

LOCATION	Sterling Valley, Western Volcanics	Depth	44	Direction	092°	Dip.	-56.5°	Direction		Dip.		COLLAR DIP.	-60°	TOTAL DEPTH	165m
OBJECTIVE	To test ground magnetics, I.P. and geochemical anomalies.		74		097.75°		-53.75°					DIRECTION	087° A.M.G.	HOLE SIZE	NQ (0-17.4m) BQ-165m
RESULT	Two zones of minor sulphide mineralisation were intersected.		104		100°		-52.5°					R.L.		COMMENCED	19.5.80
			134		105°		-50.5°					COORDINATES	Grid 4486N 4190E	COMPLETED	9.6.80
			164		105°		-49°							LOGGED BY	A. Mollison

DEPTH (m)	ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA								CORE REC'D		
							Pb	Zn	Cu	Ag g/t	Au g/t	As	Sn	RUN	SHORT		
0	<p><u>Porphyritic Trachyte - fresh</u> Pale grey to green fine grained trachyte, locally porphyritic, consisting of zoned plagioclase crystals and hornblende in a pale green ground-mass. Minor quartz and epidote veins are cut by late carbonate (calcite) veins. There is a small fine grained basic dyke and veining between 15.3m and 16.3m</p>	Trace disseminated pyrite occurs up to 1% concentration.	38901	0	5	1.0	5.0	40	125	90	x		18	30	0	-	
			902	5	10	1.7	5.0	30	150	80	x		28	140	9	7.3	
			903	10	15	5.0	5.0	60	160	55	x		112	160	10	-	
			904	15	20	5.0	5.0	25	150	50	x		16	15	14.5	-	
			905	20	25	4.5	5.0	20	160	100	x		6	110	17.4	-	
			29517	13.5	Thin Section Sample - Porphyritic trachyte												
																18.0	-
																21.0	-
																22.5	-
																24	0.5
17.4	<p><u>Dacitic Pyroclastic</u> Pale green to grey fine grained crystal vitric tuff consisting of white feldspar crystals up to 5mm diameter in a pale green sericitised ground-mass. Local lithic fragments indicate a tuffaceous origin. There is a small basic dyke from 18.7-18.9m. Minor calcite/carbonate/quartz veining occurs through the unit.</p>	Trace disseminated pyrite up to 1% and fine grained blackish sulphide about 0.5mm occurs up to 1%.	38906	25	30	5.0	5.0	10	130	150	x		12	30	27	-	
			907	30	35	5.0	5.0	10	110	45	x		68	200	30	-	
			908	35	40	5.0	5.0	15	120	45	x		45	330	33	-	
			909	40	45	5.0	5.0	35	155	285	x		450	390	36	-	
			38910	45	50	5.0	5.0	15	95	55	x		x	25	42	-	
			911	50	55	5.0	5.0	25	100	60	x		20	110	45	-	
			912	55	60	5.0	5.0	10	55	15	x		8	110	48	-	
			913	60	65	5.0	5.0	x	65	25	x		11	65	51	-	
			914	65	70	5.0	5.0	15	75	15	x		2	15	52.2	0.2	
			915	70	75	5.0	5.0	10	70	45	x		8	40	54.7	0.2	
22.4	<p><u>Rhyodacitic crystal lithic pyroclastic</u> Rounded lumps of pinkish porphyritic lava (up to 10cm diameter) occur in a fine grained chloritised and sericitised porphyritic ground-mass. The lower contact is irregular.</p>	Pyrite occurs in trace amounts on shears.	916	75	80	5.0	5.0	20	85	75	x		4	15	57	-	
			917	80	85	5.0	5.0	15	110	235	x		960	630	59	-	
			918	85	90	5.0	5.0	x	85	150	x		1040	30	63	-	
			919	90	95	5.0	5.0	10	135	195	x		680	240	66	-	
			920	95	100	5.0	5.0	x	95	225	x		240	160	66	-	
			38921	100	105	5.0	5.0	x	115	245	x		500	340	57.5	-	
			922	105	110	5.0	5.0	15	95	150	x		21	70	69	-	
			923	110	115	5.0	5.0	250	555	240	x		60	160	72	-	
			924	115	120	5.0	5.0	15	125	125	x		12	320	75	-	
			925	120	125	5.0	5.0	35	95	150	x		8	20	81	-	
23.9	<p><u>Pale green andesitic intrusives</u> Fine grained uniform textured intrusive with slightly baked lower contact and stoped fragments of pyroclastic on the upper contact. Faulted from 28.4-29.2m. There is minor calcite (quartz), epidote fluorite, chlorite veining with incipient epidotisation as halos near veining.</p>	<p>23.9-45.3m Minor pyrite and chalcocopyrite with traces of pyrrhotite and arsenopyrite occur in calcite/quartz/epidote/fluorite veins up to 2cm wide, averaging 0.8cm which are between 0.3 and 1.0m apart.</p>	926	125	130	5.0	5.0	15	100	100	x		x	120	84	-	
			927	130	135	5.0	5.0	5	105	110	x		x	25	87	-	
			928	135	140	5.0	5.0	10	85	115	x		4	x	90	-	
			929	140	145	5.0	5.0	5	80	130	x		x	15	93	-	
			38930	145	150	5.0	5.0	30	85	145	x		10	x	96	-	
			931	150	155	5.0	5.0	10	115	155	x		8	x	98.7	-	
			932	155	160	5.0	5.0	15	90	60	x		14	15	-	-	
			933	160	165	5.0	5.0	10	75	135	x		40	50	-	-	

BET

063145

DEPTH (m)		ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA per ppm						CORE REC'D	
FROM	TO							Ag - g/t	Au - g/t	As	Sn	RUN	SHORT		
37.1	40	<p><u>Grey medium grained trachy-andesitic crystal vitric tuff</u> Consisting of approximately 30% feldspar phenocrysts up to 5mm in diameter, rounded to irregular in shape with vague grain boundaries. The fine grained chloritised sericitised mesostasis is cut by epidote veins up to 1 cm wide with carbonates, quartz, fluorite and sulphides also present in veins. Upper contact is sharp, brecciated, silicified and epidotised.</p>												102	-
														105	-
														108	-
														111	-
														114	-
														117	-
														119	-
														120	-
														123	-
														126	-
														129	-
40	44.1	<p><u>Pale green grey fine grained andesitic lava</u> ?) Consisting of: occasional feldspar phenocrysts up to 3mm in diameter and a chloritised-sericitised matrix after volcanic glass. Veining is the same as for 37.1 to 40m. Unit has green epidotisation throughout.</p>												130	-
														132	-
														135	-
														138	-
														141	-
														144	-
														147	-
														150	-
44.1	57	<p><u>Pale grey lithic crystal vitric dacitic tuff</u> consisting of: sub-rounded to angular feldspar crystals and lithic fragments in a sericitised chloritised vitric matrix. There are rare fine carbonate veins. Unit grades from a crystal vitric tuff down hole to a lithic crystal vitric tuff.</p>	Trace pyrite in veins from 45.3 to 57.0											153	-
														156	-
														159	-
														162	-
														165	-
														EDH	-
57	59	<p><u>Pale grey to grey green bedded vitric tuff</u> (or tuffaceous sediments) Bedding is contorted and slumped with a coarsening of grains down hole. 58.0 to 58.2m sheared with carbonate & fluorite veins.</p>	Trace pyrite associated carbonate and fluorite veins												
59	98.7	<p><u>Pale grey to pale green grey vitric crystal lithic lapilli tuff</u> consisting of: lithic fragments (pink grey-grey porphyritic lava, fine grained pale green grey, dark grey medium grained andesite) in a framework of white and fresh pink feldspar grains (angular to sub-rounded with vague grain boundaries) The mesostasis is sericitised and chloritised vitric material. The unit is graded with grain size increasing down hole from less than 4mm at 59.0m to coarse fragments up to 5cm at 75.</p>	Trace pyrite & pyrrhotite in rare carbonate, fluorite veins Rare exotic pyritic fragments <u>78-106.9m</u> approximately 1 cm wide cross-cutting carbonate, fluorite epidote veins containing minor pyrite, chalcopyrite, arsenopyrite and rare pyrrhotite. Veins are between 0.3 & 1m apart												

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063146

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	Au g/t	As	Sn	RUN	SHORT
		There are rare fine carbonate veins The ground mass of the unit is locally strongly epidotised. The fine grained sedimentary fragments have distinct grain boundaries while volcanic fragments have altered grain boundaries. At the bottom of this unit there are 2 large fragments up to 20cm long composed of trachytic crystal vitric tuff fragments up to 6mm diameter.	<u>78-106.9</u> see previous sheet														
98.7	109	<u>Porphyritic trachy-andesite</u> consisting of white to cream feldspars of irregular shape up to 6mm long in a chloritised sericitised and locally epidotised vitric matrix. Unit is quite altered near its upper contact with veins containing, epidote calcite, quartz, fluorite and sulphides associated.	<u>106.9-109</u> trace pyrite, chalcopyrite and arsenopyrite in veins of calcite and fluorite which are rare.														
109	111	<u>Pale grey fine grained bedded vitric tuff</u> consisting of fine feldspar up to 1mm diameter in a vitric matrix. Grains show a distinct bedding or foliation. There are rare fine carbonate veins and the particle size grades down hole. A gradational contact exists at the base of the unit.	Trace pyrite in calcite/fluorite veins.														
111	119	<u>Pale gray lithic crystal vitric tuff</u> grading down hole to crystal lithic vitric tuff. Feldspars are up to 3mm and the lithic fragments up to 5cm long have distinct grain boundaries.	Trace pyrite														
119	123	<u>Bedded fine grained vitric to crystal vitric tuff</u> Pale grey green to grey grading down hole to a crystal lithic vitric tuff with volcanic fragments up to 2cm diameter. The bedding to long core axis angle at 119m is 55° There are rare carbonate and epidote veins up to 1 cm wide.	Trace pyrite														
123	126.1	<u>Pale grey fine grained vitric tuff to crystal lithic vitric tuff</u> with similar texture and grading to 119.0 to 123.0m.	Trace pyrite														

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063147

DEPTH (m)		ROCK DESCRIPTION	MINERALISATION	SAMPLE NO.	FROM	TO	CORE REC'D	ASSAY DATA						CORE REC'D			
FROM	TO							per ppm	Ag - g/t	Au - g/t	As	Sr	RUN	SHORT			
126.	130.1	Pale grey foliated lithic crystal vitric tuff consisting of a vitric matrix with elongate feldspar phenocrysts up to 5mm long and rare pale grey fine grained lithic fragments aligned parallel to bedding in the finer units. Occasional carbonate & epidote veins up to 10% core volume.	Trace pyrite in carbonate/epidote veins.														
130.	165	<p>Bedded pale green grey fine grained vitric tuff with rare interbeds of coarser lithic crystal vitric material at 135.7m, 138.9m, 143m and at 144.9m. Between 146 and 152.6m grains are coarser (up to 3mm) with some rare lithic fragments.</p> <p>Carbonate veins are generally uncommon, however, between 159.5 & 160.1m carbonate veins are associated with brecciation & chlorite alteration. Similar veining and alteration occur at 162.1. From 164.5 to 165m the rock is cleaved & altered to chlorite & sericite with elongated fragments</p> <p>Core angles - bedding to long core axis 134.6m 50° 143.6m 50° 145.2m 53° 156.3m 50°</p> <p>Facings - 138.8 graded bedding coarsening down hole to a sharp contact between coarse & fine tuff.</p>	Trace pyrite occasionally in epidote veins														

LDT

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