25 Item 2

SUMMARY-CRESCENT PEAK
PROJECT TO DATE
by
Phillip R. Miller
April 1963

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Core in core shack
see Mr. Schilling
Sample Library No. 3

CONCLUSIONS AND RECOMMENDATIONS

As the drill logs show, no ore was intercepted in any of the four holes and the initial stage of exploratory drilling of the Crescent Peak area was terminated on March 28, 1963.

Drill holes No. 1, 2, and 3 have indicated a barren, quartz-rich core of quartz monzonite that has numerous, vuggy, quartz veins and veinlets. DDH-2 apparently was in this core entirely. DDH-1 and DDH-3 appear to be close to the outer margin of the core and intersect metallized zones which contain thin (5-10 feet) intercepts of 0.1% copper or molybdenum. DDH-4 did not intersect strong mineralization and is assumed to be too far from the core to be of further interest at this time.

Consideration should be given to the possibility of the existance of a mineralized band around the barren core and that DDH-1 and DDH-3 have intersected the inner margin of this band. The alteration map of the area suggests that the band could be as much as 1000 feet wide.

It is recommended that the inner 500 feet of this presumed band be tested with two holes, about 700 feet deep, one of which should be about 200 feet outward from the circumference indicated by DDH-1 and DDH-3 and one of which should be about 400 feet from this circumference. A study of the topography of the area suggests that these holes could be drilled at or near the locations shown on the accompanying map.

CRESCENT PEAK DRILLING

Four vertical, diamond drill holes were drilled by Sprague & Henwood, Incorporated, during December, 1962 and January, February, and March of 1963. A total of 4046 feet was drilled. At all times, cooperation between the foreman (Mr. Roy Jackson of Sprague & Henwoos) and the Homestake geologist was excellent.

Each of the holes was collared with a 5 5/8 inch rotary bit which was driven through the overburden and several feet into the rock. This portion of the hole was cased with a 4 inch pipe. (After the hole was completed this collar pipe was left in the hole and capped to permit future entry.) Coring then began using an NC bit and conventional rods. The NC bit was used to penetrate the more broken material in the upper portion of the hole and allow placement of the NX casing through which the NX(W) wire-line rods could be used.

Bentonitic mud was used as a drilling fluid in all of the holes and resulted in excellent core recovery. Circulation was maintained by regulation of the viscosity and specific gravity of the drilling fluid.

Water for drilling was purchased from the Molybdenum Corporation of American at their well in Ivanpah Valley about 18 miles from Crescent Peak. A total of 63,426 gallons were used in drilling the four holes.

Diamond Drill Hole #1

Location	126 feet N33°E of NSC Tina #1
Started	12-2-62
Stopped	1-2-63
Total depth	1045
Total cored	1035
Total recovered	982.6 feet
% recovery	94.9
Runs	169 at 1035' 6.12'/run
NC runs	43 at 290' 6.73'/run
NX(W) runs	126 at 735' 5.83'/run
Water	19 loads (961 gallons per load) 18,200 gallons

Casing was placed to 300 feet. It was stuck and had to be blasted. The bottom 90 feet of casing is still in the hole and could present some trouble in case reentry is ever attempted.

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 1 BEARING - INCLINATION -90 STARTED 12-2--62

LOCATION 2550' S33°E of Crescent Peak B.M. (126' N33°E of N Side Center Tina #1) STOPPED -1-1-63

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0-10	10	0	0-10 Overburden	1-1	10-15	.025			
10-15	5	$2\frac{6}{-}$	10-13 Fractured Gneiss with much Fe stain on	2	15-20	.064			
15-19	4	$4\frac{1}{-}$	fractures.	3	20-25	.066			
19-22	3	2	13-21 Coarse, fractured Granite-much Argillic	4	25-30	.130			
22-30	8	$8\frac{6}{-}$	alteration, some of the clay is apple green,	5	30-35	.130			
30-33	3	$1\frac{4}{-}$	occasional bleb of biotite, about 30% of rock	1-C-1	10-35	(.083)	.001	Tr.	0.01
33-38	5	$5\frac{1}{-}$	is quartz as veinlets.	6	35-40	.050			
38-44	6	6	21-42 Less quartz as veinlets, rock is mostly	7	40-45	.039			
44-54	10	$9\frac{6}{-}$	quartz grains and light green clay with oc-	8	45-50	.039			
54-60	6	6	casional sericite and hematite blebs, badly	9	50-55	.021			
60-70	10	10	broken 28-31, occasional zones of nearly pure	10	55-60	.031			
			altered feldspar. All rock to this depth is	1-C-2	35-60	(.036)	.003	Nil	0.02
			buff colored with heavy Fe staining on fractures						
			42-44 Light grey, fine grained granite with						
			about 3" zone speckled with very small dis-						
			seminated FeS_2.						
			44-55 Light grey, fine to medium grained,						
			fractured granite with much FeOx and $FeSO_4$						
			staining, primarily along fractures.						
			55-65 Buff, coarser, more broken, much dis-						
			seminated FeS_2 in and near fractures-cavity at						
			$60\frac{6}{-}$ much FeS_2 and MoS_2						

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
70 - 75	5	$4\frac{7}{}$	65-73 Medium to dark grey, with less FeOx	1-11	60- 65	.039			
75 - 84	9	$9\frac{2}{}$	staining-much FeS_2 and occasional MoS_2 (mostly	12	65-70	.039			
84 - 94	10	$9\frac{6}{}$	in seams) several specks chalcopyrite at 68'-	13	70- 75	.103			
94 -101	7	$6\frac{2}{}$	much biotite and epidote past 65'-Occasional	14	75- 80	.064			
101 -110	9	$9\frac{8}{}$	Muscovite in open fractures.	15	80- 85	.064			
110 -118$\frac{5}{}$	8$\frac{5}{}$	8$\frac{4}{}$	73-76 Metamorphic inclusions black slate-	1-C-3	60- 85	(.062)	.005	Nil	0.02
118$\frac{5}{}$-128	9$\frac{5}{}$	9$\frac{4}{}$	gneiss, pyrite on fractures.	16	85-90	.031			
128 -136	8	$7\frac{2}{}$	76-80 Coarse, massive, medium grey, Feldspars	17	90- 95	.026			
136 -143	7	$6\frac{8}{}$	argillized, some FeOx on fractures-much pyrite,	18	95-100	.026			
143 -147	4	4	mostly disseminated (no apparent Chalcopyrite	19	100-105	.031			
147 -154	7	$6\frac{8}{}$	or MoS_2)	20	105-110	.039			
154 -159	5	$4\frac{7}{}$	80-84 Broken (rotten?) zone, light grey, pyrite	1-C-4	85-110	(.025)	.003	Nil	Tr.
			(Some MoS_2?) along fractures.	21	110-115	.026			
			84-110 Medium grey, massive granite, argillized	22	115-120	.024			
			(greenish due to epidote?) Some zones of line-	23	120-125	.021			
			ated(?) feldspar clusters, occasional blebs or	24	125-130	.026			
			small areas of biotite, pyrite mostly along	25	130-135	.018			
			fractures and seams,-no apparent chalcopyrite	1-C-5	110-135	(.023)	.006	Nil	Tr.
			or MoS_2, some of pyrite altered to hematite.	26	135-140	.026			
				27	140-145	.021			
				28	145-150	.021			
				29	.50-155	.039			

DIAMOND DRILL CORE LOG Page 3

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
159 -165	6	6	110-128 Much more quartz and some buff feldspars	1-30	155-160	.026			
165 -172^{5}	7^{5}	8^{2}	areas of lineated biotite and white (plagio?)	1-C-6	135-160	(.027)	.007	Nil	Tr.
172^{5}-182^{5}	10	10	feldspar-much less (none?) FeOx staining in	31	160-165	.021			
182^{5}-192	9^{5}	8^{4}	fractures-rock seems to be "fresh"	32	165-170	.018			
192 -201^{5}	9^{5}	9^{5}	128-130 Coarse porphyritic rock-big feldspars	33	170-175	.023			
201^{5}-207	5^{2}	5^{2}	xls-mostly cloudy	34	175-180	.036			
207 -212	5	4^{6}	130-160 Same as above, occasional areas of	35	180-185	.031			
212 -216^{5}	4^{5}	4^{5}	fresh material, within these areas. Occasional	1-C-7	160-185	(.026)	.005	Nil	Tr.
216^{5}-223	6^{5}	6^{5}	chalcopyrite and MoS_2 flecks-very much dis-	36	185-190	.028			
223 -226	3	3	seminated fine-grained pyrite and much along	37	190-195	.031			
226 -233	7	7	fractures less pyrite 142-143 badly broken,	38	195-200	.021			
233 -237^{5}	4^{5}	4^{5}	153-159.	39	200-205	.021			
			160-165 Medium grained granite; weak argillic	40	205-210	.034			
			alteration; about 1% pyrite, mostly along	1-C-8	185-210	(.028)	.007	Nil	Tr.
			fractures and in vuggy quartz veinlets; minor	41	210-215	.031			
			MoS_2 associated with quartz veinlets.	42	215-220	.028			
			165-244 Moderate argillic alteration, alter-	43	220-225	.021			
			nating with weak argillic alteration, local	44	225-230	.018			
			zones with abundant biotite, about 1% pyrite in	45	230-235	.026			
			quartz veinlets. Minor disseminated pyrite-	1-C-9	210-235	(.025)	.006	Nil	Tr.
			minor MoS_2 associated with quartz and pyrite						
			moderate epidote, along some fractures, local,						

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
237.5-247.5	10	9.4	thin silicified zones, trace chalcopyrite thin	1-46	235-240	.046			
247.5-256	8.5	8.2	gouge(?) zone at 225' dips 25°-gouge at 223'	47	240-245	.018			
256 -264	8	8	dips 30°-gouge and breccia 234.5-235.5, dips 45°	48	245-250	.021			
264 -267.5	3.5	3.3	MoS_2 decreases toward base of interval	49	250-255	.018			
267.5-275.5	8	8.3	244-247 Fine grained biotite Schist includes;	50	255-260	.021			
275.5-282	6.5	6.5	upper contact dips 30° thin quartz veinlets,	1-C-10	235-260	(.025)	.007	Tr.	Tr.
282 -286	4	4	cubic pyrite and epidote in veinlets and	51	260-265	.023			
286 -291	5	5.1	fractures basal contact is sheared.	52	265-270	.041			
291 -300	9	8	247-256 Medium coarse grained, fairly fresh, 4"	53	270-275	.018			
			biotite clot at 251.5. Epidoate on fractures,	54	275-280	.018			
			vuggy quartz filled cabities up to 1" across,	55	280-285	.026			
			gouge filled fractures, dips 65° at 255 moly	1-C-11	260-285	(.025)	.005	Nil	Tr.
			seam at 249.5 sericitic alteration 252-253						
			256-262.5 Granite: strongly sheared; abundant						
			gouge seams.						
			262.5-312.5 Fresh biotite granite; local weak-						
			moderate argillic alteration pyrite disseminated						
			and along fractures. Epidote along fractures						
			gouge 274.5-275. 2" gouge seam at 275.5 dips 55°						
			Sparse MoS_2 flecks at 264.5. FeOx and possible						
			"relief limonite" at 268.1. Monor MoS_2 in						
			silicified zone at 268.6?						

DIAMOND DRILL CORE LOG Page 5

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
300 -303.5	3.5	4.5	312.5-400 Coarse grained, light grey moderate	1-56	285-290	.021	.005		
303.5-313	9.5	9.6	argillic alterated granite with occasional	57	290-295	.023	.002		
313 -322	9	8.4	intense alteration-occasional bleb 1" ± FeS_2	58	295-300	.021	.004		
322 -324	2	2	(mostly fine disseminated FeS_2) badly broken	59	300-305	.026	.003		
324 -330	6	5.4	zone 344-346 with greenish gouge at 33°.	60	305-310	.028	.003		
330 -337	7	4	Little or no MoS_2, few grains magnetite with	1-C 12	285-310	(.024)	.003	Nil	Tr.
337 -341	4	4	FeS_2, area probably has some "Quartz Flood"	61	310-315	.023	.004		
341 -346	5	4.7	alteration, ± ½" quartz veinlets about every	62	315-320	.021	.005		
346 -350	4	4.2	6"-MoS_2 in (or on edges of Quartz) at 343, 352,	63	320-325	.018	.030	✓	
350 -354.5	4.5	4.1	356, 362, 364, 367.5, 369, 371.5, 374 (dis-	64	325-330	.031	.014		
354.5-360	5.5	5.6	seminates in Granite?), 390, less quartz vein-	65	330-335	.064	.016		
360 -362	2	1.8	lets past 370, dark (basic dike?) at 398-400	1-C 13	310-335	(.031)	(.014)	Tr.	Tr.
362 -370	8	8	at 45° broken zones 378-390, 384-385	66	335-340	.021	.014		
370 -376	6	5.8		67	340-345	.018	.014		
376 -384	8	6.9		68	345-350	.026	.040	✓	
384 -391	7	6.3		69	350-355	.031	.030	✓	
391 -400.5	9.5	9		70	355-360	.033	.051	✓	
				1-C 14	335-360	(.026)	(.030)	Nil	Tr.

DIAMOND DRILL CORE LOG Page 6

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
400^{5}-407^{5}	7	6^{6}	400-448 (Similar to above) light medium grey,	1-71	360-365	.021	.005		
407^{5}-414	6^{5}	6^{3}	medium coarse grained, moderate argillic	72	365-370	.016	.013		
414 -422	8	7^{7}	altered granite, some areas quite dark with	73	370-375	.016	.012		
422 -432	10	9^{9}	biotite and general green tint from chlorite,	74	375-380	.010	.003		
432 -433^{7}	1^{7}	1^{6}	about ½% FeS_2 disseminated and along fractures-	75	380-385	.041	.005		
433^{7}-439^{5}	5^{8}	5^{8}	in area of heavy biotite, the feldspars are	1-C 15	360-385	(.021	.007)	Nil	Tr.
439^{5}-444^{5}	5	4^{6}	badly corroded and colored a deep orange. Oc-	76	385-390	.021	.004		
444^{5}-448	3^{5}	3^{5}	casional bleb and seam of FeS_2 has minor MoS_2:	77	390-395	.021	.003		
448 -455^{5}	7^{5}	7	at 410, 413, 418, 428, 433^{5}, (quartz stringers	78	395-400	.031	.002		
455^{5}-456^{5}	1	0^{9}	are quite vuggy) 435, 446, 448	79	400-405	.046	.034		
456^{5}-461^{5}	5	5	448-460 (Similar to above but this zone has	80	405-410	.051	.007		
461^{5}-469	7^{5}	7^{2}	stronger alteration) FeOx stain on fractures	1-C 16	385-410	(.034	.010)	Tr.	Tr.
469 -476	7	6^{2}	and around feldspars this zone generally more	81	410-415	.023	.010		
476 -482	6	6^{3}	broken-badly broken 453-461 ±, 1/8" ± clay in	82	415-420	.026	.012		
482 -485	3	1^{8}	fractures (FeOx stained)	83	420-425	.010	.042		
485 -488	3	3^{2}	460-492 Fresher, light medium grey, less	84	425-430	.021	.001		
488 -490	2	1^{9}	broken,-broken zone 478-480 metamorphic in-	85	430-435	.021	.003		
			clusions (Ign?) 476-479-much "quartz flood"	1-C 17	410-435	(.020	.013)	Nil	Tr.
			479-492	86	435-440	.031	.009		
				87	440-445	.018	.007		
				88	445-450	.031	.005		

DIAMOND DRILL CORE LOG Page 7

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
490 -498.5	8.5	8	492-536 Buff colored Feldspars-still quite	1-89	450-455	.021	.017		
498.5-503.5	5	5.2	fresh in some areas-moderate argillic alteration	90	455-460	.018	.030	✓	
503.5-511	7.5	7.2	(Bio? off dike 521-522), still much quartz	1-C-18	435-460	(.024	.013)	Nil	Tr.
511 -514.5	3.5	3.4	stringers-MoS_2 in broken quartz zone at 503,	91	460-465	.021	.057	✓	
514.5-519.5	5	4.5	in quartz at 504, 509	92	465-470	.021	.019		
519.5-526	6.5	6		93	470-475	.018	.002		
526 -529	3	1.3		94	475-480	.041	.006		
529 -534.5	5.5	3.9		95	480-485	.018	.005		
534.5-536	1.5	0.8		1-C-19	460-485	(.024	.018)	Nil	Tr.
				96	485-490	.021	.008		
				97	490-495	.018	.010		
				98	495-500	.026	.028	✓	
				99	500-505	.018	.024		
				100	505-510	.033	.006		
				1-C-20	485-510	(.023	.013)	Nil	Tr.
				101	510-515	.010	.002		
				102	515-520	.021	.005		
				103	520-525	.026	.007		
				104	525-530	.016	.002		
				105	530-535	.018	.004		
				1-C-21	510-535	(.018	.004)	Nil	Tr.

DIAMOND DRILL CORE LOG Page 8

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
536 -539	3	0^{4}	536-586 Similar to above, but occasional more	1-106	535-540	.021	.004		
539 -539^{5}	0^{5}	0^{2}	alteration, more quartz veinlets, MoS_2 visible	107	540-545	.018	.022		
539^{5}-546	6^{5}	6^{1}	in nearly all quartz veinlets, possibly some	108	545-550	.026	.050	✓	
546 -553	7	4	chalco? Dark green (Bio) metamorphic (Ign?)	109	550-555	.021	.008		
553 -560	7	6^{9}	inclusions quite common 575-578, 582-583^{5}	110	555-560	.018	.008		
560 -566	6	5^{7}		1-C-22	535-560	(.021	.018)	Nil	Tr.
566 -568^{5}	2^{5}	2^{3}	586-685 Less altered than above, possibly more	111	560-565	.026	.007		
568^{5}-572^{5}	4	4^{1}	quartz veinlets and occasional zones heavy	112	565-570	.010	.002		
572^{5}-578	5^{5}	5^{5}	biotite, occasional MoS_2 in quartz, Past 600'	113	570-575	.008	.002		
578 -586	8	7^{8}	the rock is less coarse and lighter grey, less	114	575-580	.015	.004		
586 -591	5	4^{9}	broken, (still drusy, vuggy quartz, apparently	115	580-585	.021	.005		
591 -597	6	5^{5}	less MoS_2 past about 610-604, 605, 612, 165^{5},	1-C-23	560-585	(.016	.004)	Nil	Tr.
597 -600	3	3^{5}	616-moderate amounts FeS_2 with occasional MoS_2	116	585-590	.023	.091	✓	
600 -607	7	6^{1}	past 620-Metam? (Ign?) Bio? rock at 45° at 655-657,	117	590-595	.010	.024		
607 -610	3	3^{5}	665-665^{5} at 60°	118	595-600	.021	.022		
610 -616	6	5^{2}		119	600-605	.018	.004		
616 -619^{5}	3^{5}	3^{7}		120	605-610	.031	.007		
619^{5}-627	7^{5}	5^{3}		1-C-24	585-610	(.020	.030)	✓ Nil	Tr.
627 -636	9	9^{6}		121	610-615	.010	.036	✓	
636 -646	10	9^{6}		122	615-620	.008	.025	✓	
				123	620-625	.015	.004		
				124	625-630	.021	.002		

DIAMOND DRILL CORE LOG Page 9

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
646 -656	10	$9\frac{5}{}$	685-710 Medium dark grey bio/granite with much	1-125	630-635	.013	.005		
656 -662	6	$5\frac{8}{}$	less FeS_2 disseminate in granite, some flecks	1-C-25	610-635	(.013	.014)	Nil	Tr.
662 -669	7	$6\frac{1}{}$	MoS_2 in occasional quartz seams-occasional	126	635-640	.021	.003		
669 -676	7	$6\frac{2}{}$	short areas moderate argillic alteration most	127	640-645	.018	.003		
676 -681	5	$4\frac{9}{}$	of zone is weak moderate argillic alteration	128	645-650	.018	.002		
681 -691	10	$9\frac{6}{}$		129	650-655	.023	.002		
691-701	10	10	710-816 Light medium grey, light moderate	130	655-660	.015	.004		
701-710	9	$8\frac{1}{}$	argillic fine-grained bio/granite, much fine	1-C-26	635-660	-	-	Nil	Tr.
710 -711	1	1	disseminated FeS_2-broken zone 721-722 occasional	131	660-665	.015	.005		
711 -$719\frac{5}{}$	$8\frac{5}{}$	$8\frac{5}{}$	blue tint (Mo?) in thin (1/8" ±) shear zones-	132	665-670	.008	.003		
$719\frac{5}{}$-724	$4\frac{5}{}$	$4\frac{1}{}$	all shears and fractures seem to be at random	133	670-675	.021	.021		
724 -$726\frac{5}{}$	$2\frac{5}{}$	$2\frac{5}{}$	angles-occasional dark clusters Biotite-	134	675-680	.018	.030		
$726\frac{5}{}$-736	$9\frac{5}{}$	$10\frac{1}{}$	occasional MoS_2-occasional areas of very fresh	135	680-685	.008	.006		
736 -741	5	$4\frac{8}{}$	granite-less biotite toward end of section,	1-C-27	660-685	-	-	Nil	Tr.
741 -751	10	$9\frac{8}{}$	lighter grey in color, occasional muscovite in	136	685-690	.013	.014		
751 -761	10	$7\frac{7}{}$	fractures 790-800 badly broken (fault?) higher	137	690-695	.018	.005		
761 -771	10	$9\frac{4}{}$	FeS_2 -less MoS_2-after about 800' the alteration	138	695-700	.015	.002		
			seems more intense, Ser/Musc in fractures	139	700-705	.013	.008		
				140	705-710	.013	.006		
				1-C-28	685-710	-	-	Nil	Tr.

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
771 -778.5	7.5	7.2	816-850 Fine grained, light medium grey weak	1-141	710-715	.013	.006		
778.5-786	7.5	6.5	moderate argillic altered granite with oc-	142	715-720	.018	.005		
786 -787	1	0.3	casional zones of lineated biotite-moderate	143	720-725	.021	.003		
787 -792	5	4.2	disseminated FeS_2 and strong FeS_2 along	144	725-730	.018	.014		
792 -796	4	2	fractures-badly broken (fault) 836-838-oc-	145	730-735	.015	.006		
796 -800	4	2.7	casional quartz veinlets, no apparent MoS_2-	1-C-29	710-735	-	-	Nil	Tr.
800 -809	9	8.2	occasional epidote and chlorite, mostly in or	146	735-740	.010	.010		
809 -816	7	6.3	along fractures badly broken 845-847, 850-851	147	740-745	.018	.002		
816 -824.5	8.5	8		148	745-750	.018	.002		
824.5-830	4.5	4.5	850-913 Moderate strong Ser/Musc (with some	149	750-755	.018	.003		
830 -836	6	6	artillation) past 850' (Strong fault 850-852.5 -	150	755-760	.018	.016		
836 -838	2	2	with much gouge (probably the zone from 830-	1-C-30	735-760	-	-	Nil	Tr.
838 -840	2	1.8	860 is one main fault zone)(Steep fracture at	151	760-765	.010	.001		
840 -843	3	2.7	850' has sliken sides at 75°). Rock is light	152	765-770	.010	.002		
843 -851	8	7.8	grey, fine to medium grained-strong sericite	153	770-775	.018	.002		
851 -856	5	5.2	altered bio-granite-much FeS_2 with possible	154	775-780	.008	.002		
856 -860	4	3.9	(but very seldom) MoS_2	155	780-785	.008	.003		
860-863.5	3.5	3.7		1-C-31	760-785	-	-	Nil	Tr.
863.5-870	6.5	6.3		156	785-790	.013	.002		
870 -877	7	6.8		157	790-795	.013	.004		
877 -885	8	8		158	795-800	.005	.014		
885 -891	6	6.2		159	800-805	.010	.003		

DIAMOND DRILL CORE LOG Page 11

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
891 -897.5	6.5	6.2	913-1045 Gradual change to very weak sericitic	1-160	805-810	.010	.001		
897.5-904.5	7	6.4	alteration and then weak argillic alteration	1-C-32	785-810	-	-	Nil	Tr.
904.5-912.5	8	7.9	blending to very fresh bio-granite-much quartz	161	810-815	.005	.003		
912.5-913	0.5	0.5	flood between 900 and 1000 -vuggy quartz vein-	162	815-820	.008	.002		
913 -922	9	9	lets throughout-much FeS_2-very little MoS_2	163	820-825	.005	.004		
922 -925.5	3.5	3.6	apparent-occasional areas of very heavy biotite	164	825-830	.013	.002		
925.5-930	4.5	4.5	MoS_2 noticed at 978 (1/16") and 1026.5 -the	165	830-835	.013	.004		
930 -936	6	6	fresh granite at the bottom is a coarse grained	1-C-33	810-835	-	-	Nil	Tr.
936 -946	10	9.6	mottled yellow/grey bio-granite with much dis-	166	835-840	.010	.002		
946 -954	8	7.7	seminated pyrite	167	840-845	.008	.004		
954 -960	6	6		168	845-850	.010	.005		
960 -964	4	3.2		169	850-855	.010	.010		
964 -970	6	5.2		170	855-860	.008	.003		
970 -974.5	4.5	4		1-C-34	835-860	-	-	Tr.	Tr.
974.5-981	6.5	6.7		171	860-865	.003	.003		
981 -983.5	2.5	2.1		172	865-870	.005	.003		
983.5-993	9.5	9.6		173	870-875	.005	.003		
993 -1002	9	8.4		174	875-880	.008	.008		
1002 -1004	2	1.7		175	880-885	.005	.007		
1004 -1014	10	10		1-C-35	860-885	-	-	Nil	Tr.
1014 -1024	10	10		176	885-890	.008	.005		
1024 -1034	10	9.3		177	890-895	.005	.005		

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
1034-1038	4	3 9		1-178	895-900	.008	.003		
1038-1045	7	6 9	Total depth 1045' Stopped January 1st, 1963	179	900-905	.003	.001		
			Phillip R. Miller	180	905-910	.008	.003		
				1-C-36	885-910	-	-	Nil	Tr.
				181	910-915	.008	.003		
				182	915-920	.013	.003		
				183	920-925	.005	.002		
				184	925-930	.003	.001		
				185	930-935	.003	.002		
				1-C-37	910-935	-	-	Nil	Tr.
				186	935-940	.005	.004		
				187	940-945	.005	.001		
				188	945-950	.005	.003		
				189	950-955	.005	.002		
				190	955-960	.005	.004		
				1-C-38	935-960	-	-	Nil	Tr.
				191	960-965	.008	.003		
				192	965-970	.005	.001		
				193	970-975	.005	.003		
				194	975-980	.008	.008		
				195	980-985	.008	.003		
				1-C-39	960-985	-	-	Nil	Tr.

DIAMOND DRILL CORE LOG Page 13

MINE _____ HOLE NO. 1 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
				1-196	985-990	.008	.002		
				197	990-995	.010	.003		
				198	995-1000	.008	.004		
				199	1000-1005	.010	.002		
				200	1005-1010	.010	.011		
				1-C-40	985-1010	-	-	Nil	Tr.
				201	1010-1015	.013	.082		
				202	1015-1020	.010	.005		
				203	1020-1025	.005	.009		
				204	1025-1030	.008	.006		
				205	1030-1045	.005	.006		
				1-C-41	1010-1045	-	-	Tr.	Tr.

Diamond Drill Hole #2

Location	2070 feet S18°E of Crescent Peak VABM	
Started	1-9-63	
Stopped	2-3-63	
Total depth	1000 feet	
Total cored	990 feet	
Total recovered	952.7 feet	
% recovery	96.3	
Runs	142 at 990'	6.97'/run
NC runs	17 at 110'	6.47'/run
NX(W)	125 at 880'	7.04'/run
Water	26 loads (961 gallons per load) 25,000 gallons	

Casing was placed to 270 feet. The drillers had anticipated a difficult withdrawal and had greased the casing very heavily but it was stuck. Blasting finally loosened it at 200 feet. There is still the bottom 70 feet of casing in the hole. The blasted section of casing that was removed from the hole indicated that the remaining casing is not in bad shape.

Water encountered at approximately 520 feet.

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING - INCLINATION -90° STARTED 1/9/63

LOCATION 2070' S18°E of Crescent Peak Triangulation Station STOPPED 2/3/63

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0 - 10	10	Sludge	Not cored--drilled with rock bit	2-1	0- 10	.010	.016		
10 - 14⅝	4⅝	4¾	10'-240' Heavy FeOx stained, mostly coarse-	2	10- 20	.013	.015		
14⅝- 24⅝	10	10	grained very strong argillic altered	3	20- 30	.046	.014		
24⅝- 30	5⅝	5¼	biotite granite much vuggy quartz,	4	30- 40	.036	.012		
30 - 36	6	5⅜	most rock badly broken-much sericite	5	40- 50	.010	.010		
36 - 44	8	8	(muscovite?). Quartz veinlets (and	2-6-1	0- 50	-	-	Trace	Trac
44 - 51	7	6⅞	veins) are in all attitudes and are	6	50- 60	.008	.011		
51 - 57	7	7	from ½" to 9" wide. Rock toward	7	60- 70	.008	.006		
57 - 64⅝	7⅝	7⅛	100' and beyond is less broken.	8	70- 80	.005	.012		
64⅝- 74	9⅝	9⅞	Very badly broken 127-134⅝, 140-145	9	80- 90	.015	.006		
74 - 84	10	10	NC casing had been set at 120' but	10	90-100	.010	.008		
84 - 94	10	6⅔	caving from these areas necessitated	2-6-2	50-100	--	-	Trace	0.05
94 - 97	3	3¾	redrilling and going back to NC-	11	100-110	.008	.004		
97 -102	5	5	(casing finall set at 270').	12	110-120	.004	.002		
102 -108	6	6⅚		13	120-130	.008	.005		
108 -116	8	7⅞		14	130-140	.008	.002		
116 -120	4	3⅞		15	140-150	.006	.002		
120 -127	7	6¼		2-6-3	100-150	-	-	Trace	Trac
127 -128⅝	1⅝	0⅝							
128⅝-137	8⅝	8⅝							
137 -143⅝	6⅝	6							
143⅝-145	1⅝	1							

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
145 -146^{5}	1^{5}	1^{2}	(0-240') (continued) Same as above-first	2-16	150-160	.004	.003		
146^{5}-153	6^{5}	6^{4}	visible sulfide (MoS_2) at 150'-Rock	17	160-170	.006	.002		
153 -162	9	8^{7}	toward bottom of interval is gradually	18	170-180	.004	.003		
162 -169	7	7	less oxidized-(Less buff feldspars)	19	180-190	.008	.003		
169 -176	7	7	some areas in bottom of interval show	20	190-200	.008	.005		
176 -183	7	7	quite a bit of biotite-all of hole has	2-6-4	150-200	-	-	.005	Trace
183 -193	10	10	much muscovite-moderate amount of fine	21	200-210	.005	.004		
193 -203	10	10	disseminated FeS_2 at 183'- FeOx is	22	210-220	.005	.003		
203 -213	10	9^{9}	essentially unseen at 240'- (some Mo	23	220-230	.010	.008		
213 -223	10	10	S_2 at 205').	24	230-240	.013	.032		
223 -229^{5}	6^{5}	6^{5}		25	240-250	.013	.012		
229^{5}-237	7^{5}	6^{8}		2-6-5	200-250	-	-	Trace	Trace
237 -244	7	6^{2}		26	250-260	.013	.010		
244 -254	10	10^{4}		27	260-270	.010	.010		
254 -264	10	10		28	270-280	.010	.008		
264 -270	6	5^{5}		29	280-290	.008	.004		
270 -280	10	9^{3}		30	290-300	.010	.003		
280 -287	7	7		2-6-6	250-300	-	-	Trace	Trace
287 -291^{5}	4^{5}	4^{2}							
291^{5}-296	4^{5}	4^{2}							
296 -301	5	4^{3}							
301 -307	6	6							

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS					ASSAYS					
RUN	FT.	REC.		LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
307 -313	6	6	240-450	Much of core has orange/green mottled	2-31	300-310	.008	.003		
313 -317	4	4		appearance due to buff colored feld-	32	310-320	.008	.002		
317 -324	7	6^{8}		spars and green chlorite stained areas.	33	320-330	.008	.003		
324 -328	4	4		Mostly moderate argillic altered bio-	34	330-340	.005	.001		
328 -334	6	5^{7}		tite granite with much quartz as vein-	35	340-350	.008	.002		
334 -337	3	2^{8}		lets (veins?) up to 3' thick. Some	2-6-7	300-350	-	-	Trace	Trace
337 -347	10	9^{7}		zones are quite fresh-moderate-fine	36	350-360	.008	.007		
347 -351	4	4		disseminated FeS_2-Occasional very fine,	37	360-370	.008	.003		
351 -357	6	5^{6}		flecks of MoS_2 disseminated in vuggy	38	370-380	.010	.003		
357 -364	7	6^{1}		areas of quartz veinlets.	39	380-390	.008	.006		
364 -366	2	2		Moderate argillic alteration with much	40	390-400	.010	.006		
366 -368^{5}	2^{5}	2^{3}		muscovite (coarse sericite) MoS_2 at 298,	2-6-8	350-400	-	-	Trace	Trace
368^{5}-375	6^{5}	6^{1}		339, quartz up to 3' thick in pieces,	41	400-410	.005	.002		
375 -380	5	4^{4}		generally FeS_2 is weak.	42	410-420	.003	.002		
380 -389	9	9	450-500	FeS_2 seems to be increasing a bit past	43	420-430	.005	.004		
389 -394	5	4		about 450'-still only slight amounts of	44	430-440	.005	.012		
394 -396	2	0^{1}		MoS_2-Rock is very similar to above;	45	440-450	.005	.014		
396 -404	8	8		medium coarse, medium grey-light green	2-6-9	400-450	-	-	Trace	Trace
404 -410	6	6		biotite granite with much quartz as						
410 -417	7	6		veinlets quite soft and crumbly in some						
417 -427	10	10^{1}		areas-(Moderate argillic) (MoS_2 in-						
427 -437	10	10		creasing?) 3" disseminated MoS_2 at 492'.						

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING INCLINATION STARTED

LOCATION STOPPED

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
437 -445	8	8	500-577 Moderate weak argillic alteration, med-	2-46	450-460	.008	.010		
445 -455	10	9^{4}	ium light grey, biotitic granite.	47	460-470	.005	.019		
455 -461	6	5^{8}	Quartz diminishing in this zone from	48	470-480	.005	.008		
461 -466	5	5^{2}	30% - to 5% - occasional fleck of MoS_2-	49	480-490	.008	.010		
466 -475	9	8^{4}	FeS_2 less than 1% of rock. Rock is	50	490-500	.005	.027		
475 -478^{5}	3^{5}	3^{4}	occasionally very fresh! 510-535 is	2-6-10	450-500	-	-	.005	Trace
478^{5}-486^{5}	8	8^{2}	extremely vuggy-(driller reports losing	51	500-510	.005	.010		
486^{5}-491^{5}	6	5^{6}	water in this general zone--Driller re-	52	510-520	.008	.007		
491^{5}-496^{5}	5	5^{1}	ports hole is making water in this zone	53	520-530	.008	.008		
496^{5}-506^{5}	10	9^{7}	(! ?) water rises to about 300' in hole	54	530-540	.005	.009		
506^{5}-509^{5}	3	2^{3}	between shifts-). All core in this	55	540-550	.003	.010		
509^{5}-517	7^{5}	7^{6}	area is medium fine grained, light	2-6-11	500-550	-	-	.005	Trace
517 -524	7	7	green to light grey biotite-granite-	56	550-560	.021	.008		
524 -527	3	2^{9}	weak-moderate argillic altered. Moder-	57	560-570	.005	.008		
527 -537	10	9^{9}	ate amounts of muscovite throughout.	58	570-580	.005	.009		
537 -547	10	9^{7}	Vuggy quartz is quite common (- 5%)	59	580-590	.008	.005		
547 -553	6	6^{1}	very little sulfides.	60	590-600	.003	.004		
553 -563	10	10		2-6-12	550-600	-	-	.005	Trace
563 -573	10	10							
573 -583	10	10							
583 -587	4	3^{3}							
587 -593	6	4^{2}							

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS					ASSAYS					
RUN	FT.	REC.		LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
593 -603	10	10	577-637	In general rock is similar to above but	61	600-610	.003	.012		
603 -609	6	6		mica is now predominately muscovite	62	610-620	.005	.008		
609 -617	8	7		with only very little biotite, strong	63	620-630	.005	.010		
617 -627	10	$2\frac{9}{}$		fault at 584-595 at 32°. Rock is badly	64	630-640	.008	.008		
627 -$630\frac{5}{}$	$3\frac{5}{}$	$3\frac{5}{}$		broken with much gouge and shear. Very	65	640-650	.008	.008		
$630\frac{5}{}$-639	$8\frac{5}{}$	$8\frac{5}{}$		fresh 572-578-quartz is less than 5%	2-6-13	600-650	-	-	.005	Trace
639 -642	3	3		FeS_2 is less than 1%, MoS_2 very sparse,	66	650-660	.018	.008		
642 -647	5	$4\frac{8}{}$		Flecks at 610,639.	67	660-670	.015	.010		
647 -657	10	$8\frac{3}{}$			68	670-680	.021	.004		
657 -667	10	10	637-734	After 637 definite increase in biotite	69	680-690	.005	.005		
667 -677	10	10		again-occasionally (very) small flecks	70	690-700	.005	.006		
677 -685	8	$7\frac{6}{}$		of MoS_2-Rock is less than 1% FeS_2	2-6-14	650-700	-	-	Trace	Trace
685 -692	7	7		quartz 5%-extremely vuggy, badly	71	700-710	.008	.010		
692 -699	7	7		broken 683-686-Driller now reports	72	710-720	.008	.008		
699 -704	5	5		water in hole now rises to 210' (rock	73	720-730	.005	.005		
704 -714	10	10		is prominently fractured at about 25°	74	730-740	.005	.006		
714 -724	10	10		biotite "clot" at 674.	75	740-750	.013	.003		
724 -728	4	$3\frac{6}{}$			2-6015	700-750	-	-		
728 -734	6	$5\frac{2}{}$								

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS					ASSAYS					
RUN	FT.	REC.		LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
734 -744	10	10	734-800	Slight fault at 734 then into a zone of	2-76	750-760	.013	.003		
744 -751	7	7		much quartz (30% -) and no apparent	77	760-770	.018	.003		
751 -761	10	10		biotite. Rock is fine-medium grained,	78	770-780	.018	.004		
761 -767	6	6		light medium green, some bright, fresh	79	780-790	.005	.005		
767 -768	1	1		feldspars within the quartz. Very	80	790-800	.005	.007		
768 -777	9	9		little sulfide, very sparse Molybde-	2-6-16	750-800	-	-		
777 -787	10	10		nite, 778-784 is area of very vuggy	81	800-810	.015	.009		
787 -797	10	10		quartz (some vugs are still full of	82	810-820	.008	.012		
797 -804	7	7		FeS_2 with occasional MoS_2) (Rock is	83	820-830	.005	.013		
804 -807	3	3		locally greater than 50% muscovite).	84	830-840	.020	.008		
807 -809	2	2			85	840-850	.018	.009		
809 -810	1	0 6/7	800-875	Medium coarse grained, light green bio-	2-6-17	800-850	-	-		
810 -815	5	5 2/3		tite granite with occasional biotite	86	850-860	.018	.007		
815 -825	10	10		clots- badly broken 803-809, 1/16"	87	860-870	.007	.015		
825 -835	10	10		seam (spotty) of MoS_2 at 812, flecks	88	870-880	.007	.008		
835 -845	10	10		at 822-very little sulfide (FeS_2 less	89	880-890	.005	.005		
845 -855	10	10		than 1%)-MoS_2 at 833 small shale zone	90	890-900	.007	.007		
855 -862	7	7		at 871 at 20°-Some of biotite granite	2-6-18	850-900	-	-		
862 -872	10	10		is very fresh! Occasional zones of						
872 -882	10	10		coarse muscovite.						
882 -892	10	10								
892 -902	10	10								

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING INCLINATION STARTED

LOCATION STOPPED

SKETCH

OBSERVATIONS					ASSAYS					
RUN	FT.	REC.		LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
902 - 912	10	10	875-1000	Rock is mostly vuggy quartz and bio-	2-91	900-910	.013	.020		
912 - 913.5	1.5	1.5		tite granite, the quartz has much	92	910-920	.010	.006		
913.5 - 915	1.5	1.5		pink-buff feldspars. In some areas	93	920-930	.007	.008		
915 - 919	4	4		the feldspars are segregated along	94	930-940	.005	.006		
919 - 927	8	8		the edge or the quartz veinlets FeS_2	95	940-950	.005	.008		
927 - 937	10	9.7		is less than 1%, occasional flecks	2-6-19	900-950	-	-		
937 - 947	10	10		MoS_2 toward the bottom of the hole,	96	950-960	.013	.008		
947 - 952	5	5.2		the rock is generally fresh biotite	97	960-970	.005	.004		
952 - 962	10	9.7		granite there are still areas of	98	970-980	.007	.004		
962 - 972	10	10		heavy quartz which is quite vuggy,	99	980-990	.005	.010		
972 - 980	8	8		the buff-pink colored feldspars in	100	990-1000	.007	.004		
980 - 990	10	10		the quartz areas have much sericite	2-6-20	950-1000	-	-		
990 -1000	10	9.2		(muscovite?) and the rock has very						
				little sulfide FeS_2 is less than 1%-						
				Past 998 the rock is badly broken and						
				sandy-broken zones = 978-980, 991-992,						
				999-1000. Small flecks MoS_2 seen at						
				970, 987-Hole stopped 2/3/63						
				Phillip R. Miller						

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 2 BEARING - INCLINATION -90° STARTED 1/9/63

LOCATION STOPPED 2/3/63

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0- 10	10	Slu-dge							
10- 240	230	97.0							
240- 450	210	94.5							
450- 500	50	97.6							
500- 577	77	97.6							
577- 637	60	49.4							
637- 734	97	97.4							
734- 800	66	100.0							
800- 875	75	99.6							
875-1000	125	99.0							
(10-1000'	990'	96.3%)							

Diamond Drill Hole #3

Location	175 feet S52°W of Tina #11 NE "End"	
Started	2-6-63	
Stopped	2-27-63	
Total depth	1001 feet	
Total cored	1001 feet	
Total recovered	977.4 feet	
% recovery	97.7	
Runs	146 at 1001'	6.86'/run
NC runs	19 at 123'	6.47'/run
NX(W) runs	127 at 878'	6.90'/run
Water	13 loads (961 gallons per load) 12,493 gallons	

Casing was placed to 123 feet. All casing was removed from the hole (except the 4").

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 3 BEARING - INCLINATION -90 STARTED 2/6/63

LOCATION 175' S 52° W of Tina #11 NE end STOPPED 2/27/63

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0- 10	10	Sludge	0-25 Apparently overburden	3-1	0- 10	.008	.008		
10- 13	3	$2\frac{1}{2}$		2	10- 20	.008	.015		
13- 19	6	2	25-56 Medium to coarse, Fe stained, strong	3	20- 30	.033	.010		
19- 25	6	$3\frac{4}{5}$	argillic altered "rotten", badly broken granite,	4	30- 40	.077	.005		
25- 31	6	6	occasional quartz as veinlets. Moderate FeS_2,	5	40- 50	.044	.007		
31- 39	8	8	Chalcopyrite (?) and or MoS_2 in moderate amounts	3C-1	0- 50	-	-	Tr.	Tr.
39- 44	5	$2\frac{4}{5}$	37' - 44' is quite yellowish (SO_4).	6	50- 60	.036	.006		
44- 47	3	$2\frac{1}{3}$		7	60- 70	.039	.012		
47- 53	6	$4\frac{9}{10}$	56-77 Fine to medium, greenish, weak argillic	8	70- 80	.118	.005		
53- 60	7	$7\frac{2}{7}$	altered, much less broken biotite granite with	9	80- 90	.036	.013		
60- 65	5	$4\frac{3}{5}$	much sulfides and occasional Magnetite. Still	10	90-100	.021	.006		
65-70	5	5	with some oxidation along fractures.	3C-2	50-100	-	-	.005	Tr.
70- 77	7	$7\frac{3}{7}$		11	100-110	.018	.021		
77- 83	6	$6\frac{2}{6}$	77-233 Similar; but no oxidation along frac-	12	110-120	.021	.010		
83- 90	7	$6\frac{3}{7}$	tures, medium grey much biotite and sparse,	13	120-130	.026	.008		
90- 94	4	4	pink feldspar, very sparse chalcopyrite, weak	14	130-140	.021	.009		
94-101	7	$7\frac{3}{7}$	argillic alteration. Badly broken 102-104, 129-	15	140-150	.031	.010		
101-106	5	$5\frac{3}{5}$	153, 162 (3"), $171\frac{5}{6}$ - 173, 179-185, 194-195	3C-3	100-150	-	-	Tr.	Tr.
106-113	7	$6\frac{7}{8}$	occasional inclusion of banded biotitic material						
113-123	10	10	that must be gneiss. Gneiss is weaken in						
123-130	7	$6\frac{5}{7}$	sulfides. Inclusions are more frequent and						
130-132	2	2	thicker past about 150'. Rock is less broken past 153'.						

DIAMOND DRILL CORE LOG Page 2

MINE _____ HOLE NO. _____ BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
132 -134^{5}	2^{5}	2^{5}	233-261 Fine to medium grained, light medium	3-16	150-160	.041	.011		
134^{5}-135^{5}	1	0^{6}	grey, weak argillic. Fresh bio-granite with	17	160-170	.044	.007		
135^{5}-138^{5}	3	3	occasional distinct areas of dark, banded	18	170-180	.021	.009		
138^{5}-141^{5}	3	3	gneiss (236-240 for example), the gneiss has	19	180-190	.018	.006		
141^{5}-147	5^{5}	4	FeS_2 in thin (1/5") quartz veinlets. The	20	190-200	.031	.010		
147 -152	5	5^{1}	granite has much FeS_2 both disseminated and in	3C-4	150-200	-	-	Tr.	Tr.
152 -157	5	5	veinlets. Unknown sulfide (?), small, irregu-	21	200-210	.021	.012		
157 -164	7	6^{6}	lar xls and masses, dark, with iridescent	22	210-220	.018	.022		
164 -172	8	8^{1}	luster, H= 4($\pm$) and streak = brassy MoS_2 is	23	220-230	.023	.014		
172 -175	3	3	small, mostly granular, sub hedral xls - well	24	230-240	.018	.011		
175 -180^{5}	5^{5}	5^{3}	dispersed.	25	240-250	.021	.008		
180^{5}-183	2^{5}	1^{8}		3C-5	200-250	-	-	Tr.	Tr.
183 -185	2	1^{4}	261-311^{5} Bio-gneiss medium dark grey banded	26	250-260	.018	.017		
185 -195	10	10	gneiss with occasional seam of fresh granite	27	260-270	.008	.010		
195 -204	9	8^{3}	that has much FeS_2 and occasional chalcopyrite	28	270-280	.018	.007		
204 -210	6	5^{6}	and MoS_2. Broken 297-301, 305-310.	29	280-290	.008	.005		
210 -215	5	5^{3}		30	290-300	.028	.006		
215 -221	6	5^{9}	311^{5} -337 Mixed granite and gneiss is moderate	3C-6	250-300	-	-	Tr.	Tr.
221 -230	9	8^{4}	coarse, weak argillic-fresh with pink feldspar						
230 -234	4	3^{7}	and epidote stain.						
234 -236^{5}	2^{5}	2^{1}							
236^{5}-238	1^{5}	1^{7}							

DIAMOND DRILL CORE LOG Page 3

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
238 -245	7	7	337-354 Fine to medium grained (?) dark gneiss	3-31	300-310	.023	.007		
245 -251	6	5^{6}	with 1/16" - 1/3" seams of quartz @ 60° (up &	32	310-320	.008	.010		
251 -254	3	3	down) quartz has moderate amounts of FeS_2 and	33	320-330	.010	.010		
254 -261	7	7	lesser magnetite. The gneiss has fine dissemi-	34	330-340	.018	.005		
261 -270	9	9	nated FeS_2 throughout with no apparent Mo or	35	340-350	.015	.013		
270 -277	7	7	Cu. 8" seam of quartz @ 345 has moderate a-	3C-7	300-350	-	-	Tr.	Tr.
277 -286	9	9	mount MoS_2 and at least 2 ages of quartz.	36	350-360	.028	.008		
286 -296	10	10		37	360-370	.026	.011		
296 -297^{5}	1^{5}	1^{5}	354-374^{5} Bio-granite with some banding, quite	38	370-380	.021	.007		
297^{5}-302^{5}	5	4^{7}	fresh, badly broken 366-367 pink-orange (with	39	380-390	.018	.006		
302^{5}-306	3^{5}	3^{1}	Epidote and chl staining).	40	390-400	.018	.005		
306 -308^{5}	2^{5}	2^{5}		3C-8	350-400	-	-	Tr.	Tr.
308^{5}-311^{5}	3	2^{4}	374^{5}-600 Mostly gneiss, with much Euhedral	41	400-410	.031	.010		
311^{5}-317	5^{5}	5^{5}	FeS_2 in quartz veinlets granitic areas through	42	410-420	.023	.120		
317 -323	6	6	out-i.e.; 390-392, 407-410, 428, etc. Mostly	43	420-430	.021	.012		
323 -330	7	7	as thin granitic veinlets @ 419 and elsewhere	44	430-440	.021	.006		
330 -339	9	8^{6}	some of the FeS_2 has a pink luster and may	45	440-450	.021	.009		
339 -346	7	7^{4}	indicate or be cuprite. The quartz veinlets	3C-9	400-450	-	-	Tr.	Tr.
346 -353	7	7	occasionaly show good MoS_2. Distorted, thin						
353 -360	7	6^{8}	banded, medium dark grey gneiss, about 1/5 of						
360 -366^{5}	6^{5}	6^{5}	rock is granite as thin "veinlets". Gneiss has						
366^{5}-369^{5}	3	2^{4}	occasional biotite "clots" (with $CaCo_3$) granite						

DIAMOND DRILL CORE LOG Page 4

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS			
RUN	FT.	REC.	LITHOLOGY
369^{5}-375^{5}	6	6	seams are heavy in FeS_2 with/w good MoS_2 and
375^{5}-383	7^{5}	7^{5}	occasional good Chalcopyrite (Fe/Cu ratio
383 -390	7	7	improving past 500'?) Fault @ 535' -(MoS_2 @
390 -396	6	6	540 with 3" quartz seam).
396 -405	9	9	
405 -410	5	5	
410 -413	3	3	
413 -418^{5}	5^{5}	5^{5}	
418^{5}-426	7^{5}	7^{5}	
426 -431^{5}	5^{5}	5^{5}	
431^{5}-435	3^{5}	4	
435 -438	3	3	
438 -446	8	8	
446 -453	7	6^{9}	
453 -463	10	9^{7}	
463 -473	10	10	
473 -483	10	10	
483 -488	5	5	
488 -493	5	5	
493 -503	10	10	
503 -513	10	10	
513 -523	10	10	

ASSAYS					
NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
46	450-460	.008	.010		
47	460-470	.005	.008		
48	470-480	.028	.110		
49	480-490	.036	.011		
50	490-500	.018	.007		
3C-10	450-500	-	-	Tr.	Tr.
51	500-510	.008	.004		
52	510-520	.021			
53	520-530	.028			
54	530-540	.031			
55	540-550	.018			
3C-11	500-550	-	.012	Tr.	Tr.
56	550-560	.015			
57	560-570	.015			
58	570-580	.015			
59	580-590	.015			
60	590-600	.028			
3C-12	550-600	-	.010	Nil	Tr.

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

RUN	FT.	REC.	OBSERVATIONS — LITHOLOGY
523 -533	10	$9\frac{3}{}$	600-753 Past 600' there is more granite.
533 -540	7	$7\frac{2}{}$	Granite is medium grained, light grey with some
540 -550	10	10	orange feldspars, with much chlorite and epidote,
550-556	6	6	not badly broken, less sulfides, Cu/Fe ratio is
556 -565	9	9	still about the same little or no MoS_2-sparse
565 -573	8	$8\frac{3}{}$	Bornite 696-711 solid granite Occasional weak
573 -583	10	$9\frac{4}{}$	moderate Sericitic alteration some of granite
583 -591	8	$7\frac{8}{}$	material is <u>very</u> <u>fine</u>.
591 -596	5	$4\frac{2}{}$	
596 -606	10	10	
606 -611	5	5	
611 -$619\frac{5}{}$	$8\frac{5}{}$	$8\frac{5}{}$	
$619\frac{5}{}$ 626	$6\frac{5}{}$	$6\frac{5}{}$	
626 -$630\frac{5}{}$	$4\frac{5}{}$	$4\frac{7}{}$	
$630\frac{5}{}$-632	$1\frac{5}{}$	$1\frac{3}{}$	
632 -641	9	$8\frac{6}{}$	
641 -651	10	10	
651 -661	10	$9\frac{8}{}$	
661 -666	5	5	
666 -676	10	10	
676 -686	10	10	
686 -696	10	$9\frac{8}{}$	

ASSAYS NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
3-61	600-610	.018			
62	610-620	.015			
63	620-630	.018			
64	630-640	.010			
65	640-650	.031			
30-13	600-650	-	.014	Nil	Tr.
66	650-660	.031			
67	660-670	.015			
68	670-680	.005			
69	680-690	.010			
70	690-700	.018			
30-14	650-700	-	.008	Nil	Tr.
71	700-710	.010			
72	710-720	.013			
73	720-730	.036			
74	730-740	.013			
75	740-750	.036			
30-15	700-750	-	.005	Tr.	Tr.
76	750-760	.021			
77	760-770	.010			
78	770-780	.008			
79	780-790	.010			

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
696-706	10	10	753-795 Badly broken but recemented with	3-80	790-800	.010			
706-716	10	10	granitic material. Much of rock is greenish	3C-16	750-800	-	.015	Tr.	Tr.
716-726	10	10	breccia. Slight amounts of disseminated pyrite	81	800-810	.026			
726-735	9	9	no apparent Cu or Mo. Rock is quite "fresh"	82	810-820	.018			
735-745	10	10	but locally has mild argillic alteration-"Pink"	83	820-830	.018			
745-754	9	8.5	mineral (?) 782-784.	84	830-840	.015			
754-755	1	1.8		85	840-850	.010			
755-765	10	10	795-850 Less brecciated material-slightly more	3C-17	800-850	-	.017	Tr.	Tr.
765-770	5	5.2	Cu & Mo. Occasional moderate amounts of Magne-	86	850-860	.018			
770-777	7	5.9	tite in quartz veinlets or zone of heavy dis-	87	860-870	.018			
777-778	1	1	seminated pyrite-broken zone @ 805 past 820'	88	870-880	.010			
778-786	8	7.7	of the rock is quite heavy in sericite and	89	880-890	.008			
786-796	10	10	granitic rock is "bleached".	90	890-900	.010			
796-806	10	10		3C-18	850-900	-	.014	Nil	Tr.
806-816	10	10	850-860 Similar (but vuggy).						
816-826	10	10							
826-836	10	10	860-903 Fine to medium grained, light green,						
836-846	10	10	light grey, moderate sericitic alteration not						
846-856	10	10	badly broken, (Granite 80%, gneiss 20%) most						
856-866	10	10	feldspars are fresh. Moderate FeS_2, weak						
866-874	8	8.4	Chalcopyrite, sparse MoS_2.						
874-884	10	10							

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
884 -888.6	4.6	4.3	903-910 Mixed gneiss & granite, with much	3-91	900-910	.008			
888.6-896	7.4	7.9	quartz, gneiss has much biotite, fault at 40°	92	910-920	.008			
896 -904	8	8	at 910'.	93	920-930	.010			
904 -912	8	8		94	930-940	.013			
912 -922	10	10	910-926 Medium dark, moderate argillic altered,	95	940-950	.010			
922 -928	6	6	gneiss (light blue-light green feldspars)	3C-19	900-950	-	.014	Nil	Tr.
928 -933.5	5.5	4.2	Moderate FeS_2 with occasional chalcopyrite.	96	950-960	.008			
933.5-940	6.5	6.9	Thin seams occasionally have sparse bornite.	97	960-970	.008			
940 -946	6	6.2		98	970-980	.008			
946 -956	10	10	926-927 Broken/shear zone (@ 23°).	99	980-990	.006			
956 -966	10	9.7		100	990-1001	.006			
966 -976	10	10	927-1001 Mostly granite with small amounts of	3C-20	950-1001	-	.008	Nil	Tr.
976 -986	10	10	gneiss-occasionally vuggy-(small but distinct						
986 -996	10	10	fault @ 956' @ 32° with much FeS_2 and weak MoS_2						
996-1001	5	5.4	in 2" quartz veinlet). Fine to medium grained,						
			light grey to very light green, spotty argillic						
			alteration with lesser zones of sericitic alter-						
			ation. Even in fresh rock the argillic alter-						
			ation is weak but widespread. Some feldspars						
			are quite red. Sparse quartz veinlets are						
			heavy in sulfides. Rock has weak disseminated						
			FeS_2 with occasional chalcopyrite and sparse						

DIAMOND DRILL CORE LOG

MINE _____ HOLE NO. 3 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0 - 25	25	70	MoS_2. The gneiss areas are bent and broken.						
25 - 56	31	85.5							
56 - 77	21	98.5	Stopped 2/27/63 at 1001'						
77 -233	156	96.4							
233 -261	29	97.5							
261 -311.5	50.5	97.5							
311 -337	25.5	100.0	Phillip R. Miller						
337 -354	17	100.0							
354 -374.5	20.5	94.1							
374.5-600	225.5	99.2							
600 -753	153	99.3							
753 -795	42	98.8							
795 -850	55	100.0							
850 -860	10	100.0							
860 -903	43	100.0							
903 -910	7	100.0							
910 -926	16	100.0							
926 -927	1	100.0							
927 -1001	74	99.1							

Diamond Drill Hole #4

Location	15 feet S46°E of Location Monument Tina #23
Started	3-1-63
Stopped	3-28-63
Total depth	1000 feet
Total cored	990 feet
Total recovered	957.6 feet
% recovery	95.8
Runs	224 at 990' 4.41'/run
NC runs	96 at 420' 4.38'/run
NX(W) runs	128 at 570' 4.45'/run
Water	8 loads (961 gallons per load) 7,700 gallons

Casing was placed to 430 feet. The top 110 feet of casing was removed. The bottom 320 feet was left in the hole. The casing from 110 feet to 170 deparated from the casing below it but hung up-so, there are two sections of casing in the hole: there is about a 5 foot break between the two pieces at about 165-170.

Water encountered at 910 feet, within 24 hours it had risen to 210'.

DIAMOND DRILL CORE LOG

MINE Crescent Peak HOLE NO. 4 BEARING - INCLINATION -90° STARTED 3/1/63

LOCATION 15' S46° E of Location monument Tina #23 STOPPED 3/28/63

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
0 - 10	10	-	0-55 Fine to medium grained, buff-light grey,	4-1	0- 10	.018			
10 - 20	10	10	moderate argillic altered, occasionally badly	2	10- 20	.015			
20 - 24	4	4^{2}	broken (but mostly good core) granite. moder-	3	20- 30	.013			
24 - 34	10	11	ately FeOx stained. Sparse sulfides along	4	30- 40	.010			
34 - 44	10	9^{6}	fractures, with several Cu stained flecks.	5	40- 50	.013			
44 - 54	10	10	Occasionally "vuggy". Some of oxidized materi-	4C-1	0- 50	-	.004	Tr.	Tr.
$54 - 58^{5}$	4^{5}	4^{5}	al seems to be $FeSo_4$ but could be MoO(?). No	6	50- 60	.018			
$58^{5} - 64$	5^{5}	3^{3}	MoS_2 observed. Small amounts of fine, dis-	7	60-70	.031			
64 - 66	2	1^{7}	seminated chalcopyrite and possibly chalcocite	8	70- 80	.036			
66 - 70	4	4	in a fracture at 45'.	9	80- 90	.026			
70 - 76	6	4^{1}		10	90-100	.018			
$76 - 80^{5}$	4^{5}	4^{5}	55--64 Fault zone-very badly broken with much	4C-2	50-100	-	.005	Tr.	Tr.
$80^{5} - 85^{5}$	5	5^{5}	gouge						
$85^{5} - 89^{5}$	4	1^{7}							
$89^{5} - 92^{5}$	3	2^{1}							
$92^{5} - 93^{5}$	1	0^{3}							
$93^{5} - 96$	2^{5}	2^{1}							
96 - 97	1	0^{3}							
97 -100	3	1^{7}							
100 -102	2	1^{7}							
102 -106	4	4^{7}							
106 -110	4	4^{3}							

DIAMOND DRILL CORE LOG Page 2

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
110 -113	3	3	64-340 Medium coarse grained, light medium	4-11	100-110	.010			
113 -118	5	5	grey, weak argillic altered, very badly broken	12	110-120	.015			
118 -122	4	2^{4}	(with gouge sections at least every 3') (No	13	120-130	.018			
122 -126	4	3^{5}	single, strong fault) granite. With moderate	14	130-140	.021			
126 -129	3	3	FeS_2 disseminated and along fractures. Oc-	15	140-150	.031			
129 -133	4	1^{4}	casionally some of the feldspars are quite	4C-3	100-150	-	.004	Tr.	Tr.
133 -135	2	0^{7}	"orange". Occasionally gouge is parallel to	16	150-160	.018			
135 -137	2	1^{8}	core-some very pale pyrite-no Cu-very weak	17	160-170	.010			
137 -139	2	1^{7}	alteration, all core is badly broken, no	18	170-180	.008			
139 -142^{5}	3^{5}	2^{6}	prominent direction of fractures.	19	180-190	.010			
142^{5}-146	3^{5}	3^{1}		20	190-200	.018			
146 -150	4	4^{3}		4C-4	150-200	-	.007	Tr.	Tr.
150 -152	2	2^{3}							
152 -156^{5}	4^{5}	3^{6}							
156^{5}-162	5^{5}	1^{8}							
162 -166	4	5^{1}							
166 -170	4	2							
170 -176	6	5^{4}							
176 -180	4	4^{7}							
180 -190	10	9^{1}							
190 -194	4	4^{2}							
194 -199	5	4^{7}							

DIAMOND DRILL CORE LOG Page 3

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
199 -203	4	$3\frac{4}{}$	64-340 (continued) Gouge at 215' on a sharp	4-21	200-210	.008			
203 -207	4	4	definite fault @ 50° (overall fracture pattern	22	210-220	.015			
207 -214	7	7	seems to be parallel to this angle in this	23	220-230	.015			
214 -220	6	6	area). At 216' a 9" seam of quartz (with about	24	230-240	.021			
220 -225	5	5	60% pyrite) is at 50°. No apparent copper,	25	240-250	.041			
225 -230	5	5	very fine grained MoS_2 (occasionally) along	4C-5	200-250	-	.005	.005	Tr.
230 -$233\frac{6}{}$	$3\frac{6}{}$	$3\frac{6}{}$	quartz veinlets. At 223' a very strong, sharp	26	250-260	.018			
$233\frac{6}{}$-236	$2\frac{4}{}$	$2\frac{4}{}$	fault has 18" of gouge at 46°. All rock is	27	260-270	.018			
236 -$238\frac{5}{}$	$2\frac{5}{}$	$2\frac{5}{}$	very badly broken, much of core is "gravel"	28	270-280	.021			
$238\frac{5}{}$-242	$3\frac{5}{}$	$3\frac{5}{}$	size. Gouge is from parallel to 46° and makes	29	280-290	.018			
242 -$245\frac{5}{}$	$3\frac{5}{}$	$3\frac{5}{}$	up about 1/3 of all core. Much FeS_2, no	30	290-300	.018			
$245\frac{5}{}$-250	$4\frac{5}{}$	$4\frac{5}{}$	apparent copper, possibly slight MoS_2.	4C-6	250-300	-	.002	.005	Tr.
250 -253	3	3							
253 -256	3	3							
256 -260	4	4							
260 -263	3	$2\frac{1}{}$							
263 -267	4	$4\frac{2}{}$							
267 -272	5	5							
272 -276	4	4							
276 -281	5	5							
281 -284	3	3							
284 -289	5	$4\frac{7}{}$							

DIAMOND DRILL CORE LOG Page 4

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
289 -294	5	5	64-340 (continued) All badly broken, some of	4-31	300-310	.010			
294 -299	5	5	rock is moderately argillic altered. Mostly	32	310-320	.008			
299 -301	2	1.7	"crumbly" material with occasional seams of	33	320-330	.018			
301 -305	4	4	quartz-in area around 300' the rock seems to be	34	330-340	.010			
305 -309	4	4	a poorly cemented breccia-with thin seams of	35	340-350	.015			
309 -313	4	4	pyrite (it is still "crumbly)	4C-7	300-350	-	.004	Tr.	Tr.
313 -318	5	5		36	350-360	.005			
318 -323.5	5.5	5.5	340-342 Less broken-intensely argillic altered	37	360-370	.005			
323.5-330	6.5	6.5	rock.	38	370-380	.003			
330 -335.5	5.5	4.7		39	380-390	.018			
335.5-340	4.5	4.3	342-348 Dark green, biotite-chlorite schist-	40	390-400	.010			
340 -346	6	5.2	upper contact at 46°, lower at about 30°.	4C-8	350-400	-	.002	Tr.	Tr.
346 -353	7	7.2							
353 -357	4	4	348-388 Similar to rock above schist-badly						
357 -361	4	3.6	broken, gravel size chunks 1/8"-1" occasionally						
361 -365.5	4.5	4.5	12" pieces, all "mixed" with section s of						
365.5-370.5	5	5.2	gouge. Rock is alternately fresh and altered.						
370.5-375.5	5	5	Occasional quartz as veinlets with much dis-						
375.5-380	4.5	4.5	seminated pyrite. Measurable fractures at 50°,						
380 -384	4	4	27°, 57°, 0°, 33°, 45°, 20°, 35°, 40°.						
384 -389	5	5							
389 -394	5	5							

DIAMOND DRILL CORE LOG Page 5

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
394 -400	6	6	388-448 Gradually less broken-possibly less	4-41	400-410	.010			
400 -404	4	4	altered very little quartz as veinlets, (casing	42	410-420	.031			
404 -410	6	6	set at 430'). Several zones between 430 and	43	420-430	.020			
410 -414^{5}	4^{5}	4^{2}	451^{5} are extremely broken-badly sheared-no	44	430-440	.015			
414^{5}-422	7^{5}	7^{5}	apparent trend to fractures. In worst zones	45	440-450	.010			
422 -425	3	3	rock seems to be intensely altered. Mostly	4C-9	400-450	-	.006	Tr.	Tr.
425 -429	4	4	argillic with portions of strong sericitic	46	450-460	.015			
429 -430	1	0^{6}	alteration.	47	460-470	.015			
430 -433	3	2^{8}		48	470-480	.025			
433 -435^{5}	2^{5}	2	448-474 Coarse, dark green, soft crumbly	49	480-490	.010			
435^{5}-436^{5}	1	1^{3}	(argillic altered?) gneiss-no apparent sulfides	50	490-500	.008			
436^{5}-442	5^{5}	5^{5}	upper contact at 55°. Toward end of section	4C-10	450-500	-	.003	Tr.	Tr.
442 -446	4	4	gneiss is interfingered with fresh granite.						
446 -449^{5}	3^{5}	3^{2}							
449^{5}-451^{5}	2	2	474-487 Medium coarse grained, orange-light						
451^{5}-456	4^{5}	4^{3}	grey, mostly fresh, moderately fresh, biotite-						
456 -461	5	5	granite. With occasional pyrite-prominent						
461 -467	6	6	fractures at 45° about every 3" (½ quartz at						
467 -471	4	3^{7}	467^{5}, at 46° with weak MoS_2, ¼" x 1" or chalco-						
471-475^{5}	4^{5}	4^{5}	pyrite and much FeS_2.						
475^{5}-476	0^{5}	0^{5}							
476 -481	5	4^{7}							

DIAMOND DRILL CORE LOG Page 6

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
481 -487^{5}	6^{5}	6	487-538 Alternating units fresh coarse grained	4-51	500-510	.010			
487^{5}-495	7^{5}	7^{5}	granite and biotite granite up to 5' thick.	52	510-520	.020			
495 -500	5	5	Weak to moderate argillic alteration in biotite	53	520-530	.008			
500 -507	7	6^{4}	rich units. Biotite-rich units are probably	54	530-540	.013			
507 -515	8	8	altered gneiss. Argillic alteration along	55	540-550	.015			
515 -523	8	7^{8}	shears. Brecciated 494-495^{5}, 496 (dips 40°),	4C-11	500-550	-	.002	Tr.	Tr.
523 -533	10	10	499-501, 506-508^{5}, 535-537^{5} (dips 90°, 45°).	56	550-560	.005			
533 -539^{5}	6^{5}	5^{8}	Schist inclusion 496-496^{5} scattered round, dark	57	560-570	.005			
539^{5}-544^{5}	5	4^{5}	xtals of altered garnet(?). Traces molybdenite,	58	570-580	.008			
544^{5}-549^{5}	5	5	chalcopyrite. Sparse pyrite as veinlets and	59	580-590	.015			
549^{5}-553	3^{5}	3^{5}	disseminated xtals.	60	590-600	.010			
553 -555^{5}	2^{5}	2^{5}		4C-12	550-600	-	.001	Tr.	Tr.
555^{5}-559^{5}	4	4	538-545 Gouge. Crushed biotite granite gneiss						
559^{5}-562^{5}	3	2^{5}	(?) showing strong to moderate argillic alter-						
562^{5}-566^{5}	4	3^{4}	ation. Sparse pyrite.						
566^{5}-570	3^{5}	3^{5}							
570 -574	4	4	545-601 Biotite granite gneiss with strong to						
574 -577	3	2^{6}	moderate argillic alteration. Locally brecci-						
577 -579	2	2	ated and numerous thin gouge seams. Granite						
579 -582	3	2^{6}	units up to 2' thick. Sparse pyrite.						
582 -585	3	2^{7}							
585 -590	5	5							

DIAMOND DRILL CORE LOG Page 7

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
590 -593	3	3	601-610 Gneissic biotite; mostly fresh, medi-	4-61	600-610	.013			
593 -596½	3½	3½	um grained; medium gray; not badly broken.	62	610-620	.013			
596½-601	4½	4½	610-620 Biotite gneiss with scattered granitic	63	620-630	.008			
601 -607	6	6	units. Argillic alternation with greenish clay	64	630-640	.013			
607 -617	10	9Ⅷ	in places. Gneiss more broken than granite.	65	640-650	.005			
617 -622	5	5½	Very little pyrite, no apparent molybdenite or	4C-13	600-650	-	.002	Nil	Tr.
622 -632	10	9Ⅶ	chalcopyrite.	66	650-660	.005			
632 -641	9	9¼	620-643 Gneissic biotite granite as in 601-610.	67	660-670	.005			
641 -647	6	5Ⅸ	643-692 Biotite granite gneiss; coarse to medi-	68	670-680	.008			
647 -654	7	7	um coarse grained; fresh to moderately fresh	69	680-690	.015			
654 -656	2	1Ⅸ	with thin zones showing strong argillic alter-	70	690-700	.008			
656 -663½	7½	7¼	ation. Clay gouge 660-663. Strongly altered	4C-14	650-700	-	Tr.	Tr.	Tr.
663½-673	9½	9¼	zones are highly broken. Sparse scattered						
673 -677	4	4¼	pyrite veinlets and xtals. Thin granitic units						
677 -683	6	5¾	with altered schistose inclusions.						
683 -688	5	3½	692-726 Medium grained granite with strong to						
688 -694	6	6¼	moderate argillic alteration. Sparse pyrite						
694 -697	3	3¼	veinlets. Locally almost pegmatitic.						
697 -699	2	2Ⅷ	726-771½ Fresh gneissic biotite granite with						
699 -704	5	4Ⅷ	sparse veinlets of pyrite.						
704 -714	10	10							
714 -720	6	5Ⅵ							

DIAMOND DRILL CORE LOG Page 8

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
720 -726	6	6^{3}	$726-771^{5}$ Mostly dark grey-dark green biotite	4-71	700-710	.005			
726 -730	4	1^{3}	gneiss. (Occasional areas of biotite schist).	72	710-720	.013			
730 -740	10	10	(Rock is strongly altered and fractured in	73	720-730	.002			
740 -745	5	5^{4}	schist areas). Badly broken 754-757 in this	74	730-740	.002			
745 -751	6	6^{1}	area rock is more granite.	75	740-750	.008			
751 -757	6	6		4C-15	700-750	-	.002	Nil	Tr.
757 -765	8	7^{8}	$771^{5}-823$ (Fault zone 772-790) more granite	76	750-760	.008			
765 -768	3	3	than gneiss-very badly broken-granite is very	77	760-770	.005			
768 -773	5	5	fresh, very weak FeS_2-No apparent Copper or	78	770-780	.008			
773 -775	2	2	Moly-More gneissic toward bottom of interval-	79	780-790	.008			
775 -776	1	1	lime-filling in some of the thin fractures.	80	790-800	.005			
776 -781	5	5		4C-16	750-800	-	.002	Nil	Tr.
781 -784	3	3							
784 -789	5	5							
789 -794	5	5							
794 -800	6	5^{7}							
800 -803	3	3							
803 -806	3	2^{7}							
806 -809	3	2^{1}							
809 -813	4	2^{8}							
$813-817^{5}$	4^{5}	4^{2}							
$817^{5}-821$	5^{5}	4							

DIAMOND DRILL CORE LOG Page 9

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
821 -825	4	3^{7}	823-1000 Strongly faulted area-much gouge (most	4-81	800-810	.018			
825 -833	8	7^{7}	of core is gouge and gravel) Rock is probably	82	810-820	.013			
833 -835	2	0^{4}	gneissic granite with moderate strong argillic	83	820-830	.015			
835 -838	3	3^{1}	alteration-more gneissic past 950, encountered	84	830-840	.008			
838 -841	3	3	water at about 920' and some FeOx was observed	85	840-850	.015			
841 -844	3	2^{6}	Short intervals of coarse granite-very sparse	4C-17	800-850	-	.002	Nil	Tr.
844 -846	2	2^{4}	FeS_2 no apparent Copper of Moly.	86	850-860	.008			
846 -849	3	3		87	860-870	.008			
849 -850	1	1		88	870-880	.008			
850 -850^{5}	0^{5}	0^{5}		89	880-890	.015			
850^{5}-853^{5}	3	3		90	890-900	.015			
853^{5}-856	2^{5}	2^{5}		4C-18	850-900	-	.002	Nil	Tr.
856 -859	3	3							
859 -862	3	2^{7}							
862 -864^{5}	2^{5}	2^{5}							
864^{5}-868	3^{5}	3^{2}							
868 -871	3	3^{4}							
871 -875	4	3^{5}							
875 -880	5	5^{2}							
880 -881	1	0^{4}							
881 -887	6	6^{5}							
887 -892	5	5							

DIAMOND DRILL CORE LOG Page 10

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
892 -896	4	4		4C-91	900-910	.010			
896 -902 5/2	6 5/2	6 5/2		92	910-920	.008			
902 5/2 -904 5/2	2	2		93	920-930	.008			
904 5/2 -906 5/2	2	2		94	930-940	.008			
906 5/2 -911 5/2	5	5		95	940-950	.008			
911 5/2 -914	2 5/2	1 7/2		4C-19	900-950	-	.001	Tr.	Tr.
914 -917 5/2	3 5/2	3 5/2		96	950-960	.008			
917 5/2 -919 5/2	2	1 7/2		97	960-970	.020			
919 5/2 -924	4 5/2	3 8/2		98	970-980	.005			
924 -928	4	4 2/2		99	980-990	.010			
928 -936	8	8		100	990-1000	.005			
936 -937	1	0 2/2		4C-20	950-1000	-	.001	Nil.	Tr.
937 -939 5/2	2 5/2	2 3/2							
939 5/2 -943	3 5/2	3 7/2							
943 -946	3	3 2/2							
946 -950	4	4							
950 -956	6	5 5/2							
956 -958	2	2							
958 -961	3	3 6/2							
961 -966	5	5							
966 -975	9	9							
975 -980	5	4 1/2							

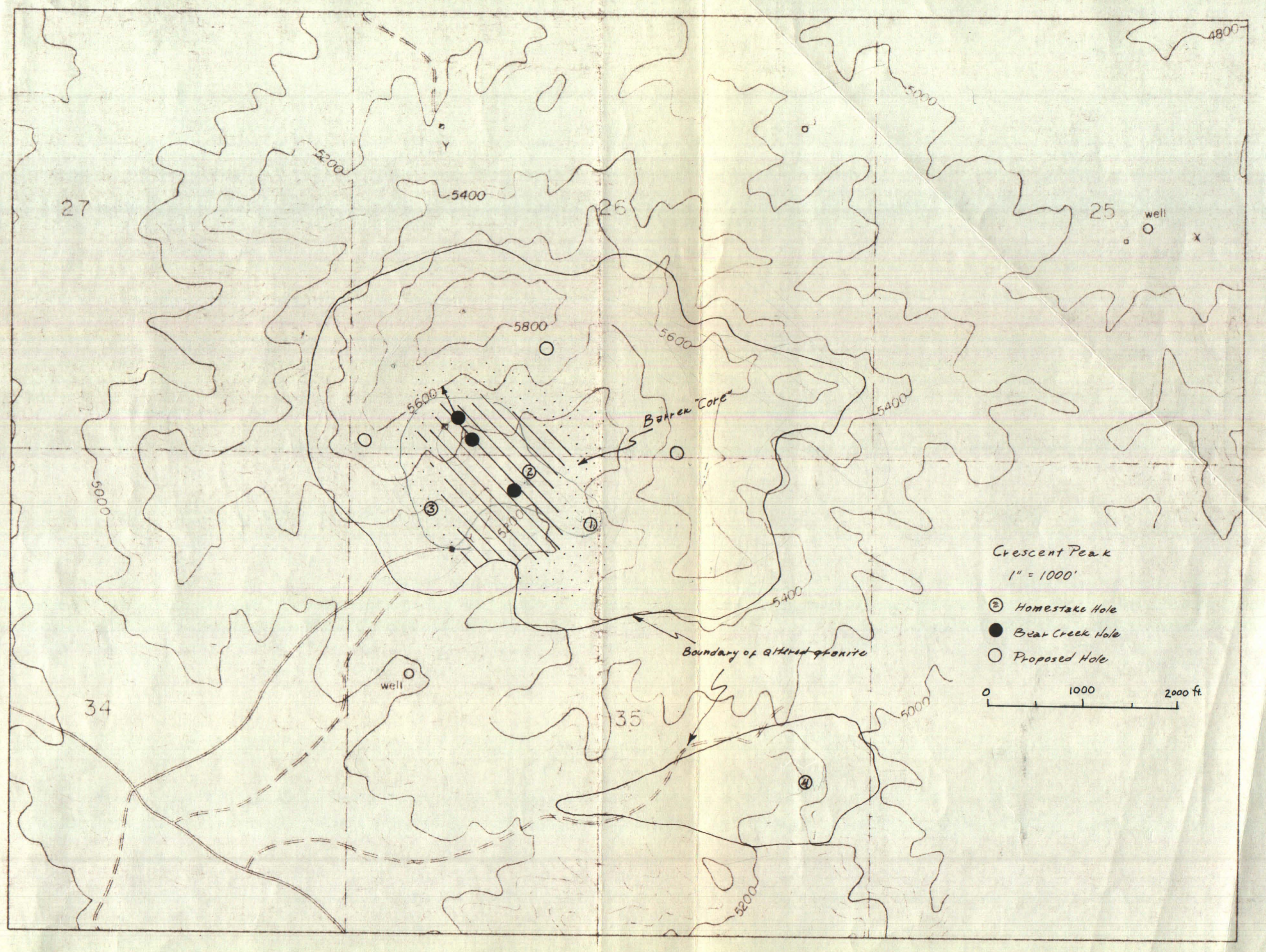
DIAMOND DRILL CORE LOG Page 11

MINE _____ HOLE NO. 4 BEARING _____ INCLINATION _____ STARTED _____

LOCATION _____ STOPPED _____

SKETCH

OBSERVATIONS				ASSAYS					
RUN	FT.	REC.	LITHOLOGY	NO.	DEPTH	% Cu	% Mo	OZ Au	OZ Ag
980 -987	7	6 3/4							
987 -993	6	5 4/5							
993 -994 1/2	1 1/2	1 3/4	Stopped 3/28/63 Phillip R. Miller						
994 1/2 -1000	5 1/2	5 1/2							


27
26
25
34
35
well
well
5200
5400
5000
4800
5800
5600
5400
5000
5200
5400
5000
5200
Barren "Core"
Boundary of altered granite
Crescent Peak
1" = 1000'
Homestake Hole
Bear Creek Hole
Proposed Hole
0
1000
2000 ft.