

LATITUDE 3 + 00 N
 DEPARTURE 1 + 75 E
 ELEVATION 160 metres
 DIP AT COLLAR -45°
 BEARING 122°
 FINAL DEPTH 236 metres
 TOTAL DRIFT 9 metres
 REMARKS CORE SIZE NQ

Vinland Resources Limited
DIAMOND DRILL CORE LOG

Sheet No. 1 of 4

Test Depth	Dip	Magnetic Bearing	Correcting Bearing	Project No.	Hole No.
16 metres	-43°	144°	121°		BJ-01-11
100 metres	-43°	150°	127°	Property	Buchans Junction
200 metres	-43°	157°	134°	NTS	12A/16
				Date Started	June 1, 2001
				Contractor	Logan Drilling Limited
				Logged By	R. M. Graves

DEPTH & LITHOLOGY	DESCRIPTION	REMARKS
0 – 9m	<u>Overburden</u>	
9.0 – 16.0m	<u>Mafic Volcanic</u> - greenish-red in colour, fine grained equigranular; mineralogy comprises 45% green mineral, 45% reddish brown (altered plagioclase) mineral and 10% black (mafic) mineral; non-magnetic - core extensively broken in bottom metre - intruded by quartz – feldspar veining from 13.5 – 15.5m	
16.0 – 19.4m	<u>Mafic Volcanic</u> - dark green, fine grained to aphanitic, massive, no fabric and generally featureless rock, the lower .5 metres of unit is silicified	
19.4 – 19.9m	<u>Rhyolite</u> - pink to greenish grey in colour, aphanitic, banding at 75° TCA, very siliceous	
19.9 – 20.8m	<u>Felsic Volcanic</u> - fine grained, equigranular, massive, non-magnetic	
20.8 – 55.5m	<u>Felsic Crystal Lithic Tuff</u> - grey to reddish grey in colour, medium grained equigranular texture (looks intrusive), most fragments are 1-5mm in diameter; composed of greater than 75% of feldspar, lithic and perhaps quartz in grain to grain contact – is essentially clast supported; hosts 5% angular lithic lapilli fragments, jasperoidal fragments common at 27 – 30 metres; lithic clasts dominantly felsic and mafic, may be some sedimentary lithologies - at 42 – 52 metres the unit changes compositionally and appears to be entirely a felsic – crystal tuff with very few other lithologies except at 48.5 – 49.0m - graphitic fault gouge at 46.6 metres - chlorite very common on fracture faces - lower contact sharp with an irregular dip	
55.5 – 57.1m	<u>Mafic Volcanic / Basalt</u> - dark green, massive, no fabric, fine grained equigranular, weakly magnetic, lower contact at 60° TCA	
57.1 – 59.6m	<u>Felsic Ash Tuff</u> - greyish green in colour, non-magnetic; matrix is 80 – 90% ash fragments > 1mm in diameter, 10-20% of rock is quartz, feldspar and angular lithic fragments (shards) 1-5mm in diameter - unit is bleached by silicification from 58 – 58.5 metres - lower contact sharp and at 60° TCA	
59.6 – 62.5m	<u>Rhyolite</u> - buff in colour, aphanitic, hosts numerous anastomosing fractures that are chlorite filled, upper 5cm of unit is	

	totally chloritized, very siliceous, mottled green at 62.2, lower contact at 45° TCA	
62.5 – 63.4m	<u>Felsic Ash (Intermediate) Tuff</u> - greyish green in colour, non-magnetic, massive; >95% of fragments less than .5mm in diameter; 5% of fragments are .5–1.5mm; lower contact sharp at 45° TCA	
63.4 – 66.0m	<u>Rhyolite</u> - some rhyolite as at 59.6 – 62.5 metres, fractures chlorite filled, lower contact at 45° TCA	
66.0 – 69.0m	<u>Felsic Crystal Ash Tuff</u> - grey to pink in colour; from 66.0 – 69.0 metres the unit is an ash tuff with all fragments less than 1mm	
69.0 – 89.6	<u>Felsic Crystal Lithic Tuff</u> - pink in colour; hosts 5% anhedral plagioclase crystals in a coarse ash matrix and hosting 5 – 10% felsic fragments (particularly at 80 – 84 metres) - 1cm thick vein of chlorite paralleling axis of core from 66 – 68.5 metres - feldspar veins flooding unit at 74.7 – 75.1 metres - unit hosts 5 – 10% jasperoidal fragments .5 – 2cm in length from 83.5 – 86.0 metres - a 2cm x 2cm fragment of the unit below occurs at 88.7m indicating younging up the hole - lower contact appears to be at 90° TCA	
89.6 – 118.3	<u>Mafic Volcanic / Basalt (Sericitized)</u> - greenish grey, fine grained equigranular, weakly magnetic, matrix is carbonitized; possible intermediate composition - 20cm of fault gouge at 94.6m - unit becoming totally sericitized at 95m – 104m hosts trace – 1% fine pyrite throughout, sericitic rock loses magnetism and matrix no longer carbonitized - 20cm of broken core 101.6m - sericite is light green; chlorite common on fractures as at 103 – 103.5 metres and associated with sericite in matrix - silicified zone at 103.9 – 104.1 metres - epidote veinlets at 103 – 117m - from 104 – 116m unit is only weakly sericitic and similar (still hosts fine trace pyrite) to rock at 89.6 – 95m - hosts 2-3% anastomosing quartz – calcite veinlets - lower contact at 45° TCA	
118.3 – 120.6m	<u>Felsic Crystal Lithic Tuff</u> - grey to pink in colour, hosts, 3-5% anhedral feldspar crystals 1-5mm in diameter; hosts 5% lapilli sized felsic fragments - lower contact at 45° TCA	
120.6 – 124.5m	<u>Felsic Volcanic</u> - pinkish grey in colour, fine grained to aphanitic, locally looks like rhyolite, rock has been sheared by faulting, broken core and fault gouge from 121.0 – 121.8 metres - fine grained intermediate volcanic from 123.0 – 123.7 metres - chlorite common on fractures	
124.5 – 127.9m	<u>Altered Fault Zone</u> - a zone of complete chloritization, sericitization and calcite veining; fault gouge at 126.0 – 126.2m, overall colour is black to green - fuchsite over 30cm at 127.0 metres	

	- fabric at 30° TCA - lower contact is sharp	
127.9 – 133.8m	<u>Lapilli Tuff / Lapilli Stone</u> - mottled green – brown in colour; unit is a clast rich (almost clast supported) coarse grained pyroclastic, rock is approximately 5% angular fragments varying from 1cm to 5cm in diameter, clasts vary from angular to sub-rounded; matrix is fine grained and green, fragments are both mafic and felsic - lower contact is sharp at 30° TCA - 30/cm of fault gouge at 128.1 – 128.4m	
133.8 – 136.7m	<u>Mafic Dyke</u> - dark green, fine grained to aphanitic, margins are chilled, strongly magnetic; hosts 1-2% of a black mineral, .5 – 1mm in diameter – mineral has calcite core - a rock (xenolith) similar to the lapilli tuff above occurs at 136.2 – 136.4m; lower contact sharp at 30° TCA	
136.7 – 143.0m	<u>Lapilli Tuff / Lapilli Stone</u> - same as at 127.9 – 133.8 although not as clast rich (25% fragments), matrix colour is a lime green; looks like a debris flow, mafic dyke at 138.4 – 138.7	
143.0 – 146.5m	<u>Mafic dyke</u> - same as at 133.8 – 136.7m, dark green, magnetic, hosts .5-1mm black mineral, 10cm thick shear zone at 146 metres; chilling at margins not evident	
146.5 – 149.8m	<u>Felsic Volcanic</u> - pink to green in colour, fine grained equigranular, sericitic locally; may be felsic ash tuff; not sufficiently fine grained to be a rhyolite	
149.8 – 151.1m	<u>Mafic Dyke</u> - dark green, magnetic, chilled margins, hosts black mineral rimming calcite cores	
151.1 – 152.2m	<u>Felsic Volcanic</u> - same as at 146.5 – 149.8m, lower contact at 30° TCA	
152.2 – 154.2m	<u>Felsic Crystal Lithic Tuff</u> - greyish green in colour, massive, matrix is 90% fragments <1mm in diameter; hosts 5% anhedral plag crystals 1-3mm in diameter and 5% felsic clasts, .5-3cm clasts are generally angular - lower contact sharp at 60° TCA	
154.2 – 154.8m	<u>Felsic Ash Tuff</u> - pinkish grey in colour, fine grained equigranular, hosts a few feldspar crystals at base	
154.8 – 156.8m	<u>Mafic Dyke</u> - same as at 149.8 – 151.1m	
156.8 – 161.5m	<u>Felsic Crystal Lithic Tuff</u> - reddish in colour, has strong shear fabric at 30° TCA, much of original texture obliterated - hosts 2-3% feldspar crystals and <5% mafic and felsic fragments 1cm in length	
161.5 – 170.0m	<u>Felsic Volcanic</u> - colour varies from red, green, orange; unit is fine grained; was probably an ash tuff - unit is strongly sheared and original textures are obliterated, fabric at 20-30° TCA; fabric defined by chlorite and sericite, pyrite at 169.0 and 169.4 metres - rock brecciated and recemented at 169.0 metres	

	- trace pyrite in strongly sheared portion of core	
170.0 – 184.5m	<u>Rhyolite</u> - colour varies from yellowish green to orange, massive, very siliceous, hosts 5-10% anastomising chlorite / sericite veins following fractures; chlorite hosts trace pyrite - lower 1 metre of unit is sheared - 2cm thick shear zone at 183.9m, fabric at 20° TCA	
184.5 – 191.1m	<u>Felsic Volcanic</u> - colour varies from red, green, buff; unit has been sheared and brecciated, original textures are lost, protolith may have been rhyolite as above or crystal lithic tuff as at 190 – 191m	
191.1 – 191.8m	<u>Mafic Dyke</u> - dark green, magnetic chilled contacts, matrix is carbonitized	
191.8 – 193.1m	<u>Felsic Volcanic</u> - sheared, original textures gone, may have been a crystal lithic tuff, sericitic locally	
193.1 – 193.6m	<u>Mafic Dyke</u> - same as at 191.1 – 191.8; chilled margins are buff coloured; interior of dyke coarser grained than margins	
193.6 – 194.9m	<u>Felsic Volcanic</u> - same as at 191.8 – 193.1	
194.9 – 195.5m	<u>Mafic Dyke</u> - same as at 193.1 – 193.6m	
195.5 – 201.1m	<u>Felsic Volcanic</u> - buff to pink in colour, sheared rock, fabric at 45° TCA, original textures obliterated, fabric defined by chlorite and sericite; chlorite and sericite veining comprise 10-15% of rock; unit hosts trace pyrite in felsic volcanic and chlorite veining	
201.1 – 225.5m	<u>Felsic Volcanic</u> - colour varies from pink – buff – light green, sheared locally; uncertain of protolith – may have been fine ash tuff or more likely a rhyolite; rock is variably sericitic, not silicified; although siliceous locally, minor chlorite and hematite veining; hosts 2-3% quartz-calcite veinlets - unit may be a crystal lithic tuff from 218 – 222 metres - trace pyrite visible in some of the chlorite veinlets	
225.5 – 236m EOH	<u>Rhyolite</u> - pink-red in colour, massive, very siliceous; feldspar phyrlic, hosts 2-3% chlorite veinlets	