

LATITUDE	L44+00N
DEPARTURE	19+75W
ELEVATION	210m
DIP AT COLLAR	-54°
BEARING	133°
FINAL DEPTH	400.2m
TOTAL DRIFT	CORE SIZE NQ
REMARKS	Hole moved after 2 attempts at L44+00N/ 20+00W; used standard corebarrel

Vinland Resources Limited **DIAMOND DRILL CORE LOG**

Sheet No. 1 of 4

Project No.	Hole No.	BJ-03-16
Property	Buchans Junction	
NTS	12A/16	Grid Name Area 2
Date Started	June 24, 2003	Date Completed July 01, 2003
Contractor	Petro Drilling Co. Ltd	
Logged By	R. M. Graves	

DEPTH & LITHOLOGY	DESCRIPTION	REMARKS
0 – 13.8m	<u>Overburden</u>	
13.8 – 14.2m	<u>Felsic Volcanic</u> - pinkish green in colour, very siliceous and heavily epidotized	
14.2 – 25.8m	<u>Mafic Volcanic on Sill</u> - dark green, very fine grained, upper and lower contacts lost in broken core, non-magnetic, no calcite in matrix, ~1% anhedral plag crystals, epidote veining - rock is harder than normal for a mafic - trace pyrite	
25.8 – 42.6m	<u>Epidotized Plagiophyric Basalt</u> - dark green, non-magnetic, no calcite in matrix, hosts 3-5% anhedral plag and K-spar ? crystals - looks mafic but quite hard, quartz crystals present locally – may be intermediate in composition - rock becomes extensively epidotized and potassic altered at 27.0 metres to base, rock is altered to 70-80% epidote and K-spar from 27.0-30.5 metres, plag crystals are frequently pink and the altered rock is very hard - amygdules/pumice at 33.5 - 34.5, and 37.5 – 37.7, 38.4 - 40.0, 41.0 - 42.6 metres - amygdules frequently filled by pink mineral – K-spar (?) - rock is 25-50% epidotized and potassic altered from 30.5-42.6 metres - lower contact lost in broken core	
42.6 – 50.8m	<u>Intermediate Volcanic</u> - Grey in colour, non-magnetic, siliceous, deformed with fabric at 60° TCA, hosts 2-3% anhedral feldspar crystals - may be a deformed intermediate pyroclastic - hosts ~5% epidote veining	
50.8 – 52.9m	<u>Epidotized Basalt</u> - same as at 25.8-42.6m - lower contact at 45° TCA	
52.9 – 82.5m	<u>Volcano Clastic Sediment/Greywacke</u> - grey, massive, fine grained to argillaceous, non-magnetic, extensively veined by epidote, generally featureless looking rock; felsic to intermediate in composition - pyrite at 60.0m - bedding at 40° TCA at 56.5 metres - intense potassic-epidote alteration at 57.6 - 57.8, 59.8 - 60.0 and 74.5 - 74.6 metres	

	- bedding at 50°TCA at 75.8 metres - lower contact sharp at 45° TCA	
82.5 – 83.1m	<u>Rhyolitic Rock</u> - orange, massive, siliceous, lower contact sharp at 45°TCA - may be felsic crystal tuff	
83.1 – 162.6m	<u>Intermediate/Mafic Volcanic</u> - fine grained equigranular, completely sericitic from 83.1- 99.0 metres, non-magnetic, massive, no fabric, featureless, monotonous, minor epidote veining, no calcite in matrix, non-magnetic; grey – green in colour - locally rock has a granular sedimentary appearance - epidote veining disappears for most part at ~130 metres - unit appears to be andesitic - weakly sericitized matrix from 145m – 155 metres - unit brecciated over 20cm at 161.7m - lower contact sharp at 45° TCA	
162.6 – 184.7m	<u>Rhyolitic Unit</u> - colour varies from orange-pink-dark grey, very siliceous, non-magnetic; has a weak fabric at 50° TCA - appears to have an internal contact at 166.2m – flow contact ? - hosts 3-5% anhedral feldspar crystals locally - minor epidote veining - a few breccia zones - chlorite on fractures, particularly in lower part of unit - lower contact sharp at 70° TCA	
184.7 – 191.8m	<u>Plagiophyric Mafic Volcanic</u> - dark green, weakly magnetic locally, non-calcareous matrix, hosts 2-4% anhedral plagioclase crystals - numerous zones and veins of epidote-potassic alteration	
191.8 – 194.1m	<u>Mafic Volcanic</u> - dark green, fine grained, non-magnetic, non-calcareous matrix, hosts epidote-potassic alteration	
194.1 – 194.4m	<u>Felsic Volcanic</u> - pink, massive, feldspar phyric, minor epidote veining	
194.4 – 201.0m	<u>Silicified Mafic Volcanic ?/Dark Grey Rhyolite ?</u> - dark grey in colour, fine grained to aphanitic, non-magnetic, very siliceous, hosts numerous zones and veins of potassic – epidote alteration - amygdular ? at 197.6 metres - is either a silicified mafic or a rhyolite	
201.0 – 202.2m	<u>Plagiophyric Mafic Volcanic</u> - same as at 184.7 – 191.8 metres - lower contact sharp at 90° TCA	
202.2 – 203.2m	<u>Mafic Lapilli Tuff</u> - dark green to grey, unit ~25% mafic lapilli sized clasts in a mafic matrix, fabric of clasts orthogonal to core axis - hosts epidote-potassic alteration	

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203.2 – 249.4m	<u>Mafic Volcanic/Sediment ?</u> - dark green, fine grained to aphanitic, non-magnetic, extensively veined by epidote-potassic alteration; unit looks sedimentary in places; trace pyrite common in unit - amygdules at 215.5 metres - pyrite in epidote alteration at 217.0 metres - disseminated pyrite at 237 metres - 20cm of fault gouge at 221.0 metres - feldspar megacrysts from 226-234 metres - for most part epidote alteration has disappeared at 220 metres to bottom of unit - lower 2 metres of unit may in part be pyroclastic - minor siltstone inter-bedded near base of unit - fine disseminated pyrite seen occasionally in unit	
249.4 – 253.5m	<u>Siltstone</u> - colour varies from red-green-black, well laminated, bedding at 60° TCA, very siliceous, cherty, trace pyrite	
253.5 – 264.8m	<u>Mafic Volcanic</u> - dark green, fine grained equigranular, non-magnetic, non-calcareous matrix, epidote-potassic alteration - considerable broken core from 261-264 metres, slickensides at 203.5 metres - lower contact sharp at 70° TCA	
264.8 – 265.5m	<u>Siltstone</u> - black, bedding at 65° TCA, very siliceous - lower contact sharp at 65° TCA	
265.5 – 267.4m	<u>Felsic Crystal Lithic Tuff</u> - dark green in colour, hosts 20-30% anhedral feldspar crystals and fragments of black shale, siliceous, may host a minor amount of mafic material	
267.4 – 283.0m	<u>Siltstone</u> - colour varies from dark grey to red, red variant is jasperoidal, bedding at 50° TCA - unit has grey ferruginous coatings on fracture faces - magnetite/hematite beds are common, beds vary in thickness from 2-4mm and distributed over a few centimeters to tens of centimeters - epidote alteration common from 273-283.0 metres	
283.0 – 332.3m	<u>Epidote Alteration Zone</u> - host rock virtually completely altered to epidote with lesser sericitic and potassic alteration; alteration occurs as massive flooding; alteration overprinted by quartz-calcite veining; trace pyrite - alteration too intense to identify protolith – alteration appears to over-ride fine grained mafic volcanic and sediments - hematite locally - .5cm thick hematite-magnetic beds from 308.8 - 310.4 and 313.7 - 314.0 metres, bedding at 70°TCA; similar to that 267.4 - 283.0 metres - protolith from 307.8 - 314.2 appears to be green siltstone with inter-bedded iron formation as described - pyrite at 315.8 and 319.8 metres	

	- unit taking on a strong fabric at 50-60° TCA from 310 – 320 metres; strong banded appearance; calcite veins now comprising significant proportion of alteration (~10-20%) which may indicate mafic component to protolith - 3-5mm thick magnetic band common from 324 - 329 metres - green siltstone protolith from 330.5 - 331.1 metres	
332.3 – 337.4m	<u>Deformed Rock</u> - colour varies from grey-maroon-light green; hosts strong fabric at 60-70° TCA; for the most part rock is banded; hosts clasts which may be fragments from protolith on tectono-clasts	
337.4 – 339.0m	<u>Felsic Pyroclastic</u> - grey in colour, hosts 25-50% felsic fragments in a felsic matrix; most fragments are lapilli size - appears not to be tectonized like unit above	
339.0 – 349.8m	<u>Mafic Volcanic (Basalt?)</u> - fine grained, equigranular, non-magnetic, non-calcareous matrix, massive, no fabric, trace pyrite throughout, quartz-calcite and epidote-potassic veining, silica and epidote filled amygdules locally - 20cm of fault gauge at 349.6-349.8 metres - this rock fault bounded against unit beneath	
349.8 – 354.7m	<u>Felsic Crystal Lithic Tuff</u> - grey in colour, hosts 3-5mm anhedral feldspar crystals and lapilli sized fragments of varying felsic provenance, non-magnetic, fabric at 45° TCA - jasperoidal material at base of unit	
354.7 – 400.2m	<u>Deformed Mafic Volcanic (Basalt?)</u> - dark green-black, non-magnetic, fine grained equigranular, non-calcareous matrix, numerous veins and pods of epidote - strong fabric at 30-45° TCA - stretched and deformed calcite bearing amygdules from 361.6 - 366.3 metres - locally looks sedimentary - trace pyrite throughout - fabric paralleling TCA from 384.6 – 385.3 metres, may be paralleling fabric of parasitic fold - rock is entirely banded over lower 20 - 30 metres	
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