

% (no. Recovered)	Minerals	Alteration	Structure	Rock Type	D.D.P. No. <u>BIM-4</u> SCALE <u>1"=100'</u> BY <u>L.C.2</u> LOC. ON <u>N. 70° W. 1/2 Sec 12</u> COLLAR EL. <u>6230</u> DATE <u>1-22-78</u> <u>NE 1/4 Sec 12</u> <u>TE 3-24-78</u>	INTERVAL		MINERAL	
						FROM	TO	Cu	Mc
					<u>THIS RISEN GRANT Co. N.M.</u>				
					<u>0-160' ARGILLIC TUFF - PINKISH GRAY</u>				
					<u>SR 8 1/2 - RAGGED PORPHYRITIC TEX</u>				
					<u>COMPOSED BIM, MASON, QTR & FELDSPAR</u>	0	160	5	12
					<u>SAT IN STRONGLY CLAYEY MATRIX. VERY</u>				
					<u>SOFT - VERY FRIABLE.</u>				
					<u>OTED AT THIS LOCATION IS KNEELING</u>				
					<u>NUN TUFF.</u>	100	200	5	12
					<u>160-260 DACITE POR - PALE RED</u>				
					<u>SR 1/2 - RAGGED POR TEX COMPOSED</u>				
					<u>QTR & ALT. FELDSPAR. ROCK IS</u>				
					<u>SILICIFIED - VERY HARD & COMPETANT.</u>				
					<u>(C.S. 720-900 HNE BIM-3.)</u>	200	300	10	12
					<u>POSS. BASE TKN</u>				
					<u>FORMATION ??</u>				
					<u>260-480</u>				
					<u>BANDED CHERTY TUFF - MED GRAY</u>	300	400	25	12
					<u>N-S TO GRAYISH RED 100 1/2 - STRONG</u>				
					<u>SILICIFIED - CHERTY BANDED AND LAMINATED</u>				
					<u>NOTE THE AMT. WHITE CLAYEY MATERIAL</u>				
					<u>BELOW 420.</u>	400	500	215	2
					<u>480-640 ARGILLIC TUFF - WHITE -</u>				
					<u>VERY FRIABLE - SOFT. CONTAINS</u>				
					<u>SOME GRAYISH RED CHERTY MATERIAL</u>	500	600	300	2
					<u>POSS INFALL FROM 260-480.</u>				
					<u>640-720 TUFF - (GRAYISH PINK - SR 8 1/2</u>				
					<u>STRONG ARGILLIC - VERY SOFT - LOOSE</u>	600	700	440	2
					<u>AND FRIABLE - TEX. RESEMBLES</u>				
					<u>BLASTING SAND.</u>				
					<u>720-840 ARGILLIC LITHIC TUFF - PALE</u>				
					<u>PINK SR 8 1/2 FRAGMENTS ARE STRONGLY</u>	700	800	250	2
					<u>ARGILLIC (SERICITIZED ??) DACITE PORPHY.</u>				
					<u>840-920 TUFF - DUSKY YELLOW SR 1/4 -</u>				
					<u>V. ST. CLAY LOWER 40' NOTE PROMINENT</u>	800	900	205	2
					<u>FRAG. OF TALEY SOAPY YELLOW GREEN</u>				
					<u>MATERIAL IN ZONE 840-850.</u>				
					<u>920-1820 LITHIC TUFF - GREENISH GRAY</u>				
					<u>SGY 1/4 - FRAGMENTS ARE STRONGLY</u>	900	960	120	2
					<u>ARGILLIC & SERICITIZED - PINK W/</u>				
					<u>POR. TEX & CHERIES 1-3% DISSEM</u>	960	1000	120	2
					<u>MINERAL PYRITE.</u>				

Mud Rot
 Air Rot

[illegible]

	Core Recovery	Mineralite	Alteration	Structure	Rock Type	D.P. No. _____ SCALE _____ BY <u>AA</u>	LOCATION _____ COLLAR EL _____ DATE <u>2/16/70</u>	INTERVAL		MINERAL			
								FROM	TO	Cu	Mc	Zn	
	5/55					1900	1895 - 1930						
- 12%	2/2			AA			Lt. bluish gray SB 7/1, Feldspar Hornblende porphyry. Hb disseminations embedded laths (20%) mostly altered to chlorite; dominant alteration appears to be silicification. V.F.G. py = 2% rare to common calcite veins; cemented shear zone 1904.5 to 1907.5; also at 1910 to 1914.5						
- 28%	5/5			AA		1910							
	4.5/5			AA		1920							
- 65%	3/3			AA		1930	1930 - 1943.5 Greenish gray SG 6/1, Feldspar porphyry; abundant chlorite; all feldspar clouded; V.F.G. py = 3% (Latite porphyry in 2H-3)	1930	1940	5	2		
	5/5			AA		1940							
- 5%	10/10			AA		1943.5 - 2121							
- 26%	5/5			AA		1950	Light bluish gray SB 7/1, Feldspar Hornblende porphyry. Feldspars all clouded; all Hb altered to chlorite; some section slightly harder than others (silicification); abundant CO ₂ veins; intensely fractured; contains V.F.G. pyrite ≈ 2-3%; no cpy nor CC observed.	1950	1960	10	2	30	
- 44%	6/5			AA		1960							
- 65%	5/5			AA		1970							
	5/5			AA		1980							
52%	5/5			AA		1990	Following shear/broken zones:						
- 42%	5/5			AA		1990	1943.5 - 1960 Broken, sheared about gneiss, probably shear angle 30°-45° cemented breccia.						

[illegible]

Core Recovery %	Mineral	Alteration	Structure	Rock Type	Depth m	Location	Collar EL	Date	Interval		Mineral	
									From	To	Cu	Mo
2.5/2.5					2100							
2.0/2.5												
2.5/2.5												
2.5/2.5												
1.5/1.5					2110							
1.5/1.5												
1.5/1.5												
1.5/1.5					2120							
1.5/1.5					2121-2210							
1.5/1.5												
1.5/1.5												
1.5/1.5					2130							
1.5/1.5												
1.5/1.5												
1.5/1.5					2140							
1.5/1.5												
1.5/1.5					2150							
1.5/1.5												
1.5/1.5												
1.5/1.5					2160							
1.5/1.5												
1.5/1.5					2170							
1.5/1.5												
1.5/1.5					2180							
1.5/1.5												
1.5/1.5					2190							
1.5/1.5												
1.5/1.5					2200							

		D	No	SCALE	BY	INTERVAL		MINERAL	
		LOCATION				FROM	TO	Cu	Me
		2200							
53%	5/6								
	5/5								
+0' 22d	5/1	2210							
21%	2.7/3								
	3/3.5								
38%	5/6								
?	4.6/4								
	4.4/5.5								
25%	2.7/2.5								
	5.8/5								
73%	4.2/3								
	5/5								
31.6%	5/5								
	4/4								
31.6%	3.2/3								
	5/5								
38%	5/5								
	2.8/3								
	2.7/3.5								
4%	3.4/4								
	4.2/4.5								
7%	4.4/5								
	3.9/4								
		2200							
		2210							
		2220							
		2230							
		2240							
		2250							
		2260							
		2270							
		2280							
		2290							
		2300							

D.D. No. 15M-4		SCALE		BY		INTERVAL		MINERAL	
LOC. 10N		COLLAR EL		DATE		FROM	TO	Cu	Mc Zn
44%	16/5			2300					
44%	4/4								
46%	4.8/5			2310	2306-2320 BRECCIATED LATHITE OR ANASTOMOSING POR - LT. GRAY TO 11/16				
46%	1.9/2				LT. GRAY NG TO N7 - VERY RAGGED POR. TO FORMED BY ANHEDRAL ARGIL.				
46%	4/4				POR. SET IN ST. FRAC. SIL. MATRIX.				
46%	4.4/5			2320	ST. 1/2" CALC. VNS + 11% VFL. DISSEM. PY.				
64%	5/5			2320-2400					
47%	4.8/5			2330	LATHITE POR. VERY LT. GRAY NG TO LT. BLUISH GRAY SB 7/1 - RAGGED				
47%	4.9/5				SEMIATE POR TEX FORMED BY STRONGLY DISTURBED PLACING.				
64%	4.8/5.5			2340	ROCK IS 1000 FRAGMENTED AND CUT BY STAINL CO ₃ VNS + 1/2				
64%	5/5				AND SILICIFIED ZONE TO L.	2340	2350	LS	L2
54%	4.8/4.5			2350	ROCK STONY ARGILLITE! SERICITIZED AND CARRIE 11% VFL. DISSEM. PY. PY. SOME SOME				
54%	4.6/5				POST DRILLING OXIDATION ON OUTER SURFACE OF CORE.				
52%	5/5			2360					
74%	4.0/5			2370					
66%	5/5			2380	(@2379 NOTE DEFINITE FRAGMENTAL TEX - APPARENTLY AUTOCLASTIC)				
66%	5.0/5				(2380-2400 ALSO VARIATION IN TEX - POR TEX VIRTUALLY DISAPPEARS -				
60%	4.5/5			2390	VERY CRUDE VERY FAINT LAGENINI DIPS = 45°	2390	2400	LS	L2
	4.7/5			2400					

DD No <u>111-4</u> SCALE _____ BY _____		INTERVAL		MINERAL	
LOC. ION _____ COLLAR EL _____ DATE _____		FROM	TO	CL	MC
	2400				
40%	(2400-2460 FELSITES ASSUME PINKISH CAST - POSS K-SPAR IN PART.)				
58%	2410				
41%	2420				
80%	2430				
66%	2440				
66%	2450	2450	2460	45	2 105
22%	2460-2499 LATITE POR - LT. BLUSH GRAY TO LT. GREENISH GRAY 53 7/8 SG 6% CROWNED SERIATE POR. THE PRINCIPALLY COMPOSED OF RNDER SUBHEDRAL PLAGIOCLASE SOME ARE PINKISH SUBSTANTIAL K-SPAR. ROCK IS STRONGLY ARGILLIZED W/ SOME SERICITE ALSO SOME CLEAVE PLAC. CLEAVAGES NOTED. CARBIES OCCURS CO ₂ VENTS AN 1-2% VFC DISSEM FRESH PY.				
23%	2470				
26%	2480				
23%	2490	2490	2500	5	2 50
	2500				

	% Calc Recover	Mineral	Alteration	Structure	Rock Type	D.E. No. <u>211-2</u> SCALE _____ BY _____		LOCATION _____ COLLAR EL _____ DATE <u>3/10/79</u>		INTERVAL		MINERAL			
										FROM	TO	Cu	Mo		
	1/3					2500		2495-2558							
21%	2 1/2							ANDESITE - GRAYISH RED PURP SRP 4 1/2 TO GRAYISH GRAY 56%.							
	5/5					2510		FRAGMENTARY TEX - PARTIALLY DIGESTED LARY FRAGMENTS IN V.F.C. CHLORITIC MATRIX.							
53%	5/5							FROM CALCO ₂ IN UNITS AND AS MATRIX CONSTITUENT.							
	5/5					2520		NO BEDDING RECOGNIZED - ROCK CARRIER 1-2% V.F.C.							
46%	4 1/4					2530		DISSEM PY.							
	5/5							ANDESITE IS OF "HIDALGO" TYPE ALSO NOTED BM-3 AND							
41%	5/5					2540		PROBABLY DISTINCT FROM T-K ANDESITES SEEN IN OTHER AT BALO Mtn.	2540	2550	20	2			
55%	5/5					2550									
	5/5														
82%	3 1/2					2560		U.SHP INTRUSIVE CONTACT - NOTE FRAGS OF AMP ENCLOSED IN LATITE 2' BELOW CONTACT.							
42%	5/5					2570		2558-2640 LATITE PORPHYRY - LT. BLUISH GRAY SB 7% - VERY CRANWOOD SCRIBED FOR T4 COMPOSED SLANDORAL PLAC AND ANHYDRA CHLORITIZED BIO.							
46%	5/5					2580		FLAG. ARE THINNING ARELLIZED AND CLOUDED - BIOTITE WELL CHLORITIZED.							
38%	6/6							ROCK CARRIES U.S.P. (<1% V.F.C. DISSEM. PY)							
	10/10					2590		NOTE @ 2629 WELL DEVELOP BANDING DIP 50-55°)	2590	2600	65	2	375		
43%	4.5/4					2600		ALSO @ 2597 POSSIB SMALL XENOLITH AS SHOWN BY							

						CORE ASSAY						
% Core Recovered	Mineraliz.	Alteration	Structure	Rock Type	Dip No. <u>1-4</u> SCALE _____ BY _____	LOCATION _____ COLLAR EL _____ DATE <u>2/17/79</u>	INTERVAL		MINERAL			
							FROM	TO	Cu	Mc		
24%	5/5		11		2608	GRADATIONAL CHANGE IN COLOR AND TEXTURE TO A DARKER-POSSIBLY MORE SILICIFIED ROCK.						
30%	5/5		11		2610							
33%	10/10		11		2620							
45%	5/5		11		2630							
60%	5/5		11		2640	U SHP CONT. - DIPS +90° 2640-2651 GRANODI (?) POR. MED DR GRAY NY - SOMEWHAT FARED HIATAL FOR TEX SUBHERAL PLAC 1/2 K-SPA CLERE TO MOD CLODED. MATRIX V.F.L. - HIGHLY SILICEOUS 2650 V.S. V.F.L. PY	2640	2650	LS	2		
56%	5/4		7-2		2660	U SHP FAULT CONT - 45° SLICKS RAKE 90° 2651-2661 Latite Por Lt. BLANK (hard) SB 7/8 ALTERNATES w/ SILICIFIED GRANODIORITE MED DR CRAGG. LITHOLOGIES AS DESCRIBED 2640 - SI AND RESEMB TO 2640. WELL DEVEL FOLIATION - CHE BID (?) DIPS +45°						
46%	5/5		11		2670	V. SP. V.F.L. DISSEMINATED PY.						
62%	5/5		11		2680							
80%	5/5		11		2690	CONTINUED SHEEP DIPS +45° 2691-2700 Qtz LAT. Por - V. LT. GRAY NB - COARSE SEDIMENT PORTEX - PLAC FABRY COARSEN - WELL CLODED. ROCK V. SILICEOUS. CHANGES 1/4% DISSEM PY	2690	2700	LS	2	20	
48%	5/5		11		2700							

CORE ASSAYS									
INTERVAL		MINERAL			D.T. No. <u>F.M. 0</u> SCALE <u> </u> BY <u> </u>				
FROM	TO	Cu	Mo	Zn	LOCATION <u> </u> COLLAR EL <u> </u> DATE <u> </u>				
2700	2870				Qtz Latite Por - Very Lt. Grained TO WHITE NB - NS - TEX IS FINE GRAINED POR - ALMOST APLITE 2710 IN PLACE. OPEN HIAL POR TEX BADLY FOLDED Rock shows st. clay size ALT AND V. ST. Qtz VEINING. Rock 2720 CARRIES 3-4% <u>UNLT</u> : DISSEM Py - NO Cu MIN NOTED. Est Cu < 500 PPM.				
2730	2740	10	2		Note: ① Intrusive (tectonic?) breccia at 2838.5' 2" thick				
2740	2750	5	2	25					
2750	2760	5	2		NOT TO SCALE				
2760	2770	5	4	5	② sharp fault contact at 2870' ; 45°				
2770	2780	15	2						
2780	2790	5	12	15					
2790	2800	15	12						

	Core Recover	Mineraliz	Alteratic	Structure	Rock Type	D.T. No. <u>F.M. 4</u> SCALE _____ BY _____ LOCATION _____ COLLAR EL _____ DATE _____	INTERVAL		MINERAL				
							FROM	TO	CU	MC	ZN		
	5/5			A Δ Δ	2800								
24%	5/5												
	6/5			h x h	2810								
30%	5/5												
	5/4			A /	2820								
59%	5/5												
	5/5			-	2830								
74%	5/5			-									
	5/5			//	2840								
82%	5/5			///			2840	2850	10	27	160		
	5/5				2850								
76%	5/5												
	5/5				2860								
75%	5/5												
	5/5			///	2870	V. SHARP CONT. - PROB INT W/ SLIGHT INT. - DIP 45°							
					2870-								
92%	7/5			-		pale brownish gray 54R 6/1 to							
					2880	pale green 10G 6 1/2 andesite.							
66%	10/5 11					Abundant calcite xenoliths (>5% by volume); Pyrite - coarse sube- dal grains and inclusions; 3-4%;							
	5/5			-	2890	slight silicification; chlorite abundant.							
79%	5/5						2890	2900	35	22			
					2900								

Core Recover	Minerals	Alteration	Structure	Rock Type	Drill No. <u>511-6</u> SCALE _____ BY _____ LOCATION _____ COLLAR EL _____ DATE _____	INTERVAL		MINERAL			
						FROM	TO	Cu	Mo	Zn	
86%	5/5				2900 note: ① Pyrite ranges from 2-4% occurring as small, 8' nodules.						
61%	5/5 A5/A		1/1 A1/A1		2910 ② apparent fragmental nature of many textures (xenoliths?)						
72%	5/5				2920 ③ chlorite is probably most abundant mineral.						
86%	5/5				2930						
50%	5/5				2940						
50%	5/5				2950	2940	2950	30	12	13	
72%	5/5				2960						
65%	5/5				2970						
33%	5/5				2980						
57%	5/5				2990 note: 2985 - 2995 Breccia zone; fragments of matrix altered, mostly chlorite - pyrite, pyrite + 5%; partly gangue	2990	3000	30	12		
50%	5/5		A L		3000						

Core Recovery	Mineralith	Alteration	Structure	Rock Type	PROJECT D.P. No. <u>EM-6</u> SCALE _____ BY _____ LOCATION _____ COLLAR EL _____ DATE <u>3/27/77</u>	CORE ASSAYS				
						INTERVAL		MINERAL		
						FROM	TO	Cu	Mc	
	5/5				3000					
93%	5/5									
	5/5				3010					
67%	5/5									
	5/5				3020					
58%	4/5				(3022 - CRIMEE RAMPART DIPS 60°)					
	5/5				3030					
63%	5/5									
	5/5				3040					
41%	4/5					3040	3050	20	22	190
	5/5				3050					
79%	3/3									
	5/5				3060					
53%	5/5									
	10/10				3070					
29%	4/5									
					3080					
					T.D. 3084' 3-24-79					
					3090					