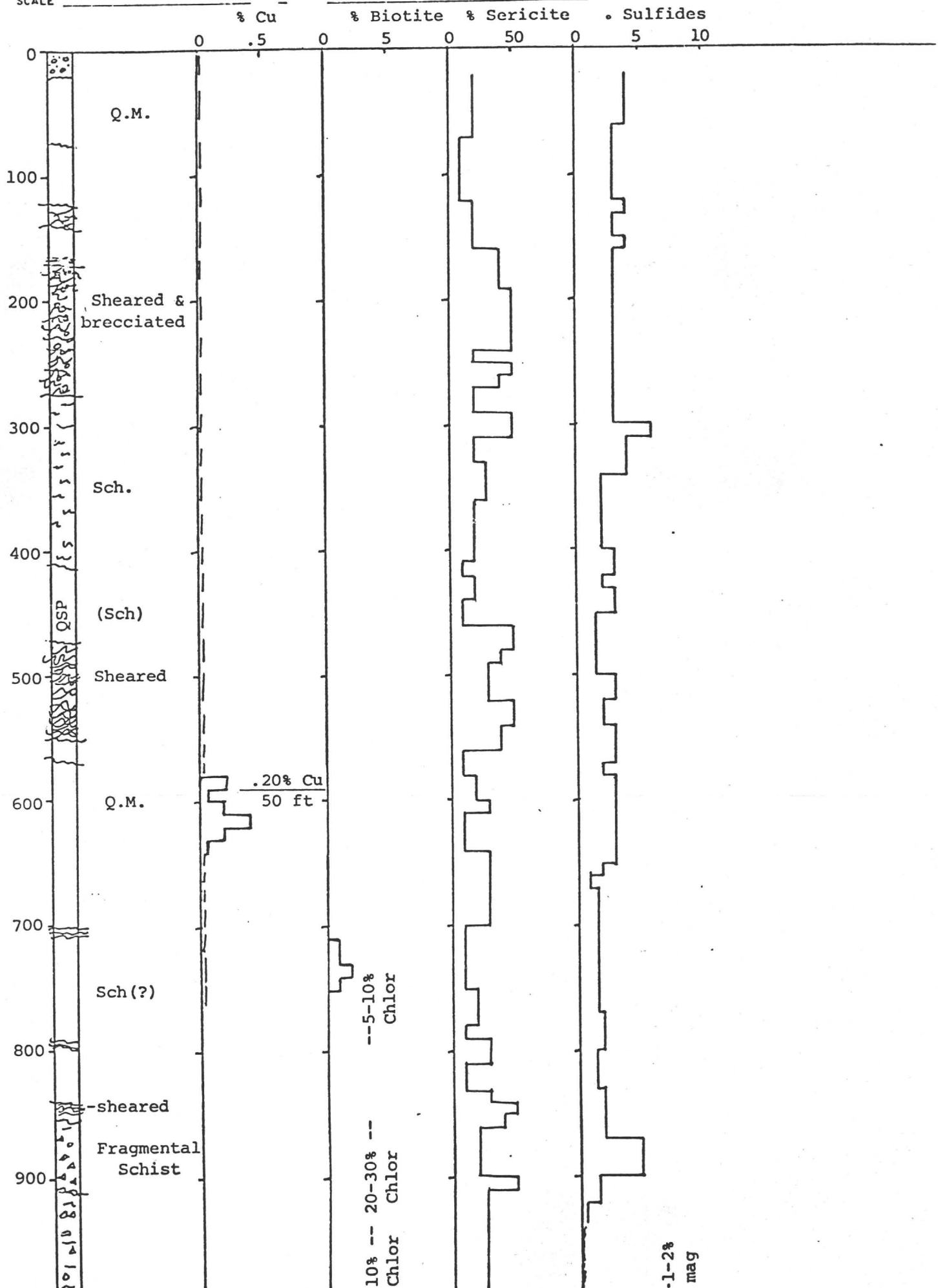


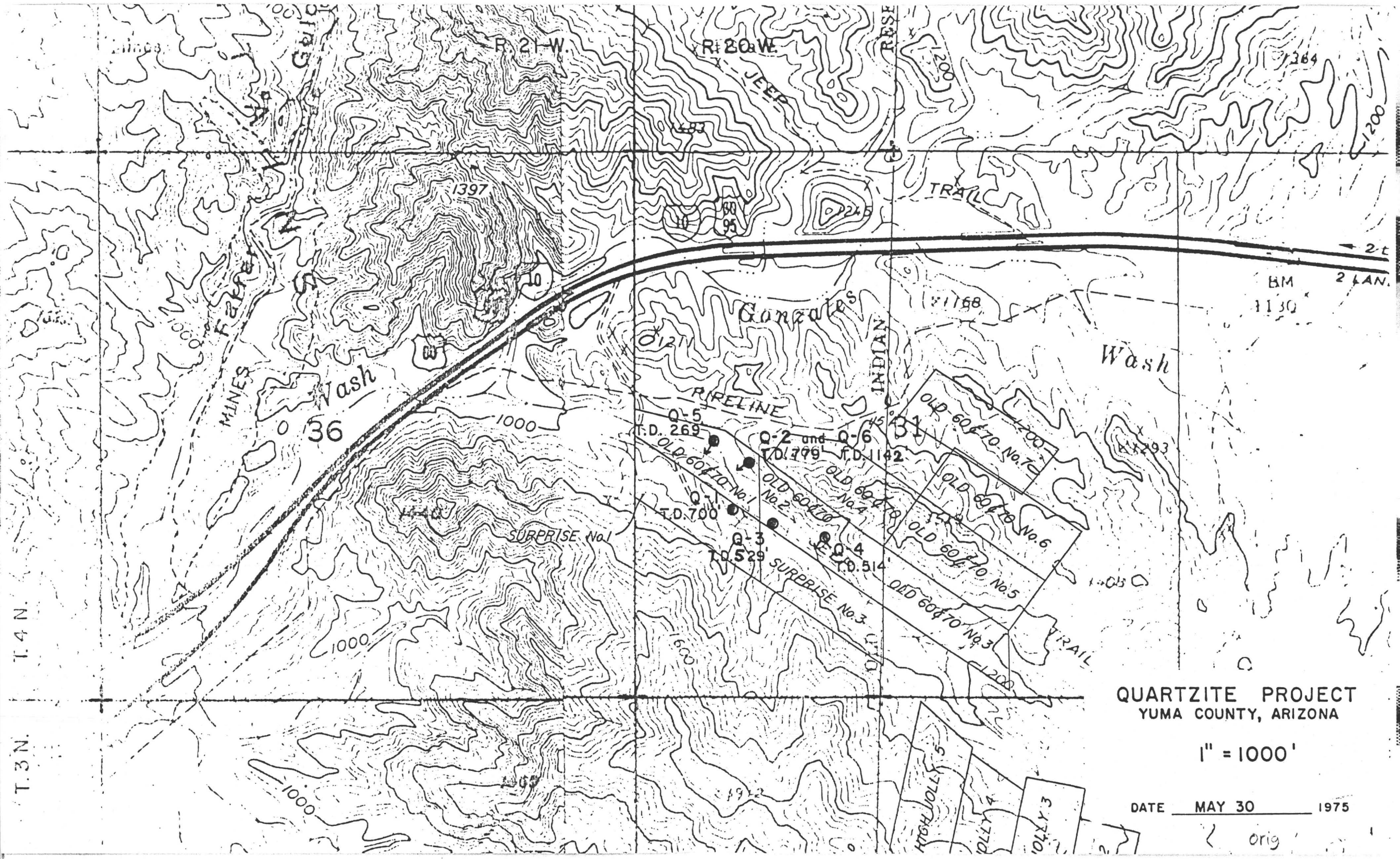
KERR-McGEE CORPORATION
SUMMARY DRILL HOLE LOG
SCALE 1"=100'

PROJECT Quartzite
LOCATION Yuma County, Arizona

DRILL HOLE NO. Q-6
BEARING S.50° W.
TOTAL DEPTH 1142'

PAGE 1 OF 1
DIP -45°
BY W.P.L.



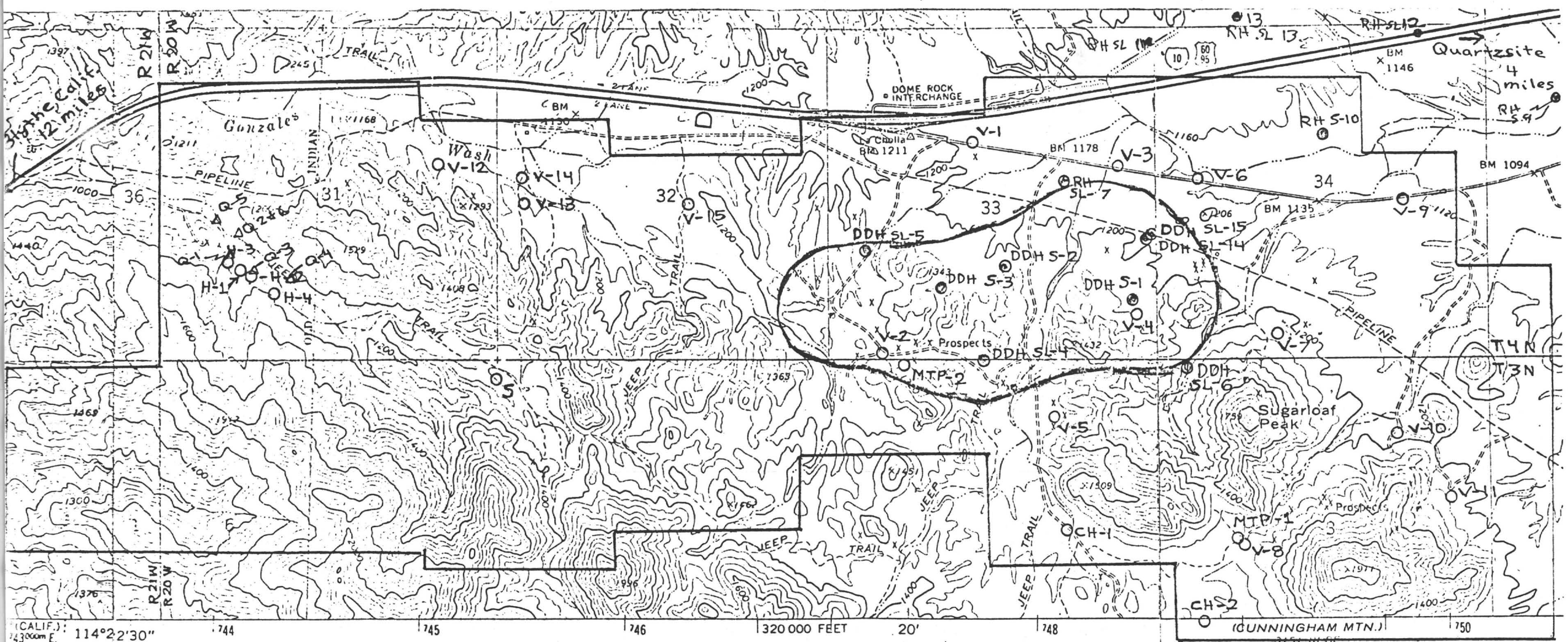


QUARTZITE PROJECT
YUMA COUNTY, ARIZONA

1" = 1000'

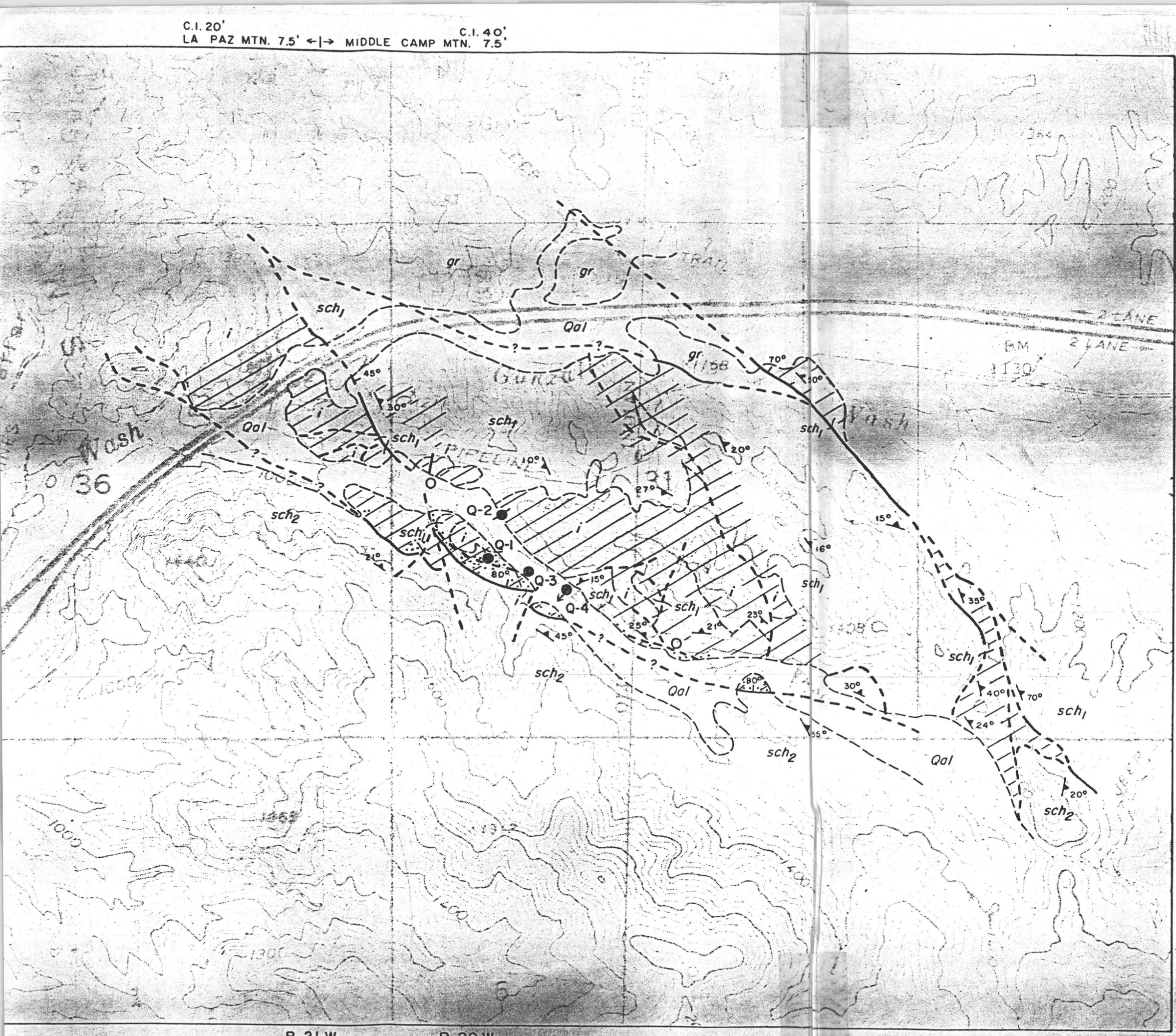
DATE MAY 30 1975

orig


Quartzsite 4 miles
DOME ROCK INTERCHANGE
Gonzales Wash
PIPELINE
INDIAN
Sugarloaf Peak
Prospects
T4N
T3N
R21W
R20W
(CUNNINGHAM MTN.)
320 000 FEET
20'
114°22'30"
744
745
746
748
750
DDH SL-5
DDH S-2
DDH S-3
DDH S-1
DDH SL-4
DDH SL-6
DDH SL-15
DDH SL-14
RH SL-7
RH S-10
V-1
V-2
V-3
V-4
V-5
V-6
V-7
V-8
V-9
V-10
V-12
V-13
V-14
V-15
MTP-1
MTP-2
CH-1
CH-2
H-1
H-4
BM 1178
BM 1135
BM 1094
BM 1146
JEEP TRAIL

orig

orig.



Qal	ALLUVIUM
i	YOUNGER INTRUSIVE - QUARTZ, ORTHOCLASE, AND WEAK CHLORITE, SERICITE. THIS UNIT USUALLY HIGHLY ALTERED TO QUARTZ - SERICITE - PYRITE
gr	OLDER GRANITE - QUARTZ-ORTHOCLASE-PLAGIOCLASE, BIOTITE, GENERALLY CHLORITIZED WITH WEAK TO MODERATE EPIDOTE, WEAK PYRITIC ZONES
sch_1	QUARTZ-ALBITE-BIOTITE SCHIST-GENERALLY CHLORITIZED, WEAK TO LOCALLY HEAVY EPIDOTE CUT BY WEAK TO LOCALLY STRONG PYRITIC ZONES, MAY BE IN PART HYBRID ROCKS INCLUDED WITHIN AND PRODUCED BY INTRUSION OF OLDER GRANITE
sch_2	QUARTZ-CHLORITE-EPIDOTE SCHIST, DISTINCTIVE QUARTZ-EYES, SOME SERICITE
	AREA OF STRONG PYRITIC ALTERATION
	COPPER MINERALIZATION
15°	FOLIATION
	FAULT, SHOWING DIP

KERR McGEE DRILL HOLES
- MINERALIZED
- ORE
- IN PROGRESS (ANGLE)
- PROPOSED

KERR McGEE CORPORATION

QUARTZITE
GEOLOGY and ALTERATION

YUMA COUNTY, ARIZONA

1" = 1000'

B. LEEDY FEBRUARY, 1975

TO ACCOMPANY MONTHLY REPORT - FEBRUARY, 1975