

Direction Vertical Depth 2109 Mar coord 60°45'13.41" N 105°05'00" E
 Started 3-31-75 Hole No. NXRM-1 Collar Elev. 6090 ± 5
 Completed 5-11-75 Property RAMP Mountain Sheet 1 of 1

ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	% CORE ASSAYS				
				Rec	CORE	PPM	PPM	
				run	cal	mo		
0-430' <u>Felsic Tuff</u> White to cream and Pale. Pinkish, firm but soft argillitic, felsic, crystal lithic tuff. This light colored soft material forms the bulk of this unit and constitutes the primary volcanic material forming a matrix which includes angular clasts derived from pre-existing dense aphanitic felsic flows. The clasts make up from 5 to 40% of the rock, and are mostly medium grey, banded, aphanitic (approaching cryptocrystalline), felsic flow material. They range from about 1mm to boulder size.	Average penetration 2-3 minutes / ft		Notes 0-719' by C.N. Upchurch for Quintana Minerals Corp. 5 1/8" rotary drill hole					
430-520' <u>Dacite ?</u> Light to medium grey gritty textured, aphanitic volcanic material. Probably felsic, but possibly of intermediate composition.	Average penetration 2-3 minutes / ft 430-470 ft. Average penetration 5-7 minutes / ft 470-520 ft.							

ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	%	CORE ASSAYS			
					Rec	CORE TUP	PPM Cu	PPM Mo
520-550' <u>Felsic Tuff</u> Similar to tuff above (0-430) except the soft matrix material here is mostly pinkish.	Penetration ranged from 3-9 min/ft.					520- 540	34	1
						540- 550	25	1
560-590 <u>Andesite Tuff</u> Medium grey, medium grained, crystal-lithic tuff of probable andesitic composition. The fine to medium-grained andesitic matrix includes dark ed, cryptocrystalline, siliceous clasts (5-10%)	Penetration rate 3-4 min/ft					550- 560	23	1
						560- 570	20	<1
						570- 580	25	1
						580- 590	21	<1
590-719 <u>Andesite</u> Strongly sericitized, somewhat soft rock material. The pre-alteration rock was probably of intermediate composition (possibly andesite). Lots of very fine grained pyrite is readily visible in cuttings and probably constitutes from one to a few percent of rock. No obvious copper minerals present. (See spot core 713-719')	Incorrectly interpreted to be premineral rock		1-3% fine Py.			590- 600	20	1
						600- 610	22	1
						610- 620	24	1
						620- 630	21	1
						630- 640	21	1
						640- 650	19	1
						650- 660	17	<1
						660- 670	20	<1
						670- 680	20	1
						680- 690	19	1
						690- 700	20	2
						700- 713	23	2
						713- 719	22	1

ROCK TYPE	ALTERATION	SOL	STRUCTURE & MINERALIZATION	% Rec	CORE ASSAYS			
					CORE RUN	PPM Cu	PPM MO	
Spot core 713-719' Medium-grained porphyritic Andesite Feldspar phenocrysts are completely altered to sericite. They make up from 30 to 40 % of rock. The light gray matrix is soft and is probably largely altered to sericite also. Very fine diss. pyrite makes up from 1-3 % of the rock. Faint incipient molding dips from 20-30°. This rock could be of flow pyroclastic, or intrusive origin.				70%	4.2' 6.0			
719-760' <u>Tuff</u> Gray to white, f. gr. plag & lithic frags in a siliceous matrix, approx 10% lithic rhyolite frags.	Notes by Bill Danley Strong argillization of plagioclase Penetration rate 2-5 minutes / ft.		3-5% f. gr. diss py.		730- 750	50	2	
760-960 <u>Tuff</u> White play (poss K-spar) phenos up to 1/8" diam in an aphanitic gray siliceous groundmass, less than 5% lithic frags Feldspar (rare)	Feldspar(?) is alt to clay RK is very soft Penetration rate 2-5 minutes / ft.		3-5% f. gr. diss py Locally as much as 8-10% py.		800- 820	50	1	
					900- 920	30	1	

ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	% Rec	CORE ASSAYS			
					CORE RUN	PPM Cu	PPM Mo	
960-1100' Tuff As prev descr. except bearing 10-15% lithic frags of pink rhyolite	As prev. 1000-1100' 5-10% green perov. sericitized frags.		As prev		1000-1020	55	<1	
1100-1230' Tuff White, f. gr. & generally lacking feldspar crystal frags as prev. 1-3% pink rhyolite lithic frags, & 1-3% pumice lithic frags.	Strong argillization		1-3% f. gr. diss py.		1100-1120	25	<1	
					1200-1220	240	<1	
1230-1440' Welded (?) Tuff White to light gray, and few flesh colored siliceous argillized chips. 2-3% Sericite? Penetration rate reduced from previous 3-5 minutes / ft. to 8 minutes / ft. Generally indistinguishable from material above except there are few or no lithic frags.	Mod to str. perov. argillization		5-10% U. f. gr. diss py.					
spot core 1260-1265' The complete obliteration of original minerals	Total pervasive argillization		10% U. f. gr. diss py	60%	3/5 1260-1265 1300-1320	30 95	1 <1	

ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	% Rec	CORE ASSAYS			
					Core Fe	PPM Cu	PPM Mo	
This rock problematic. F. gr., gray-pink, massive clay altered volc. rk. Few short brecc. zones cemented w/ ser. Prob an alt. welded tuff 1440-1575' Latite flow Breccia Mixed white arg. frags and dk gray, f. gr. siliceous frags 1540-1575' Decrease in number of dk gray frags. Spot Core 1502-1509' Latite-Flow Breccia, Dk. gray, f. gr. breccia frags of latite porphyry comprised of 35% plagioclase up to 1/8" diam in a qtz-clay-ser matrix. The frags are in a white U. f. gr. matrix of qtz-clay w/ numerous relicts of plagioclase. Frags comprise 10-15% of rk.	1262.5' see thin sect rpt. Strong arg. of white frags. Str perov. ser of feld and poss. intro. of silica 1504.5' & 1506.5' See Thin sect rpt.		5-10% U. f. gr. diss py. 5-10% U. f. gr. diss py. poss tr c.c. coating py. Post-mineral Rock		1400-1410 85 3 1410-1420 85 <1 1420-1430 70 1 1430-1440 65 2 1440-1450 55 <1 1450-1460 65 <1 1460-1470 80 1 1470-1480 65 <1 1480-1490 90 1 1490-1500 65 2 1502-1509 15 3 1500-1520 75 <1			

Inclination

Started

Completed

2th

Site No. NXBm-1

Property

Lat Coord.

C. Elev.

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ROCK TYPE	ALTERATION	SOL	STRUCTURE & MINERALIZATION	%	CORE ASSAYS			
					Rec	CORE RUN	PPM Cu	PPM Mo
1575-1770 <u>Andesite</u> F. gr., gray green and some w/ mottled purple andesite, chlor and clay/ser are prime silicate minerals;	WK prop. WK to mod chlor of mafics, chips are soft indicating arg. of plag. Poss ser. 1-2% carbonate uns.		S=100% fgr. py. Diss > Un. Tr cc. & cpy. PY: C/PY >> 20:1 CC ≈ C/PY Chips bear 3-5% PY while the sample bears up to 100% free pyrite that may be contamination from overlying post min. rx. Random samples bear 10-15% PY Tr spec H.			1600-1620	100	21
1650-1770' Possibly more siliceous than an andesite.	Penetration rate 10-15 minutes/ft					1590-1600	90	-1
Spot Core 1616-1623' <u>Andesite</u> F. gr. w/ relict plug phenos up to 1.5 mm diam. ray green andesite. Plag alt to clay 65-70% of rk, chlor 20-25% pyrite 5%, 1-2% calcite 1-2% H. stained clots of arg. plag.	mod str prop to mod Arg. chlor repl all mafic minerals & all plag alt to clay. 1622.5' See Thin Sect rpt.		1-2% PY w/ diss >> Und. PY U. f. gr. Approx. 5 frags/ft which are filled w/ calcite, minor qtz, and tr py. Non magnetic. 1616-1617' 5% diss PY		100%	7/7		
Spot Core 1716-1726 <u>Andesite-latitude</u> F. gr., gray plag alt to clay & mafic alt to chlor.	As prev. but w/ poss silica flooding minor carbonate on tight frags. 1720' See thin sect rpt.		3-5% U. f. gr. PY. Diss >> Un. Poss tr cc. Approx 5 tight frags/ft filled w/ calcite.			1616-1620 1620-1624 1624-1630 1630-1640 1640-1650 1650-1660 1660-1670 1670-1680 1680-1690 1690-1700 1700-1716	10 10 155 155 270 255 130 0.169	2 4 -1 1 1 -1 -1 -1 440 1
1770-2087 <u>Latitude</u> Gray to white, fgr. latite Qtz & ser are dom silicate min.	Str. qtz-ser per. sericitization. Penetration rate		Py 10+ % PY: C/PY >> 20:1 cf. coatings on some py. Also few clots of sooty cc. est grade 0.1% Cu		100%	10/10		
						1716-1721 1721-1726 1730-1740 1740-1750 1750-1760 1760-1770 1770-1780 1780-1790	15 15 345 325 240 480 605	5 6 7 3 2 2 3

Direction		Notes by		Magnetic		Magnetic	
Inclination		Depth		Magnetic coord.		Magnetic	
Started		Hole No. NXBM-1		Collar Elev.		Magnetic	
Completed		Property		Sheet 7 of		Magnetic	
ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	% Rec	CORE ASSAYS	PPM Cu	PPM Mo
Qtz 25% Ser 65% Probable Volc unit. Spot core 1921-1932 Latite			1830-1850' 15-20% PY less cc, cpy est 0.1% Cu 1850-1880 10-15% PY 1880-1890 15-20% PY		1790- 1800 360 4 1800- 1810 410 4 1810- 1820 305 3 1820- 1830 615 4 1830- 1840 640 2 1840- 1850 515 3 1850- 1860 485 5 1860- 1870 510 4 1870- 1880 610 3 1880- 1890 480 5 1890- 1900 435 5 1900- 1910 650 7 1910- 1920 580 5		
Mottled gray-green and white latite. Ser ~ 60% Qtz ~ 30% Py ~ 10% Probable Volc unit. 1921-1924 No recovery Sericite - clay zone, Few Sericite recovered on rotary bit.	Str. si flooding & pervasive sericitization of feldspar, Qtz-py-cc on fract. Fract very tight - < 1/16" wide.		10% pyrite w/ diss > Und py: cpy >> 20:1 py: cc ~ 20:1 est grade 0.1-0.2% Cu Approx 10 tight qtz-py filled fract 1ft. Random orientation. cc on fract diss py does not have cc. 1930-1950 py: cpy 15-20% 1950-2087' 5-10% PY.		1920- 1930 625 51 1930- 1940 820 9 1940- 1950 935 8 1950- 1960 735 6 1960- 1970 845 13 1970- 1980 800 9 1980- 1990 840 9 1990- 2000 810 8 2000- 2010 695 8 2010- 2020 625 14 2020- 2030 675 8		
2000' Approx 3" of "rock" on rotary bit. End of run. Gray-green, fine. Very soft. Sericitized rk. 90% Ser 2-3% PY.	1926.5' Thin sect			72% 8/11	1924 0.1% 60 1928 1928 625 51 1932 1920 820 9 1930 935 8 1940 735 6 1950 845 13 1960 800 9 1970 840 9 1980 810 8 1990 695 8 2000 625 14 2010 675 8		
2087-2109' Precambrian Burro Mtn Gran. No discernable change in cuttings except for poss. increase in colorless qtz. No proper sample was obtained because of remaining overlying lithologies.	Penetration rate 20-30 min/ft.						

GEOLOGIC LOG		DATE	
Direction	Site by	Location	
Inclination	Depth	Collar coord.	N E
Started	Hole No. <i>NXBm-1</i>	Collar Elev.	
Completed	Property	Sheet <i>8</i> of	

ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	% Rec	CORE ASSAYS			
					core run	APM Cu	APM Pb	
Spot core					2020			
2101-2109.					2030	860	12	
Precambrian					2030	745	7	
Burro mtn					2040			
Granite					2040	760	5	
Variable cs.					2050			
gned, d.					2050	640	10	
Porphyritic.					2060			
Mottled gray-green w/pink					2060	655	8	
K-spar phenos up to 1" diam					2070			
Qtz ~35%					2070	670	10	
K-spar phenos 1-5%					2080			
Sericitized feldspar 55-60%					2080	825	10	
Pyrite 5%					2090			
					2090	765	10	
					2100			
					100%	8/8		
					2101	120%	9	
					2105			
					2105	120%	3	
					2109			
2109'								
End of Hole								
Drill hole								
Cored from								
3111-2605 ft.								

Str. perm. ser of
plag & K-spar
except K-spar
phenos.
Few Qtz-py
& Qtz-mgt
unlets up to
1/16" wide

3-5% PY.
Diss > Un.
cc coatings on diss py
& minor cc on unlets.
est grade 0.1% Cu.
Py: cpy 10-15:1
20+ tight random fract
1 ft.

AMAX EXPLORATION

GEOLOGIC LOG

Scale: 1" = 20'

Direction	Notes by	Location
Inclination Vert	Depth 2605.3'	Collar coord. N. E.
Started	Hole No. NXBM-1	Collar Elev.
Completed July 8, 1976	Property Bald Mountain	Sheet of

	ROCK TYPE	ALTERATION	STRUCTURE & MINERALIZATION	%	CORE ASSAYS			
					REC	Core Run	Tot Cu	Mo
2100	PE Burro mtn gr. Variable CS. gneiss Porphyritic, mottled gray green & flesh pink. K-spar phenos up to 1" diam.	Strong Arw. Ser of Plag & K-spar except K-spar phenos. Secondary mgt (diss) intergran w/ Ser.	1-5% Py w/ Diss >> Un. C.C. coatings on diss py & minor C.C. on unlets. est grade 0.1 - 0.25% Cu Py: Cpy 5-10:1 Diss & Uned mgt 2-7% intermixed w/ py-coated C.C. Diff to distinguish. Rk has prob been str fract. but prev Ser has healed fract. Fracts @ random orient. 2111-2130' 1-2% diss py.	100%	2101-2109 8'	0.20	9	-
2120	Qtz ~35% ; K-spar phenos 1-20% Sericitized feld 45-60%. Py 1-5% Mgt 2-7% Tr 2% chlor.	3-10 Qtz-mgt &/or Qtz sulf unlets to 1/16" wide 1 ft. Chlor generally absent. Some fine mixtures of chlor & ser ± mgt.		100	2111-2118 4'	0.13	18	-
2140				100	2125-2131 8.1	0.13	23	-
				100	2131-2135 11.9	0.22	12	-
		2152-2166' Minor secondary K-spar along Qtz unlets	2156-2182 Tr-1% Mgt.	100	2135-2145 10	0.16	15	-
2160				100	2145-2155 10	0.21	14	-
		2173.5' 3" wide band w/ strong silica flooding.	2175-2204.2' 1-2% diss py	100	2155.1-2164 8.9	0.14	21	-
	2179-2195' Peg. B.M. gn.			100	2164-2174 10.1	0.14	47	-
2180				100	2174.1-2180 5.9	0.18	20	-
				100	2180-2185.2 5.2	0.13	14	-
	2195-2204.2 Shear	2195-2204.2 Str Prev Ser. minor secondary K-spar along Qtz unlets.		100	2185.2-2195.1 9.9	0.12	14	-
2200	2204.2			100	2195.1-2202.1 7	0.12	14	-
	2204.2-2210.5 Mtn gr to flesh monzonite. Porphyritic.	Plag is alt to Ksd. Mod Sil Ser along unlets. Some secondary K-spar	3-5% Py w/ Un & diss minor mgt on unlets (s)	100	2202.1-2212.1 10	0.14	9	-
2220	2210.5-2234.7' Peg PE Burro mtn gr. Qtz ~35% ; K-spar phenos 15-25% Sericitized feld 35% Chlor 3-5%	Peg Ser of groundmass feldspar. K-spar phenos generally fresh. Strong Si Uning. Aver 10"/ft. Biot alt to chlor.	Tr-1% Py w/ diss > Un 1-2% mgt w/ Un > diss. Tr cpy Tr CC (?)	100	2212.1-2222.3 10.2	0.14	9	-
	2234.7 Intr contact ⑤ 500 to C.A.			100	2222.3-2234.7 9.9	0.17	26	-
2240	2234.7-2279.5' monzonite Porphyry light gray. Plag phenos up to 1 cm diam ~35% f. to med gr matrix of plags & K-spar 60- 65%. Biot 2-3% Py Tr-1%.	Plag phenos fresh. Groundmass generally fresh. Locally wk Ser of feld. wk chlor of biot. 10-15 ft. Si ± Ser unlets up to 1/16" wide 1 ft. unlets at random orient. 2234.7-2242' Mod Sil & 2-3% Py 2274-2279.5' Mod Sil 2-3% Py	Tr-1% py w/ diss ≅ Un. Tr mgt w/ Un > diss	100	2234.7-2245 10.1	0.12	23	-
2260				100	2245-2255 10	0.13	21	-
				100	2255-2265 10	0.11	30	-
				100	2265-2275 10			

**AMAX EXPLORATION
GEOLOGIC LOG**

Scale: 1" = 20'

Direction	Notes by Bill Danley	Location
Inclination	Depth	Collar coord. N. E.
Started	Hole No. <i>NXBm-1</i>	Collar Elev.
Completed	Property <i>Bald Mtn</i>	Sheet of

	ROCK TYPE	ALTERATION	LOG	STRUCTURE & MINERALIZATION	%	CORE ASSAYS			
						REC	Core Run	Tot Cu	Mo
80	2279.5-2299.0' PE Burro mtn gn. Cs gned. As prev descr.	Str prev ser of feld. 10-15 Si Unlets / ft. Poss secondary K-spar or alunite.		2-3% Py w/ tr cpy. f c.c (?). Diss > Un 1-2% mgt w/ Un >> diss.					
					100		2284.1 -2294.3 10.2	0.18	24
	2299.0' intr cont 040°				100		2294.3 -2303.3 9	0.18	42
300	2299.0-2321.0 PE aplitic gn. Fto med gned equigran. Siliceous granitic Qtz 50-60% Ser feld 40-50%	Mod to Str prev Ser of feld. Mod Si Uning w/ 5-10 unlets / ft		3-4% Py w/ diss >> Un. 1% mgt w/ Un ≈ diss Less than 5 tight unlets / ft w/ Py or mgt.			2303.3 -2313 9.7	940	65
					100		2313- -2321.3 8.3	845	45
2320	2321.0-2374.5' PE Burro mtn gn. Variable Cs gned & Porphyritic. Mottled gray green & flesh Ank. K-spar phenos up to 1" diam. Qtz ~35% K-spar Phenos 1-20% Ser feld 45-60%	Mod to Str prev Ser of feld. K-spar phenos generally fresh. Aver 5-10 Si Unlets / ft. Very tight minor Py-mgt. Poss secondary K-spar or alunite.		2-4% Py w/ diss > Un. Py:cpy 5-10:1. 1-3% mgt w/ Un > diss.			2321.3- -2331.6 10.3	0.14	40
2340				2330.4' 2 1/2" wide Py Un w/ minor cpy.			2331.6- -2341.7 10.1	0.21	33
					100		2341.7 -2351.7 10	0.23	33
					100		2351.7 -2361.2 9.5	0.21	42
2360					50		2361.2 -2368.0 3.4 236.8	0.28	36
					100		2375 -2384.4 9.4	0.16	17
2380	2374.5-2407.7 Lar Qmp. Lt gray to flesh colored Phenos of plug up to 0.5 cm diam Plug 45-50% K-spar 35-40% Qtz 10-15% Py 1-2% biot 2-3% fgr matrix around plug phenos.	Str arg of plug phenos. Wk - Qtz-ser prev alt of groundmass. Little or no Si Uning.		1-2% diss Py: Py:cpy 5-10:1 No mgt.			2375- -2384.4 9.4	460	9
2400					100		2384.4 -2394.6 10.2	835	65
					100		2394.6 -2404.8 10.2	0.15	43
2420	2407.7-2465.8 PE Burro mtn gn. As prev descr B.m. unit.	2407.7-2426.5 Wk Ser of feld. Mod to St Si Uning w/ 15-20 unlets / ft		1-2% Py w/ diss ≥ Un Py:cpy 5-10:1			2404.8 -2414.9 10.1	0.15	30
				2418-2436' Strongly sheared. Py aver 5% w/ Py:cpy 5:1 Un > diss. Poss cf. f Tr MoS2			2414.9 -2424.7 9.8	0.34	133
				2426.5-2438' high angle Sulfide Un running down c.A.			2424.7 -2434.6 9.9	0.47	34
2440	2426.5-2465.8 Strong prev Ser of groundmass feld. K-spar phenos generally fresh. Aver 5 tight Si Unlets / ft. in mod fract rk that has been heated			2436-2465.8 2-3% Py w/ Py:cpy ~5-10:1 Diss ≥ Un w/ few Uns up to 1/8" wide. Aver 2 Uns / ft w/ Sulf.			2434.6 -2444.8 10.2	0.16	65
					100		2444.8 -2454.9 10.1		

Scale:

[illegible]