

078

DRILL LOG SHEET

CONTINUATION SHEET

PROJECT STERLING VALLEY

HOLE NAME SVD 89-3

LOGGED BY J. RANDALL

TOTAL DEPTH 364.2m

I	2	DISTANCE FROM COLLAR		Cu	Pb	Zn	Ag	Au	As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
		TO TOP	TO BOTTOM														
SP		21.0	23.0								17411						Thin fine grained pink laminations at 19.4m.
		23.0	24.3								17412						
		24.3	26.0	55	400	5150	2.5			60	1750	17413					20.1-24.3. Strong sericite poor chlorite permic. minor chlorite developed down hole.
		26.0	28.0							42	1760	17414					Some silicification and elongate quartz boudins from 23.4-24.3.
		28.0	30.0									17415					Fine layering at 85° LCA.
		30.0	32.0									17416					
		32.0	34.0									17417					
		34.0	36.0									17418					
		36.0	38.0									17419					
		38.0	40.0									17420					24.3-28.4. Very strong sericite, mod silicification
		40.0	42.0									17421					T.S. in crystal rich (quartz + feldspar) fine grained
		42.0	44.0									17422					16626 ash. Weak quartz veining.
		44.0	46.0									17423					273m Minor veinlets and blebs sph + gn ± py from
		46.0	48.0									17424					24.3-31.8. Mod veinlets subparallel to layering.
		48.0	50.0									17425					Other sulphide in quartz veinlets.
		50.0	52.0									17426					
		52.0	54.0									17427					28.4-34.0. Strong sericite + silica in crystal
		54.0	56.0									17428					rich volcanoclastic.
		56.0	58.0									17429					Sharp contact 55° LCA.
		58.0	60.0									17430					
		60.0	62.0									17431					
		62.0	64.0									17432					34.0-140.0 MASSIVE FELDSPAR PHYRIC
		64.0	66.0									17433					DACTIC LAVA.
		66.0	68.0									17434					
SP		68.0	70.0									17435					34.0-37.4. Weakly feldspar phyric, moderate

SAMPLE NUMBER: 16226

SUMMARY:

This is a former quartz-feldspar-phyric rhyolitic lava or crystal tuff with strong foliation defined by bands of sericite.

SAMPLE NUMBER: 16630

SUMMARY:

This is a plagioclase-phyric dacitic lava that has suffered some chloritic alteration.

Thin fine grained pink laminations at 19.4m.

20.1-24.3. Strong sericite poor chlorite permic. minor chlorite developed down hole.

Some silicification and elongate quartz boudins from 23.4-24.3.

Fine layering at 85° LCA.

24.3-28.4. Very strong sericite, mod silicification

T.S. in crystal rich (quartz + feldspar) fine grained

16626 ash. Weak quartz veining.

273m Minor veinlets and blebs sph + gn ± py from 24.3-31.8. Mod veinlets subparallel to layering. Other sulphide in quartz veinlets.

28.4-34.0. Strong sericite + silica in crystal rich volcanoclastic.

Sharp contact 55° LCA.

34.0-140.0 MASSIVE FELDSPAR PHYRIC DACTIC LAVA.

34.0-37.4. Weakly feldspar phyric, moderate quartz crackle veining and irregular veinlets Mod. chloritic.

37.4-48.8. Increasing feldspar phyric. Also irregular trace blebs and veinlets py + sph + gn ± py.

43.4-44.0. Strongly broken core in nearly quartz veinlet area with minor floorite.

48.8-49.8. Mod-strong silicification + some late stage quartz veining. Sulphide continuous as trace blebs and veinlets.

T.S. 16630 523m Strong white quartz + pink K-spar veining.

61.3-62.0. Mod. silicification, broken core.

64.2-65.0. Mod. broken, strongly feldspar phyric.

Trace disseminated gal-py throughout.

67.4-69.0. Mod. layering in chloritic lava/clastic at 60° LCA.

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DRILL LOG SHEET

CONTINUATION SHEET

PROJECT	STERLING VALLEY	HOLE NAME	SVD 89-3
LOGGED BY	J. RANDELL	TOTAL DEPTH	364.2m.

S	DISTANCE FROM COLLAR		As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
	TO TOP	TO BOTTOM									
518	70.0	72.0			174436						72.1-73. Weak K-spar alteration.
	72.0	74.0	K2	3200	174437						
	74.0	76.0			174438						78.0-79.5. Mod. chloritic, vague layering.
	76.0	78.0			174439						
	78.0	80.0			174440						80.8-82.1. Mod. broken core.
	80.0	82.0			174441						
	82.0	84.0			174442						86.4-87.2. 2-5% Stringer pyrite in silicified lava.
	84.0	86.0			174443						
	86.0	88.0			174444						92.6-93.3. Irregular 2-4% stringer pyrite.
	88.0	90.0			174445						
	90.0	92.0			174446						96.5. 10cm bleached lava + 2-4% stringer pyrite.
	92.0	94.0			174447						
	94.0	96.0			174448						98.5-99.4. Strongly broken core.
	96.0	98.0			174449						
	98.0	100.0			174450						99.8-100.0. Strongly silicified + bleached + 5-7% dissemin. pyrite.
	100.0	102.0			174451						
	102.0	104.0			174452						
	104.0	106.0			174453						101.3-102.6. Irregular mod. K-spar alteration.
	106.0	108.0			174454						
	108.0	110.0			174455						106.3-106.5. Strong silica + K-spar alteration.
	110.0	112.0			174456						
	112.0	114.0			174457						
	114.0	116.0			174458						109.4-110.5. Intensely K-spar + silica altered.
	116.0	118.0			174459						
	118.0	120.0			174460						112.1-113.5. Irreg. thick zones of quartz (carb) veins.
	120.0	122.0			174461						
	122.0	124.0			174462						
	124.0	126.0			174463						118.2-118.4. Intensely broken core.
	126.0	128.0			174464						- 119.2. Strong quartz-filled K-spar veins.
	128.0	130.0			174465						- 120.7. Mod. strong zones of K-spar + silica alter.
	130.0	132.0			174466						- 122.1. In lens pink K-spar + silica alteration.
519	132.0	134.0			174467						
518	134.0	136.0			174468						122.4-123.0. Strongly broken, strongly K-spar alteration some quartz veining.
											Rare specks pyrite throughout core.
											125.5-126.3. Mod. broken core.
											127.4-128.9. Mod. broken core.
											128.9-130.7. SHEAR ZONE. Intensely broken core. Some quartz + fluorite veining, strongly bleached + silicified.
											130.7-135.4. Mod. strong broken core, mod. chlor- itic, minor zones of mod. K-spar alteration.

ASSAY INFORMATION

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DISTANCE FROM COLLAR		Cu	Pb	Zn	Ag	Au	As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DMM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
TO TOP	TO BOTTOM														
SP	136.0								17469						137.2-138.1. Mod. broken cor.
	138.0								17470						
	140.0								17471						138.1-140.0. Weak-mod. broken.
	142.0								17472						
	144.0								17473						Contact quite sharp at 60° LCA.
	146.0								17474						
	148.0								17475						140.0 - 218.5 // MEDIUM GRAINED FELDSPAR + QUARTZ PHYRIC SERICITIC FELSIC VOLCANICLASTIC.
	150.0								17476						
	152.0								17477						
	154.0								17478						
	156.0								17479						T.S. 140.0-143.9. Mod. broken cor, well layered 16640 at 65-70° LCA.
	158.0								17480						141.3m
	160.0								17481						143.4. 2mm. ven sph gal.
	162.0								17482						
	164.0								17483						
	166.0								17484						143.9-147.8. Strong to intensely broken cor. Trace pyric + gal-sph.
SP	168.0		2525	2310	3.0	0.068			17485						
															147.8-150.2. Strongly broken cor.
															149.5-151.2. Very strong pumiceous and sericitic. Trace dissem. gal.
															T.S. 151.5-156.4 Weak to mod. layering 65-70° LCA, 16642 poorly feldspar phyric, strongly sericitic, mod. 152.2m silicified.
															158.0-159. Puggy clayey zone in fractured volcaniclastics.
															159.8-160. 2mm vented sph(gal) + trace blebs gal.
															160.7. 1mm vented sph-(gal)
															159-166.2. Moderately sericitic + weakly silicified generally massive some layered zones defined by wispy thin chlorite 70° LCA.
															165.6-165.8. Rare thin 1mm vented sph-phy
															166.2-168.2. Fine grained strongly sericitic + silicified, feldspar phyric.
															168.2-170.2. Irregular subrounded silicified boundaries in weakly chloritic matrix. Some crystal rich zones and silica rich zones.
															168.8. 1mm vented sph.

SAMPLE NUMBER: 16640

SUMMARY:

This is a weakly foliated crystal-lithic tuff dominated by fragments of glassy quartz+felspar-phyric rhyolitic lava, and discrete quartz and felspar crystals and crystal fragments.

SAMPLE NUMBER: 16642

SUMMARY:

This rock was a formerly glassy quartz+felspar-phyric rhyolitic or rhyodacitic lava that has a weak sericitic+calcite-defined foliation, and strong calcite overprinting.

ASSAY INFORMATION

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DRILL LOG SHEET

CONTINUATION SHEET

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DEPTH (m)	DISTANCE FROM COLLAR		Cu	Pb	Zn	Ag	Au	As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG	
	TO TOP	TO BOTTOM															
170.0	170.0	172.0								17486						170.1-170.2. 5 x 1mm veinlets gal-sph (py).	
172.0	172.0	174.0								17487							
174.0	174.0	176.0								17488							170.2-175.5. Irregular strong zones of K-spar alteration in silicified crystal rich vicinity.
176.0	176.0	178.0								17489							
178.0	178.0	180.0								17490							170.0. 0.5mm veinlet sph.
180.0	180.0	182.0								17491							
182.0	182.0	184.0								17492							
184.0	184.0	186.0								17493							Minor quartz physis component throughout. From 175.5, definite quartz + feldspar physis.
186.0	186.0	188.0								17494							
188.0	188.0	190.0								17495							175.5-178.7. Weak K-spar alteration.
190.0	190.0	192.0								17496							
192.0	192.0	194.0	20	1525	2100	1.5	0.045			17497							
194.0	194.0	196.0	20	755	2700	2.0	0.014			17498							178.7-184.3. Mod. fine layering 65-70° LCA, strongly sericitic.
196.0	196.0	198.0								17499							
198.0	198.0	200.0								17500							
200.0	200.0	202.0								17501							179.2. 1.5cm blob sph.
202.0	202.0	204.0								17502							
204.0	204.0	206.0								17503							
206.0	206.0	208.0								17504							184.3-189.8. Moderate irregular K-spar in irregular crystal rich + spar zones. Some silicified.
208.0	208.0	210.0								17505							
210.0	210.0	212.0								17506							
212.0	212.0	214.0								17507							189.8-190.1. White massive quartz. Upper contact sharp at 75° LCA.
214.0	214.0	216.0								17508							
216.0	216.0	218.0								17509							190.1-196.2. Weak to moderately irregular K-spar, variable layering 75° LCA. Unit appears to be lava-like in place.
																	192.5. blobs gal-(py).
																	194.9. " sph-gal.
																	195.7-195.9. Irregular boudin quartz.
																	196.2-201.0. Weak to moderate crystal portions feldspar + quartz physis. Weakly chloritic. Some fine layering 65° LCA.
																	201.0-204.6. Weak to moderate K-spar, some quartz physis volcanic.
																	T.S. 204.6-208.4. Strongly quartz physis + feldspar physis, fine layering. 70° LCA. Weak K-spar.
																	208.4-211.4. Moderately chloritic strongly silicified, fine grained well layered 65° LCA.
																	211.4-218.4. Weak K-spar. Fine grained well layered. Moderately quartz physis. Seems to be gradual change to more uniform vit to, little evidence for clastic texture. Becoming more lava like.

SAMPLE NUMBER: 16648

SUMMARY:

This is a foliated formerly glassy quartz + feldspar-physis crystal-lithic tuff of rhyolitic to rhyodacitic composition, with strong sericite-calcite alteration accompanying foliation development.

T.S. 204.6-208.4. Strongly quartz physis + feldspar physis, fine layering. 70° LCA. Weak K-spar.

208.4-211.4. Moderately chloritic strongly silicified, fine grained well layered 65° LCA.

211.4-218.4. Weak K-spar. Fine grained well layered. Moderately quartz physis. Seems to be gradual change to more uniform vit to, little evidence for clastic texture. Becoming more lava like.

ASBAY INFORMATION

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DRILL LOG SHEET

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CONTINUATION SHEET

L	S	DISTANCE FROM COLLAR		Cu	Pb	Zn	Ag	Au	As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
		TO TOP	TO BOTTOM														
50		218.0	220.0								17510						218.5-248.2 // QUARTZ FELDSPAR PHYRIC RHYODACITIC LAVA.
		220.0	222.0								17511						
		222.0	224.0								17512						
		224.0	226.0								17513						
		226.0	228.0								17514						T.S. Variable K-spar, weak to moderate. Some
		228.0	230.0								17515						16651 layered rocks, medium grained phytic component
		230.0	232.0								17516						220m quick consistent, often massive. Moderate
		232.0	234.0								17517						silicification. Minor zones of chloritic
		234.0	236.0								17518						pyrite.
		236.0	238.0								17519						229-232. Quartz + feldspar phytic becoming
		238.0	240.0								17520						finer grained.
		240.0	242.0								17521						Vague layering 70° LCA.
		242.0	244.0								17522						
		244.0	246.0								17523						235.1. Several m. grained py xstals.
		246.0	248.0								17524						
		248.0	250.0								17525						241-242.4. In situ albitization + silicification.
		250.0	252.0								17526						
		252.0	254.0								17527						248.2-251.3 // WHITE QUARTZ VEIN.
		254.0	256.0								17528						
		256.0	258.0								17529						Upper contact diffuse over 10cm.
		258.0	260.0								17530						Overall composition 80% quartz, 10% K-spar,
		260.0	262.0								17531						10% volcanics.
		262.0	264.0								17532						
		264.0	266.0	2860	55	215	5.0	0.0	0.11		17533						251.3-272.5 // QUARTZ + FELDSPAR PHYRIC
		266.0	268.0								17534						ALTERED RHYODACITIC LAVA.
		268.0	270.0								17535						
		270.0	272.0								17536						Irregular distribution K-spar, massive, consistent
		272.0	274.0								17537						quartz + feldspar phytic.
		274.0	276.0								17538						
																	253-254.9. Weak K-spar alteration, some
																	thin chlorite veins. Some chlor banding.
																	261.6-262.8. Strong silica, weak K-spar
																	chlor banded.
																	264.0. 5mm veins of Py Gg
																	264.6-264.8. 70% white quartz, irregular veins.
																	265.0. 3cm. 20% Py Gg stringers.
																	271.3-272.5. 40% quartz-carbonate-K-spar
																	veins, quick irregular.
																	272.5-280.3 // SILICIFIED (+SERICITIC) RHYODACITIC LAVA WITH TUFF.
																	T.S.
																	16657 272.5-276. Mod. layered 65° LCA, strong
																	275m quartz-feldspar phytic component, some K-spar

ASSAY INFORMATION

SAMPLE NUMBER: 16651

SUMMARY:

This sample was probably a quartz+feldspar-phyric rhyolitic or rhyodacitic lava.

SAMPLE NUMBER: 16657

SUMMARY:

This is a weakly foliated, formerly glassy quartz+feldspar-phyric lava of rhyolitic or rhyodacitic composition.

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DRILL LOG SHEET

CONTINUATION SHEET

PROJECT	STERLING VALLEY	HOLE NAME	SVD 89-3
LOGGED BY	J. RANDEL	TOTAL DEPTH	364.2 m.

I	E	DISTANCE FROM COLLAR		Cu	Pb	Zn	Ag	Au	As	Ba	SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
		TO TOP	TO BOTTOM														
SA		276.0	278.0								17539						7 silica alteration. Some chlorite zones. Strong sericite towards 276 m.
SA		278.0	280.0								17540						276-278.4. Fine grained sericite with sil. Fine quartz physis.
																	276.4-278.2. Chlorite-sericite zone silification.
																	278.2-279.2. Strong sericite, fine layering and fine grained mat. Dominantly quartz physis.
																	279.2-280.3. Strong feldspar physis, chlorite poor layering.
																	280.3-334.1 // SILICIFIED CHLORITIC RHYOLITIC-RHYODALCIC LAVAS
																	Contains gradational. Strongly silicified, poorly feldspar (+ quartz) physis, generally massive. Abundant fine chlorite network veinlets. Some flow banding.
																	282.1-282.3. Trace blebs of Gg.
																	285.7-287.4. Fine grained basaltic dyke + remnant chlorite thin. Perhaps this is mostly intense alteration.
SA		294.0	296.0								17541						296.9-297.0. Trace stringers of Gg.
SA		296.0	298.0	4.150	75	400	5.5	0.020			17542						297.3-297.4. Up to 10% stringers of Gg.
SA		298.0	300.0								17543						299.3-300.9. Intense K-spar in strongly quartz veined volcanics.
																	304.5-305.9. Mod. to strongly broken lxxx. Minor quartz-carb. veinlets.
																	307.2-310.8. Fine grained volcanics massive strongly silicified, chloritic + weak K-spar. Minor physis component.
																	310.8-311.8. Weak - strongly broken lxxx.
																	313.1-313.8. Strongly bleached, silicified with fine chlorite veinlets.
																	314.5-314.7. 80% white quartz.

ASBAT INFORMATION

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SILMET SYSTEM
METRIC
DECIMAL POINTS AS REQUIRED

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The Shell Company of Australia Limited
METALS DIVISION
DRILL LOG SHEET
CONTINUATION SHEET

PROJECT *STERLING VALLEY* HOLE NAME *SYD 89-3*
LOGGED BY *J. RANDALL* TOTAL DEPTH *364.2 m.*

DISTANCE FROM COLLAR				SAMPLE NO	CORE ANGLE	ROCK TYPE	DIAM	DESC CODE	GRAPHIC LOG	DESCRIPTIVE LOG
TO TOP	TO BOTTOM									
SP	317.6	0	318.0	17514						317.9-318.0. Trace Gpy.
SP	318.0	0	320.0	17515						321.8-325.9. Very strongly broken core, mod. chlorite.
										325.9-331.0. Irregular phytic component, mod. chlorite often silicified. Irregular patches and zones of K-spar alteration.
										331.0-334.1. As above but increasing sericit alteration, vague flow banding. Increasing chlorite towards bottom.
SP	332.0	0	334.0	17546						334.1-339.1 // FINE GRAINED FISSILE CHLORITIC ALTERATION ZONE. Contact sharp 85° LCA. Abundant to strongly broken core, trace 875° LCA. No obvious bedding but fairly consistent layering. Fracture-carbonate borders and sub-parallel veins. Rare phytic laminae at 337.4. Gradually increasing silicification from 337m. Sharp lower contact at 60° LCA.
SP	334.0	0	336.0	17547						
SP	336.0	0	338.0	17548						
SP	338.0	0	340.0	17549						
										339.1-364.2 // MASSIVE SILICIFIED CHLORITIC K-SPAR ALTERED RHYODACITIC LAVA
										Generally massive, irregular zones of K-spar and chlorite in strongly silicified lava.
										339.9-341.1. Strong K-spar + irregular quartz veins.
										341.9-344.1. Strong but irregular zones of chlorite.
SP	346.0	0	348.0	17550						348.4. Small zone of magnetite veinlets
SP	348.0	0	350.0	17551						349.9-350.0. Small veinlets Gpy.
SP	350.0	0	352.0	17552						350.2-364.2. Strongly silicified massive, weakly to non-phytic abundant chlorite + K-spar.
										E.O.H. 364.2m.

100% CORE RECOVERY IN ENTIRE HOLE

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