

LOCATION	Bulgobac, North Pinnacles	Depth(m)	100m	Direction	-	Dip.	-53.5°	Depth (m)		Direction		Dip.		COLLAR DIP.	-53.5°	TOTAL DEPTH	142m
OBJECTIVE	To test a Pb geochemical anomaly & contact zone on the western side of the Burns Peak Rhyolite													DIRECTION	86° 13'	HOLE SIZE	NQ 130.0m BQ 142.0m
RESULT	Trace pyrite, galena and sphalerite explain anomalous geochemical values. No economic mineralisation was intersected.													R.L.	600m	COMMENCED	4. 2. '80
														COORDINATES		COMPLETED	29. 2. '80
														Grid	5,387,300N 378,610E	LOGGED BY	A. Mollison
														A, M, G.	5,387,296.0mN 378,595.6mE		

DEPTH (m)		ROCK DESCRIPTION REFER DDH SUMMARY SHEET A1-521-0053	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA							CORE REC'D		
FROM	TO							Sample Length	Pb	Zn	Cu	Ag - g/t	Mn	Fe%	Sn	RUN	SHORT
0	13.8	<u>Banded Shale, Siltstone & Arkosic Sandstone Shale & Siltstone</u> Well laminated dark grey, coarsening down-hole to sandstone. Slump features common bands less than 3cm wide. <u>Arkosic Sandstone</u> Pale grey-yellow forms fine lamellae within the shale as well as occasional bands up to 20cm wide. Consists of a) rounded quartz grains 50% b) sub-rounded to a circular feldspar grains 30%, with a matrix of grey shale. Minor quartz veins are present in this unit. Core Angles at 4.8m - 50° Angles of bedding 7.0m - 58° to long core axis 11.1m - 55° 13.7m - 62° <u>Facings</u> 3.6-3.9m graded bedding becoming finer up hole.	Minor blebs of disseminated pyrite in slump fractures.	33033	0	5	3.3	5.0	115	170	10	0.4	750	2.90	0	-	
				034	5	10	4.0	5.0	125	950	15	0.7	660	2.20	4.8	1.6	
				035	10	15	4.7	5.0	155	315	20	0.8	800	2.70	6.9	0.5	
															7.8	-	
															11.1	-	
															12.8	0.3	
															13.8	-	
13.8	16.7	<u>Arkosic Sandstone with Clasts of Shale</u> <u>Arkosic Sandstone</u> Poorly bedded yellow greeny grey with considerable variation of grain size up to 4mm for rounded quartz grains. Constituents are: rounded quartz grains 30%; sub-rounded to bladed feldspar grains up to 3mm diam. 30% with a shale matrix minor chloritic fragments. <u>Shale Clasts:</u> irregular lenticular clasts occur within the coarser bands of sandstone where the texture is chaotic. They are up to 5cm long. Quartz veins up to 2cm thick are common in this band. Some contain chlorite.	Minor blebs of disseminated pyrite occur within this band particularly in the coarser zones with most chaotic texture	33036	15	20	5.0	5.0	220	550	15	0.8			x	15.7	-
																16.7	-

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DEPTH (m)		ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA per ppm							CORE REC'D		
FROM	TO							Sample Length	Pb	Zn	Cu	Ag - g/t	Mn	Fe%	Sn	RUN	SHORT
13.8	16.7	Core Angles: at 14.3m 45° Bedding to 16.7m 53° Long core axis															
16.7	42.5	<u>Banded Shale, Siltstone & Arkosic Sandstone Shale</u> Dark grey well bedded, bands up to 10cm wide, commonly 3mm-10mm wide. <u>Siltstone</u> Grey-grey green, weakly chloritised, forms lamellae within shale up to 10mm wide. <u>Arkosic Sandstone</u> Pale grey-green forms in bands up to 40cm wide commonly 5cm wide. Consists of: rounded-sub rounded quartz grains 30%, sub rounded to angular feldspar grains 20% Chloritic fragments 10-40% with a shale matrix. Occasional quartz veins up to 2cm wide commonly 3mm wide occur throughout the rock particularly in the sandstone. <u>Core Angles</u> at 18.0 60° Bedding to long 21.5 55° Core Axis 25.0 45° 26.0 53° 34.8 30° 36.4 41° 38.6 55° 42.0 60°	Disseminated pyrite occurs throughout this band in trace amounts. Very minor galena occurs as vein fillings. Facings up to collar, graded bedding, slump structures at 23m and 26m	33037	20	25	5.0	5.0	215	430	10	0.8	605	2.25	x	16.7	-
				038	25	30	5.0	5.0	215	400	15	1.0	665	2.80	x	17.4	-
				039	30	35	2.5	5.0	360	710	5	0.5	380	2.45	x	18.8	-
				33040	35	40	4.8	5.0	1250	645	15	0.9	690	2.90	x	22.0	-
																25.0	-
																28.0	-
																31.0	1.4
																31.7	0.3
																34.0	0.8
																37.0	-
																40.0	0.3
42.5	47.5	<u>Grey Ashfall Crystal Vitric Tuff with Interbeds of Shale</u> Tuff Grey vitric matrix forms 70% of rock with white feldspar shards, up to 4mm long of elongate, angular shape. The feldspar grains are evenly spaced through the matrix. There are also occasional yellow-grey soft fragments after pumice up to 2 cm diam. Core axis to bedding angle at 47.5m 45°	No mineralisation	33041	40	45	2.0	5.0	450	1000	10	1.1	2200	3.55	x	42.5	-
																47.5	3.0

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DEPTH (m)		ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA							CORE REC'D			
FROM	TO							per ppm	Pb	Zn	Cu	Ag - g/t	Mn	Fe%	Sn	RUN	SHORT	
47.5	94.0	Banded Grey Shale, Siltstone & Pale Grey Arkosic Sandstone	Occasional blebs of pyrite up to 5mm diameter occur throughout this section.	33042	45	50	5.0	5.0	410	1400	20	1.8	1800	3.30	x	47.5	-	
		<u>Arkosic Sandstone</u> - pale grey, fine to medium grained. Consists of sub-rounded quartz grains up to 2mm diameter 50%; sub rounded to rectangular white feldspar grains up to 4mm diameter; irregular elongate shale fragments generally 2-5mm long with some chaotic aggregates up to 5cm long in coarser sandstone 10% and chloritic fragments up to 3mm long.			043	50	55	5.0	5.0	255	950	10	0.9	800	2.75	x	52	-
					044	55	60	5.0	5.0	285	805	10	0.7	800	2.85	x	61	-
					045	60	65	5.0	5.0	365	1000	10	1.0	700	2.75	x	64	-
					046	65	70	5.0	5.0	405	1050	10	0.8	710	2.40	x	67	-
					047	70	75	5.0	5.0	550	1050	10	0.5	850	2.40	x	70	-
					048	75	80	5.0	5.0	130	240	15	0.4	1000	3.20	x	71.5	-
					049	80	85	5.0	5.0	155	575	10	0.9	680	2.30	x	73	-
					33050	85	90	5.0	5.0	260	560	20	0.8	1400	2.60	x	76	-
					051	90	95	5.0	5.0	250	1150	20	0.7	2500	3.15	x	79	-
					052	95	100	5.0	5.0	165	480	10	0.7	1700	2.70	x	82	-
																	85	-
																	88	-
																	91	-
																94	-	
																97	-	
		Shale & Siltstone - well laminated, dark grey, some good slump structure giving facings up hole. Shale bands generally 1-5cm wide up to 15cm wide.																
		Occasional quartz veins, generally 1-5mm wide up to 2cm wide, occur, particularly between 67m and 72m. Chlorite associated with larger quartz veins.	Thin section sample No 29660 was taken at 69m Fender describes it as an arkosic sandstone.															
		Facings 76.3m - graded bedding coarsening downhole. 65.7m load of coarse sandstone in underlying shale.																
		Angles: core axis to bedding at:																
		50.6 50° 73.1 60°																
		55.0 52° 76.8 65°																
		57.1 47° 79.0 70°																
		61.0 45° 81.8 48°																
		64.0 50° 84.8 55°																
		66.2 55° 88.0 42°																
		69.8 45° 91.0 45°																
		72.2 56° 94.0 50°																
94	124.5	Pale Grey Reworked Vitric Crystal Tuff with Shale Interbeds		Dolitic blebs of pyrite (disseminated) occur in trace amounts throughout the unit, mainly in the more coarse tuff bands. Blebs are up to 3mm diameter.														
		<u>Tuff</u> Pale grey to grey reworked lithic vitric crystal tuff of acid composition. Constituents are: rounded to irregular quartz grains up to 8mm diameter 40%; sub-rounded to euhedral feldspar grains up to 5mm with indistinct grain boundaries 30%;																

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DEPTH (m)		ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA							CORE REC'D																		
FROM	TO							Sample Length	Pb	Zn	Cu	Ag - g/t	Mn	Fe	Sn	RUN	SHORT																
94	124,5	<p>Shale fragments approximately 5mm long up to interbed size 15%; chloritic fragments up to 5mm long 10% and carbonates 5%.</p> <p>Shale</p> <p>Well laminated interbeds to irregular clasts of shale form approximately 15% of this unit. Interbeds may be up to 50cm wide.</p> <p>Carbonate veins are quite common in the tuff and shale</p> <p>Quartz veins also occur both are up to 2cm wide generally 3-5mm wide.</p> <p>Core axis to bedding angles at:</p> <table border="0"> <tr> <td>94m</td> <td>50°</td> <td>114,3m</td> <td>60°</td> </tr> <tr> <td>97,5m</td> <td>55°</td> <td>119,5m</td> <td>60°</td> </tr> <tr> <td>100,0m</td> <td>70°</td> <td>124,0m</td> <td>60°</td> </tr> <tr> <td>103,0m</td> <td>50°</td> <td></td> <td></td> </tr> </table>	94m	50°	114,3m	60°	97,5m	55°	119,5m	60°	100,0m	70°	124,0m	60°	103,0m	50°			<p>High Pb & Zn concentrations (100-120m) result from galena & sphalerite in veins up to 5mm wide associated with coarse tuffs</p>	33053	100	105	5.0	5.0	190	755	15	0.5	1500	1.80	x	97.0	-
94m	50°	114,3m	60°																														
97,5m	55°	119,5m	60°																														
100,0m	70°	124,0m	60°																														
103,0m	50°																																
				054	105	110	5.0	5.0	565	1100	5	0.6	1150	1.55	x	100.0	-																
				055	110	115	5.0	5.0	215	770	10	0.6	2100	2.35	x	106.0	-																
				056	115	120	5.0	5.0	385	1050	10	0.8	1800	2.60	x	109	-																
				057	120	125	5.0	5.0	190	395	10	0.4	2200	3.20	x	112	-																
																115	-																
																118	-																
																121	-																
																127	-																
124.5	142	<p><u>Fragmental Crystal Vitric Tuff</u></p> <p>Constituents of this rock unit are:</p> <p>a) equant, sub-rounded feldspar grains with indistinct, welded grain boundaries up to 6mm diameter 50%;</p> <p>b) rounded quartz grains up to 8mm diameter 20%;</p> <p>c) dark grey vitric matrix &</p> <p>d) minor shale clasts up to 3mm long.</p> <p>Quartz veins occur throughout this unit and are between 5mm and 2cm wide.</p> <p>This unit appears to be partially silicified and chlorite occurs in quartz veins.</p> <p>Thin section sample T 29668 was described by D. Cowan as a rhyolitic vitric crystal tuff (see CMS report 80/3/21)</p>	<p>Trace disseminated pyrite blebs occur throughout this unit with very minor traces of galena present in quartz veins.</p>	33058	125	129	4.0	4.0	30	110	20	x	1400	2.40	x	124.5	-																
					129	142	NOT SAMPLED									127	-																
																130	-																
																133	-																
																136	-																
																139	-																
																142	-																
																EOH	-																

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