PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
0.00	34.20	SANDSTONE, medium grained. Deeply weathered quartz feldspar crystal sandstone, no core recovered see BPD82A.	Very weathered, no core recovered.		30			
34.20	62.65	SANDSTONE cream, medium grained, massive, crystal. Feldspar quartz crystal sandstone, quartz subrounded <7mm diameter. Chloritized quartz feldspar crystal patches may have been glassy lithics or alteration stylolites. Sandstone massive with later breccia texture over print, breccia infilled with veinlets of chlorite/quartz/sphalerite.. CONTACT: unassigned	moderately oxidised. Limonitic joints and fractures.	VEIN. Limonite vein.				FAULT A5 brittle
			slightly oxidised, slightly chloritised	VEIN trace sphalerite in veinlets	40			BROKEN CORE
				VEIN trace sphalerite in veinlets quartz. Dark brown to black sphalerite.	50			BROKEN CORE

5 cm

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
34.20	62.65	SANDSTONE cream, medium grained, massive, crystal. Feldspar quartz crystal sandstone, quartz subrounded <7mm diameter. Chloritized quartz feldspar crystal patches may have been glassy lithics or alteration stylolites. Sandstone massive with later breccia texture over print, breccia infilled with veinlets of chlorite/quartz/sphalerite.. CONTACT: unassigned	slightly oxidised, slightly chloritised	VEIN trace sphalerite in veinlets trace chalcopyrite in veinlets	60			BROKEN CORE
62.65	75.00	RHYOLITE cream pink, fine grained, brecciated, feldspar phyric. Lava cream-pink-green mottled, aphyric to feldspar/quartz phyric, texturally variable including brecciation/ glass(now sericite/ flow banding.. CONTACT: faulted	slightly silicified, slightly chloritised, slightly sericitised		70			
75.00	75.70	DEFORMED ZONE. Crush zone.				d/z		FAULT brittle
75.70	166.10	SANDSTONE MIXED WITH RHYOLITE grey cream, coarse grained medium grained, massive peperitic, crystal lithic. Massive, mottled pink - grey green with chloritic stylolites. Felsic lithic horizons within the unit may represent hyaloclastites?/peperite?, these occur at 76.7m, 85.8m, 111.4m, 161.3-166.1m (quartz feldspar porphyry) and 99.2m (fine grained aphyric to feldspar phyric rhyolite).. CONTACT: conformable abrupt		VEIN trace sphalerite in veinlets	80			

5 cm

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Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
75.70	166.10	SANDSTONE MIXED WITH RHYOLITE grey cream, coarse grained medium grained, massive peperitic, crystal lithic. Massive, mottled pink - grey green with chloritic stylolites. Felsic lithic horizons within the unit may represent hyaloclastites?/peperite?, these occur at 76.7m, 85.8m, 111.4m, 161.3-166.1m (quartz feldspar porphyry) and 99.2m (fine grained aphyric to feldspar phyric rhyolite).. CONTACT: conformable abrupt	slightly silicified. slightly chloritised. slightly sericitised	VEIN trace sphalerite in veinlets trace chalcopyrite in veinlets. Veinlets associated with a zone of bleaching ie weak silica sericite alteration.	90 100 110			

5 cm

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PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
75.70	166.10	SANDSTONE MIXED WITH RHYOLITE grey cream, coarse grained medium grained, massive peperitic, crystal lithic. Massive, mottled pink - grey green with chloritic stylolites. Felsic lithic horizons within the unit may represent hyaloclastites?/peperite?, these occur at 76.7m, 85.8m, 111.4m, 161.3-166.1m (quartz feldspar porphyry) and 99.2m (fine grained aphyric to feldspar phyric rhyolite).. CONTACT: conformable abrupt	slightly silicified, slightly chloritised, slightly sericitised		120 130			

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
75.70	166.10	SANDSTONE MIXED WITH RHYOLITE grey cream, coarse grained medium grained, massive peperitic, crystal lithic. Massive, mottled pink - grey green with chloritic stylolites. Felsic lithic horizons within the unit may represent hyaloclastites?/peperite?, these occur at 76.7m, 85.8m, 111.4m, 161.3-166.1m (quartz feldspar porphyry) and 99.2m (fine grained aphyric to feldspar phyric rhyolite).. CONTRACT: conformable abrupt	slightly silicified, slightly chloritised, slightly sericitised	VEIN trace sphalerite in veinlets	140			
		MIXED WITH SANDSTONE cream, medium grained, massive, crystal lithic. Sandstone occurs between 180.0-182.9m, and is composed of crystal and lithic fragments.						
		SILTSTONE black, fine grained, foliated, crystal. Foliation sub parallel to LCA and with a similar orientation to weak disrupted banding/bedding. Abundant veinlets of carbonate/quartz/sphalerite.. CONTRACT: gradational					FAULT R30	
		WITH MINOR GREYWACKE grey green, medium grained, poorly sorted, crystal lithic. Greywacke occurs between 167.00 - 167.50m and is composed of crystal and lithic fragments, lithics mainly black silstone fragments (<1mm), matrix calcareous. The greywacke is quite distinctive and may be a good marker horizon and is simialr to the interval 361.20-363.00m in EAF2.. CONTRACT: conformable mixed		VEIN trace sphalerite in veinlets trace galena in veinlets. Scattered veinlets with chalcedonic quartz gangue.	150			
		MIXED WITH RHYOLITE cream, fine grained, peperitic. Lava? occurs between 169.6-171.6m, 179.7-182.0m and 187.3-193.0m, lava is fine grained, slightly feldspar phyric, mixed with crystal sandstone and black siltstone. The lack of chilling (sericitized glass) and baking/silicification of siltstone may suggest that the unit is not a peperite but a mixed fine grained sandstone/siltstone?		VEIN trace sphalerite in veinlets	160			
166.10	193.00		slightly carbonatised. Carbonate may be primary or a product of alteration.	VEIN 0.5% sphalerite in veinlets minor pyrite disseminated. Pyrite occurs as fine grained patches in siltstone.				

5 cm

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PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
166.00	193.00	SILTSTONE black, fine grained, foliated, crystal. Foliation sub parallel to LCA and with a similar orientation to weak disrupted banding/bedding. Abundant veinlets of carbonate/quartz/sphalerite.. CONTACT: gradational WITH MINOR GREYWACKE grey green, medium grained, poorly sorted, crystal lithic. *Greywacke occurs* between 167.00 - 167.50m and is composed of crystal and lithic fragments, lithics mainly black silstone fragments (<1mm), matrix calcareous. The greywacke is quite distinctive and may be a good marker horizon and is simialr to the interval 361.20-363.00m in EAF2.. CONTACT: conformable mixed MIXED WITH RHYOLITE cream, fine grained, peperitic. Lava? occurs between 169.6-171.6m, 179.7-182.0m and 187.3-193.0m, lava is fine grained, slightly feldspar phyric, mixed with crystal sandstone and black siltstone. The lack of chilling (sericitized glass) and baking/silicification of siltstone may suggest that the unit is not a peperite but a mixed fine grained sandstone/siltstone? MIXED WITH SANDSTONE cream, medium grained, massive, crystal lithic. Sandstone occurs between 180.0-182.9m, and is composed of crystal and lithic fragments.	slightly carbonatised. Carbonate may be primary or a product of alteration.	VEIN 0.5% sphalerite in veinlets minor pyrite disseminated. Pyrite occurs as fine grained patches in siltstone. VEIN trace sphalerite in veinlets minor pyrite disseminated. Sphalerite occurs in calcite quartz veinlets. Pyrite occurs as fine grained blebs in siltstone.	170 180 190		FAULT R30 breccia	
193.00	226.30	MIXED WITH RHYOLITE cream, fine grained, peperitic, feldspar phyric. Lava? fine grained, aphyric to feldspar phyric. There is little textural evidence for lava chilling on contacts with the siltstone.. CONTACT: faulted MIXED WITH SILTSTONE black, fine grained, massive, crystal. Bedding not readily apparent due to soft sediment and later deformation. Some siltstone occurs as stylolites. Siltstone *locally silicified and primary* textures are not readily recognizable.	moderately silicified, slightly sericitised, slightly chloritised. Alteration patchy, lithotype controlled. Weak carbonate alteration is fracture controlled.					

5 cm

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Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
193.00	226.30	MIXED WITH RHYOLITE cream, fine grained, peperitic, feldspar phyric. Lava? fine grained, aphyric to feldspar phyric. There is little textural evidence for lava chilling on contacts with the siltstone.. CONTACT: faulted MIXED WITH SILTSTONE black, fine grained, massive, crystal. *Bedding not readily apparent due to soft* sediment and later deformation. Some siltstone occurs as stylolites. Siltstone locally silicified and primary textures are not readily recognizable.	moderately silicified, slightly sericitised, slightly chloritised. Alteration patchy, lithotype controlled. Weak carbonate alteration is fracture controlled.	VEIN trace sphalerite in veinlets carbonate in veinlets VEIN trace sphalerite in veinlets. Sphalerite in quartz carbonate veinlets/fracture coatings and disseminated in silicified felsic volcanic fragments. VEIN trace sphalerite in veinlets. Sphalerite in veinlets and disseminated in silica/carbonate altered felsic volcanic fragments.	200 210 220			

5 cm

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PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
193.00	226.30	MIXED WITH RHYOLITE cream, fine grained, peperitic, feldspar phyric. Lava? fine grained, aphyric to feldspar phyric. There is little textural evidence for lava chilling on contacts with the siltstone.. CONTACT: faulted	moderately silicified, slightly sericitised, slightly chloritised. Alteration patchy, lithotype controlled. Weak carbonate alteration is fracture controlled.					
226.30	230.40	MIXED WITH SILTSTONE black, fine grained, massive, crystal. Bedding not readily apparent due to soft sediment and later deformation. Some siltstone occurs as stylolites. Siltstone locally silicified and primary textures are not readily recognizable.						
		ACID VOLCANICLASTIC grey, medium grained, brecciated. A grey to green blotchy rock composed mainly of feldspar crystals with little matrix. The brecciated appearance may be due entirely to alteration ie blocks grey flecked with chlorite, groundmass? more chloritic. This is an odd rock with little textural evidence to indicate whether it is a lava breccia or volcaniclastic..			230			
230.40	239.25	CONTAINING CLASTS OF MINERALISATION/ALTERATION grey, fine grained. Sub-rounded clasts of fine grained silica/pyrite alteration occur at 226.9m and 227.8m						
		ACID LAVA cream, fine grained, peperitic. Grey green, fine grained, slightly feldspar phyric lava?. An alternative interpretation is that the unit is a monomict felsic volcanic derived mass debris flow into siltstone. The unit is very similar to that between 193.00 - 226.30m.. CONTACT: conformable abrupt						
		MIXED WITH SILTSTONE black, fine grained, peperitic. Siltstone matrix locally silicified and sericitized.						
239.25	244.60	ACID LAVA cream, medium grained, brecciated. This interval is a mixture of several different lithologies and only the basalt can be positively identified as a lava, all others could be sediments or lavas.. CONTACT: faulted		VEIN trace sphalerite in veinlets carbonate in veinlets. The most mineralized interval (0.5%Zn) occurs between 241.8-242.0m in a quartz carbonate vein @ 15LCA.	240			
		MIXED WITH SANDSTONE green, medium grained, massive, feldspar phyric lithic. Feldspar crystals in a sericite/chlorite matrix with scattered lithics. *There is usually a close association between this sandstone? and the felsic lava?.* Minor banding that could be bedding occurs at 243.00m.						
244.60	255.85	INTERBEDDED WITH SILTSTONE green, fine grained, massive, vitric						
		WITH MINOR BASALT green, fine grained, massive, amygdales. Basalt occurs between 240.80-241.20m. Irregular contacts would indicate that it is a peperite rather than clasts. Carbonate amygdales.	intensely silicified, slightly sericitised, slightly carbonatised. Silicification is patchy, in part controlled by fractures.			Va		
		ACID VOLCANICLASTIC cream, coarse grained, matrix supported, lithic. Felsic volcanic derived mass debris flow?. Matrix sericitic with pink feldspar crystals. Clasts include fine grained cream-pink rhyolite? and silicified pumice or finely flow banded lava?. CONTACT: conformable abrupt			250		FAULT R40	

5 cm

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
244.60	255.85	ACID VOLCANICLASTIC cream, coarse grained, matrix supported, lithic. Felsic volcanic derived mass debris flow?. Matrix sericitic with pink feldspar crystals. Clasts include fine grained cream-pink rhyolite? and silicified pumice or finely flow banded lava?. CONTACT: conformable abrupt	intensely silicified, slightly sericitised, slightly carbonatised. Silicification is patchy, in part controlled by fractures.			Va		
255.85	259.60	ANDESITE cream, medium grained, peperitic, amygdales. Lava? pink-cream fine grained groundmas, quartz amygdales and abundant small feldspar phenocrysts plus an unidentified euhedral phenocryst * see thin section. Matrix is very sericitic and may be the altered glassy chilled margins of the lava.	intensely sericitised, moderately silicified. Sericite associated with fine grained pyrite as peperite matrix.	DISSEMINATED trace pyrite associated with alteration. Pyrite finely disseminated in sericite. Minor sphalerite quartz calcite veins also occur within the interval.				FAULT A5 shear
259.60	280.10	INTERBEDDED WITH ACID VOLCANICLASTIC cream, medium grained, matrix supported, polymict. This is very similar to the interval 244.60-255.85m.	intensely sericitised, moderately silicified, slightly fuchsitic. Fuchsite restricted to fractures in the andesite? lava. Sericite associated with fine grained pyrite as peperite matrix.		260			
		ACID LAVA cream pink, fine grained, peperitic. Glassy, aphyric, highly fractured rhyolite? lava. Texturally variable, fragments frequently with jig-saw fit.. CONTACT: faulted	highly sericitised, moderately silicified	VEIN trace sphalerite in veinlets				FAULT A30 brittle FAULT A25 shear
		MIXED WITH MINERALISATION/ALTERATION green, fine grained, peperitic. Peperite matrix, strongly sericitized with finely disseminated pyrite. Matrix in places is a medium grained sandstone composed of fine aphyric lava fragments.	moderately silicified, slightly sericitised, slightly carbonatised. Carbonatization is fracture controlled.		270			FAULT A25 shear
					280			BEDDING A15

5 cm

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Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
280.10	306.50	ACID LAVA cream pink, fine grained, peperitic. Glassy, aphyric, highly fractured rhyolite? lava. Texturally variable, fragments frequently with jig-saw fit.. CONTACT: faulted MIXED WITH MINERALISATION/ALTERATION green, fine grained, peperitic. Peperite matrix, strongly sericitized with finely disseminated pyrite. Matrix in places is a medium grained sandstone composed of fine aphyric lava fragments. SILTSTONE black, fine grained, foliated. Calcareous siltstone, massive/laminated/foliated with abundant carbonate veinlets.. CONTACT: conformable abrupt MIXED WITH LIMESTONE grey, fine grained, bedded. Limestone occuring as boudins? and poorly defined beds in black siltstone. WITH MINOR RHYOLITE cream, fine grained, peperitic. 287.10 - 288.30m, 300.60 - 306.50m fine grained, aphyric rhyolite lava fragments/peperite in black siltstone. Partial sericite alteration may reflect chilled glassy contacts.	highly carbonatised. Pervasive carbonate may be primary or due to alteration.	VEIN trace sphalerite in veinlets trace pyrite disseminated. Sphalerite in quartz calcite veinlets. Pyrite disseminated and in fine grained blebs.	280 290 300			
306.50	310.50	RHYOLITE cream, medium grained, foliated. Silica flooding and sericitization have obscured the primary texture and the interval could be a volcaniclastic or lava.. CONTACT: conformable abrupt WITH MINOR SILTSTONE black, fine grained. Minor sheared out lenses/stylolites include black siltstone/ chert or silicified siltstone/ sericitized lava? These three lithologies occur together and may represent a sheared out peperite.	highly silicified, slightly carbonatised. Silicification is patchy and affecting both lava and siltstone, carbonatization is associated with microfractures. slightly sericitised, slightly silicified, slightly carbonatised					

5 cm

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
306.50	310.50	RHYOLITE cream, medium grained, foliated. Silica flooding and sericitization have obscured the primary texture and the interval could be a volcaniclastic or lava.. CONTACT: conformable abrupt	slightly sericitised, slightly silicified, slightly carbonatised	VEIN trace sphalerite in veinlets trace pyrite disseminated. Sphalerite in quartz calcite veinlets. Pyrite disseminated and in fine grained blebs.	310			
310.50	327.40	WITH MINOR SILTSTONE black, fine grained. Minor sheared out lenses/stylolites include black siltstone/ chert or *silicified siltstone/ sericitized lava? These* three lithologies occur together and may represent a sheared out peperite.	highly silicified, moderately carbonatised. Carbonatization associated with fractures and veinlets.					FAULT A40 shear PRIMARY FABRIC 055 FIRST CLEAVAGE D80 fracture
		SILTSTONE WITH MINOR LIMESTONE black grey, fine grained fine grained, massive massive. Massive to weakly bedded?/weakly foliated. 318.20-318.60m slightly banded limestone.. CONTACT: conformable abrupt						FIRST CLEAVAGE D90 fracture
		MIXED WITH RHYOLITE cream, fine grained, peperitic. Cream to pale grey, fine grained, aphyric, cherty rhyolite peperite. Below 318.60m lava? sericitized which may indicate chilled glassy contacts. Some of this unit, particularly the grey cherty rocks may be silicified siltstone rather than lava.. CONTACT: conformable abrupt	highly silicified, slightly sericitised, slightly carbonatised		320			FIRST CLEAVAGE D90 fracture
				VEIN pyrite in veinlets 2% sphalerite in veinlets				
327.40	338.45	RHYOLITE cream, fine grained, massive. Aphyric rhyolite lava, chilled margins are pale grey silicified. Massive lava mixed with a medium grained epiclastic appearing unit which is most likely a variation of the lava and is similar to the interval 306.50 - 310.50m.. CONTACT: conformable abrupt		VEIN 0.5% sphalerite in veinlets carbonate in veinlets	330			
				STRINGER 1% sphalerite in veinlets carbonate in veinlets. Maximum stringer development between 335.70 - 336.50m 5% Zn. Sphalerite chalcopyrite vein at 338.50m.				

5 cm

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
327.40	338.45	RHYOLITE cream, fine grained, massive. Aphyric rhyolite lava, chilled margins are pale grey silicified. Massive lava mixed with a medium grained epiclastic appearing unit which is most likely a variation of the lava and is similar to the interval 306.50 - 310.50m.. CONTACT: conformable abrupt	highly silicified, slightly sericitised, slightly carbonatised	STRINGER 1% sphalerite in veinlets carbonate in veinlets. Maximum stringer development between 335.70 - 336.50m 5% Zn. Sphalerite chalcopyrite vein at 338.50m.				
338.45	341.20		slightly silicified, slightly carbonatised. Carbonatization associated with fractures and veinlets.		340			
341.20	345.50	SILTSTONE grey, fine grained, massive. Flecked with fine crystal/lithic fragments, these could be the distal equivalents of a peperite/hyaloclastite.. CONTACT: conformable abrupt	slightly silicified, slightly sericitised					
345.50	355.90	RHYOLITE cream, fine grained, massive, stylolites. Blotchy appearance reflecting stylolitic sericite alteration. Nature of contact indicates that it is most likely a lava, otherwise the unit is textureless.. CONTACT: conformable abrupt	moderately sericitised					
		ACID VOLCANICLASTIC cream, medium grained, foliated, lithic crystal. Pink feldspar crystals and fine grained rhyolite fragments (<2cm) in sericitized groundmass. Unit could be a brecciated lava, there are no definite sedimentary textures visible.. CONTACT: conformable mixed			350	Va		
			highly silicified, moderately carbonatised					
		RHYOLITE cream, fine grained, peperitic brecciated. Rhyolite? lava, aphyric, texturally variable including, massive, banded, brecciated and with sericite stylolites.. CONTACT: gradational						
355.90	412.00		slightly silicified, slightly sericitised					
		MIXED WITH SILTSTONE black, fine grained, peperitic. Siltstone massive, bedding may have been totally disrupted by lava intrusion. Fragments of lava are common giving the siltstone a conglomeratic appearance in some intervals. Siltstone dominant intervals are as follows, 359.00-371.30m, 376.60-381.00m, 390.00-393.40m and 407.00-412.00m. A quartz crystal rich lava or sandstone occurs between 383.80-385.10m, quartz grains are subrounded <6mm.		DISSEMINATED trace pyrite	360			BROKEN CORE A40 brittle

5 cm

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
355.90	412.00	RHYOLITE cream, fine grained, peperitic brecciated. Rhyolite? lava, aphyric, texturally variable including, massive, banded, brecciated and with sericite stylolites.. CONTACT: gradational MIXED WITH SILTSTONE black, fine grained, peperitic. Siltstone massive, bedding may have been totally disrupted by lava intrusion. Fragments of lava are common giving the siltstone a conglomeratic appearance in some intervals. Siltstone dominant intervals are as follows, 359.00-371.30m, 376.60-381.00m, 390.00-393.40m and 407.00-412.00m. A quartz crystal rich lava or sandstone occurs between 383.80-385.10m, quartz grains are subrounded <6mm.	slightly silicified, slightly sericitised highly detextured. Pug and shear zone.	DISSEMINATED trace pyrite	370 380 390			FAULT A30 PRIMARY FABRIC A5 FAULT A10 FAULT D80 pug FAULT D70 shear FAULT A35 shear FAULT A17 shear

5 cm

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FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
355.90	412.00	RHYOLITE cream, fine grained, peperitic brecciated. Rhyolite? lava, aphyric, texturally variable including, massive, banded, brecciated and with sericite stylolites.. CONTACT: gradational MIXED WITH SILTSTONE black, fine grained, peperitic. Siltstone massive, bedding may have been totally disrupted by lava intrusion. Fragments of lava are common giving the siltstone a conglomeratic appearance in some intervals. Siltstone dominant intervals are as follows, 359.00-371.30m, 376.60-381.00m, 390.00-393.40m and 407.00-412.00m. A quartz crystal rich lava or sandstone occurs between 383.80-385.10m, quartz grains are subrounded <6mm.	highly detextured. Pug and shear zone. slightly sericitised, moderately carbonatised moderately carbonatised. Includes calcareous siltstone and limestone clast conglomerate.		400 410 420		FAULT A80 FAULT A35 FAULT A10 shear FAULT A25 shear FAULT A30 shear FAULT A45 shear FAULT D10 shear FAULT D30 shear	
412.00	428.10	SILTSTONE CONTAINING LAMINAE OF LIMESTONE black grey, fine grained fine grained, laminated, calcarious. Dark grey siltstone with fine grained - gritty calcareous sandstone.. CONTACT: faulted WITH MINOR CONGLOMERATE grey, medium grained, clast supported, calcarious. Conglomerate beds occur between 422.10-422.30m and 424.90-425.60m, clasts are primarily of fine grained massive and fossiliferous limestone and minor sericitized, fine grained, aphyric to feldspar phyric volcanics.					BEDDING A70 D25 facing uphole BEDDING D30 BEDDING D90 BEDDING D20 BEDDING D50	

5 cm

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DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
412.00	428.10	SILTSTONE CONTAINING LAMINAE OF LIMESTONE black grey, fine grained fine grained, laminated, calcarious. Dark grey siltstone with fine grained - gritty calcareous sandstone.. CONTACT: faulted WITH MINOR CONGLOMERATE grey, medium grained, clast supported, calcarious. Conglomerate beds occur between 422.10-422.30m and 424.90-425.60m, clasts are primarily of fine grained massive and fossiliferous limestone and minor sericitized, fine grained, aphyric to feldspar phyric volcanics.	moderately carbonatised. Includes calcareous siltstone and limestone clast conglomerate.	DISSEMINATED trace pyrite disseminated. Disseminated and veinlet pyrite in conglomerate matrix and some clasts.	420			BEDDING A60 facing uphole BEDDING A80 BEDDING D90 BEDDING A30
428.10	442.70	CONGLOMERATE cream, coarse grained, clast supported, polymict. Clasts dominantly fine grained massive / slightly fossiliferous / gritty limestone. Other clast types include fine grained massive vitric siltstone, sericitized fine grained aphyric to feldspar phyric felsic lava and pumice breccia. Matrix forms a minor part of the rock, comprising calcareous and locally pyritic sandstone / grit.. CONTACT: faulted			430			FAULT A60 D70 FAULT D25 FAULT D80
442.70	448.55	PUMICEOUS MASS FLOW grey, medium grained, massive, stylolites. Some pumice textures recognizable but the intensity of carbonate/silica alteration obliterates most primary textures.. CONTACT: faulted	slightly sericitised, slightly carbonatised		440			

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. **BPD82**

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
442.70	448.55	PUMICEOUS MASS FLOW grey, medium grained, massive, stylolites. Some pumice textures recognizable but the intensity of carbonate/silica alteration obliterates most primary textures.. CONTACT: faulted	slightly sericitised, slightly carbonatised					
448.55	465.70	PUMICEOUS MASS FLOW cream, medium grained, bedded. Pumiceous rocks are texturally variable, includes 3mm grainsize with cherty lithics (448.55-449.00m) and fine to medium grained bedded to augen sandstone. The entire interval may represent the top of an uphole facing mass debris flow unit.. CONTACT: faulted INTERBEDDED WITH SILTSTONE CONTAINING CLASTS OF LIMESTONE black, medium grained, bedded. Siltstone with lenses and fragments (disrupted lenses) of sandy limestone.	moderately silicified, slightly sericitised	DISSEMINATED trace pyrite disseminated. Disseminated in fine grained sandstone lenses.	450 460		BEDDING D90 FAULT A80 D45 BEDDING D90 BEDDING D85	
465.70	491.80	PUMICEOUS MASS FLOW cream, medium grained, massive, stylolites. *Essentialy the same lithological association from 442.70m. Weak foliation with abundant calcite +-quartz veining. Localized sericitic stylolites.. CONTACT: gradational WITH MINOR SILTSTONE grey, fine grained, bedded. Fine grained cream to dark grey sandstone and siltstone, occurs between 478.30-479.50m, 482.70-482.90m and 484.70-485.00m	moderately silicified. Black pumice breccia. moderately silicified, slightly sericitised. Abundant calcite quartz veins.		470		BEDDING A10 folded FAULT A5 annealed BEDDING A40 FAULT A30 shear FAULT A30 shear FAULT A10 annealed FAULT A20 shear FAULT A30 shear FAULT A45 shear	

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. **BPD82**

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
465.70	491.80	PUMICEOUS MASS FLOW cream, medium grained, massive, stylolites. *Essentialy the same lithological association from 442.70m. Weak foliation with abundant calcite +-quartz veining. Localized sericitic stylolites.. CONTACT: gradational WITH MINOR SILTSTONE grey, fine grained, bedded. Fine grained cream to dark grey sandstone and siltstone, occurs between 478.30-479.50m, 482.70-482.90m and 484.70-485.00m	moderately silicified, slightly sericitised. Abundant calcite quartz veins.		480			FAULT A45 shear FAULT A25 shear BEDDING A20 BEDDING A80 FAULT A70 shear FAULT A40 shear FAULT A45 shear FAULT A25
			slightly sericitised					
		SILTSTONE CONTRAINING LAMINAE OF LIMESTONE black grey, fine grained fine grained, laminated. Limestone occurs as disrupted lenses between 510.80-511.20m, 520.00-522.00m and 530.30-532.70m. This interval may represent the waning phase of a mass debris flow unit into a mudstone basin, interpreted down hole facing.. CONTACT: faulted			490			FAULT A20 annealed FAULT A10 annealed
491.80	533.70	INTERBEDDED WITH SANDSTONE grey, medium grained, bedded, lithic. Sandstone matrix fine grained slightly silicified and pyritic. Clasts are subrounded *carbonatized felsic volcanics.* WITH MINOR RHYODACITE cream, medium grained, peperitic. Carbonatized felsic peperite occurs between 532.75-533.55m. Contacts with siltstone are slightly silicified (chilled?). Possible perlitic textures occur.		DISSEMINATED trace pyrite disseminated. Disseminated in fine grained sandstone lenses.	500			FAULT A15 annealed BEDDING A20 BEDDING A10

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. **BPD82**

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
491.80	533.70	SILTSTONE CONTAINING LAMINAE OF LIMESTONE black grey, fine grained fine grained, laminated. Limestone occurs as disrupted lenses between 510.80-511.20m, 520.00-522.00m and 530.30-532.70m. This interval may represent the waning phase of a mass debris flow unit into a mudstone basin, interpreted down hole facing.. CONTACT: faulted INTERBEDDED WITH SANDSTONE grey, medium grained, bedded, lithic. Sandstone matrix fine grained slightly silicified and pyritic. Clasts are subrounded carbonatized felsic volcanics. WITH MINOR RHYODACITE cream, medium grained, peperitic. Carbonatized felsic peperite occurs between 532.75-533.55m. Contacts with siltstone are slightly silicified (chilled?). Possible perlitic textures occur.		STRINGER 2% pyrite in veinlets. Fine grained veinlets and patches.	510 520 530			BEDDING A5 FAULT A80 BEDDING A30 BEDDING D75 BEDDING D75 BEDDING D55 FIRST CLEAVAGE D80 spaced BEDDING D75 BEDDING D90 FAULT D70 annealed BEDDING D80 BEDDING D55 FIRST CLEAVAGE D70

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
491.80	533.70	SILTSTONE CONTAINING LAMINAE OF LIMESTONE black grey, fine grained fine grained, laminated. Limestone occurs as disrupted lenses between 510.80-511.20m, 520.00-522.00m and 530.30-532.70m. This interval may represent the waning phase of a mass debris flow unit into a mudstone basin, interpreted down hole facing.. CONTACT: faulted						FIRST CLEAVAGE D75
533.70	619.50	INTERBEDDED WITH SANDSTONE grey, medium grained, bedded, lithic. Sandstone matrix fine grained slightly silicified and pyritic. Clasts are subrounded carbonatized felsic volcanics.						FAULT D60
		WITH MINOR RHYODACITE cream, medium grained, peperitic. Carbonatized felsic peperite occurs between 532.75-533.55m. Contacts with siltstone are slightly silicified (chilled?). Possible perlitic textures occur.						FIRST CLEAVAGE D30
								BEDDING D80
					540			FAULT D80
								FAULT D90
		SILTSTONE INTERBEDDED WITH LIMESTONE black grey, fine grained fine grained, laminated brecciated. Siltstone frequently with fine grained pyritic lamina. Limestone lenses brecciated as a result of soft sediment deformation and spaced cleavage development. Abundant calcite +- quartz veining throughout.						BEDDING D85
								FIRST CLEAVAGE A45 spaced
					550			FIRST CLEAVAGE A40 spaced
								BEDDING A37
								FAULT A45 brittle
								BEDDING A5
								BEDDING A0
					560			

5 cm

741122

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

Page of 1

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
533.70	619.50	SILTSTONE INTERBEDDED WITH LIMESTONE black grey, fine grained fine grained, laminated brecciated. Siltstone frequently with fine grained pyritic lamina. Limestone lenses brecciated as a result of soft sediment deformation and spaced cleavage development. Abundant calcite +- quartz veining throughout.			560 570 580			BEDDING A20 FIRST CLEAVAGE A0 spaced BEDDING A15 FIRST CLEAVAGE A0 spaced BEDDING D55

5 cm

94123

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
533.70	619.50	SILTSTONE INTERBEDDED WITH LIMESTONE black grey, fine grained fine grained, laminated brecciated. Siltstone frequently with fine grained pyritic lamina. Limestone lenses brecciated as a result of soft sediment deformation and spaced cleavage development. Abundant calcite +- quartz veining throughout.			590 600 610			FIRST CLEAVAGE D90 spaced BEDDING D60 BEDDING D85 FAULT D62 BEDDING A5 BEDDING A35 BEDDING A5

5 cm

241124

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole No. BPD82

PROJECT:

Vertical Scale 1 : 200

DESCRIPTION					GRAPHIC			
FROM	TO	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Struct	STRUCTURES
533.70	619.50	SILTSTONE INTERBEDDED WITH LIMESTONE black grey, fine grained fine grained, laminated brecciated. Siltstone frequently with fine grained pyritic lamina. Limestone lenses brecciated as a result of soft sediment deformation and spaced cleavage development. Abundant calcite +- quartz veining throughout.			620 630 640			BEDDING A20

5 cm