

Hole No: 005B

From (m)	To (m)	Strat Code	Desc Code	Alt Code	Alt Int	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
12.0	21.5	BR	cy	a	Oxidised, Fe mottled, sheared cherty breccia. Cherty clasts are elongate or sub-rounded, but are the zones which control the mottling. These are up to 5cm wide, but may be stretched out along a fabric (close to CA). The matrix is sand-silt size, and is usually clay altered (weathering). Competency is awful. Many metres of core loss (~6.6m). Core block error at 22.9m, remarked as 21.9m (error assumed to be in broken material). 22 reassigned as 21m.	16.0	CV	13°	81502	39.9	40.9	1.0	0.1	0.1	0.01	1	0.1	0.8	3			
						19.0	CV	8°	81503	40.9	41.9	1.0	0.1	0.2	0.01	2	0.1	1.0	4			
						81504	41.9	42.9	1.0	0.1	0.1	0.01	1	0.1	1.2	3						
						81505	42.9	43.9	1.0	0.1	0.2	0.01	2	0.1	1.3	4						
						81506	43.9	44.7	0.8	0.1	0.2	0.01	3	0.1	1.4	5						
						81507	44.7	45.7	1.0	0.1	0.5	0.01	4	0.1	2.5	9						
						81508	45.7	46.0	0.3	0.1	1.1	0.01	5	0.1	2.4	17						
21.5	23.3	RK	cy	b	Pale creamy-grey, variably silica and clay altered. sandstone/rock. Unit fairly massive. Has numerous small, discontinuous, Fe coated fractures. Possible thin cherty clast or quartz vein at 22.6m. Core of moderate competency. Fairly abrupt boundary with next unit, in terms of colour/alteration, but texture is more gradual.	22.7	JT	40°	81509	46.0	47.0	1.0	0.2	0.3	0.01	1	0.1	2.0	6			
						23.3	CT	65°	81510	47.0	48.0	1.0	0.1	0.5	0.01	1	0.1	1.3	8			
						81511	48.0	49.2	1.2	0.1	0.2	0.01	1	0.1	1.0	4						
						81512	49.2	50.2	1.0	0.1	0.3	0.01	1	0.1	1.3	6						
						81513	50.2	51.2	1.0	0.1	0.4	0.01	1	0.1	1.0	7						
						81514	51.2	51.8	0.6	0.1	0.3	0.01	1	0.1	0.7	6						
23.3	26.2	CH	qs	a	Partially oxidised. Variably cleaved/sheared, light grey to greenish-yellow grey, poorly sorted, cherty clast bearing volcanoclastic sandstone. Unit variably sericite+/-chlorite and lesser silica altered. Weathering concentrated along fractures (as in previous unit). Clasts usually <3-5mm in size. Cleavage runs ~30-40 degrees to CA. Unit of poor-moderate competency, with many pieces under 10 and 5cm. Last 2m quite broken (10cm core loss).	23.6	JT	50°	81515	51.8	53.8	2.0	0.1	0.3	0.01	1	0.1	1.7	6			
						23.6	CV	35°	81516	53.8	54.8	1.0	0.2	0.2	0.01	1	0.1	3.8	5			
						25.0	CV	30°	81517	54.8	55.8	1.0	0.1	0.2	0.01	5	0.1	5.2	5			
						25.9	CV	41°	81518	55.8	56.8	1.0	0.1	0.2	0.01	1	0.1	4.8	4			
						81519	56.8	57.8	1.0	0.6	0.7	0.01	1	0.1	3.8	13						
						81520	57.8	58.7	0.9	0.1	0.5	0.01	1	0.1	1.8	8						
26.2	29.5	RK	se	a	Greenish-yellow-grey, moderately oxidised, sericite+/-chlorite altered rock. Unit has a very strong cleavage, marked by white ?sericite flecks. Fractures oxidised (as previous), and often run against cleavage. Competency moderate to good.	28.1	CV	24°	81521	58.7	59.7	1.0	0.2	0.5	0.01	5	0.1	2.8	9			
						28.2	JT	36°	81522	59.7	60.7	1.0	0.2	0.5	0.01	4	0.1	3.2	9			
						81523	60.7	61.9	1.2	0.2	0.5	0.01	6	0.1	3.1	10						
						81524	61.9	62.7	0.8	0.1	0.6	0.01	1	0.1	3.7	9						
						81525	62.7	63.7	1.0	0.1	0.5	0.01	4	0.1	2.2	9						
29.5	32.9	RK	sc	a	Lime green, lightly-barely oxidised, sericite+/-chlorite altered, matrix dominant, chert and pyrite clast bearing rock. Unit like previous, except for pyrite wisps, spots and blebs, and lesser cherty clasts. Clasts <5-10mm in length generally. Cleavage strong, but hard to measure, seems to lie close to CA. Some pyrite wisps seem to mark cleavage, while pyrite blobs are rounded, and may partially overprint/accompany cherty clasts. Strong lineations present on joint faces. Competency moderate except from 32.2 onwards, which becomes broken.	31.5	JT	38°	81526	63.7	64.7	1.0	0.1	0.6	0.01	1	0.1	2.9	9			
						31.5	CV	8°	81527	64.7	65.7	1.0	0.2	0.6	0.01	1	0.1	1.6	10			
						31.8	JT	7°	81528	65.7	66.1	0.4	0.2	0.3	0.01	1	0.1	2.6	6			
						81529	66.1	67.1	1.0	0.1	0.1	0.01	1	0.1	2.5	3						
						81530	67.1	68.1	1.0	0.2	0.4	0.02	1	0.1	2.5	7						
						81531	68.1	69.1	1.0	0.1	0.3	0.01	1	0.1	2.3	6						
						81532	69.1	70.2	1.1	0.1	0.2	0.01	1	0.1	1.9	4						
32.9	33.4	VC	qs	a	Hardly weathered at all. Well cleaved, 'chert/silicified sediment' clast bearing volcanoclastic sandstone. Sericite altered (weathered?) along joints; looks to be alteration. Clasts (may be elongate) mm-5cm length. Small pyrite blobs and clasts present. Competency awful.	33.2	JT	32°	81533	70.2	71.3	1.1	0.1	0.2	0.01	1	0.1	1.5	4			
						33.2	JT	23°	81534	71.3	72.6	1.3	0.1	0.1	0.01	1	0.1	1.5	3			
						81535	72.6	73.6	1.0	0.1	0.1	0.01	1	0.1	1.2	3						
						81536	97.0	98.0	1.0	0.1	0.1	0.01	1	0.1	1.3	3						
						81537	98.0	99.0	1.0	0.1	0.5	0.01	1	0.1	2.8	8						
33.4	53.8	F			FAULT				81538	99.0	99.2	0.2	2.4	5.2	0.11	66	0.2	13.4	94			
									81539	99.2	99.7	0.5	0.5	1.7	0.02	27	0.2	14.9	31			
33.4	35.9	BR	qs	a	Broken zone of light yellow-green, quartz-sericite altered version of previous unit. Silicified clasts are strung out along the fabric (becomes almost schistose), possibly late quartz veins along this as well as around earlier clasts.	34.9	CV	30°	81540	99.7	100.0	0.3	0.1	0.1	0.01	1	0.1	4.4	3			
									81541	100.0	101.0	1.0	0.1	0.2	0.01	1	0.1	2.2	4			
									81542	101.0	102.0	1.0	0.1	0.1	0.01	1	0.1	2.3	3			
									81543	102.0	103.0	1.0	0.1	0.1	0.01	1	0.1	1.7	3			
									81544	103.0	104.0	1.0	0.1	0.1	0.01	1	0.1	2.0	3			
									81545	104.0	105.0	1.0	0.1	0.2	0.01	3	0.1	2.5	5			
									81546	105.0	106.0	1.0	0.1	0.5	0.01	4	0.1	3.0	9			
									81547	106.0	107.0	1.0	0.1	0.1	0.01	1	0.1	3.6	3			
									81548	107.0	108.0	1.0	0.1	0.1	0.01	1	0.1	3.2	3			

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35.9	49.2	BR	qs	a		Broken zone consisting of strongly foliated, medium to dark grey and green-grey, fragments of siltstone, cherty clast breccias, volcanoclastic and quartz-sericite schistose material. Minor wisps or disseminations of pyrite may be associated with these. Zones are: mixed sediments to 39.8m, silicified siltstone/chert to 40.5m, schistose material to 42.1m; dark siltstone to 42.9m; sheared cherty breccia zoning to a schist around 47.2m to 49.2m. Interesting features: 45.7-46m, breccia containing sphalerite blebs and wisps associated with void filling quartz veining, went 1.1%Zn (in breaks in clasts and in the matrix around them). 36.4-36.7m, Joint/fault along cleavage, which has 9cm left lateral displacement, cutting across bedding. Some core loss marked ~.4m, but possibly more due to very broken nature of ground.	36.6	BE	31°			81549	108.0	109.0	1.0	0.1	0.3	0.01	3	0.1	3.3	6	
		CH					36.6	JT	5°				81550	109.0	110.0	1.0	0.2	0.7	0.01	5	0.1	2.4	12
		SH	qs				41.2	CV	22°				81551	110.0	111.0	1.0	0.2	0.7	0.04	9	0.1	1.6	13
		ST					45.6	CV	24°				81552	111.0	112.0	1.0	0.2	2.4	0.15	15	0.1	1.8	37
							47.8	CV	2°				81553	112.0	112.8	0.8	0.2	0.4	0.01	1	0.1	3.1	7
													81554	112.8	114.0	1.2	0.2	0.6	0.01	3	0.1	3.6	10
													81555	114.0	115.0	1.0	0.2	0.3	0.01	1	0.1	3.5	6
													81556	115.0	116.0	1.0	0.1	0.1	0.01	1	0.1	3.6	3
													81557	116.0	117.0	1.0	0.1	0.4	0.01	1	0.1	3.3	7
													81558	117.0	117.7	0.7	0.1	0.3	0.01	1	0.1	2.2	6
												81559	117.7	118.7	1.0	0.1	0.2	0.01	1	0.1	1.6	4	
												81560	118.7	119.7	1.0	0.1	0.4	0.01	1	0.1	1.3	7	
												81561	119.7	120.5	0.8	0.2	0.4	0.01	1	0.1	1.1	7	
49.2	51.8	CH		a		Light grey with darker grey patches, more competent (poor to moderate) quartz-sericite schist and sheared cherty bearing volcanoclastic breccia with lesser siltstone and sandstone. Core of poor competency with many pieces over 10cm. Core orientation at 49.5m. Orientated measurement 49.5m - cleavage - dip 80 degrees East, strike 185-005. Sometimes cleavage vertical.	49.5	CV	10°			81562	120.5	121.5	1.0	0.1	0.1	0.01	1	0.1	1.5	3	
		SH	qs										81563	172.1	173.1	1.0	0.1	0.1	0.01	1	0.1	1.7	3
		ST											81564	173.1	174.1	1.0	0.1	0.1	0.01	1	0.1	1.7	3
		VC	qs										81565	174.1	175.3	1.2	0.1	0.1	0.01	1	0.1	2.0	3
													81566	175.3	176.3	1.0	0.5	1.5	0.10	10	0.1	3.7	26
													81567	176.3	177.3	1.0	0.1	0.2	0.01	1	0.1	3.1	4
													81568	177.3	178.3	1.0	0.1	0.2	0.01	9	0.1	2.6	6
51.8	53.8	BR		a		Broken zone of sheared dark siltstone and light greenish-grey sericite+/-chlorite altered rock, possibly after lithology of previous unit. 1.5m core loss between 52.1 and 53.6m.						81569	178.3	179.3	1.0	0.2	2.0	0.33	23	0.1	5.9	36	
		RK	se										81570	179.3	180.3	1.0	0.1	0.2	0.03	11	0.1	2.9	6
		ST											81571	180.3	181.3	1.0	0.1	1.8	0.03	9	0.1	3.0	27
													81572	181.3	182.2	0.9	0.1	0.3	0.01	4	0.1	3.4	6
													81573	182.2	183.0	0.8	0.1	1.9	0.13	4	0.1	5.0	28
53.8	58.7	HOTS				HOST - TRACE SULPHIDES																	
53.8	57.8	BR		a		Yellow and greenish grey, strongly foliated (schistose) quartz-sericite+/-carbonate siltstone/rock/breccia. Contains sporadic occurrences of siltstone, relatively un-silicified, as bands/rafts or as rounded clasts with pressure shadows and wrapping cleavage. Siltstone fragments are large near to previous unit, but become more diffuse and small, going through the unit. Towards end of unit, may bear small (<5mm) blobs and wisps of sphalerite, in the cleavage, or abutting clasts (zone went <1%Zn). Competency poor-moderate, with most pieces making 10cm; small (10cm) zones of broken material are present.	55.6	CV	10°			81574	183.0	183.9	0.9	0.1	7.7	0.60	26	0.1	11.1	112	
		SH	se										81575	183.9	184.3	0.4	0.1	1.4	0.25	10	0.1	8.0	24
		ST											81576	184.3	184.9	0.6	0.1	2.6	0.91	41	0.2	9.9	53
													81577	184.9	185.1	0.2	0.1	0.4	0.02	5	0.1	2.5	8
													81578	185.1	186.2	1.1	0.1	1.9	0.10	7	0.1	5.8	28
													81579	186.2	187.2	1.0	0.1	0.1	0.01	1	0.1	1.8	3
													81580	187.2	188.5	1.3	0.1	0.1	0.01	1	0.1	1.2	3
													81581	188.5	189.5	1.0	0.1	0.1	0.01	1	0.1	3.2	3
													81582	189.5	190.5	1.0	0.1	0.1	0.01	3	0.1	2.2	3
													81583	190.5	191.5	1.0	0.1	0.3	0.02	5	0.1	2.6	6
													81584	191.5	192.5	1.0	0.1	0.4	0.02	1	0.1	1.6	7
													81585	192.5	193.5	1.0	0.1	0.1	0.01	1	0.1	0.8	3
													81586	193.5	194.5	1.0	0.1	0.1	0.01	1	0.1	1.1	3
												81587	194.5	195.1	0.6	0.1	0.1	0.01	1	0.1	2.0	3	
												81588	195.1	196.1	1.0	0.1	0.1	0.01	1	0.1	1.0	3	
												81589	196.1	197.1	1.0	0.1	0.3	0.03	6	0.1	1.2	7	
												81590	197.1	197.8	0.7	0.1	0.1	0.01	1	0.1	1.0	3	
												81591	197.8	198.0	0.2	0.6	8.5	0.37	76	0.1	9.8	132	
												81592	198.0	199.0	1.0	0.1	0.1	0.10	1	0.1	1.5	4	
												81593	199.0	200.0	1.0	0.1	0.1	0.01	1	0.1	1.0	3	
												81594	200.0	201.0	1.0	0.1	0.7	0.02	10	0.1	1.8	12	
												81595	201.0	202.0	1.0	0.1	0.1	0.01	1	0.1	0.9	3	
58.7	61.9	S				SHEAR																	

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58.7	61.9	BR		a		Shear zone - centred on 60.2, cleavage parallels it. Dark green and dark grey-black, strongly foliated, 'silicified/non-silicified siltstone' clast bearing breccia. Clast size range large (5mm to 10cm). Clasts may be rounded or elongate (rafts/bands). Unit heavily veined by, variably orientated (often 90 degrees to cleavage, but close to CA) yellow carbonate+/- quartz veins which may carry or be associated with sphalerite blebs. Pyrite may be present as small clasts (replacement?). Core competency is bad between 59.4-61.5m (possible shear zone - small clay zone at 60.2m. Otherwise of moderate competency.	59.2	VN	4°			81596	202.0	202.7	0.7	0.1	0.2	0.01	1	0.1	1.1	4						
		SH	se				59.2	CV	6°			81597	202.7	204.0	1.3	0.9	3.8	0.18	31	0.1	3.6	62						
			si				59.8	CV	10°			81598	204.0	205.0	1.0	0.1	0.1	0.02	1	0.1	1.8	3						
		ST	si				60.3	SR	11°			81599	205.0	206.0	1.0	0.1	0.1	0.01	1	0.1	1.9	3						
							61.8	CV	21°			81600	206.0	206.7	0.7	0.1	0.1	0.01	1	0.1	1.5	3						
												81601	206.7	207.0	0.3	0.2	8.3	0.16	15	0.1	6.4	114						
												81602	207.0	208.0	1.0	0.1	0.2	0.01	1	0.1	1.5	4						
											81603	208.0	209.0	1.0	0.1	0.1	0.01	1	0.1	1.0	3							
													Total Length:		123.0													
Standards																												
													Reference Values for:		HBM-02							17/07/98						
															3.4		12.5		0.46		150		1.3		22.7			
													Variances Allowed:		20%		20%		30%		20%		20%		20%			
													81604 Inserted @ 209.0m		4.0		16.4		0.53		162		1.4		23.3		N	
HOST - TRACE SULPHIDES																												
61.9	69.1	HOTS		b		Breccia as in 57.8-58.7m. Moderately silicified. More matrix - very fine grained, black. Some chalcopyrite with the sphalerite veinlets and blebs. Pyrite still dominant however. Matrix is occasionally yellow carbonate-quartz. Core orientation 64.5m.	65.1	CV	42°																			
65.7	69.1			a		Unit is a dark green grey sericite-chlorite and silica altered breccia of silicified siltstone/chert and large sandstone clasts. Similar to previous sheared cherty breccias. Small sphalerite spots and pyrite clots/clasts are uncommon (went <0.5%Zn). Sericite wips and veinlets common. Some banding noted at 66.8m, superimposed on other fabrics? Competency good, but deteriorates towards the end of unit.	66.8	BD	38°																			
			sc				66.8	CV	20°																			
			ss	si			68.5	CV	14°																			
FAULT																												
69.1	71.3	F		a		Moderately broken fragments of previous unit. Competency poor to bad.	69.9	CV	10°																			
70.2	71.3			a		Broken zone of altered siltstone, ?sediment, possibly after previous unit. Clay patch in last 10cm of core of this unit. 30cm core loss.																						
FOOTWALL SEQUENCE																												
71.3	98.0	FW		b		Light greeny yellow, silicified, densely altered-feldspar phytic, poorly sorted, dacitic mass flow breccia. Clasts of variable size (5mm to >15cm). Matrix is a mass of feldspar phytic groundmass. Feldspars appear to be altered to yellowy ?carbonate and/or sericite. Black silicified siltstone are present as the largest angular fragments, intraclast to these is a pinky yellow breccia fill mass of silica/?K feldspar/?carbonate. Other clasts are rare cherts, and more common rounded or irregular, silicified rock (most likely after dacitic clasts). Faint greeny, squished masses are also present in the groundmass (pumice?). Competency good. Possible faint fabric picked out by clast elongation. Contact with previous unit sharp.	71.3	CT	31°																			
71.3	72.6																											
			si																									
			bs																									
			si																									

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72.6	81.5	PU	qs	si	b	Case off to NQ 77.8m. Pinky yellow, often grey, silicified dacitic mass flow pumice breccia. Dacitic by phenocryst composition. Supposed pumice fragments, may be silicified or chlorite-sericite altered, are irregular in shape, may carry internal laminations, and usually contain altered feldspar phenocrysts. Silicified fragments, which are pinky in hue, may be larger than 5cm. Chlorite clots/pseudo-flamme are usually much smaller. Unit cut by occasional quartz-carbonate veins (<.5cm usually) in varying orientations. Possibly a faint fabric picked by out by clast orientations ~35-45 degrees to CA. Unit competent.	72.9	CV	35°														
							76.0	CV	44°														
							76.0	VN	58°														
							76.3	VN	27°														
81.5	83.8	BR	si		a	Bleached version of previous, associated with a broken zone (possibly a poor expression of a fault). Broken zone between 81.8 and 83.2m. Unit cut by common thin quartz veinlets, which appear conjugate to any perceived fabric.	82.6	QV	45°														
		PU	si				82.6	CV	44°														
83.8	98.0	DA	qs	si	a	Return to 72.6-81.5, with a few zones more green in colour (chlorite content increase?), others are grey, lacking the yellowy tinge that dominates the unit. The yellowy zones seem to carry more of a fabric than others. Larger veins are carbonate dominant and often have rounded quartz cores (e.g. 91.1m, 89.6m and 87.1m). Silicification seems to become more intense with depth, as textures become more difficult to discern. Unit heavily quartz-carbonate veined in places e.g. 89.5-92m. Unit competent. Contact with next unit sharp. Core orient at 84m.	90.6	QV	60°														
		PU	si				90.6	QV	27°														
							90.7	CV	24°														
							93.4	CV	36°														
							93.4	JT	7°														
							98.0	CT	70°														
98.0	119.7	HOTS				HOST - TRACE SULPHIDES																	
98.0	99.7	SS	si		a	Medium to light grey in colour. A mish mash of variably heavily silicified and veined siltstone and sandstones. Silicification dies off after 99m. Strong fabric present in first 30cm of unit. Faint banding (bedding?) present throughout, often marked by fine grained disseminated pyrite bands. Small zones are sulphide rich 99-99.2 consisting of sediment heavily infiltrated by disseminated pyrite, and irregular worm-like sphalerite veinlets. In these the sphalerite is bordered by a white material. Core orient at 99m. Small blobs of sphalerite rimmed by a black fine grained material occur uncommonly, associated with the carbonate-quartz veining. Possible ?shear	98.1	BD	51°														
		ST	si				98.4	BD	54°														
							98.5	VN	45°														
							98.5	VN	10°														
							99.5	CV	47°														

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From (m)	To (m)	Strat Code	Desc Code	Alt Code	Alt Int	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$					
99.7	112.8	SL	si	b		Black to medium grey package of shale, intermixed with siltstone and sandstone beds. Unit fairly heavily veined by yellowy quartz-carbonate veins, which uncommonly carry sphalerite (unit went generally less than 0.5%Zn). Zones of intense veining - 99.7-100.2 and 106-107.6m. Some of the veins are brittle containing angular fragments of the wallrock. Veining is variably orientated either ~30 degrees or about 60-70 to CA, and may run against bedding. Unit coarsens gradually and veining intensity drops as unit progresses. Bedding is observable (can be thinly laminated or thick intervals e.g. 30cm, and the angle to CA increases throughout unit. Bedding may be disrupted by veining. Possible development of a cleavage overprint, and disruption of cherty beds in last 1m of unit. Unit of moderate competency. Sphalerite is present as an accessory in veins, as rare patchy blebs and wisps, pyrite is more common as banding, disseminated cubes, or small blebs unassociated with veining. Core moderately competent. Beds fine up in a downhole direction. Core orientation at 105m and 111m. Orientated measurement; 111m - bedding - mainly horizontal, some at 10 degrees striking ~E-W; - fracture set (weak cleavage?) dip 76 degrees north, strike E-W. Looking at pen mark, think orient was 90 degrees out. So bedding is unchanged (more or less), while the second measurement should be N-S, dipping to the east..... Orientated measurement at 112.2m, cleavage/banding, dip 60-62 degrees west, strike ~N-S.	101.0	VN	19°																		
		SS	si				101.0	VN	61°																		
		ST	se				101.0	BE	20°																		
							103.3	VN	19°																		
							103.3	BE	20°																		
							104.0	BE	40°																		
							105.0	BE	57°																		
							107.0	VN	10°																		
							110.6	BE	89°																		
							112.2	CV	30°																		
112.8	117.7	SL	si	b		Similar package of sediments to previous. Fairly arbitrary division, mainly by a more ubiquitous silicification, though patches are sericite altered. Heavily veined in first 1.1m, and moderately thereafter. Once again bedding/laminations are close to CA in finer units, and steep to near 70 degrees in coarser units (due to cross-lamination?, or is cleavage not bedding being reflected in finer zones). Thin quartz-carbonate veinlets appear to mark an incipient cleavage in places. Beds become heavily silicified/cherty in last metre of unit. Core of poor competency to 114m, poor-moderate thereafter. Core orient at 117m. Orientated measurement - 117m, bedding, dip 23 degrees N-W, strike 030(-035)-210(-215). Green and grey, fairly chaotic mix of silicified sediment with lesser isolated patches of light green, quartz phytic, silica-chlorite-sericite altered rhyolitic Peperite contact? or rip up clasts of underlying rhyolite. May get small blebs of sphalerite and galena near end of unit. Core of moderate competency.	113.0	CV	30°																		
		SS	si				113.0	BD	44°																		
		ST	si				113.1	BE	90°																		
							113.3	VN	14°																		
							115.0	BD	34°																		
							115.5	VN	10°																		
							116.0	CV	24°																		
							116.0	BD	46°																		
							116.8	VN	27°																		
							117.0	BE	72°																		
		CH				Green and grey, fairly chaotic mix of silicified sediment with lesser isolated patches of light green, quartz phytic, silica-chlorite-sericite altered rhyolitic Peperite contact? or rip up clasts of underlying rhyolite. May get small blebs of sphalerite and galena near end of unit. Core of moderate competency.																					
		PE																									
		RY	ql																								
119.7	120.5	FWTS				FOOTWALL - TRACE SULPHIDES																					
119.7	120.5	CH			a	As previous unit but silicified sediment bands are now lesser and isolated within the rhyolite. The cherty bands look to be folded. Some thin quartz and carbonate-quartz veining present. Spots and blebs of sphalerite and galena present, sometimes associated with the veining. Core competent.																					
		PE																									
		RY	sc																								
			si																								
120.5	173.1	FW				FOOTWALL SEQUENCE																					

From (m)	To (m)	Strat Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$				
120.5	173.1	RY	cb	a		Light green, occasionally patchy dark green, generally massive, occasionally banded, perhaps slightly sheared, sericite-chlorite and silica altered, quartz with lesser chlorite-altered-feldspar phytic, rhyolite. Quartz phenocrysts are generally <1-2mm, may be rounded, resorbed, elongate and wispy. The elongate and wispy forms may be 5mm in length, though usually less than 1mm wide. Quartz phenocrysts are often rimmed or in varying stage of replacement by white carbonate or sericite (my guess is carbonate)? Chlorite spots, possibly after feldspar, are present mainly after 135.7m. This metreage sees the end of the white spots of carbonate that are common up to then. Possibly a change from rhyo-dacite to rhyolite? Banding is sporadically present throughout e.g. 130.2m, after 135.7m banding is virtually absent, but a faint orientation of the elongate phenocrysts and chlorite wisps is sporadically noticeable ~40-50 degrees to CA. Unit is veined by quartz, and quartz-carbonate veins throughout, in two main orientations; some close to CA, while others sit ~30-45 degrees, but often opposite to the faint cleavage. Veins, especially the purer quartz variety, show folding, while some of the larger quartz-carbonate veins are brittle e.g. 155.9m. The veins may carry rare blebs of fine grained pyrite +/- galena or sphalerite. Pyrite vein at 133.5. Unit is competent. Core orientation at 123m, 129m, 141m, 149.9m, 155.9m, 162m, 168m. Sharp contact with next unit. Orientated measurement at 149.9m, cleavage approximated by core break - 72-74 degees dip to SE, strike 30(-35)-210(-215).	128.7	VN	3°																	
			sc				130.2	BD	62°																	
			si				141.6	VN	25°																	
							141.6	CV	42°																	
							143.6	VN	9°																	
							167.5	VN	35°																	
						167.5	CV	54°																		
173.1	175.3	HO				HOST SEQUENCE																				
173.1	175.3		PU	sc	b	Fairly massive, black, silicified siltstone/shale. Contains a small, sericite-chlorite altered pumiceous mass flow band (dacitic?) 174.5-174.7m. Unit carries occasional 1cm thick, pinky white quartz-carbonate veins. Sharp contact with next unit, but cannot get an angle due to disruption of the silicified unit. Possible incipient cleavage, marked by thin ?sericite veinlets.	173.9	CV	19°																	
			ST	si																						
175.3	183.0	FWTS				FOOTWALL - TRACE SULPHIDES																				
				si		Dark green, strongly foliated/bedded, chlorite-sericite altered, patchily silicified, silicified siltstone clast bearing, altered-feldspar phytic, dacitic mass flow pumice breccia. Clasts can be from 1-2mm up to 5cm in length. Silicified siltstone clasts occur occasionally. Sphalerite blebs, spots and wisps are common, and sometimes surrounded by a gun metal coloured material. Parts of unit commonly went 1-2%Zn. Pyrite occurs as disseminated cubes throughout, in places comprising much of interclast areas (e.g. 178.4-180m). Less commonly pyrite +/- sphalerite may also have preferentially replaced silicified clasts. Unit has occasional quartz-carbonate veins (1-2cm) running near 90 degrees to CA. Fine sericite wisps may mark a poor cleavage. Mineral or clast/matrix segregations define a strong fabric/banding/bedding ~40-55 degrees to CA. Core is competent.	176.6	CV	10°																	
			ST	si			177.6	JT	55°																	
							177.6	BD	44°																	
							177.7	BD	40°																	
							180.7	VN	88°																	

From (m)	To (m)	Strat Code	Desc Code	All Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$		
182.2	183.0		PU	cs	a	Unit as before, but with increasing density of black chlorite? spots. Core competent.	182.5	BD	42°															
183.0		184.9				FWDS		FOOTWALL - DISSEMINATED SULPHIDES																
183.0	184.9		PU	cl	a	Possibly FWDS. Black chlorite altered version of previous unit. Unit carries bands of disseminated pyrite and small sphalerite spots and blebs rimmed or accompanied by chalcocopyrite, all entrained within a gun-metal/light grey coloured unidentified sulphide (possibly sulphide-mix?). These bands are roughly conformable with the ?mass flow banding, but in places are internally marked by chlorite wisps with a fabric closer to CA. Core competent.	183.8	CV	15°															
			SP				184.2	BD	52°															
184.9		186.2				FWTS		FOOTWALL - TRACE SULPHIDES																
184.9	185.1		PU	si	a	Silicified pumice breccia. Core competent.																		
185.1	186.2		PU	cs	a	Similar to 183-184.9, in mineralogy, except dark chlorite +/- sulphide patches are more distinct clasts separated by sericite-chlorite pseudo-flamme or silicified patches. Original rock dacitic, most likely. Wisps of sericite and silica mark a fabric close to CA of banding. Core competent.	185.6	BD	54°															
				si			185.6	CV	14°															
186.2		202.7				FWTS		FOOTWALL - TRACE SULPHIDES																
186.2	188.5		PU	sc	a	Light yellowy-green, densely altered-feldspar phync, banded, clast bearing, dacitic, ?mass flow pumice breccia. Difficult to say for sure, may be a lava. Has banding and weak cleavage as previous. Has small (3mm-1-2cm) rounded yellowy-white ?clasts, which have include flecks of red ?silica. Have rare angular silica +/-sphalerite clasts. Core competent.	187.6	BD	54°															
				si			187.6	CV	4°															
188.5	195.1		BR	si	a	Darker green, mixed, occasionally bedded, probably more chlorite rich, dacitic to rhyo-dacitic, volcanoclastic/mass flow pumice breccia. Unit picked out due to colour change (although some light greeny yellow zones do occur) and because of a relative increase in clast content. Clasts mainly as silica patches (after pumice?), although some of the darker patches appear to be angular clasts (>5cm clast identified). Unit possibly one flow, with large, darker clasts entrained within. The darker zones may carry disseminated pyrite cubes as well. Last 80cm has occasional quartz phenocrysts. Quartz-carbonate veins, sometimes truncated, occasionally present. Core competent.																		
			PU	cs																				
			VC																					
195.1	202.7		PU	sc	a	Return to 186.2-188.5m; less banded, more of a cleavage development (sub-parallel to CA). Contains small zone of FWTS, dark chlorite, gun metal sulphide, pyrite and sphalerite alteration between 197.8-198.0m (went 8.5%Zn 76g/t Ag and 0.37%Cu). Boundaries of this little zone are irregular, but quite sharp (perhaps slumped banding?). Another dark chlorite patch 200.4-200.6m. Dark silicified 'clasts' and blebs of sphalerite rimmed by a dark fine grained material, uncommonly present. Unit crossed by occasional quartz carbonate veinlets. Core competent.	198.7	CV	15°															
				si			199.7	CV	4°															

From (m)	To (m)	Strat Code	Desc Code	Alt Code	Alt Int.	Description	@ Depth	Feature	LCA Deg°	RQD To (m)	RQD %	Sample No	From (m)	To (m)	Length (m)	Pb %	Zn %	Cu %	Ag g/t	Au g/t	Fe %	TMU \$
202.7	204.0	FWTS				FOOTWALL - TRACE SULPHIDES																
202.7	204.0	PU	cl	si	a	Zone similar to 183-184.9m, silicified more than chloritised. Core competent.																
						SP																
204.0	206.7	FW				FOOTWALL SEQUENCE																
204.0	206.7	PU	sc	si	a	Return to 195.1-202.7m.	205.6	VN														33°
206.7	207.0	FWDS				FOOTWALL - DISSEMINATED SULPHIDES																
206.7	207.0	PU	cl	si	a	Another dark chlorite, sulphide zone. Unit went 8.3%Zn. Core competent.																
207.0	209.0	FW				FOOTWALL SEQUENCE																
207.0	209.0	PU	sc	si	a	As before the sulphide-chlorite patch to EOH 209m. Cleavage marked by wisps of quartz or sericite, still close to CA. Core competent.																

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