PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
YNC10

DRILLING

Location	NEWTON CREEK
Project	YOLANDE
Prospect	NEWTON CREEK
Design By	P.M.Quayle
Logged By	P.M.Quayle
Relogged	
Commenced	23rd August 1994
Completed	30th September 1994
Drilled By	East Coast Drilling
Drill Rig	Longyear 38

OBJECTIVE

To test for mineralization in the Newton Creek Spillway conglomerate - Principal Target horizon 1800m north of the spillway. The hole is targeted 50m south and 150m below a zone of promising alteration/mineralization intersected in DDH YNC5.

RESULT

Althouugh favourable signs of mineralization and alteration were intersected, no focus is apparent.

COLLAR SURVEY (AMG)

AMG mN	5360116.0	Bearing	248.0
AMG mE	379949.0	Dip	-60.0
mN		Hole Length	529.7
mE		DH Survey Type	Single shot East
RL	514.5		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-60.00	248.00
30.0	-58.00	246.50
60.0	-58.00	246.80
100.0	-57.50	250.00
140.0	-55.00	248.00
180.0	-53.00	246.00
220.0	-53.00	246.00
260.0	-51.00	246.00
300.0	-49.00	246.00
340.0	-47.50	246.50
380.0	-46.00	246.60
420.0	-45.50	247.00
460.0	-45.00	247.00
500.0	-44.50	247.00

SIGNIFICANT CORE LOSS

From	To	Loss

POOR GROUND CONDITION ZONES

From	To	Condition

HOLE SIZE

From	To	Size
0	15	HQ
15	529.7	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	
Steel Casing	
PVC Casing	0 - 529.7M
Ground Water	NIL
Wedge	-
Drill Pad	Sump filled in and site roughly leveled.

SIGNIFICANT INTERSECTIONS

From	To	Int	Cu	Pb	Zn	Ag	Au	Comments
428.7	433.6	4.9	33	1098	2355	39	.02	1595ppm Ba 1334ppm Mn

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HOLE No. YNC10

PROJECT: YOLANDE

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
0.00	4.80	GLACIAL DEPOSITS Red, Coarse grained, Haematitic quartzite glacials. CONTACT: Missing,			0			
4.80	30.40	RHYOLITE Red, Porphyritic, Massive, Quartz phyric, Feldspar phyric, Magnetite, Typical red prominantly quartz phyric Tyndall rhyolite.	Slightly Chloritised, Slightly Sericitised, Minor ragged 5 to 10cm choritic patches, and minor sericitised pumiceous patches.		10			
					20			

5 cm

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From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
30.40	37.10	RHYOLITE Red, Flow banded, Porphyritic, Quartz phyric, Feldspar phyric, Brecciated rhyolite over 10cms with siliceous infilling.			30			PRIMARY FABRIC, A 40, Flow banding in lavas.
37.10	41.10	BRECCIA Pale, Green, Poorly sorted, Matrix supported, Lithic, Reworked altered mafic clasts in mafic derived matrix. Breccia zone with quartz veining.	Moderately Sericitised, Slightly Carbonatised, Moderate Mn? sericite/carbonate alteration possibly ponded below rhyolite.	DISSEMINATED, minor pyrite disseminated. Pyrite disseminated throughout and as fine clasts..	40			
41.10	41.50	BRECCIA Irregular quartz veining superimposed on siliceous zone.						
41.50	50.50	BRECCIA Yellow, Grey, Very coarse grained, Cleaved,						

5 cm

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From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith.	Structures	STRUCTURES
41.50	50.50	~~SILICEOUS ZONE.~~ BRECCIA Yellow, Grey, Very coarse grained, Cleaved, Feldspar phyric, Appears to be composed of dacite? derived detritus with minor patchy fine grained siliceous material becoming polymict and coarse grained towards base. CONTACT: Conformable abrupt,			50			FIRST CLEAVAGE, A 45.
50.50	63.10	BLACK SHALE Grey to black shale with bands and patches of pale grey fine grained siltstone. CONTACT: Conformable abrupt, at 65 degrees to LCA.	Slightly Sericitised, Slightly Carbonatised, Moderate sericite and carbonate alteration of sandstone bands and clasts in black slates.					
		INTERBEDDED WITH GREYWACKE Coarse grained, Upwards fining sequence, Poorly sorted, Polymict, Clast types include siliceous altered sediments and volcanics and minor massive pyrite.		CLAST, minor pyrite trace sphalerite DISSEMINATED, minor pyrite associated with alteration,	60			PRIMARY FABRIC, A 45, Lamination in shale.
63.10	70.00	SANDSTONE Yellow, Grey, Coarse grained, Massive, Poorly	Minor					

5 cm

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From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
63.10	70.00	SANDSTONE Yellow, Grey, Coarse grained, Massive, Poorly sorted, Unusually textured sandstone, very carbonate rich in patches resembling clasts giving a pseudoclastic appearance. CONTACT: Conformable abrupt, at 60 degrees to LCA.	Minor patchy leaching of carbonate? matrix.					
70.00	71.10	BLACK SHALE Irregular texture, a sheared mixing with carbonate sandstone.	Moderately Carbonatised. Modified limestone.	DISSEMINATED, minor pyrite disseminated, minor pyrite in veinlets.	70			
71.10	72.60	LIMESTONE White, Pink, Irregular texture, blotchy carbonate augen with pink haematitic cores and white rims, massive in part with stylolites, and with carbonate sandstone matrix in part. CONTACT: Conformable mixed.						
72.60	95.00	SANDSTONE Yellow, Grey, Coarse grained, Massive, Poorly sorted, Unusually textured carbonate rich sandstone with pseudoclastic texture. CONTACT: Gradational.	Slightly Carbonatised. Minor patchy alteration of irregular sandstone patches.		80			

5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					90			
95.00	98.20	SANDSTONE INTERBEDDED WITH SILTSTONE Coarse grained sandstone interbedded with fine grained siltstone on a cm scale, structurally disrupted and mixed.	Highly Carbonatised, Moderately Chloritised, Carbonate veinlets and altered matrix, chloritic matrix and abundant haematite spots.	DISSEMINATED, minor pyrite disseminated, minor haematite disseminated, Pyrite associated with sericitization, haematite with carbonate/chlorite (resembles Howards jasper)..				
98.20	104.00	FAULT ZONE (PUG) Zone of massive white quartz, green chlorite, with pale grey sacharoidal carbonate, and pink/red heamatite alteration in part. This mixed with both sandstone and rhyolite.	Highly Chloritised, Moderately Carbonatised, Moderately Silicified, Massive quartz chlorite carbonate veining superimposed on zone of carbonate/chlorite alteration.	DISSEMINATED, minor pyrite disseminated, minor haematite disseminated, trace chalcopyrite disseminated, Associated with vein massive chlorite/quartz, and carbonate and possibly barite..	100			VEIN, Quartz, Chlorite, Carbonate. Irregular veining at contact with rhyolite sill.
104.00	153.00	RHYOLITE Red, Coarse grained, Massive, Porphyritic, Quartz phyric, Feldspar phyric, Typical Tyndall rhyolite prominantly quartz phyric and haematitic.	Haematitic zone.					

5 cm

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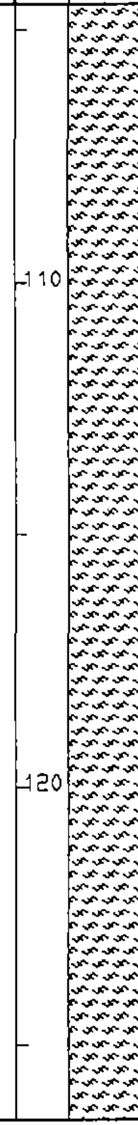
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		Quartz phyric, Feldspar phyric, Typical Tyndall rhyolite prominantly quartz phyric and haematitic. CONTACT: Faulted,						



5 cm

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PASMINCO EXPLORATION

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Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
			Haematitic zone.		130			
					140			

5 cm

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From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	STRUCTURES
					150	
153.00	161.20	RHYOLITE Grey, Green, Coarse grained, Massive, Porphyritic, Quartz phyric, Feldspar phyric,			160	
161.20	229.00	RHYOLITE Red, Grey, Coarse grained, Massive, Porphyritic, Quartz phyric, Feldspar phyric, Typical Tyndall rhyolite, prominantly quartz phyric, feldspar phyric and haematitic. CONTACT: Conformable mixed, Irregular contact at low angle to core axis but with apparent peperitic contact?	Haematitic zone.			

5 cm

782205

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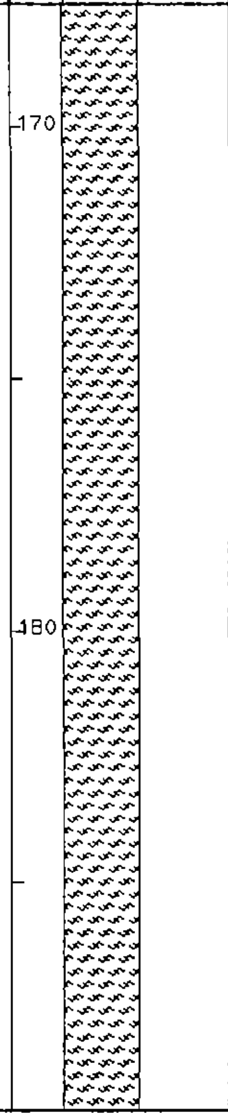
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES



5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					190			BROKEN CORE. Chlorite, Sericite. Irregular zone of brecciation and fracturing.
					200			
					210			

5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					210			
					220			
					230			
229.00	236.00	BRECCIA CONTAINING CLASTS OF DACITE Yellow, Green, Coarse grained, Poorly sorted, Reworked, poorly sorted dacitic to andesitic detritus, sericite and silics altered and manganese stained. Clasts up to 3cms andesitic in appearance are either dark green chloritic or cream to	Moderately Sericitised, Moderately Carbonatised, With Mn stain.					

5 cm

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From	To	DESCRIPTION – LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		manganese stained. Clasts up to 3cms andesitic in appearance are either dark green chloritic or cream to pink silicified, they are feldspar phenocryst poor and leucoxene rich. CONTACT: Gradational.			
236.00	246.30	BRECCIA CONTAINING CLASTS OF DACITE Green, Coarse grained, Poorly sorted, Reworked, Reworked dacitic to andesitic detritus, more massive and less altered than previous interval. Clasts fine to 2cm grey green chloritic to grey silicified in fine grained yellow-green grey matrix with minor sericite alteration in part and minor carbonate alteration in part. Note patch of dense red siliceous quartz phyric volcanic, possibly a thin irregular rhyolite intrusive. CONTACT: Gradational.		DISSEMINATED. minor pyrite disseminated. Minor 2mm cubes of pyrite associated with chlorite and carbonate and trace haematite. Note silicification emanating from fracture..	FIRST CLEAVAGE. A 45.
246.30	247.74	BRECCIA Yellow, Lithology similar to previous interval, but sericitised possibly due to intrusion. Intrusive contact, sharp with carbonate veining at contact.	Moderately Sericitised. Slightly Carbonatised. Slightly Chloritised.		
247.70	249.10	RHYOLITE Grey, Porphyritic, Quartz phyric, Feldspar phyric, Abundant prominant 2 to 4 mm rounded quartz phenocrysts in a sericitized slightly sheared matrix. Note band of fine quartz phenocrysts towards base of interval. Sharp irregular.			
249.10	251.90	BRECCIA MIXED WITH SILTSTONE Cream, Grey, Poorly sorted, Reworked dacitic to andesitic detritus, grading to fine sediment with minor banding. CONTACT: Gradational.		DISSEMINATED. minor pyrite associated with alteration. Mineralization emanating from fracture/breccia. associated with sericitization. vein carbonate breccia infilling. Note presence of 1.4m band of quartz phyric rhyolite..	
251.90	256.00				

GRAPHIC: Depth 240, 250

5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		CONTACT: Gradational,		presence of 1.4m band of quartz phyric rhyolite..				
251.90	256.00	BRECCIA Green, Grey, Reworked, Poorly sorted, Reworked andesitic detritus dark green feldspar phenocryst poor. Texture either tending to massive with carbonate alteration or cleaved with sericite alteration. CONTACT: Gradational,						
256.00	262.00	BRECCIA Grey, Green, Poorly sorted, Reworked, Reworked poorly sorted andesitic detritus grading to 20cm well sorted fine grained massive band. CONTACT: Gradational,			260			
262.00	277.50	BRECCIA Grey, Green, Poorly sorted, Reworked, Reworked andesitic detritus. Patches of minor silica alteration, and patches of minor carbonate alteration affect textures. Minor irregular yellow-pink carbonate veining with minor pyrite. CONTACT: Gradational,			270			

5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
			Highly Quartz-sericite-pyrite, Mn staining.					FIRST CLERVAGE. D 85.
277.50	282.00	ALTERATION ZONE Yellow, Poorly sorted, Reworked, Carbonate alteration zone, massive in part, and with textures resembling reworked andesitic/dacitic debris in part. Minor silicified clasts os pseudo clasts, patches with abundant disseminated pyrite, and sericitic sheared texture in part. CONTACT: Gradational,		DISSEMINATED, minor pyrite associated with alteration, trace galena associated with alteration, trace sphalerite associated with alteration, Associated with sericite/carbonate alteration..	280			
282.00	291.10	ALTERATION ZONE Cream, Massive, Comprises 1 to 3mm carbonate granules wrapped by sericite, the relative abundance of carbonate to sericite determines wether the texture is massive or cleaved. Distinct Mn staining. Trace disseminated pyrite and galena in part throughout. (Possibly altered dacite sill). CONTACT: Gradational,		DISSEMINATED, trace pyrite associated with alteration, trace galena associated with alteration, trace sphalerite associated with alteration, Associated with sericite/carbonate alteration..	290			
291.10	298.60	ALTERATION ZONE Cream, Zone comprises carbonate sericite alteration similar to previous interval but with pseudo clastic texture with the pseudo-clasts being islands of lesser altered dacite? Pseudo-clasts are 1 to 40mm are angular and appear to be "in place". The clasts appear to be feldspar(altered to carbonate) phyric. CONTACT: Faulted, No significant lithological change over						FIRST CLERVAGE. A 42.

5 cm

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		be feldspar(altered to carbonate) phyric. CONTACT: Faulted, No significant lithological change over the contact.						
298.60	306.20	ALTERATION ZONE Cream, Zone comprises carbonate sericite alteration similar to previous interval, but with indistinct banding suggesting reworking. Note minor irregular very fine distinctly cream coloured carbonate Pb+Zn veining. CONTACT: Gradational,			300			FAULT, A 40, Brittle, Parallel to cleavage.
306.20	314.60	ALTERATION ZONE GRADING TO BRECCIA Cream, Green, Zone grades from carbonate alteration to reworked hyaloclastic dacite debris from 310m. CONTACT: Conformable abrupt,		DISSEMINATED, 1% pyrite disseminated. Throughout sandstone layer..	310			
314.60	315.60	BRECCIA GRADING TO SANDSTONE Grey, Green, Coarse grained, Poorly sorted, Upwards fining sequence, Polymict, Lithic, Resembles lower spillway conglomerate. Clasts from 20mm comprise mafics, altered mafics, white and pink fine grained siliceous, pyritic and siltstone types. Band grades to massive coarse grained green mafic? derived sandstone. CONTACT: Conformable abrupt,						

5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
314.60	315.60	sandstone. CONTACT: Conformable abrupt,						
315.60	315.90	SANDSTONE CONTAINING LAMINAE OF SILTSTONE Upwards fining sequence, Bedded, Zone of upwards fining beds upto 30mm thick grading from fine sandstone to siltstone, dark green in colour. CONTACT: Conformable abrupt,						FIRST CLEAVAGE, A 40. FIRST CLEAVAGE, D 90.
315.90	318.70	DACITE Grey, Green, Hyaloclastitic, Irregular patches of feldspar phyric dacite in dacite derived matrix. CONTACT: Conformable abrupt,						
318.70	322.70	BRECCIA GRADING TO SANDSTONE Grey, Green, Coarse grained, Upwards fining sequence, Polymict, Lithic, Clasts from 3cms predominantly feldspar phyric dacite, altered dacite, and fine pink siliceous type. Grades into massive grey green sandstone, and to shale. CONTACT: Faulted, at 30 degrees to LCA. Carbonate pyrite vein 10mm.	Moderately Sericitised, Slightly Chloritised, Slightly Oxidised.	DISSEMINATED, minor pyrite disseminated, Throughout sandstone layer.. DISSEMINATED, minor pyrite associated with alteration, Associated with irregular white carbonate veinlets..	320			PRIMARY FABRIC, A 45.
322.70	338.20	DACITE Yellow, Green, Hyaloclastitic, Feldspar phyric, Zone of green-grey feldspar phyric clasts upto 12cms in a matrix composed of yellow sericitized dacitic debris, Note zone of pink (haematite?) altered dacite clasts in pale green chloritic? matrix from 325.7 to 331m. CONTACT: Conformable abrupt,	Moderately Carbonatised, Moderately Sericitised.		330			

5 cm

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From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
338.20	339.80	BLACK SHALE Grey black shale with fine laminae of carbonate rich siltstone and abundant 1mm bedding parallel veins, and minor irregular carbonate sphalerite pyrite veinlets. Minor 10cm coarse grained upwards fining bed. CONTACT: Conformable abrupt,	Moderately Carbonatised, Moderately Sericitised,	DISSEMINATED, minor pyrite disseminated, very minor sphalerite in veinlets, Very fine disseminated pyrite throughout balck shale, and trace red sphalerite associated with carbonate veinlets..				
339.80	343.40	BRECCIA CONTAINING CLASTS OF DACITE Yellow, Green, Coarse grained, Hyaloclastitic, Polymict, Hyaloclastite in part, and polymict breccia in part irregular texture. Clasts include fine grained siliceous, and pale grey siltstone. Matrix is sericite carbonate altered. Note bands of minor disseminated pyrite in carbonate rich layers. CONTACT: Conformable abrupt,		DISSEMINATED, very minor pyrite associated with alteration, very minor sphalerite associated with alteration, Sphalerite is associated with the boundary between sericitised dacite? clasts? and in carbonate altered matrix..	340			PRIMARY FABRIC, α 90.
343.40	344.40	BLACK SHALE Pale grey siltstone grading to black shale. Minor disseminated pyrite throughout.						BEDDING, α 55.
344.40	351.40	DACITE Buff, Green, Hyaloclastitic, Dacite from dark green with carbonate altered feldspars, to buff carbonate/sericite altered rock with minor irregular bands and patches of cryptocrystaline grey silica, possibly cherty mudstone baked by lava? or siliceous deposit infilling fractures? Also cut by irregular fine buff-yellow carbonate veining. CONTACT: Gradational,		DISSEMINATED, very minor sphalerite associated with alteration, Fine sphalerite replacing matrix in chloritic dacite? clast, and as fine disseminations in irregular cherty bands..				FOLD, Drag fold in cherty band indicates steep west up movement. FAULT, Cleavage parallel fault with 5cm displacement west side up.
351.40	364.00	DACITE ALTERATION ZONE Buff, Massive, Massive carbonate altered dacite (similar to altered zone in YNC5). Abundant irregular fine yellow carbonate veinlets with red sphalerite, and galena. Minor massive white quartz veins. CONTACT: Gradational,	Highly Carbonatised, Moderately Sericitised, Correlates with altered zone in YNC5. Test for K2O.	VEIN, 0.1% sphalerite in veinlets, very minor pyrite disseminated, trace galena disseminated, Red sphalerite in irregular carbonate veinlets, and minor sphalerite, pyrite and galena disseminated close to veinlets.. VEIN, 0.2% sphalerite in veinlets, very minor pyrite disseminated, very minor galena disseminated, Sphalerite associated with irregular carbonate veinlets, and irregular cherty veinlets in part, Galena and pyrite occur in	350			

5 cm

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				veinlets, and irregular cherty veinlets in part. Galena and pyrite occur in veinlets, and disseminated around veinlets..	360			
				DISSEMINATED, trace sphalerite in veinlets, trace sphalerite associated with alteration, Trace sphalerite, galena and pyrite throughout, in veinlets or disseminated in more altered bands, associated with chlorite in part..				
364.00	384.40	DACITE ALTERATION ZONE Grey, Buff, Massive, Similar to above interval but with less intense alteration. Minor massive white quartz veins in part and minor fine irregular carbonate viens in part. CONTACT: Gradational,	Moderately Carbonatised, Moderately Sericitised.		370			VEIN, Quartz, Zone of white quartz veining and breccia infill.

5 cm

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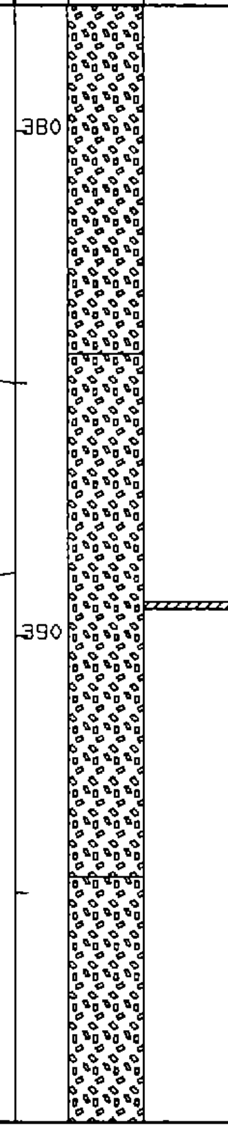
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
384.40	394.70	DACITE ALTERATION ZONE Buff, Zone of intense carbonate alteration and abundant white quartz and yellow carbonate breccia? infilling. A complex paragenesis of veining. Carbonate is coalescing radial spots in part. Note trace pale pink carbonate. CONTACT: Gradational,	Highly Carbonatised, Moderately Sericitised, Similar to altered zone in YNC5.	DISSEMINATED, minor sphalerite associated with alteration, trace galena associated with alteration, trace pyrite associated with alteration, Zone with intense carbonate alteration, and several episodes of veining and breccia infilling with clear and white quartz, buff carbonate and chlorite.. VEIN, very minor sphalerite in veinlets, In low angle irregular carbonate veinlets..	VEIN, Quartz, Carbonate, Chlorite. Zone of low angle irregular carbonate veinlets with superimposed white quartz, yellow carbonate and minor chlorite veining and breccia infilling.
394.70	426.80	DACITE Grey, Massive, Feldspar phyric, Similar to above intervals but with less intense alteration. CONTACT: Gradational,	Moderately Carbonatised, Slightly Sericitised, Similar to previous interval but less intense.		

GRAPHIC (Depth, Lith, Structures)



5 cm

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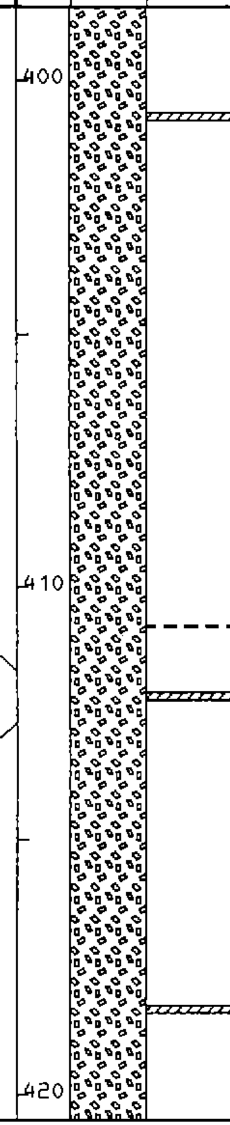
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
			Slightly Carbonatised, Slightly Sericitised, Similar to previous interval but less intense.		VEIN, Quartz, Carbonate, Zone of white quartz and yellow carbonate veining.
				VEIN, very minor sphalerite in veinlets. Coarse grained dark sphalerite in quartz chlorite veins..	FAULT, Minor displacement on fine irregular veinlets sub-vertical and at low angle to core indicates north block to the east sense of movement.
			Moderately Carbonatised, Moderately Sericitised, Similar to previous interval but more intense, note feldspars carbonatized.	DISSEMINATED, trace pyrite disseminated, trace sphalerite disseminated, trace galena disseminated. Trace very fine disseminated sulphides throughout..	VEIN, Quartz, Chlorite, Minor sub-horizontal veins with perpendicular crystal growth.
					VEIN, Quartz, Chlorite, Minor sub-horizontal veins with perpendicular crystal growth.

GRAPHIC



5 cm

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					420			
								VEIN, Quartz, Sub-horizontal massive white quartz vein.
426.80	436.50	DACITE ALTERATION ZONE Buff, Massive, Similar to above intervals but with more intense alteration, and apparent decrease in feldspars.		DISSEMINATED, minor sphalerite disseminated, minor galena disseminated, Disseminated sulphides throughout, associated with pale grey cryptlcrystaline silica in part? possibly stringer bands..				FAULT, Hairline fracture, sub vertical trending north-south, displacement direction not determined.
		DACITE Buff, Grey, Hyaloclastitic, Feldspar phyric, Similar to above intervals but with fragmental texture, jigsaw fit in part clasts upto 30mm, in dacite derived matrix. CONTACT: Conformable abrupt,			430			
436.50	440.30	DACITE MIXED WITH SILTSTONE Grey, Green, Coarse grained, Hyaloclastitic, Dacite derived breccia mixed with bands or incorporated patches of shale to siltstone. CONTACT: Conformable abrupt,						FAULT, Sub-vertical fault with undetermined movement direction.
		DACITE BRECCIA Grey, Green, Very coarse grained, Dacite derived breccia. CONTACT: Conformable abrupt,						FAULT, Brittle, Sub-vertical fault trending NNW-SSE
440.30	441.70	TURBIDITE Pale, Grey, Fine grained, Upwards fining sequence, Comprises several 10 to 20mm upwards fining bands from fine grained sandstone to siltstone. Distinct appearance in contrast to lava deris.			440			BEDDING, 0 75, Oriented on

5 cm

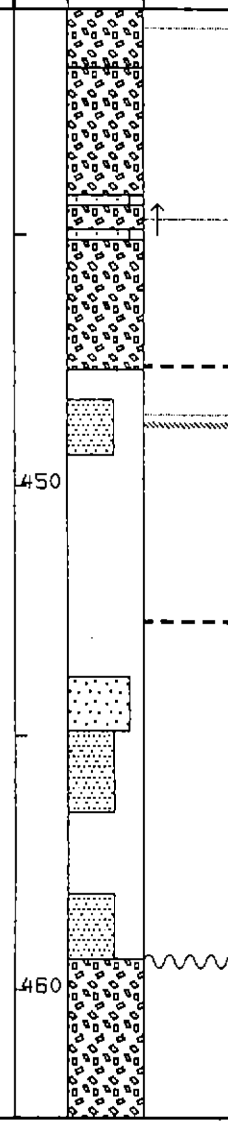
From	To	LITHOLOGY
440.30	441.70	... bands from fine grained sandstone to siltstone. Distinct appearance in contrast to lava deris. Appears to be unconformable, possibly deposited in a hollow in lava debris.
441.70	444.20	DACITE Grey, Green, Very coarse grained, Hyaloclastitic, Dacite derived breccia. CONTACT: Conformable abrupt,
444.20 / 444.48	444.48 / 444.90	TURBIDITE Pale, Grey, Fine grained, Upwards fining sequence, Several fine upwards fining bands. CONTACT: Conformable mixed,
444.90 / 445.10	445.10 / 447.70	DACITE Grey, Green, Very coarse grained, Hyaloclastitic, Zone of mixed dacite and pumiceous derived sandstones grading to fine grained tops. CONTACT: Conformable abrupt,
447.70	448.30	BASIC VOLCANICLASTIC Pale, Green, Zone of 5 to 15mm angular monomict pale green finely vesicular mafics in a fine pumiceous? matrix.
448.30	449.40	SILTSTONE INTERBEDDED WITH SANDSTONE Zone of cherty siltstones interbedded with shaley sandstones.
449.40	451.40	INTERMEDIATE VOLCANICLASTIC Grey, Green, Zone of 10 30mm dacite clasts in dacite derived matrix.
451.40	452.80	BASIC VOLCANICLASTIC Pale, Green, Coarse grained, Distinct monomict clastic with 5 to 10mm ragged flattened pale green altered (0.5mm) vesicular mafic clasts in matrix of fine pumiceous? detritus grading to fine grained sandstone tops. CONTACT: Faulted,
452.80	453.80	DEFORMED ZONE Pale, Fine grained, Brecciated, Zone of brecciated cherty siltstone and sericitized sandstone. CONTACT: Faulted,
453.80	454.90	SANDSTONE Grey, Medium grained, Pumiceous, Zone of massive pumiceous sandstone. CONTACT: Conformable abrupt,
454.90	456.50	SILTSTONE INTERBEDDED WITH SANDSTONE Pale, Grey, Fine grained, Laminated, Zone of interbedded laminated pale grey cherty and dark grey shaley siltstones to sandstones.
456.50	458.10	INTERMEDIATE VOLCANICLASTIC Green, Grey, Zone of dacite derived detritus.
458.10	459.40	SILTSTONE INTERBEDDED WITH SANDSTONE Pale, Grey, Fine grained, Zone of pale grey fine grained cherty siltstones with prominant slump? folded texture.
459.40	463.70	

ALTERATION

Slightly Carbonatised, Slightly Sericitised, Minor pervasive carbonate sericite alteration throughout, also minor bands with altered mafic clasts.

MINERALISATION

GRAPHIC (Depth | Lith | Structures)



STRUCTURES

trending NNW-SSE

BEDDING, D 75, Oriented on cleavage.

BEDDING, D 80, Younging uphole, Oriented on cleavage.

FAULT, D 75, Brittle, Pug.

BEDDING, D 80, Good bedding.

FIRST CLEAVAGE, D 80.

FAULT, Shear, Sub-vertical trending northerly with east side up.

5 cm

878298

PASMINCO EXPLORATION

DIAMOND DRILL CORE LOG

HOLE No. YNC10

PROJECT: YOLANDE

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		grained, Zone of pale grey fine grained cherty siltstones with prominant slump? folded texture.						
		DACITE Grey, Green, Hyaloclastitic, Zone of abundant ragged 5 to 50 mm jigsaw fit dacite clasts in a dacite derived matrix with hyaloclastic contacts, and minor altered siliceous volcanic clasts. Resembles "upper spillway conglomerate". CONTACT: Conformable mixed,						
463.70	464.50							FOLD, Zone with abundant evidence of folding, generally associated with slip planes and disruptions possibly indicating drag folding or slumping disruption. If drag folding then movement direction is east side up sub-vertical trending northerly.
464.50	465.80	SILTSTONE INTERBEDDED WITH SANDSTONE Interbedded laminated siltstone and sandstone with distinct slump? folding texture.						
465.80	467.30	SILTSTONE INTERBEDDED WITH SANDSTONE Upwards fining sequence, Zone of irregular 10 to 20cm interbeds of pale cherty and dark shaley siltstone and sandstones finely laminated in part and with minor 10 to 20mm clasts in part.						
467.30	470.60	SANDSTONE Green, Grey, Massive to upwards fining sandstone comprising dacite derived and pumiceous debris. CONTACT: Conformable abrupt,		MASSIVE, abundant pyrite associated with alteration, semi-massive pyrite, fine to recrystaline coarse grained, with trace sphalerite/chlorite replacement associated with carbonate alteration..	470			
470.60	472.80	BASIC VOLCANICLASTIC Green, Grey, Coarse grained, Distinct monomict breccia coposed of 1 to 20mm ragged and flattened pale green (0.5mm) vesicular mafic clasts in darker grey-green matrix composed of mixed mafic and pumiceous dedris. Pumice and mafics are sericitized, and Mn staining is pervasive throughout. CONTACT: Conformable abrupt,		CLAST, very minor pyrite disseminated, Minor 10 to 30mm clast-like patches of massive pyrite, with grainsize from very fine to coarse recrystalline..				
472.80	479.80	BRECCIA Grey, Green, Medium grained, Coarse grained, Lithic, Zone of irregular dacite/andesite derived sandstone with scattered 10mm pale altered vesicular mafic clasts. Vesicles are 0.5mm and clasts are not flattened. CONTACT: Conformable abrupt,		DISSEMINATED, minor pyrite disseminated, Ubiquitous fine grained pyrite disseminated throughout the matrix, with minor fine pyritic bedding parallel laminae..				BEDDING, A 50, Grading uphole,
		BRECCIA Green, Grey, Coarse grained, Poorly sorted, Polymict, Zone of several 2m massive polymict breccias with 10 to 20cm graded tops. Clasts predominantly siliceous sediments? vesicular mafics, and siliceous volcanics and pumiceous clasts. Abundant disseminated pyrite throughout. Well developed cleavage picked out by sericite. Mn staining throughout. Resembles "lower spillway wacke". CONTACT: Conformable abrupt,		DISSEMINATED, very minor sphalerite disseminated, very minor galena disseminated, trace chalcopyrite disseminated, Patchy pods of red sphalerite 1 to 10mm often associated with chlorite and carbonate alteration in siliceous bands. Galena in finer grained often surrounding sphalerite, and trace chalcopyrite is selvage to sulphides..	480			
479.80	480.40							
480.40	483.90							
		BRECCIA Green, Grey, Coarse grained, Cleaved, Lithic, Upwards fining breccia composed predominantly of flattened pale altered vesicular3 to 10mm mafic clasts.						

5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG

HOLE No. YNC10

PROJECT: YOLANDE

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		Upwards fining breccia composed predominantly of flattened pale altered vesicular3 to 10mm mafic clasts. Strong fabric developed. CONTACT: Conformable abrupt,						PRIMARY FABRIC, Zone with minor carbonate veining.
483.90	502.00	SANDSTONE Grey, Medium grained, Massive, Pumiceous, Cleavage picked out by abundant sericite laths. Common irregular carbonate veinlets. CONTACT: Conformable abrupt,						
		PUMICEOUS MASS FLOW Pink, Grey, Pumiceous, Feldspar phyric, Abundant 1mm pink feldspars in breccia composed of 2 to 10mm pumice clasts. Upper contact is somewhat gradational with overlying sediments. Abundant 10 to 50mm pink siliceous dacite clasts throughout, possibly xenoliths. Minor carbonate veining throughout. CONTACT: Faulted, at 35 degrees to Sharp, 3mm sericite, no mixing.	Moderately Silica-albite, Distinct salmon pink alteration.associated with fractures.	CLAST, very minor pyrite massive. Minor 10mm clasts of fine grey possibly siltstone containing disseminated to massive pyrite. Trace disseminated pyrite in pink dacite? clasts..	490			
					500			FIRST CLEAVAGE, D 85.
502.00	503.70	SANDSTONE Green, Grey, Medium grained, Graded sandstone possibly representing graded top of pumiceous mass flow grading to fine grained siltstone. Both contacts appear to be faulted however there is am mixing of feldspars in the sandstone at the base. CONTACT: Faulted, at 60 degrees to Zone of 10cm brecciation, containing fragments of both units and minor carbonate veining.						FAULT, A 35, Shrap contact between two lithologies with 3mm sericite band.
								FOLD, Possible slump fold.
503.70	507.80							FAULT, Breccia, Irregular mixed contact, possibly fault breccia, but also

5 cm

0 2 2 8 1

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG

HOLE No. YNC10

PROJECT: YOLANDE

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
503.70	507.80	brecciation, containing fragments of both units and minor carbonate veining. PUMICEOUS MASS FLOW Green, Grey, Pumiceous, Feldspar phyric, Pink 1mm feldspar crystal rich pumice breccia, with minor 10mm pink dacite clasts. CONTACT: Faulted, at 70 degrees to Brittle with pug.						mixed contact, possibly fault breccia, but also depositional mixing of lithologies. FAULT, A 70, Breccia, Pug, Zone of pug and quartz-carbonate gravel seperating pumice breccias with different alteration, possibly late structure.
507.80	529.70	PUMICEOUS MASS FLOW Grey, Pink, Coarse grained, Pumiceous, Feldspar phyric, Abundant 1mm pink feldspars, in sericite-silica and chlorite altered 3mm pumiceous fragments. Pumice fragments are un compacted and are randomly alligned in part. Minor 5mm pink dacite? clasts occur throughout, these clasts are siliceous contain disseminated pyrite and resemble outcrop in Newton Creek below andesite contact, and clasts in pumice breccia in YNC7 and in stratified mafic breccia in spillway. Trace clasts of dark grey very fine grained and very pyritic rock in part. Xenoliths?	Moderately Silica-albite, Distinct salmon pink alteration apparently emmanating from fractures.	DISSEMINATED, very minor pyrite disseminated, Very minor pyrite disseminated or in irregular carbonate veinlets or stringers..	510 520			VEIN, A 20, Quartz, Carbonate,

5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG

HOLE No. YNC10

PROJECT: YOLANDE

Vertical Scale 1 : 150

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					530			
					540			

5 cm