

LA CODE 2+00N
 DEPARTURE 0+70E
 ELEVATION 160 metres
 DIP AT COLLAR -55 degrees
 BEARING 133 degrees
 FINAL DEPTH 506 metres

TOTAL DRIFT CORE SIZE NQ
 REMARKS BJ-00-10 actually ended at 135.0 metres

Vinland Resources Limited
DIAMOND DRILL CORE LOG

Sheet No. 1 of 6

Tests Depth	Dip	Magnetic Bearing	Correcting Bearing
100 metres	-55 °	178 °	155 °
200 metres	-54 °	183 °	160 °
300 metres	-54 °	178 °	155 °
400 metres	-53 °	181 °	158 °
467 metres	-53 °	181 °	158 °

Project No. _____ Hole No. BJ-01-10ext
 Property Buchans Junction
 NTS 12A/16 Grid Name
 Date Started May 25, 2001 Date Completed May 31, 2001
 Contractor Logan Drilling Limited
 Logged By R. M. Graves

* core boxes have hole # as BJ-00-10 ext

DEPTH & LITHOLOGY	DESCRIPTION	REMARKS
135 – 149.8m	<u>Crystal Lithic Felsic Tuff</u> - colour varies from pink-grey-green, weakly sericitic locally, non-magnetic, coarse grained equigranular, white feldspars, (plag) are megacrysts and pink feldspars (Kspar) comprise matrix, almost looks intrusive, 5-10% chlorite, massive, no visible internal contacts; quartz and feldspar crystals 2-5mm in diameter comprising 5% of unit; not many quartz eyes, may be andesitic in composition - hematite on fractures at 138.6 metres and 144.5 metres - contact with unit below is sharp and at 70 degrees TCA - minor quartz-calcite veining, minor aphanitic volcanic lapilli fragments	
149.8 – 150.5m	<u>Rhyolite</u> - deep red in colour, aphanitic matrix, 1mm anhedral feldspar crystals comprising 2-3% of unit, non-magnetic, believe the unit to be a flow and not a dike because adjacent contacts above and below are not thermally metamorphosed	
150.5 – 233.5m	<u>Crystal Lithic Felsic Tuff</u> - same as unit at 135m – 149.8m - hematite veining over 20cm at 154.3m - hematite veining over 40cm at 155.4m - unit has intrusive appearance because of coarse grained equigranular textures - colour varies from buff to grey - 10 cm of brittle shearing at 163.5 metres - 5 – 10% black mineral - chlorite? - quartz calcite veining at 10° TCA at 182.5 metres - aphanitic lapilli sized fragments at 185.3m, 187.3m, 189.5m, 190.5m, 192.5m, 193.0m, 197.1m; fragments are predominantly mafic and felsic - sheared and sericitic from 201.5 – 201.8m, felsic at 40° TCA - from 205 – 225m unit comprises 5% lapilli sized lithic fragments; unit is still feldspar dominated - sericitic/hematitic from 208.7 – 208.9m - rhyolite fragment similar to rhyolite above at 209.2 metres - red mudstone fragments at 210.8 metres - siliceous hematitic veining from 217.4 – 217.7 - 10cm of brittle deformation at 227.1 metres - quartz phyrlic in lower 2 – 3 metres, lower contact is sharp	
233.5 – 236.5m	<u>Felsic Volcanic</u> - colour varies from orange to greyish orange, fine grained; quartz and feldspar phyrlic, non-magnetic lower	

	contact is sharp and at 45° TCA to unit beneath	
236.5 – 236.8m	<u>Rhyolite</u> - greyish brown, massive, weakly magnetic, aphanitic, 2 – 3% quartz eyes <1 mm in diameter - lower contact at 90° TCA	
236.8 – 237.1m	<u>Felsic Volcanic</u> - same as at 233.5 – 236.5; lower contact at 90° TCA	
237.1 – 238.6m	<u>Basalt</u> - dark green, massive, magnetic, minor calcite in matrix, lower contact at 80° TCA	
238.6 – 241.7	<u>Felsic Crystal Lithic Tuff</u> - colour varies from orange – grey, weakly magnetic, grain size is coarse ash, hematite common on fractures - lower contact sharp and at 70° TCA	
241.7 – 242.6m	<u>Basalt</u> - dark green, massive, magnetic, calcite amygdaloidal, lower contact sharp at 90° TCA	
242.6 – 258.5m	<u>Felsic Volcanic / Rhyolite</u> - colour varies from greyish brown-orange, non magnetic massive - extensively sericitized and veined with hair line chlorite from 246.9 – 248.9m, 10cm of graphitic breccia at 248.7 metres - there may be a contact between two felsic units at 245.2 metres - sericitic veining from 251.0 – 251.5 metres - total alteration of unit by sericite from 255 – 256.5m	
258.5 – 266.5m	<u>Basalt / Mafic Volcanic</u> - dark green massive, magnetic, calcite amygdaloidal from 258.5 – 259.5m - unit is consistently fine grained and plagiophyric, hosts 20% plagioclase xtals < .5mm in diameter - don't see any internal contacts - 10cm of fault gouge/breccia at 260.2 metres - minor calcite veining	
266.5 – 282.1m	<u>Rhyolite</u> - pink to light green in colour, massive, non magnetic, unit quite fractured - extensive zones of sericitic overprinting, particularly at 268.0 – 270.5m, 272.0 – 273.0m, 276.2 – 277.2m - sericitic alteration extensively cut by thin anastomosing chlorite veinlets - mafic flow at 278.3 – 279.1 metres - lower contact at 60° TCA	
282.1 – 284.7m	<u>Fine Grain Sediment (Shale)</u> - colour varies from red to green, thinly laminated with bedding at 65° TCA, locally the shale is jasperoidal as in upper 10cm, unit is totally sericitized from 283.9 – 284.4m - 4cm thick bed of felsic volcanic fragments at 282.7m - clear contact with unit below not seen	
284.7 – 292.1m	<u>Felsic Volcanic</u> - colour varies from green – pink, massive, non-magnetic - flow or pyroclastic? ; appears to be ash tuff over 30cm at 287 metres - jasper horizons locally - sericitic locally, 10cm of massive sericite at 287.5 metres	

	- lower contact sharp at 70° TCA	
292.1 – 293.2m	<u>Volcanoclastic Sediment / Shale</u> - intercalated volcanoclastic sediment and shale - 25 cm volcanoclastic sediment comprising felsic material derived from felsic unit above, fine – medium grained - 15 cm maroon shale and jasperoidal sediment - 30 cm volcanoclastic sediment derived from felsic unit above - 50 cm maroon shale and jasperoidal sediment - lower contact sharp and at 45° TCA	
293.2 – 293.9m	<u>Rhyolite</u> - pink to greyish green, massive, siliceous	
293.9 – 299.4m	<u>Mafic Volcanic/Basalt</u> - dark green, massive, magnetic, fine grained equigranular, matrix is slightly carbonitized, possible amygdules in upper 0.5 metres of unit; lower contact is chilled - lower contact at 60 - 70° TCA	
299.4 – 301.5m	<u>Rhyolite</u> - greenish grey, massive, siliceous	
301.5 – 305.1m	<u>Volcanoclastic Sediment</u> - orange – greyish green in colour, fine – medium grained, sedimentary material derived from felsic source, thickly bedded, bedding at 50° TCA - lower contact sharp	
305.1 – 307.7m	<u>Shale / Fine Grained Sediment</u> - colour varies from maroon to green, thinly to thickly bedded, bedding at 50-60° TCA; shale is jasperoidal locally, also sericitic and silicified	
307.7 – 314.0m	<u>Felsic Tuffaceous Sediment</u> - colour varies from orange to greyish green, fine to medium grained, approximately 10% plag fragments from 311.5 – 313.0 metres, unit hosts 5mm – 10mm angular felsic and sedimentary clasts	
314.0 – 317.6m	<u>Felsic Vitric Tuff</u> - sericitic green in colour, matrix sericitized and silicified - hosts 5% angular fragments 1mm – 1cm in diameter that are chloritized or sericitized (altered vitric chards?), bedding at 40 - 45° TCA - hematite common on fractures	
317.6 – 322.0m	<u>Volcanoclastic Sediment (Felsic)</u> - greyish green in colour, fine – medium grained, 5% feldspar fragments < 1mm diameter, minor sedimentary and felsic fragments - lower 1 metre is hematized and sericitic - hematite common in fractures	
322.0 – 326.7m	<u>Felsic Vitric Tuff</u> - sericitic green in colour, 5% angular sericitic/chloritic glass shards 1mm – 1cm in diameter; hosts other sedimentary and felsic clasts, matrix rich - same as felsic vitric tuff at 314.0 – 317.6 metres - lower contact at 20° TCA	

326.7 – 329.8m	<u>Fine Grained Sediment/Shale</u> - intercalated red and green shale, siliceous, red shale is jasperoidal, core is broken, strong ductile shear fabric at 20° TCA, locally the sediment is brecciated and re-cemented - shale hosts clast supported volcanoclastic sediment at 329.3 – 329.5 metres	
329.8 – 332.2m	<u>Volcanoclastic Sediment (unusual rock)</u> - pinkish green pyroclastic rock, clast supported, rock comprises almost entirely 2-5mm granules in grain to grain contact; rock granules comprise mafic, felsic and sedimentary lithologies, massive, no visible bedding; same rock as seen in shale above - lower contact at 65° TCA	
332.2 – 335.7m	<u>Fine Grained Sediment/Shale</u> - intercalated red/green shale as per 326.7 – 329.8 metres - sediment is quite siliceous - bedding at 45° TCA	
335.7 – 337.1m	<u>Basalt</u> - dark green – black, non-magnetic, extensively veined with calcite, fault gouge at 136.5m, cpy on fragment in gouge; lower contact is sheared	
337.1 – 344.9m	<u>Silicified Mafic Volcanic</u> - pinkish black plagiophyric mafic from 337.1 – 338.8m changing to a siliceous nodular (spherulitic?) mafic for 2 metres; the unit is strongly overprinted by silica from 341 – 344; however, enclaves of the plagiophyric mafic are visible; the silicification is so intense the mafic appears rhyolitic - were extensively broken at 340 metres (i.e. fault gouge)	
344.9 – 348.7m	<u>Fine Grained Sediment/Shale</u> - interbedded black, green and red shale; red shale is jasperoidal - bedding at 55° TCA - quite siliceous locally - unit cut by numerous anastomosing quartz-calcite veins - core quite broken	
348.7 – 349.5m	<u>Felsic Volcanic</u> - buff in colour, fine grained, massive - appears to be tuffaceous	
349.5 – 354.8m	<u>Fine Grained Sediment/Shale</u> - intercalated red, green and black shale; red shale is jasperoidal; green and black shale siliceous locally - bedding varies from 55 - 65° TCA - trace pyrite at 351.8 metres - some broken core	
354.8 – 360.8m	<u>Felsic Crystal Lithic Tuff</u> - brownish green in colour, massive, host 2-3% feldspar crystals, 2-3% lithic fragments; coarse ash tuff in texture - deep red jasperoidal zone from 358 – 358.2 metres - bedding at 50° TCA - lower contact at 50° TCA	

360.8 – 361.8m	<u>Jasperoidal Shale</u> - deep red, aphanitic, bedding at 60° TCA, siliceous, lower contact sharp	
361.8 – 377.0m	<u>Felsic Crystal Tuff</u> - pinkish grey in colour, massive, weakly magnetic, medium grained equigranular textures - units comprises 50% anhedral crystals of pink feldspar and quartz 2-3mm in diameter; unit is almost clast supported and similar to clast supported rock higher up in hole - minor lithic fragments (<5% modally) - minor quartz-calcite veining - looks intrusive but calling it tuff because of lithic fragments - core extensively broken from 373 – 377m; 10cm of fault gouge at 376.5m, major brittle fault	
377.0 – 378.0m	<u>Basalt</u> - dark green, fine grained, weakly magnetic, lower contact at 90° TCA	
378.0 – 429.0m	<u>Rhyolite/Rhyolitic Tuff</u> - pink to buff – green in colour, massive, non-magnetic, extensively broken from 381.5 – 385m; hosts mafic volcanic fragments (2-3% at 1-3mm diameter) suggesting unit is pyroclastic; 1-3% feldspar and quartz crystals, core extensively broken from 388 – 391 metres - chlorite and sericite on fractures - locally the unit is mottled pink as at 398.5 indicating silicification; the buff-green colour is the colour of the protolith and the pink is the colour of the altered variant - the rhyolite is dominantly buff – green from 405.3 – 413.2 metres - appears to be a small mafic dyke at 408.7 - core hematized and extensively fractured from 414.5 – 415.0 metres - quartz-calcite veining at 415.5 metres	
429.0 – 442.7m	<u>Feldspar Crystal Lithic Tuff</u> - greenish coarse grained tuffaceous rock, hosts 5% anhedral feldspar crystals 2 – 5mm in diameter - contains 5% mafic lithic lapilli sized clasts - massive, no fabric, hosts minor hematitic veining - lower contact is sharp	
442.7 – 457.6m	<u>Felsic Crystal Lithic Tuff</u> - greyish in colour, fine grained equigranular, 2-3% anhedral quartz and feldspar crystals, massive, no fabric, minor quartz-calcite veining, hematite on fractures - lower contact sharp and at 70° TCA	
457.6 – 460.5m	<u>Felsic Crystal Lithic Tuff</u> - red to green in colour, hosts 5% of 2-5 mm anhedral quartz and feldspar crystals; pyroclastic fragments are felsic and mafic; also fragments of sericite alteration; hosts 5-10% lapilli sized clasts - rock host 5% chloritic patches	
460.5 – 462.6m	<u>Felsic/Intermediate Volcanic</u> - fine grained equigranular, greenish in colour; jasperoidal horizon at 461.2 – 461.5 metres	
462.6 – 473.2m	<u>Felsic (Intermediate) Crystal Lithic Lapilli Tuff</u> - greenish grey to pinkish in colour, fine grained matrix comprised of >90% particles less than 1mm in diameter; hosts 2-3% anhedral plagioclase crystals 2-5 mm in diameter; hosts angular lapilli sized mafic and felsic volcanic clasts	

473.2 – 477.0m	<u>Felsic Volcanic</u> - fine grained equigranular, minute quartz eyes (<.5mm) massive, unique feature of unit is pink – green mottling that gives the rock a banded appearance, banding is 1cm thick and at 80° TCA; lower contact is at 90° TCA and sharp	
477.0 – 479.5m	<u>Mafic Dyke</u> - fine grained equigranular, massive, carbonitized matrix and 2-3% calcite crystals, magnetic; upper and lower contacts are aphanitic (chilled) over 5cm; contacts at 90° TCA	
479.5 – 480.8m	<u>Felsic Volcanic</u> - similar to felsic volcanic at 473.2 – 477.0 except this unit is not banded	
480.8 – 486.0m	<u>Crystal Lithic Vitric Lapilli Tuff (Intermediate)</u> - light green to grey in colour, non-magnetic, 20-30% lithic and chloritized vitric fragments, hosts 2-3% anhedral plagioclase crystals, unit is jasperoidal from 484.9 – 485.2 metres	
486.0 – 492.8m	<u>Felsic (Intermediate) Ash-Lapilli Tuff</u> - green in colour, fine grained equigranular, greater than 90% of rock is <1mm in diameter, hosts 5% clasts that are .5–1cm in length; the lower 1 metre of unit hosts 10% lapilli size fragments	
492.8 – 493.9m	<u>Fault</u> - appears to be a crushed jasperoidal mafic; fabric in fault zone varies from 45 - 80° TCA	
493.9 – 496.7m	<u>Mafic Volcanic/Basalt</u> - dark green, fine grained equigranular, non-magnetic, hosts 2-3% calcite crystals with carbonitized matrix; lower contact at 60° TCA	
496.7 – 498.2m	<u>Felsic (Intermediate) Crystal Lithic Tuff</u> - greenish in colour; >5% of fragments are less than 1mm, hosts 5% lithic fragments; some are chloritized; 5cm black dyke at 497.8m	
498.2 – 500.8m	<u>Intermediate Lapilli Tuff</u> - lime green in colour, hosts 10% lapilli sized fragments, approximately half are chloritized	
500.8 – 506.0m EOH	<u>Mafic Volcanic/Basalt</u> - dark green, magnetic, massive, no fabric, matrix is carbonitized, fine grained equigranular - minor felsic rock at 504.0 – 504.3, 505.0 – 505.2 and 505.9 – 506.0	

• **ADDITIONAL TROPARI TESTS**

•

• <u>DEPTH</u>	<u>DIP</u>	<u>MAGNETIC BEARING</u>	<u>CORRECTED BEARING</u>
• 9 METRES	-55	164 DEGREES	141 DEGREES
• 50 METRES	-55	170 DEGREES	147 DEGREES
• 506 METRES	-52	181 DEGREES	158 DEGREES