PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Input

Hole_ID	MS-03	Project	
Hole_Type		Tenement_No.	
Year	1999	Prospect	
Geologist	ARMS	Date	9/5/99

Depth	Lithology		Comments	Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour		Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
0.0		brown									
		6.6									
10											
		green-brown						14.7(0.5/?)N			
15											
			quartz-feldspar-porphyry	clay (2) & fld. ser, sil (1) (ground mass			silico (1)				brown intervals are more intensely leached/weathered
20											
25		top									
		brown									
		26.8									
		green					29.0				
							silico (2)				
30											

64514

PASMINCO [redacted] ORATION

DIAMOND DRILL HOLE LOGGI[redacted]

Input

Hole_ID	[redacted]ject
Hole_Type	Tenement_No.
Year	Prospect
Geologist AMcM	Date 9/5/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
30					Lst						
					Sst (tr)						
					Sst						
35											
		green									
		32.9									
40		brown									
		Lst									
		green	quartz - feldspar - porphyry	clay (x) after feldspar			Sil + Ca (2)				brown - green intervals are weathered - green intervals are v. fresh.
				Ser, Sil (1) & granulation.							
45											
		brown - green									
50											
55											

64148

PASMINCO ORATION

DIAMOND DRILL HOLE LOGGI

Input

Hole_ID		ject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Aryan	Date	9/5/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
55											
60											
65											
70		green-brown	Quartz-feldspar-porphyry. (2 core losses 70.1m, 70.6m & brecciation & Co (@ 58.6m) or vk altered (@ 77.4m and 69.9m)	Clay (2) (light yellow) Sil, ser (1) (& groundmass)			Sil+Co (2)				all faults loaded + southward
75											
80											

6451149

PASMINC[illegible]ORATION **DIAMOND DRILL HOLE LOGG[illegible]** Input

Hole_ID		[illegible]oject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Amard	Date	9/5/94

Depth	Lithology Code	Lithology Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
80		green-brown		?Ser (2) Clay (1)		80.4 FL: 45° to CA (weakly defined flow-banding)	Co+sil (2)				80.0 end of obvious weathering.
		81.0 brown-Pink		sil,kf (2) ser,chl (1)			84.5 Co+Sil±chl (3)				
85							84.9 Co+sil (2)				
		87.3 Pink		87.3 sil,kf (2) chl,ser (1)			87.8 Co+sil±chl (3)				
90		91.2	quartz-feldspar-porphyry (average size of qz phen. seems to be decreasing whole	92.0			91.8 Co+sil (2)				
95		brown		sil,kf (1) chl,ser (2)			95.4 Co+sil± chl (3)				
							98.2				
100							Co+sil (1)	103.7 / 0.2 / ? / Pf, Py; 104.2 / 0.1 / ? / Bk			HQ 101.0 NQ
105											

645150

PASMINCO [illegible]ORATION **DIAMOND DRILL HOLE LOGGIN[illegible]** Input

Hole_ID	95-08	[illegible]oject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	MMW	Date	9/5/92

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
105							Co+sil (2) 106.6 Co+sil±chl (3) 108.6				
110							Co+sil (2)	115.0/0.1/ 20 / Rv			
115		Grn.	Quartz-feldspar-porphyry minor mica-phen. rare mafic clots.	sil,kfs (1) chl,ser (2)							
120											
125		128.0 Pink 129.0 brown		128.0 sil,kfs (2) 129.0 sil,kfs (1) chl,ser (1)	128.0 ¼ Py (tr) 129.0		127.2 Co+sil (1) 127.1 128.0 Co+sil (1) Sil+Co+chl (3) 129.0 Sil+Co±chl (2)				
130											

645151

PASMINCO E[illegible].ORATION

DIAMOND DRILL HOLE LOGGING

Input

Hole_ID	MS-08	[illegible]oject	
Hole_Type		Tenement_No.	
Year	1999	Prospect	
Geologist	AMN	Date	4/3/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
150		brown		sil kb (1) ser chl (1)			Ca sil ± chl (2)		150.5/0.1/35?/Rh		
		155.1		153.7	154.6		154.6				
155		Pink		Sil kb (2)	Vn Py (tr)		Ca sil ± chl (3)				
		156.1		156.3	155.7		155.9				
							Ca sil ± chl (2)				
160					160.4		160.3				
		Pink Green (brown)	Quartz feldspar porphyry.	Sil,kb (1) Ser,chl (2)	Vn Py (tr) Vn Si (tr)		Sil Ca ± chl (3)				
					161.6		161.4				
165							Sil,Ca (2)	146.6/0.1/40 (Pv,chl			
170											
175											

Drill Log.xls

645152

PASMIN[redacted]PLORATION

DIAMOND DRILL HOLE LOGGING

Input

Hole_ID	MS-08	Project	
Hole_Type		Tenement_No.	
Year	1994	Prospect	Beatrice
Geologist	[illegible]	Date	8/5/94

Depth	Lithology		Comments	Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour		Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
155				Sil, kfs (1) Ser, Chl (2)			Sil ±Co (2)				
		Pink green		159.0			159.8				
160							Sil ±Co ± Chl (1) 162.2				
				Sil kfs (1) Ser, Chl (2)			Sil ±Co (2)				
		164.1		164.1							
165											
				Sil, kfs (2) Ser, Chl (1)				166/1.3/?/Bk			
			quartz - feldspar - porphyry				167.4				
							Sil ±Co ± Chl (3) 169.7				
170				169.5			Sil ±Co (2)				
				Sil, kfs (2) 171.3			Sil ±Co (3) ± Chl, kfs 173.2				
		Pink									
				Sil, kfs/kfsm (2) Ser, Chl (1)			Sil ±Co (1)	134.2/0.1/40/Pu			
175								135.1/0.1/12/Pu			
								136.1/0.01/40/Pu			
				179.4 Sil, kfs (1)			179.7				
180											

645153

PASMINC LORATION — DIAMOND DRILL HOLE LOGG

Input

Hole_ID	MJ-8	Project	
Hole_Type		Tenement_No.	
Year	1999.	Prospect	
Geologist	AKEN	Date	8/5/99

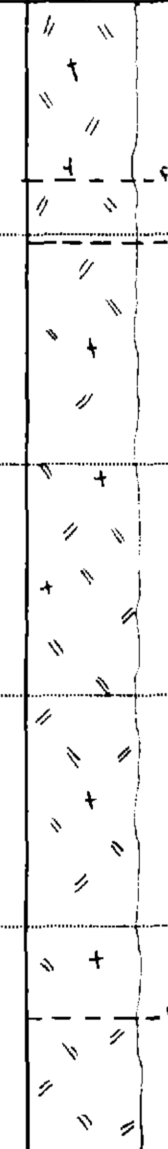
Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log
180		Pink		Sil, kfs (2) 181.0			Co+sil (3) 181.0			
181.0 – 185		Pink green	quartz-feldspar-porphyry ±mica no obvious mafic clots.	Chl, ser (2) Sil (1) 190.0			Co + sil ± chl (2)	186.0/0.1/40/Pu; 187.7/0.3/40/bk, Pu; 190.0/0.01/50/Pu		
190 – 191.2		brown	191.2	Chl, ser (3) Sil (1) 191.2				191.2/0.2/30/Pu, Bk	fault 191.2	
191.2 – 195		grey Pink	Polymict, massive crystal-rich volcaniclastic sandstone.	Ser, chl (2)			Co+sil ±chl (3) 194.2 – 194.5	194.5/0.3/55/Pu, ch		
195 – 197.7			clast-variable shale, QFP, ?pumice, grey ch/av pink lava, brecciated vol. unsorted, clast supported (v. Qz+fsp chl-rich) lithic clasts to 80mm dia. 197.7				Co+sil (1)		fault. 197.2	
197.7 – 197.7		White, Cream	Sil + Co vn 197.7	197.7			Co+sil ±chl (4?)	197.7/0.9/55/ch	fault 197.7	
200		Pink, brown.	quartz-feldspar-porphyry. 200.2	Chl, ser (1) Sil, kfs (2) 200.2			Co+sil ± ser/chl (3)		fault 200.2	
		white	Sil + Co vn. 200.7				Co+sil±chl (4?)	200.7/0.5/30/ch	fault 200.7	
200.7 – 205		brown	quartz-feldspar-porphyry	Chl (3) Ser (2) 202.0; Chl (2) sil (1) Ser (1) after fd.			Co + sil (2)			

645154

PASMINCO [illegible]LORATION **DIAMOND DRILL HOLE LOGGIN[illegible]** Input

Hole_ID	MS-8	Project	
Hole_Type		Tenement_No.	
Year	1999	Prospect	Beatrice
Geologist	AMcN	Date	8/7/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log
205		brown, green		chl (2) sil (1) ser (2) & fd.			Co+sil (2)			
		208.0					208.2 Sil+Co ± chl ± kfs (1) 208.7	208.7/0.3/65/Bk,Rh		
210								210.1/0.3/65/Bk,Rw		
							Co+Sil (1)			
215		Pink, brown	Quartz-feldspar-porphyry. quartz (to 0.7cm) feldspar (to 0.7cm - phenocrysts?) - v. altered. Mafic clots v. rare.	Sil (1) kfs/hem (1-2) (mtx + fdx)						
220				222.5	220.8 Sf Vn (0.2%) 221.8		220.8 Co+sil ± kfs ± Sp (2) 221.8			
				Sil (2) chl (2) pat. kfs/hem (1)			Co+sil (1)			
225							224.6 Co+sil ± chl (2) 225.5			
				227.0			(2) Co+sil 226.9	227.0/0.1/60/cl,Bl		
				chlorite (1) Sil, kfs (2)			(3) Co Sil 227.1			
230							Co+Sil (2)			



645155

PASMINCO LORATION   DIAMOND DRILL HOLE LOGG   Input

Hole_ID	[illegible]	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	AMN	Date	7/5/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log
230		Pink brown	Quartz-feldspar-porphyry 231 - 233.4 = small angular shale clasts.	Sil, Kspar (2) Chl, Ser (1)						
235							Co + Sil (1)			
	238.9			238.9	238.9		Co + Sil (3) 238.9 – 239.1	239.1/0.8/50°/PuAh	238.9 fault.	
240		black, green	Shale matrix volcaniclastic c qz phen, irregular porphyry (pumice?) clasts and feldspar phen.	Clasts: Ser (3)	Py vn (0.5%) Sp vn (tr)					
	241.0			241.0	241.0				241.0 peperitic	
		green Pink	Quartz-feldspar-porphyry	Ser, Sil (2-3)			Co + Sil (2)			
	243.7			243.7					243.7 peperitic	
245		black green	Shale matrix volcaniclastic c qz + fd phen, irregular porphyry (pumice?) and minor pyrite clasts	Clasts. Ser (3)	Py diss (0.5%)					
	245.3			245.3	Sp vn (1%)	245.5 S₁: 38° to LCA.		245.5/0.2/50/PuAh	245.3 fault	
		black	Poorly laminated black shale.	Co (2)	245.4 Py vn + diss (1%)	246.6 S₀: 45° to LCA	Co ± Sil (3)			
	247.7				247.7				247.7 Transition, Abrupt.	
		Pink, green	Quartz-feldspar-porphyry	Sil Ser (2-3)						
250	250.2	black	Shale, poorly laminated	250.4		250.3 S₁: 65° to LCA.		250.5/0.1/60/Pu	250.2 Abrupt fault	
	250.4	green, pink		Sil Ser (2-3)					250.4 peperitic	
	251.2	brown	Quartz-feldspar-porphyry c shale 'clasts' at 252.9 - 253.9	251.2 Sil, Ser, Chl (1)			Co + Sil (2)			
255										

645156

PASMINC… PLORATION — DIAMOND DRILL HOLE LOGG… — Input

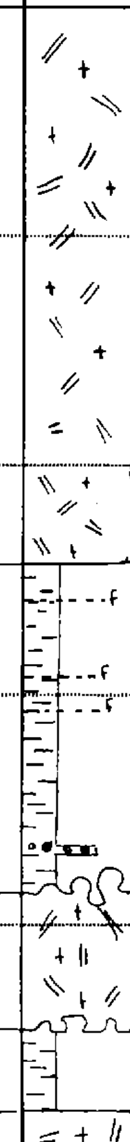
Hole_ID	MV-1	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	[illegible]	Date	26/4/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
260											
265		brown.		Sil, ser, chl (1) "regional"							
270		269.0	quartz-feldspar-porphyry Quartz to 0.7cm dia; feldspar-phen. to 0.7cm dia. Mafic-phen. to 0.4 cm dia. Some mafic clots to 1cm dia; Micas to 0.6 cm long. (look ser altered)	266.0	266.0		Co+Sil (2)	265.9/0.05/50/Pu			
275		black-green		Sil, ser, chl (1) Narrow zone ≥ chl (2-3)	Py (tr) in vn.						
280				280.0 Sil, ser, chl (1) "regional"	280.0			276.1/0.01/70/Ch,Sl			

645157

PASMINCO E RATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	MS-8		Queenstown
Hole_Type	DDH	Tenement_No.	6/98
Year	1999	Prospect	Beatrice
Geologist	AMN	Date	24/3/99

Depth	Lithology Code	Lithology Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults (Depth to base / thickness / Angle / texture)		Graphic Log
285										
		Black-Green	quartz-feldspar Porphyry Scattered altered mafic Phenocrysts (Also Mica Phenocryst there)	Sil, Ser, Chl (1) 'Regional'			Sil+Co (1)			
290					290.5 diss Py (tr) 291.5 diss Py (0.5%) 292.4					
			292.4	292.4	diss+Vn Py (1%) Vn Sp (tr)	293.2 So=25° to LCA	292.4 Sil+Co (2)	293.9/0.5/?/Br,Rh 294.8/0.3/70/Bd,Rh 295.8/0.15/40/Bd, Pu	292.4 Gradational over 0.3m	
295		Black-Grey	Laminated black shale with rare mud matrix, clast-rich (Qp, silt) interbeds (< 5cm thick) 'syngenetic' Pyrite on some beds. Shale ~ Carbonate-rich in Part.		296.0 diss+Vn Po (tr) Py(5%) 298.5 298.8 diss+Vn Py(1%) Vn Sp (tr), Vn Gn (tr)	296.0 So=45° to LCA 298.5 So=45° to LCA	Sil+Co(1) 298.9 Sil+Co (2) 299.5		299.5 Peperitic Contact (over 0.5m)	
300			299.5	299.5 Chl (2) Ser (2)						
		Brown-green	quartz-feldspar-porphyry (mafic phen. rare-absent)	300.4 Sil, Ser (1) 'Regional' 302.3			Sil+Co (1)		302.3 Peperitic Contact (over 0.2m)	
		black	302.3 Laminated black shale/siltstone		diss Py (1%) Vn Sp (tr)	303.4 So=50° to LCA				
			304.2	304.2			304.2		304.2 Irregular	
305		Orange-Pink	Quartz-feldspar Porphyry; no obv. mafics.	Sil, Kf? (1)			Co (2)		Abrupt Contact.	

645158

PASMINCO EX[illegible]ATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	MS-8		
Hole_Type		Tenem[illegible]	
Year		Prospect	
Geologist	AMW	Date	4/3/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
			Quartz-feldspar porphyry 305.7	Sil, Ksp? (1)	305.8		Co (2) 305.6		305.7 Peperitic Contact (over 0.1 m)		
310		Black Brown	black shale + siltstone / sandstone; minor green volcaniclastic sst. beds to 10cm thickness. bedding tectonically disrupted.	Vst: Ser chl (1)	diss Py (tr); Va Sp (5%) 308.4 308.6	309.0 So=35° tca					
315		Black	311.0 black shale (laminated) minor lt brown siltstone laminae		311; diss Py (tr) 315.2			small scale bedding offsets throughout	311.0 Gradational over 0.5 m		sediments v. similar to upper laminated shale in MS-7
		Black Green	315.4 black shale + siltstone / sandstone. Vst unit to 1cm thick 318.0		diss Py (1%) 316.5; Va, diss Sp (1%); diss Py (0.5%) 318.0		Sil + Co (1)		315.4; 318.0 Irregular Contact		
320		Pink, Green	Quartz-feldspar porphyry 319.4	Sil, Ksp? (2)	320.1				319.4 Irregular Contact; 319.7 Planar Contact; 320.1 Irreg. Contact		
		Black, Pink-Green	Intercalated quartz-feldspar porphyry and shale with thin interbedded siltstone / sandstone 322.4	320.7 Sil, Ksp? (2) Ser (1) 322.4	diss Py (1%) 320.7 322.4				320.7 Peperitic (0.05m); 322.4 Peperitic (0.05m)		
325		Black Grey	black shale intercalated with 1mm (0.05cm) interbeds of siltstone / fine sandstone; bedding disrupted (tectonic - soft sed.); Syngenetic Py on bedding; calcareous in part. 326.1		diss, Va Py (5%) 322.7; diss, Va Py (0.5%) 326.1	324.0 So=45° tca; Va thin section bedding disrupted by small scale faults					
		Green	Quartz-feldspar porphyry 326.6	Sil, Ser (1)	Va, diss Py (5%) 326.1				326.1 Peperitic (over 0.1 m) 326.6		
		Black Green	black shale bedded with thin (<0.7 cm) siltstone / sandstone beds; minor framboidal Py. 328.1		Diss, Va Py (0.5%); Va Sp (0.5%) 328.1	327.6 So=20 tca	Sil + Co (2) 326.6		328.1 Peperitic (over 0.1m)		
330		Green Pink	Quartz-feldspar-porphyry, no obvious mafic minerals	Sil, Ser (1)			Sil + Co (1)				

645159

PASMINCO EX ATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	MS8	Tenement	
Hole_Type		Prospect	
Year			
Geologist	Amcw	Date	29/1/99

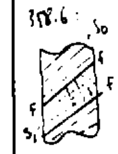
Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
330–335		green pink	Quartz-feldspar-porphyry. Minor mafic phenocrysts.	Sil, Ser (1); 334.4; Sil (1) Ser (2)	335.0						
335–340		black grey	335.4. Black shale and grey siltstone/sandstone. Sst/slt beds < 2mm thick; sst/slt calcareous. Planar laminated - no obvious faring	335.4	dis Py (0.5%); Vn Sp (tr); 337.1; Vn+dis Py (3%); Vn Sp (tr)	337.3 S0: 40° to Lca	Co + Sil (1)		335.4 Peperitic (over 0.6m)		S0 consistent from 337-339.0m, above + below tectonically disrupted.
340–345		green brown	340.6. Quartz-feldspar-porphyry. Minor mafic phenocrysts in centre of unit. 344.2	Sil (1) Ser (2); 341.2; Sil, Ser (1)	340.6; 344.1				340.6 Peperitic (over 0.1m); 344.2 broken		
345–350		black grey	Black shale ± thin (< 4mm) interbeds of coarse siltstone/sandstone. Bedding tectonically disrupted; no obvious faring. Some 'flick' style folds in S0	dis + Vn Py (0.5%); 347.5; dis + Vn Py (1%); Vn Sp (tr)	346.0 S0: 40° to Lca; 349.0 S0: 60° to Lca	347.3; Co ± Sil (2)	349.8/0.3/30/Ms,Rh; 350.3/0.4/30/Fg			
350–355					350.3; dis + Vn Py (0.1%)	353.1 S0: 60° to Lca	350.3; Co ± Sil (1)	353.3/0.15/20/Shd,Rh			

645180

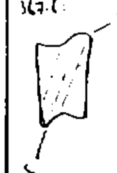
PASMINCO E[redacted]RATION **DIAMOND DRILL HOLE LOGGING[redacted]** Input

Hole_ID	MS-8	[redacted]	
Hole_Type		Tenement no.	
Year		Prospect	
Geologist	AMcN	Date	29/3/99

Depth	Lithology Code	Lithology Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log
355		black grey	black shale interbedded thin siltstone/sandstone, minor non-calcareous. 357.5			358.0 So=45° to CA	Ca ± Sil (1)	358.2/04/50/Sil, ...	358.5 planar, abrupt	
		black green	black shale interbedded silt/sst and green ultrathin sandstone; non-calcareous 359.6		dis-Vn Py (5%) Vn Sp (tr)	359.5 So=55° to CA	359.6		359.6 Faulted	
360		white green black	Fault Zone / shale 363.7		Vn Py (0.5%) Vn Sp (tr) 363.7		Sil+Ca ± chl (3) 362.2	363.7/39/55/cl, Ru		Fault zone
365		black	wk. laminated black shale		dis Vn Py (1%) Vn Sp (tr)					
		black brown	365.7 interbedded black shale and upto 5cm thick brown siltstone, sandstone interbeds. thicker sandstone beds are carbonate-rich 369.3		365.7 dis+Vn Py (5%) Vn (± Ca?) Sp (tr) 369.3	365.7 So=35° to CA; 367.6 S1=45° to CA; 369.0 S1=80° to CA	Ca ± Sil (1)		365.7 gradational over 0.4m; 369.3 gradational over 0.2m	
370		black	wk. laminated black shale 370.6		dis+Vn Py (3%) Vn Sp (tr) 370.6		370.?			
		white black	shale / Fault Zone; strongly Sil+Ca±chl veined broken, gouges 371.5m 373.7		Vn Sp (0.5%) dis+Vn Py (1%) 371.? Vn(Sil+Ca) Sp (3%) 373.7 Vn Ga Cp(?) Vn Py (1%) 374.1		Sil+Ca ± chl (3) 374.1	373.7/21/?/Rh, Ru	371.5 fault; 373.7 strongly veined, faulted	Fault zone
375		brown green	quartz-feldspar-porphyry, minor mafic phenocrysts	374.1 Sil Ser (1)	Vn + dis Sp (0.5%) Vn ?? (tr)		Sil+Ca ± chl ± Ep (3)			

358.6: 

Small scale fault displacing beds; well developed 'S1' cleavage parallel to normal

367.6: 

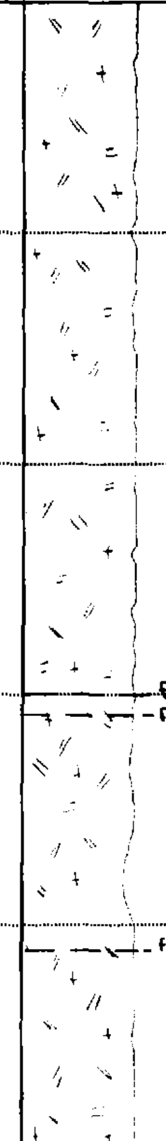
645161

16

PASMINCO EX ATION **DIAMOND DRILL HOLE LOGGING** **Input**

Hole_ID	MS8		
Hole_Type		Tenement	
Year		Prospect	
Geologist	AMcN	Date	1/7/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
385						380.7 flow banding = 75° to LCA					
390											
395		brown-green	Quartz-feldspar Porphyry Weakly flow-banded in parts; some minor zones of brecciation No obvious mafic clasts, & alt. more common-	Si/Ser (1)	Vn + dissem Sp (0.1?) Vn Gn (0.05?) Vn Asp (tr)		Sil + Co ± Chl ± kfs (3) (± SpGn)	395.0/0.8/?/Bk			
400			core. Several generations of veining i) Sil ± Co ± kfs (pink) Cut by: ii) Sil + Chl ± Co ← (± SpGn, Asp) major phase Cut by: iii) Sil + Co					395.4/0.2/?/Bk			
405								400.6/0.2/?/Bk			



645162

PASMINCO EX[illegible]ATION **DIAMOND DRILL HOLE LOGGING** **Input**

Hole_ID	M1-04		
Hole_Type		Tenem[illegible]	
Year		Prospect	
Geologist	AM.N	Date	16/4/99

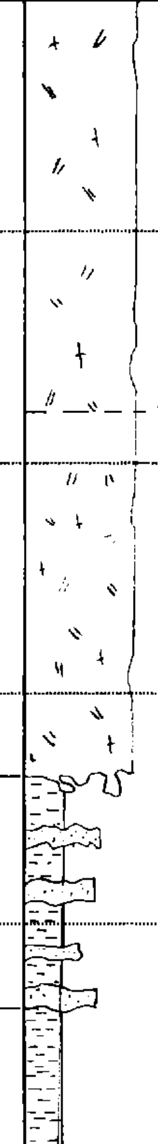
Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
410		Green brown	quartz-feldspar porphyry	Sil ser (1)	Vn sulph sp (0.1?) Vn sp (0.05?) Vn py (tr)		Sil+Co+chl± kfs (3)				
415		White Green	Vein - Sil+Co±chl 413.1 414.7		413.1 414.7		413.1 Sil+Co±chl 414.7 (4?)		413.1 irregular 414.7 irregular		
420											
425		brown Orange	Quartz-feldspar porphyry	Sil (kfs?) 1	Vn sp (0.2?) Vn gn (tr)		Sil+Co±chl± kfs (±sp,gn) (3)				
430											

645163

PASMINCO EXPLORATION | **DIAMOND DRILL HOLE LOGGING** | **Input**

Hole_ID	MS-8		
Hole_Type		Tenement No.	
Year		Prospect	
Geologist	AMcN	Date	16/04/99

Depth	Lithology Code	Lithology Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
435		Lt orange		Sil (kf?) (1)	Vn Si (0.2%) Vn gn (tr)						
440			Quartz-feldspar-porphyry	439.2			Sil+Qtz+Chl stkwk (+sp/gn) (1)	439.2/0.1/70/sld/ch			
445		Green brown		Sil ser chl (1)	Vn+diss sp (0.5%) Vn gn (tr)		442.7 Co+sil ±chl (2)				
450		black green	446.9 black shale interbedded with chloritic volcaniclastic siltstone beds (0.1-0.5m thick) Contacts between beds irregular	446.9 Vst: chl ser (3)	446.4 diss sp (3%) 446.9 Vn sp (0.1%) Vn+diss Py (0.5%)	448.5 So: 15° to lca. 450.0 So: 60° to lca.	446.0 Co+sil (2) 449.2 Co±sil (3) sw		446.9 Irregular contact (over 0.5m)		
455		black	rare calcareous beds in both Vst + Sh. 451.8 black shale	451.8	Vn gn (tr) 451.0 Vn Sp (0.1%) Vn+diss Py (1%) Vn gn (tr)	453.5 So: 30° to lca Sv 25° to lca. 454.0 So: 40° to lca. Sv: 30° to lca.	Co+sil (2)		451.8 irregular (over 0.1m)		



PASMINCO .. LORATION **DIAMOND DRILL HOLE LOGGIN** Input

Hole_ID	MS-7	. roject	
Hole_Type		Tenement_No.	
Year	1999	Prospect	
Geologist		Date	14/9/99

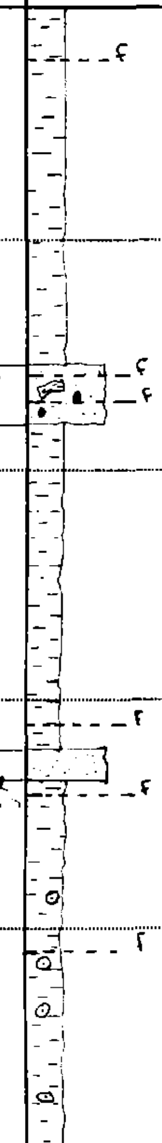
Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
460		Green	455.1 Vst, c Shale clasts. 455.6	Ser Chl (1) Per	455.4 Vn+dis Ps (1%) Vn Sr.Gn (1%)	456.9 So = 35° to lca. 458.3 So = 10 to lca. 460.0 So = 5° to lca	Co+sil (1) (± Ps)		455.1 Irregular 455.6 Irregular (lower 0.1m)		
465					462.4 dis+Vn Ps (5%) 464.3	S1 = 40° to lca. 464.2 So = 55° to lca S1 = 25° to lca	464.2	461.5/0.15/60/Pu,Bk 462.6/0.1/55/Pu		F F	
470		Black dk grey	* 465.8m Black Shale geochemistry sample (collected by MH) Black shale, laminated in part. Calcareous 465-468m 461-465m slight green colour ? chl on Joints + fractures.			466.2 So = 50 to lca 468.2 So = 45° to lca.	Co+Sil (1)				
475					Vn+dis Ps (1%)	471.4 So = 45° to lca 473.2 So = 38° to lca	471.2 Co+Sil (2)				474.2 Good core orientation
480						477.6 So = 50° to lca S1 = 30° to lca		478.3/0.1/55/Pu,Bk 479.2/0.05/30/Pu 479.5/0.05/35/Pu		F F	So = 78° to 160° (mag) S1 = 85° to 178° (mag)

645165

PASMINCO EXPLORATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	HS-8		Project
Hole_Type			Tenement_No.
Year	1999		Prospect
Geologist	Angus	Date	17/4/99

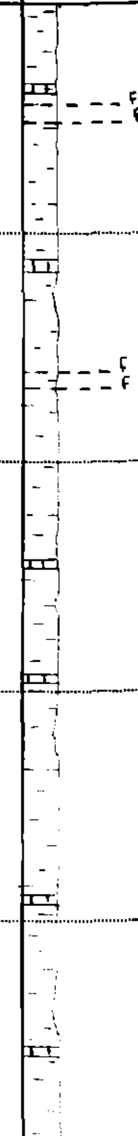
Depth	Lithology Code	Colour	Comments	Alteration: Up to 3 codes w. intensities (1-3)	Mineralisation: Up to 3 codes with %	Structure	Veining	Faults		Graphic Log	
485		black grey	black shale, well laminated calcareous, 480–487.7m		Vn+dis Py (1%)	482.0 So=25° to Lca; 484.0 So=55° to Lca		481.1/0.1/65°/Pu,PL		F	485.2 Core orient
490		Green black	487.7 – 489.0 Volcaniclastic Sandstone c shale clasts	SerChl (3)	487.7 dis Py (0.5%) 489	489.6 So=55° to Lca	Co ±sil (±Py) (2)	488.1/0.04/50/Pu; 488.6/0.01/50/Pu	487.7 Irregular (over 0.1m); 489.0 Irregular (over 0.1m)	F F	
495		black grey	black shale, well laminated, calcareous to 490m.		Vn(+dis) Py (0.5%)	491.5 So=60° to Lca					494.2 Core orient
500		grey, brown	496.1 – 496.6 Volcaniclastic Sandstone, feldspar-phyric & shale	Ser (2)	495.1 Vn+dis Py (5%); Vn+(dis) Py (1%) 500.0		495.0 Co sil (±Py) (3) 496.6; Co sil ± Py (1)	495.5/0.3/60/Pu,PL; 497.3/0.4/?/Bk,Pu	496.1 gradational (over <0.1m); 496.6 gradational (over <0.1m)	F F	So = 60° to 095° mag. h: 21° to 105° mag
505		black grey	black shale, well laminated, calcareous from 500–505m. At 498m occurrence of ellipsoidal, 1cm dia. black concretions (◎) not obviously calcareous		Vn Py (5%) 501.1; Vn Py (2%)	502.0 S1=50° to Lca, So: 65° to Lca; 504.9 S1=50° to Lca	500.2 Co sil (3) 501.5; Co sil ± Py (1)	500.4/0.2/75°/Pu		F	



645166

PASMINCO [redacted] PLORATION **DIAMOND DRILL HOLE LOGGI[redacted]** **Input**

Hole_ID	MS-7	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Amc	Date	20/4/99

Depth	Lithology: Code	Lithology: Colour	Comments	Alteration: Up to 3 codes w. intensities (1-3)	Mineralisation: Up to 3 codes with %	Structure	Veining	Faults		Graphic Log	
510					Vn Py (<1) 507.1 Vn Py+Cp (1?) 507.3	508.0 So = 50° to ka	507.1 Co+Sil+Py+Cp (3) 507.4 Co+Sil ± Py (1)	507.5/0.2/ 70 / Ch 507.5/0.01/ 60/ Pu			505.6 Core orientation - Cont ue
515						511.5 So = 50° to ka.	512.2 Co+Sil (3) 513.4	513.1/0.4/60/ Ch, Pu 513.4/0.4/ 65/ RL, R			
520		black sils.	black shale, well laminated. at 508m thin (<1cm) light green carbonate beds appear scattered down-hole below 52?m Calcite lamination appear. Bedding generally well developed but some zones of disrupted bedding, most notably from 505-511m.		Vn sulfs + Framboidal Py (≤2)	516.2 So = 40° to ka. 520.0 So = 50° to ka	Co+Sil ± Py (1)				520.0 Core Orient Cont ue
525						521.5 So = 55° to ka 524.5 So = 50° to ka So = 35° to ka					
530						527.0 So = 55° to ka.					525.9 Core orient So: 60° to 110° mag 266.1 lo = 75° to 88° mag 326.5

645167

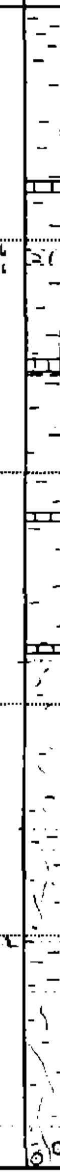
PASMINCO .ORATION

DIAMOND DRILL HOLE LOGGIN

Input

Hole_ID	MS8	oject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	[illegible]	Date	20/1/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
535						531.0 So = 50° to Lca; 534.0 So = 60° to Lca	Sl + Ca ± Py (2)				
540					Va + diss + bedded Py (2%)	536.3 So = 60 to Lca; 539.1 So = 60° to Lca	537.0; Ca + Sl (1)	538.0/0.1/63/Gt, Pu	535.4; 535.6	F	539.2 Core orient So = 30° to 070° mag
545		Dark grey	Black shale, generally well laminated. Generally calcareous below 536 m. Zones of strongly disrupted bedding are indicated (535.4 – 535.6; 544.2 – 547.7, 548.2 – 550.2; 551.4 – 555.2)			541.4 So = 50° to Lca	541.1		544.2		544.2 Core orient Can't use
550			Thin grey calcareous "limestone" beds are obvious above 544.2m. Below 554.2m Calcareous, grey limestone balls or concretions to 6 cm dia. become obvious.		547.2	542.0 So = 65° to Lca; 548.1 So = 60° to Lca	Ca + Sl ± Py (2)		547.7; 548.2		548.2 Core orient Can't use
555					Vein + diss Py (3%); Va Sp (4%)	550.2 So = 70° to Lca			550.2; 551.4; 554.2		

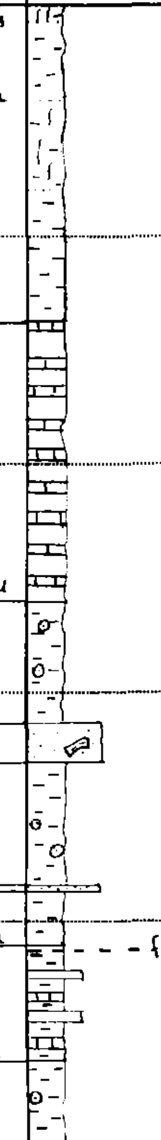


645168

PASMINCO EXPLORATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	MS8	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	[illegible]	Date	4/9/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
560		black grey	Black shale as described above; Lots of deformed bedding in 550-550.1 and 557.2-559.0		Vn + dissem Py (5%) Vn Sp (tr) 559.0 Vn + dissem Py (3%)	556.0 So: 55° to LCA; 560.0 So: 70° to LCA			556.5 557.2 559.0		
			#561.9m: Black shale geochemistry sample (collected by Marcus Hope) 561.9		Vn Sp (0.5%) Vn gn (tr) 561.6 Vn Sp (1%) 561.9				561.9 Abrupt conformable		
565		black, grey, green	Black shale (poorly laminated) interbedded with thin (<2cm) beds of calcareous mudstone (?limestone) Calc. mudstone beds are irregular, ?slumped and may be discontinuous. Also present are calcareous 'balls'.		Vn + dissem Py (7%) Vn + dissem Sp (3%) Vn gn (0.5%) 565.2	563.0 So: 70° to LCA	Ca + Sil ± sulphide (2)				565.2 Core orient Can't use.
			Most mineralisation in 'nodules' 'limestone' beds. Mineralisation also in carbonate matrix zones of hydrofracturing & angular shale 'clasts' 568.1 Shale is not strongly calcareous.	567.0	Vn + dissem Py (5%) Vn Sp (1%) Vn Po (1%)	565.4 So: 55° to LCA					* Carbonate beds appear to have 'around' some nodules (strongly mineralised)
570		black	#568.8m: Black shale geochemistry sample (collected by Marcus Hope) Poorly laminated black shale with fine (<1mm) carbonate spots; shale is calcareous; rare dk grey nodules (<0.5cm dia.) 570.9	Ca spots in shale (1)	Vn Py (>1%) Vn Sp (0.5%)	568.6 So: 65° to LCA; 570.0 So: 65° to LCA			568.1 gradational (over 0.2m)		
		green, black	571.4 Strongly altered Volcaniclastic Sst. & shale clasts.	Chl Ca (3)	Sp (3%) Py (5%)				570.9 Abrupt, irregular; Abrupt, 571.4 irregular		
575		black	Moderately laminated black shale with thin Volcaniclastic Sst. bed (574.5-574.6m), rare grey nodules and one thin (<0.5cm) calcareous mudstone bed (@ 574.8m)	Ca spots in shale (1); Chl Ca (2) 574.5 574.6	Sp (0.5%) Py (3%) 572.? Sp (1%) Py (7%) 573.9 Py (2%)	573.0 So=50° to LCA; 574.6 So= 45° to LCA	572.5 Ca+Sil ± sulphide (3) 575.7		574.5 abrupt; 574.6 abrupt		574.7 Core orient Can't use.
			575.6	Ca spots (2) 575.6	Sp (0.1%)			575.7/0.01/21/ ch	575.6 gradational (over 0.3m)		
		grey green black	Interbedded black shale, calcareous mudstone and ?Volcaniclastic siltstone & rare grey nodule and zones of hydraulic bx (Ca matrix) 578.3		576.8 Py (7%) Sp (0.5%)	578.1 So= 40° to LCA	Ca+sil ±Py Sp (2)		578.3 gradational (over 0.5m)		
580		black, grey	moderately laminated black shale & rare grey nodules to 0.5cm dia.		578.5 Py (3%) Sp (tr)						



645169

PASMINCO [illegible]ORATION **DIAMOND DRILL HOLE LOGGIN[illegible]** **Input**

Hole_ID	MS-8	[illegible]ject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Amen	Date	23/4/99

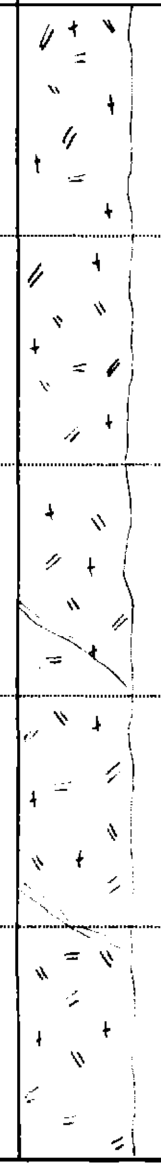
Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
585		Black silts Brown grey black	Black shale in clast 581.9 Volcaniclastic sandstone with black/grey shale. ↳ black shale + ... clasts. Sandstone variably mineralised 583.6	581.0 Ca (2) cst: chl ser (2) 583.4 Sil (1) chl ser (2) Ca (1) 584.1	Py (3%) Sp (tr) 581.4 Sp(5%) Gn(2%) Py(3%) Vn + diss Sp (2%) Py (1%) Gn (2%) Vn Sp (1%) Vn Gn (tr) 584.2	580.8 So = 45° to core 581.8 So: 55° to core 582.5	Ca + Sil ± Py, Sp (2) 583.4		581.9 Abrupt, irregular Transitional? 583.4		→ Massive Sp nodules replaced by Py ± Sp Some clasts replaced by sulphides in sst; ...
590					Vn Sp (tr) Vn Gn (tr) Vn Py (tr) 586.8 Vn + diss Py (tr) 590.1						
595		Pink Green	Quartz-feldspar-porphyry; more strongly altered than normal massive porphyry; ... Qz may be slightly Ser alt. Matrix + feldspar phen are all pervasively altered.	Sil (1) Ser (2) alt Fd chl (2) ...	Vn + diss Py (3%) Vn Gn (1%) Py (1%) 590.5 590.8 diss Py (tr) 594.0 diss + Vn Py (3%) 595.0		Ca + Sil ± chl (2)				
600					diss Py (tr)						
605											

645170

PASMINCO [redacted] ORATION　　DIAMOND DRILL HOLE LOGGIN[redacted]　　Input

Hole_ID	MS 8	[redacted]ject	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Anon	Date	23/4/99

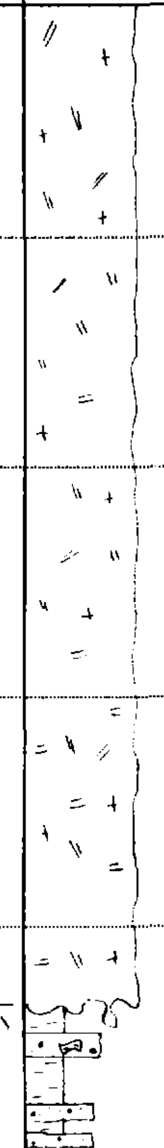
Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
610											
615											
620			Quartz-feldspar-porphyry (as above) Carbonate alt. on margins of Qp and fracture in Qp.	Sil (2) Ser(2) after Fd. Chl (2) after mags?) Co (variable 1-2)	Lim, Mn Ox (tr)	618 Foliation? = 35° to Lca.	Co+sil ± chl (2)				
625						625 Foliation = 30° to Lca.					
630											



6451171

PASMINCO E[illegible]ORATION **DIAMOND DRILL HOLE LOGGIN[illegible]** **Input**

Hole_ID AS-8	[illegible]ect
Hole_Type	Tenement_No.
Year	Prospect
Geologist Amin	Date 26/9/99

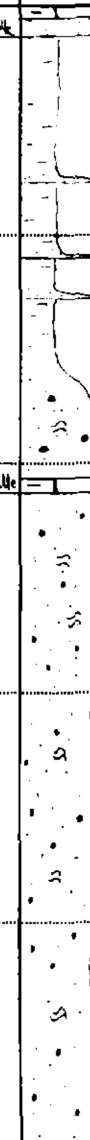
Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
635							Co±sil ±chl (2) 635.0				
640							Co±sil ±chl (1)				
645		Red Green	Quartz-feldspar-porphyry (as above)	sil (1) ser(2) after fd. chl (1) after mafics	644.0		643.2				
650		648.5 Green Grey		sil (2) chl (2)	Va Py (tr) 649.5 Vein diss Py (1%)		Co±sil + chl (2) 648.1 Co±sil + chl (3)				
655		651.5 Red, grey 651.6 Green grey	Volcaniclastic Sandstone (? Shale, av. ser alt Px?) interbedded with black-grey shale and minor Volcaniclastic siltstone No obvious scaling; Contacts between beds are sharp but irregular.	sil (2) hem (2) Vsst: chl ser (3) 654.5	Va Py (2%) Vein diss sp (0.5%) 653.2 Va Py (1%) sp (1%) Py (3%) sp (3%) Py (5%) sp (1%)	651.0 So=50° to LCA. 653.7 So=35° to LCA.	651.7 Co±sil (2)		651.6 Pegmatite (over 0.3m)		

Core had cut

[illegible]

PASMINCO EXPLORATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	1989	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	AMA	Date	20/4/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %					
		green, grey	658.6 Volcaniclastic sandstone + shale in places	Unit: chl±ser (3)	Py (1%) Sp (1%)	658.2 So = 45° to lca	Co ± sil (1)		658.6 Abrupt, conformable	
		green	interbedded with volcaniclastic (also ē chl spots) and thin volcaniclastic sandstone units (graded - facing uphole)	Sil (2) Chl (2) Ser (1)	Py (1%) Sp (1%) 659.1	659.6 So = 55° to lca; 660.3 So = 50° to lca	659.2 Co ± sil (1)			
660			basal sandstone unit Contains coarse lithics incl ? Pumice to 2 cm dia. lithics may be strongly kspar-hem altered	661.3 Sil (2) Chl (2) Ksp-hem (1)	Py dissem (1%) Sp (0.5%) Vn.	661.4 So = 55° to lca. 662.5 So = 40° to lca.	662.5 Co+sil (2)			
665		665.4 green-pink	Volcaniclastic sandstone, massive, ungraded. Clasts of pink ?lava + chloritic pumice Some narrow (2cm) ov intervals.	665.4 Chl (2) Sil (1) Ksp-hem (2) (in) clasts. 670.0	665.2 Py (3%) Sp (tr) 666.6 dissem Py (0.1%) Sp (tr) Gn (tr)	665.4 So = 50° to lca	665.6 Co+sil (1) 668.6 Co+sil (2)		665.4 Abrupt, conformable	
670		672.8		Chl (2) Sil (1) Ksp-hem (1) 672.7	672.8		~~Co+sil+chl (3)~~ 672.8 Co+sil (2)	672.0 672.1		
675		green		Ser (3) after Pu Chl (2) Sil (1)	Py dissem (tr) Cpy (tr) Po (tr)					
		677.0 green cream		677.0 Chl+sil (2)	677.0 Py (tr) diss.		Co + sil (1)			
680		679.6 green, pink		679.6	679.6					

645173

PASMIN[illegible]PLORATION

DIAMOND DRILL HOLE LOG[illegible]

Input

Hole_ID	18-3	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	A M-N	Date	3/5/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
		Green, Pink	Volcaniclastic wackestone as above 682.0	hem/kfs(1) sil(2) 680.5 sil (1) chl (2) 682.0	Py (tr) Sp (tr)	682.0 S0? = 60° to CA	Ca+sil (1)		682.0 Abrupt. ?Conformable		682.0 hem(s) on contact
685		Green Pink.	Graded volcaniclastic sandstone unit. Clast content dominated by pumice ± pink lava clasts, except for lower 60 cm where sub-angular, brown-cream carbonate-rich (?limestone) clasts are dominant. Pumice is qtz-phyric. 686.9	hem/kfs + sil clasts (2) sil (1) chl (2)	682.0 Sp, gn (tr). 683.1 Py (tr) Sp (0.5%) Vn. 683.7 Sp + Gn (0.1%) Vn. Py (tr) 686.1		Ca + sil (2)		686.9 Broken		
690		Green brown.	Pumice-rich silicified volcaniclastic sandstone/ siltstone. rare pink-green ?lava lithics, Pumice is feldspar + quartz-phyric. 690.2	Ser (3) & Po. Sil chl (2)	Sp+Gn Vn (tr) Py (tr) 690.0				690.2 Abrupt Conformable		
695		Green Grey	Massive unbedded strongly silica altered volcaniclastic sandstone. Not clear what protolith - could have been a lava even - some possible quartz-eyes. Chloritic domains around more siliceous domains	Chl (2) Sil (2-3)	Vn + diss Sp (1%) Py (tr) 692.0 Vn Sp+Gn (tr) 692.7 Py (tr) Vn + diss Sp (0.5%) Py (tr) Gn (tr) 695.6	690.2 S0? = 60° to CA	690.2 Ca + sil ± chl (2)				
			696.5	696.5	Sp Vn (3%) Po, CPy, Gn (tr)	696.5	696.5	696.5/0.01/45/Bx	696.5 Abrupt faulted?	F	
700		Khaki-green, Grey.	with volcaniclastic, poorly laminated. rare - thin (<0.3 cm) chloritic sandstone grade interbeds.	Chl Ser (2) Sil (1-2)	Sp Vn+diss (1%) Py (3%) 697.6 Sp Vn+diss (0.5%) Py (0.5%) Gn (tr)		Ca + sil (2) 697.9 Ca + sil (3) 698.9	697.6/0.05/40/Po		F	
705			Has typical carbonated 'cherty' fracture		700.0 Py Vn (1%) Sp Vn (tr) 701.8 Py Vn (3%) Sp Vn (0.5%) 702.9 Py + Sp Vn (tr)	700.3 S0 = 60° to CA 701.6 S0 = 60° to CA 704.0 S0 = 45° to CA	Ca ± sil (2)				Note: sulphide rare in [illegible] Sp all (khaki) zones.

645174

PASMINC LORATION **DIAMOND DRILL HOLE LOGG** Input

Hole_ID	MS-8	Project	
Hole_Type		Tenement_No.	
Year	1999	Prospect	
Geologist	AMN	Date	4/5/99

Depth	Lithology			Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour	Comments	Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
710		Khaki-green, grey	... volcaniclastic. Poorly laminated. At 707.9, 709.8 are oval 'patches' of intense Co all with a selvedge of chl. alt. (Also strongly mineralised ↓ sp+py) Patches are up to 10cm dia.	Chl Ser (2) Sil (1-2)	Py ... Vn (tr); 706.4 Py tr (vn) Sp Vn (0.1%); 707.6 Py Vn + diss (1%) Sp Vn + diss (0.5%) ... [ ] in chl Co patches; 710.2 Py Vn (tr) Sp Vn (tr); 713.3	707.4 So = 40° to lca	Co±Sil (2); 706.4 Co+Sil (3) 706.2	707.5/0.02/35/Pu			
715			713.7		Py Vn + diss (1%) Sp Vn (0.5%)	713.7 So = 65° to lca			713.7 Abrupt Conformable / irregular		
720		Grey Green	grey shale interbedded with fine volcaniclastic sandstone	Sil (1) Chl (1)	715.6 Py Vn + diss (5%) Sp Vn (1%); 716.0 Py Vn + diss (7%) Sp Vn (0.1%); 718.6 Py diss + Vn (5%) 719.6 Sp diss + Vn (2%)	717.2 So = 50° to lca; 717.5 So = 55° to lca; 719.0 So = 45° to lca	Co+Sil ± Py (1)	720.0/0.02/40/Rh			
			722.3	722.3	Py diss + Vn (2%) Sp Vn (0.1%)	721.4 So = 40° to lca; 722.3 So = 40° to lca			722.3 Abrupt Conformable		722.0 core orient.
725		Khaki-green, grey	coh volcaniclastic ĉ rare Co+Sil patches. 724.6	Chl Ser (2) Sil (1-2) 724.6	Py tr (tr) Sp Vn (tr) 723.9	724.6 So = 60° to lca			724.6 Abrupt Conformable		722.6 So = 75° to 310° mag; 725.0 So = 70° to 330° mag
730		Grey black	Poorly laminated grey shale ĉ minor, thin (< 5cm) green fine volcaniclastic sandstone interbeds.	Chl (2) Δ Sil. Sil (1) Δ Sh.	Py Vn + diss (1%) Sp Vn (0.5%)	726.0 So = 40° to lca; 728.0 So = 35° to lca	729.0 Co+Sil (3); 729.3 Co+Sil (2)	726.1/0.02/40/Rh; 729.3/0.1/40/Rh			

645175

PASMINC[illegible] LORATION **DIAMOND DRILL HOLE LOGG[illegible]** **Input**

Hole_ID	MS-8	[illegible]	Project
Hole_Type		Tenement_No.	
Year	1999	Prospect	
Geologist	AMN	Date	4/5/99

Depth	Lithology		Comments	Alteration	Mineralisation	Structure	Veining	Faults		Graphic Log	
	Code	Colour		Up to 3 codes w. intensities (1-3)	Up to 3 codes with %						
					Py vn/dix (1%) Sp vn (0.5%) 734.2	733.0 So=45° to lca. 734.0 So=40° to lca.					
735					Py diss/vn (2%) Sp (vn) (1%) 735.4						
			* black shale geochemistry sample 5/10/99		Py diss/vn (2%) Sp vn (2%) 736.5	735.9 So=30° to lca.					
					Py diss/vn (2%) Sp vn (0.5%) 737.0	737.4 So=20° to lca.					
					Py diss/vn (1%) Sp vn (0.1%)	739.9 So=10° to lca.					
740					740.6						740.2 Core orient:
		Grey-black	Variably laminated grey-black shale, ĉ minor thin carb. volcaniclastic. Shale to siltstone	Sil (1) Δ sh. Chl (2) Δ av.	Py diss (0.5%) Sp vn (tr) 743.2	741.5 So=10° to lca.	Cb+sil (1)				740.1 So: 70° to ob. mes 741.0 So: 80° to ob. mes
					Py (0.5%) Sp vn (1%) (as vein) 743.7			743.2/0.2/?/Bk		- - - F	
745								745.3/0.1/40/Pu 746.1/0.2/?/Bk		- - - F - - - F	746.2 Core orient: No oval.
					Py diss/vn (2%) Sp vn (0.1%)	746.4 So=35° to lca.					
						749.0 So=35° to lca.		748.7/0.3/40/Bk, Py		- - - F	
					750.1			749.8/0.2/?/Bk		- - - F	
750					Sil (2%) Py (3%) 750.6			750.4/0.5/?/Bk		- - - F	
					Py diss/vn (3%) Sp (0.5%)	751.5 So=60° to lca. 753.0 So=45° to lca.					
			754.0	753.5 Sil (2-3)	754.1				754.0 gradational over (0.4m)		
755		Grey-Green	Weakly laminated ash volcaniclastic; thin (<0.5cm) black siltstone interbeds.	Sil (2) Chl Ser (2)	Py (tr) Sp (0.1%)	755.0 So=55° to lca.					

6451176

PASMIN[illegible] LORATION **DIAMOND DRILL HOLE LOGG[illegible]** Input

Hole_ID	MS-1	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Amin	Date	5/6/99.

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
760		grey, green	ash volcaniclastic interbedded with volcaniclastic siltstone/sandstone. Sst/slt units have obvious leucoxene [illegible]. 760.0	760.0	Py (1%) Sp (0.5%) 757.5 Py vn (0.2%) Sp diss+vn (2%) 760.0	756.2 So=40° to lca; 758.2 So=45° to lca	Ca+sil+ben (2) 759.2; Ca+sil (1)	756.0/0.01/51°/Pl; 760.0/0.01/40/Pl	760.0 fault contact	F F	
765		grey black	well laminated grey-black shale/siltstone	sil, chl (1)	Py diss+vn (5%) Sp (1%) vn 763.3	760.2 So=45° to lca; 764.0 So=60° to lca	760.9; Ca+sil (1)				Ain Br. clasts laminated in So. Note veins exceeds those in shale also cordance with "Breccia Zones" i Angular sh clasts often cemented in Sp mineralisation
			767.6	sil, chl (2) 767.6	Py diss+vn (3%) Sp vn (0.1%) 767.6	766.0 So=60° to lca			767.6 gradational (over 0.2m)		
770		green, grey	Dominantly ash volcaniclastic i graded volcaniclastic near base and thin (5-0.5 cm) shale beds. Well. st in 92 + 3d. - phyric. 772.8	chl, ser (2) sil (1) 772.8	Py diss+vn (1%) Sp vn (1%) Sp [illegible] (0.2%) Py (1%) 769.5 Sp vn (1%) Sp vn (0.5%) 770.4 Sp diss (2%) Py diss+vn (1%)	770.0 So=45° to lca; 771.6 So=50° to lca	768.5 Ca+sil+chl (3) 769.7; Ca+sil (2) 770.6; Ca+sil+chl+ser (3) 770.8; Ca+sil (2)	772.8/0.01/55/Pl; 773.6/0.1/?/Bk	772.8 fault	F F	* Sd... in [illegible] sandstone
775		grey black	well laminated shale/siltstone 775	Si, chl (1)	Py vn+diss (2%) Sp (0.5%)				775.0 fault		
		black, white	775.6 fault zone / shale		Sp (2%) [illegible] 775.6 776.0	776.0 So=60° to lca	775.6 Ca+sil+chl (3) 777.4	775.6/0.6/?/Pl	775.6 fault.		
		grey black	well laminated grey-black shale 777.0		Py diss+vn (2%) Sp diss (0.2%) 777.0			777.0/0.01/55/Pl	777.0 gradational (over 0.4m)	F	
780		grey green	ash volcaniclastic interbedded with minor thin (<0.3cm) shale and volcaniclastic siltstone units	chl, ser (2) sil (1)	Py diss+vn (3%) Sp diss vn (0.1%) 779.2 Py diss+vn (2%) Sp [illegible] (1%) 779.9	777.4 So=55° to lca; 779.2 So=60° to lca.	Ca+sil (1)				

645177

PASMINCO E[XP]LORATION **DIAMOND DRILL HOLE LOGGING** Input

Hole_ID	MD-?	Project	
Hole_Type		Tenement_No.	
Year		Prospect	
Geologist	Ant N	Date	6/5/99

Depth	Lithology Code	Colour	Comments	Alteration (Up to 3 codes w. intensities (1-3))	Mineralisation (Up to 3 codes with %)	Structure	Veining	Faults		Graphic Log	
		Grey, green	ash volcaniclastic interbedded with minor shale and volcaniclastic siltstone	780.5; 781.3; Chl Ser (2) Sil (1)	Sp ... (tr ?); Sp vn ... (3%) Gn, Cpy ... (vn); Py (3%) 781.1 Sp ... (?); Py (3%) Sp (2%) Gn ... Cpy (tr) 781.6; Py (3%) b/ks (1%) Gn (0.5%) Cpy (tr) Sp (tr) 785.2	780.0 So: 60° to LCA; 780.9 So: 50° to LCA; 784.3 So: 65° to LCA	Co ... (2) 782.4; Co+sil ±chl ± sulphides (3)				
785				786.0	Py/Po (0.5%) 786.?			786.1/0.8/70/ch			
			787.7	Ser (3) Sil Chl (2) 788.0	787.0		787.0		787.3 gradational (over 0.3m)		
790		Pink, green	Volcaniclastic sandstone ? lava/tuff clasts to 10cm dia. looks like a breccia in part. feldspar-phyric only. (? top of cvc) - after cutting looks more lava breccia like !!	groundmass: Sil Chl (2) Some clasts: Sil, Kfs/hem (3)	Py in vein (tr) Cpy vn (tr)		Co+sil+chl ± Kfs/hem (2)				
795											
			796.7 E.O.H.								
800											
805											

645178