

LATITUDE L44+00N
 DEPARTURE 9+01W
 ELEVATION 190m
 DIP AT COLLAR -60°
 BEARING 133°
 FINAL DEPTH 349.7m
 TOTAL DRIFT 29.5 m CORE SIZE NQ
 REMARKS Used Warren Polk core barrel, cemented hole at 100.6 metres

Vinland Resources Limited
DIAMOND DRILL CORE LOG

Sheet No. 1 of 5

Tests Depth	Dip	Magnetic Bearing	Correcting Bearing
110m	-61°	151°	129°
225m	-62°	155°	133°
345m	-62°	156°	134°

Project No. _____ Hole No. BJ-03-15
 Property Buchans Junction
 NTS 12A/16 Grid Name Area 4
 Date Started June 16, 2003 Date Completed June 23, 2003
 Contractor Petro Drilling Co. Ltd
 Logged By R. M. Graves

DEPTH & LITHOLOGY	DESCRIPTION	REMARKS
0 – 29.5m	<u>Overburden</u>	
29.5 – 44.6m	<u>Volcano Clastic Sediment</u> - colour varies from red (oxidized) to green (reduced), non-magnetic, texturally varies from lapilli tuff to lapilli stone (may be a debris flow), fragments comprise amygdaloidal and non-amygdaloidal basalt, quartz and feldspar phyric rhyolitic rocks, massive rhyolitic rocks and red siltstone; shape of clasts varies from angular to sub-rounded; locally unit is clast supported; red colour likely caused by decomposing red siltstone clasts - fault gouge from 35.0 – 35.2m, 43.5 – 43.7m, 44.1 – 44.6metres	
44.6 – 79.5m	<u>Sheared Rhyolitic Rock (Boxes 5-13)</u> - pink, massive rhyolite (?) extensively fractured and brecciated with numerous zones of fault gouge and broken core, fault gouge at 40° TCA. Breccia appears to be re-cemented in part by hematite, silica and sericite and hosts drusy vug fillings of green and yellow sericite; some of the vug fillings are concentrically zoned; sericite has alteration rims indicating two stages of fluid influx; numerous black worm-like textures (.5mm – 10mm) cored by silica; many fractures are bleached yellow – presumably altered by sericite; for most part, sericite veins at 60° TCA - best example of alteration textures from 47.5 – 49.5m, 55.2 – 66.5m; should test core with gamma-ray spectrometer - unit appears to be classic epithermal environment of brecciation and re-cementation by alteration minerals - core completely broken from 52.5 – 55.0 metres - core bleached almost completely yellow from 54.6 – 56.1 metres - obvious breccia texture to rock from 55.2 – 67.0 metres, mottled yellow – pink in colour, sericite locally gone to clay as at 61.7 and 63.2 metres - broken core from 61.3 – 62.6 metres - numerous fault gouge zones from 63.5 – 66.5m, 67.5 – 69.2m and 73.8 – 75.3m - broken core from 70.0 – 73.0 metres; this part of the drill hole had to be cemented - bottom contact is sharp at 70°TCA	
79.5 – 82.4m	<u>Siltstone</u> - red, massive, no bedding, soft, hosts igneous fragments 1 mm in diameter, bottom .5 metres is fault gouge, hosts quartz-calcite veining	
82.4 – 105.7m	<u>Volcano Clastic Sediment</u> - coarse grained, reddish-brown in colour, lapilli tuff in texture, hosts ~50% angular clasts most of which	

	are red siltstone with lesser felsic and mafic clasts; matrix is a mixture of igneous and sedimentary material - zones of fault gouge at 83.4 – 83.5m, 95.0 – 95.2m, 96.8 – 96.9m, 97.3 – 97.4m and 101.5 – 102.1 metres - beds of red siltstone and red coarse sandstone are inter-layered with volcano clastic sediment from 101.6 to base of unit at 105.7, bedding in sediment is 70° TCA - coarse grained lapilli stone from 103.9 – 105.7 metres, hosts angular fragments of predominantly basalt from unit beneath with lesser red siltstone, lapilli stone is clast supported hosting 80 – 90% fragments, matrix is red sedimentary material - red sediments indicate unit is waterlain - presence of basalt clasts from beneath indicate younging up the hole - lower contact sharp at 70° TCA	
105.7 – 154.4m	<u>Basalt</u> - green, reddish green in upper 13 metres, fine grained equigranular, non-magnetic, massive, no fabric, calcite rich matrix, 5 – 10% hematite in matrix in addition to hematite – calcite veinlets from 105.7 – 118.0 metres - unit is remarkably consistent throughout, no discernable internal contacts - broken core from 136.0 – 137.0 metres - broken core form 145.5 – 147.5 metres, fault gouge at 147.0 metres - quartz veining from 153.5 – 153.7 at 45° TCA - sharp lower contact	
154.4 – 158.5m	<u>Shale</u> - black, massive, no bedding, conchoidal fracture locally, trace pyrite; quartz – calcite and chlorite – sericite veining - lower contact in broken shale, couldn't see relationship with unit beneath	
158.5 – 165.2m	<u>Rhyolite</u> - grey, non-magnetic, flow-banded from 158.5 – 162.3 metres, flow banding varies from 0 - 10° TCA, broken core from 162.8 – 163.3 metres; chlorite on fractures - contact with unit below gradational over 2-3cm	
165.2 – 181.6m	<u>Rhyolite</u> - orange-pink in colour, massive, no fabric, non-magnetic, chlorite and hematite on fractures, hematite also occurs as vug fillings - 20cm of fault gouge at 169.5m - unit is fragmental from 172.8 – 173.1metres - may be some fine ash felsic tuff horizons within this unit - flow banding at 10° TCA at 177.3 metres - lower contact sharp at 20° TCA with rhyolite below	
181.6 – 221.7m	<u>Rhyolite</u> - colour varies from grey-green-pink-red-buff, frequently flow banded at 20° TCA, very siliceous (almost glassy), numerous siliceous breccia zones; upper contact zone appears to be 'baked' by unit above - hosts a few fine ash felsic tuff beds as at 206.8 – 209.0 metres, upper contact at 80° TCA - flow banding changes to 45° - 80° TCA at 215 – 221 metres	

	- basal part of rhyolite is brecciated over .5 metres	
221.7 – 223.4m	<u>Mafic Volcanic</u> - similar to hematized basalt at 105.7 – 118.0m, hosts numerous anastomosing calcite-hematite veins, non-magnetic - upper and lower contacts are sharp	
223.4 – 231.5m	<u>Rhyolite</u> - colour varies from red-grey-buff, massive - extensive broken core and fault gouge from 226.0 to bottom of unit – 1.5 metres of lost core from 227.7 – 230.7 metres - contact between this rhyolite and unit below is major fault	
231.5 – 235.0m	<u>Mafic Volcanic</u> - dark green, non-magnetic, calcareous matrix, minor quartz-calcite-hematite veining - lower contact sharp at 45° TCA	
235.0 – 239.0m	<u>Felsic Crystal Lithic Tuff</u> - grey, massive, no fabric, hosts 5 – 10% quartz, feldspar and lithic fragments 2 –5 mm in diameter	
239.0 – 245.1m	<u>Felsic Tuff</u> - colour varies from red to grey, bedding (?) at 45° TCA, siliceous, generally fine grained except for coarse felsic tuff at base of unit - lower contact sharp at 45° TCA	
245.1 – 252.5m	<u>Mafic Volcanic</u> - green, very fine grained, calcareous matrix, non-magnetic, massive, no fabric; may be approaching intermediate composition - basal 1 metre of unit appears to be silicified - rip up clast from unit below at 251.9 metres - lower contact sharp at 50° TCA	
252.5 – 254.0m	<u>Felsic Crystal Lithic Tuff</u> - orange-red in colour, massive, no fabric 10-20% anhedral quartz crystals and 20% angular felsic and chloritic lithic fragments - lower contact sharp at 45° TCA	
254.0 – 257.7m	<u>Mafic Volcanic / Sill</u> - dark green, fine grained equigranular, weakly calcareous matrix, non-magnetic - sharp lower contact at 20° TCA - contacts are chilled	
257.7 – 261.2m	<u>Felsic Crystal Lithic Tuff</u> - pinkish orange in colour, no fabric, ~10% chloritic and 10% felsic fragments in a medium grained felsic matrix, fragments are angular, non-magnetic - lower contact sharp at 40° TCA	
261.2 – 263.3m	<u>Mafic Volcanic</u> - dark green, weakly magnetic, calcareous matrix, fine grained equigranular, lower contact sharp at 40° TCA	
263.3 – 267.4m	<u>Felsic Crystal Lapilli Tuff</u> - orange-buff in colour, massive, no fabric, non-magnetic, hosts ~ 25% angular chloritic fragments with	

	- quartz and feldspar crystals and ~5% felsic fragments in fine-medium grained felsic matrix - lower contact sharp at 30° TCA	
267.4 – 277.8m	<u>Mafic Volcanic</u> - dark green, fine grained equigranular, weakly magnetic locally, weakly calcareous - lower contact brecciated over 10cm, may represent flow breccia	
277.8 – 291.5m	<u>Felsic Crystal Lithic Tuff</u> - buff in colour, massive, no fabric; hosts ~10% angular chloritic and sericitic fragments with quartz and feldspar crystals and 5% felsic fragments in fine – medium grained felsic matrix - chlorite on fractures very common	
291.5 – 292.0m	<u>Mafic Volcanic</u> dark green, fine grained equigranular, non-magnetic, calcareous matrix, contacts appear to be chilled and at 30 - 45° TCA	
292.0 – 296.3m	<u>Felsic Crystal Tuff</u> colour varies from orange-red, massive, no fabric, 5-10% quartz and feldspar crystals in a fine-medium grained matrix, 3-5% mafic minerals.	
296.3 – 302.5m	<u>Mafic Volcanic</u> - dark green, fine grained, no fabric, calcareous matrix, weakly magnetic - lower contact at 40° TCA, contact appears to be chilled 10cm thick felsic crystal tuff horizon at 302.0 metres	
302.5 – 303.4m	<u>Felsic Crystal Lithic Ash Tuff</u> - orange-pink in colour, minute (2-3mm) quartz and feldspar crystals in a finer grained felsic matrix; hosts 3-5% angular chloritic lithic fragments; minor quartz – calcite veining - lower contact sharp at 40° TCA	
303.4 – 306.1m	<u>Mafic Volcanic / Sill</u> - same as at 296.3 – 302.5 metres - chilled contacts	
306.1 – 307.5m	<u>Felsic Crystal Lithic Ash Tuff</u> same as at 302.5 – 303.4 metres	
307.5 – 307.8m	<u>Mafic Volcanic</u> same as at 296.3 – 302.5 metres	
307.8 – 313.4m	<u>Felsic Crystal Lithic Tuff</u> - orange-pink in colour from 307.8 – 308.7 with 3-5% angular chloritic fragments; this rock grades over 10-20cm into a buff coloured medium grained equigranular crystal lithic tuff absent of chloritic fragments, hosts 2-3% felsic lithic clasts .5 – 1 cm in length - lower contact sharp at 40° TCA	
313.4 – 318.1m	<u>Mafic Volcanic</u> - same as at 296.3 – 302.5m - felsic tuff inclusion at 317.6 metres	
318.1 – 327.0m	<u>Felsic Crystal Lithic Ash Tuff</u> - colour varies from orange-pink-grey, hosts less than 3-5% felsic lithic fragments, matrix is a fine-medium grained equigranular and felsic - hosts inclusion and dykes of mafic intrusive	

	- lower contact sharp at 45° TCA	
327.0 – 349.7m	<u>Mafic Sill (?)</u> - dark green, massive, weakly magnetic, calcareous matrix, upper contact appears to be chilled - internal contact at 331.3 metres - minor quartz-calcite veining - silicified and sericitized zones at 335.1 – 336.1m, 339.6-340.0m, 342.3-342.7m, 343.6-343.9m, 344.6-344.9m fabric in alteration zones at 45° TCA - hematite veining from 336.1 – 337.3 metres - trace pyrite at 338.9 metres	
EOH		