PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BT4

DRILLING

Location	BROWNS TUNNEL
Project	BURNS PEAK
Prospect	BROWNS TUNNEL
Design By	PMQ
Logged By	PMQ
Relogged	
Commenced	13 May 1996
Completed	22 May 1996
Drilled By	East Coast Drilling
Drill Rig	LM38

OBJECTIVE

To test the northern down plunge position of a postulated cylindrical lens of mineralization intersected in EAF6 & BT2.

RESULT

High grade mineralization was intersected with a metre of the predicted position which gives credence to the model. The intersection is narrow but may represent clipping the top of a thicker lens.

COLLAR SURVEY (AMG)

AMG mN	5384685.0	Bearing	302.0
AMG mE	377821.8	Dip	-62.0
mN		Hole Length	175.0
mE		DH Survey Type	eastman single shot
RL	501.6		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-62.00	302.00
50.0	-59.00	298.00
100.0	-57.75	298.50
150.0	-57.00	298.00

SIGNIFICANT CORE LOSS

POOR GROUND CONDITION ZONES

HOLE SIZE

From	To	Size
0	29.8	HQ
29.8	175	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	CAPPED
Steel Casing	
PVC Casing	NIL
Ground Water	
Wedge	NIL
Drill Pad	CLEARED AND SUMP FILLED IN

SIGNIFICANT INTERSECTIONS

From	To	Int	Cu	Pb	Zn	Ag	Au	Comments
103	106.3	3.3	1060	3.1	4.7	51	0.53	Baritic

32814

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Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
0.00	3.30	UNASSIGNED. core missing.	highly oxidised		0	????		
3.30	14.80	RHYOLITE red, brecciated. weathered oxidised rhyolitic lava breccia.. CONTACT: gradational			10			BROKEN CORE
14.80	26.20	RHYOLITE pink, brecciated, feldspar phyric. Abundant 5 to 50mm angular blocky feldspar phyric lava clasts in massive feldspar phyric matrix.. CONTACT: faultedto LCR	moderately oxidised		20			JOINT

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26.20	34.20	PUMICEOUS MASS FLOW buff, brecciated, feldspar phyric pumiceous. Abundant 5 to 50mm pumiceous clasts in feldspar phyric matrix. Similar composition and appearance to above interval but with distinct pumiceous texture.. CONTACT: faultedto LCR			30		JOINT	
34.20	56.80	RHYOLITE grey, massive flow banded, feldspar phyric. Abundant 1mm white to pink feldspars, fine grained leucoxene and fine grained chlorite altered phenocrysts in pale grey massive vitric matrix. Flow banding occurs from 44 to 52m.. CONTACT: conformable abrupt			40		FAULT	

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34.20	56.80	RHYOLITE grey, massive flow banded, feldspar phyric. Abundant 1mm white to pink feldspars, fine grained leucoxene and fine grained chlorite altered phenocrysts in pale grey massive vitric matrix. Flow banding occurs from 44 to 52m.. CONTACT: conformable abrupt			50			
56.80	85.50	RHYOLITE red black, brecciated flow banded, feldspar phyric. Abundant 5 to 100mm angular to ragged clasts of massive to flowbanded red (feldspar altered) to dark green (chloritic) felspar phyric lava in massive vitric lava of same composition.. CONTACT: gradational	slightly chloritised. red/green feldspar/ chlorite alteration.		60			

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85.50	95.20	RHYOLITE red black, brecciated flow banded, feldspar phyric. Reworked lava breccia similar to above interval, with minor encorporated shale clasts.. CONTACT: conformable abruptto LCA		VEIN minor pyrite in veinlets minor sphalerite in veinlets, minor red brown coarse grained sphalerite alligned in cleavage in part, and in fine cream coloured carbonate veinlets perpendicular to cleavage. Trace chalcopyrite fringing dark sphalerite in cross cutting veinlets.	90			FAULT A20
95.20	99.50	PUMICEOUS MASS FLOW yellow, pumiceous. Distinct zone of finely preserved 3mm pumice clasts, silica/sericite altered, feldspar phyric and containing minor grey shale clasts.	moderately sericitised. pumice breccia. lithology controle on alteration.	VEIN minor sphalerite in veinlets trace galena in veinlets. crackle breccia in cherty silicified rock with network of fine red sphalerite, galen and chalcopyrite.				
99.50	101.30	PUMICEOUS MASS FLOW white grey, pumiceous. Blebby silicified pumice with sericite and chlorite with minor cream carbonate veinlets, and minor mineralization.. CONTACT: conformable abrupt	moderately silicified. silicified pumice breccia.	MASSIVE 10% sphalerite massive 10% galena massive. massive dark grey fine grained sulphide with fine trains of galena in pseudomorphing foliation in part, and interstitial to 5mm sulphide domains in part. Minor ghost cherty breccia texture in part. Trace brown coarse grained sphalerite replacement in part.	100			FIRST CLEAVAGE A45
101.30	105.10	CHERT pale grey, fine grained. Zone of cherty silicification, original textures not evident. Abundant fine crackle fractures, mineralized to massive sulphide in part. Typical host.. CONTACT: faultedto LCA	highly silicified. typical cherty silica alteration with mineralised fine fractures.	VEIN minor sphalerite in veinlets minor galena in veinlets. crackle breccia in cherty silicified rock with network of fine sphalerite galena and chalcopyrite.				
				MASSIVE 10% pyrite massive. Semi-massive fine grained pyrite alligned in cleavage in chloritic/sericitic feldspar phyric rock within fault zone.				

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
105.10	106.30	CHERT pale grey, fine grained. Zone of cherty silicification, original textures not evident. Abundant fine crackle fractures, mineralized to massive sulphide in part. Typical host.. CONTACT: faultedto LCA	highly silicified. typical cherty silica alteration with mineralised fine fractures.	MASSIVE 10% pyrite massive. Semi-massive fine grained pyrite alligned in cleavage in chloritic/sericitic feldspar phyric rock within fault zone.		a/z		FAULT A40
106.30	110.40	ALTERATION ZONE brown. Altered mineralized and cleaved zone between two faults. Zone is broken but comprises three bands: cleaved pyrite/sericite/chlorite; massive cleaved pyrite; and pale brown/white massive sphalerite/barite mineralization.. CONTACT: faultedto LCA	moderately chloritised, moderately sericitised. pyritic	MASSIVE 10% sphalerite massive 10% barite massive. pale brown wispy sphalerite in massive granular white barite with trace fine disseminated chalcopyrite. Check gold. In cleaved zone between two faults.				FAULT A45
110.40	112.40	BRECCIA dark grey, poorly sorted matrix supported, polymict. mass flow slump breccia with massive shale matrix and clasts predominantly composed of shale and fine grained sediments. Altered and mineralized.. CONTACT: faultedto LCA	moderately carbonatised. white carbonate spots from .1 to 2mm in fine grained pale grey carbonate rick matrix, note Mn staining.	DISSEMINATED abundant pyrite disseminated trace sphalerite disseminated. zone with abundant pyrite and minor sphalerite throughout as disseminations, partial clast replacement, and in veinlets and cleavage.	110			FAULT A20
112.40	117.30	ALTERATION ZONE pale grey. zone comprises abundant fine white carbonate spots/grains in fine grained grey carbonate rich matrix. Rock weathers with Mn stain. Note minor 1 x 10mm bladed crystals pseudomorphs after gypsum?. CONTACT: faulted	slightly carbonatised, slightly silicified. minor silica/pyrite alteration with minor 3mm carbonate spots.	DISSEMINATED minor pyrite disseminated. very fine grained pyrite disseminated throughout.		a/z		FAULT A40
		SHALE grey. irregular zone comprising shales with slump textures and nodular carbonate alteration in part.. CONTACT: conformable abrupt	moderately chloritised, slightly sericitised, slightly carbonatised	DISSEMINATED minor pyrite disseminated. minor semi-massive replacement spots, associated with nodular carbonate alteration and veining.				
117.30	119.40	BRECCIA dark grey, poorly sorted matrix supported. slump breccia texture with dark grey fine grained chloritic matrix and abundant monomict shale clasts.. CONTACT: conformable abrupt						
119.40	121.90	SHALE grey. irregular zone comprising shales with slump textures and minor feldspar phyric volcanic component.. CONTACT: conformable abrupt			120			FAULT A20
121.90	125.20	CHERT pale grey. mineralized cherty silicification to fing grained sandstone.. CONTACT: faultedto LCA		VEIN trace chalcopyrite in veinlets trace sphalerite in veinlets. minor fine irregular veinlets in silicified sediments, chalcopyrite with dark sphalerite cores.				
		ANDESITE buff, massive, feldspar phyric hornblende phyric. massive fine grained matrix with abundant 1mm white feldspars and green hornblend phenocrysts. (NOTE: no peperitic texture). CONTACT: conformable abruptto LCA						
125.20	135.70							FAULT A60

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
125.20	135.70	ANDESITE buff, massive, feldspar phyric hornblende phyric. massive fine grained matrix with abundant 1mm white feldspars and green hornblend phenocrysts. (NOTE: no peperitic texture). CONTACT: conformable abruptto LCA			130			
135.70	136.90	BRECCIA dark grey, poorly sorted matrix supported. chloritic monomict shale slump breccia.. CONTACT: conformable abrupt		DISSEMINATED minor pyrite in veinlets trace sphalerite in veinlets. minor fine disseminated pyrite and minor coarse grained red sphalerite in fine irregular veinlets.				FAULT A35 pug
136.90	137.20	PUMICEOUS MASS FLOW white. silicified and mineralized pumice breccia, ghost undeformed 5mm pumice clasts.. CONTACT: faulted						
137.20	139.70	FAULT ZONE (PUG) dark grey. zone comprising pug, breccia, quartz veining at low angle to LCA and slickenlines on plane of quartz vein.. CONTACT: faulted				fz		FAULT A15 pug breccia
139.70	141.70	PUMICEOUS MASS FLOW MIXED WITH SHALE dark grey, pumiceous. CONTACT: conformable abrupt			140			
141.70	147.00	SHALE dark grey, massive bedded. massive to bedded fine grained sandstone to shale unaltered but with minor mineralized veinlets.						

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147.00	148.60	RHYOLITE grey green, feldspar phyric. zone of reworked feldspar phyric volcanic detritus.. CONTACT: faultedto LCA		DISSEMINATED minor pyrite in veinlets trace sphalerite in veinlets. minor fine disseminated pyrite and minor coarse grained red sphalerite in fine irregular veinlets.				
148.60	152.90	SHALE dark grey, massive bedded. massive fine grained sandstone to shale unaltered but with minor mineralized veinlets.			150			
152.90	153.50	RHYOLITE yellow grey. reworked? feldspar phyric volcanic debris.. CONTACT: missing						
153.50	154.30	ALTERATION ZONE grey. Abundant to semi-massive cleaved pyrite in shale unit.. CONTACT: faulted				a/z		
154.30	154.90							
154.90	157.30	RHYOLITE yellow. reworked volcanic debris.	highly silicified. zone of mineralized cherty silicification, typical host.	VEIN minor sphalerite in veinlets trace chalcopyrite in veinlets. Minor coarse grained red sphalerite fringed by chalcopyrite in part, in crackle breccia in zone of cherty silicification.				
		CHERT pale grey, massive. zone of mineralized cherty silicification. Typical host.. CONTACT: faultedto LCA						FAULT A50 breccia quartz
157.30	175.30	RHYOLITE buff pink, massive flow banded, feldspar phyric quartz phyric. Typical Pinnacles Rhyolite: feldspar and quartz phenocrysts in massive to flow banded lava. Minor leucoxene.			160			

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