

HOLE #: BJN00-04 Page 1 of 4
Billtion Exploration Canada Ltd. / Celtic Minerals Ltd.
Diamond Drill Log

DRILLED BY: Petro Drilling (NQ) **LOCATION:** L-10+00 W 3+75 N **Grid Map Reference:** 12A / 16 **Claim #:** 7402M Location of hole in relation to a fixed pt. On the claim L-2+00W , 1+75 N
Location: UTM NAD 27, Zone 21 538389.36E, 5417408.7N (Handheld GPS) **PROPERTY:** Buchans Junction North (Joe Glodes) **LOGGED BY:** Trevor Rice **DATE STARTED:** 06/13/00
DATE COMPLETED: 06/15/00 **DATE LOGGED:** 06/30/00 **TOTAL Meterage:** 203.3 m **AZIMUTH:** 140° **Dip of Hole at: Collar** -50° → 140° **at:** 197.02 m -48° → 138°
NOTE: Sample sheet at back / Casing left in hole

FROM	TO	DESCRIPTION
0	3.52 m	Overburden
3.52 m	24.69	Mafic Volcanic Dark green fg-cg non-magnetic mafic volcanic. - Massive to moderately foliated . Foliation 70 to c.a.. - Alternating sections of cg plag phyric material and fg material. Cg sections account for 5% of interval. - Cg sections contain trace disseminated py, few epidote amygdules (1-3mm, rounded), and is carbonate flooded (< 3% of interval). Whispy epidote veinlets and chloritic sections noted. Minor disseminate pyrite with frequent pyrite stringers and local blebby chalcopyrite. From 17.0 – 23.36 m - Core blocky broken. 5 cm gouge seam at 23.21 m - 3-4 % stringer pyrite, blebby pyrite with local trace Chalcopyrite. Lower contact graditional.
24.69	40.46	Mafic Tuff Light green to olive green mafic tuff. Non-magnetic - Well-developed fabric at 70° to c.a. - Pervasive epidotation; rounded amygdules (1-2mm), patchy lens (up to 4 cm), and as discontinuous veins parallel to fabric. - Occasional clear and maroon-coloured siliceous flooding parallel to fabric. Local chalcopyrite blebs present. Maroon material often lens shaped (1-2 cm). Minor carbonatization. Mineralization - Trace disseminated pyrite and thin discontinuous pyrite stringers. Trace local blebs chalcopyrite. Lower contact graditional at 70° to c.a.
40.46	70.21	Mafic Tuff / Felsic Tuff Light green to grey-grey Mg grained mafic/felsic tuff. - Interval has massive uniform appearance. Almost granular. - Plag phyric – anhedral 1-2 mm crystals - Unit peppered with epidote crystals and blebs (usually 0.5 mm). - Laminated 45.13 m-47.45 m - Unit may contain quartz locally-possibly unit more related to felsic tuff - Nonmagnetic. Unit has trace – 1% disseminated and stringer Pyrite. Local chalcopyrite associated with minor carbonate/quartz veining Massive siliceous rhyolitic dykes noted at 55.9 – 56.2, 57.0 – 57.99, 59.03 – 59.63, 60 – 60.4 m. Contacts sharp at high angles to c.a

From 64.81 – 67.70 m

Unit is siliceous. Strongly sercitic from 65.83 – 66.33m

- 3-4% disseminated and stringer pyrite
 - Lower contact at 67.70 quartz flooded and followed by 2 cm fault gouge at 67.80 m
- Lower contact for unit is sharp at 70° to c.a.

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|--------|--------|--|
| 70.21 | 84.72 | <p>Mafic Volcanic</p> <p>Dark Green non-magnetic mafic volcanic. Similar to interval 3.52 – 24.69.</p> <ul style="list-style-type: none"> · Chloritic alteration pervasive. · Abundant epidote amygdules and coarse epidote patches. · Core is intensely broken with gouge noted at 70.86 – 70.99 m, 83.82-84.72m. · Moderate foliation at 60-75° to c.a. Locally contorted · 5-10% quartz/carbonate veining. <p>Mineralization</p> <ul style="list-style-type: none"> · 1 – 3% pyrite stringer locally with minor chalcopyrite. <p>Lower contact marked by gouge seam</p> |
| 84.72 | 110.65 | <p>Mafic Tuff</p> <p>Light green to bleached cg mafic tuff. Massive in appearance.</p> <ul style="list-style-type: none"> · Plag phyric. Phenocrysts 1-3 mm subangular shaped. · Patchy epidote blebs up to 2 cm oblong shaped. · Minor quartz / carbonate veining. · Bleaching not as intense over last 10 m <p>From 85.36 – 86.63 m – felsic dyke?</p> <p>Trace to 1% pyrite stringer (1-2 mm and disseminated)</p> <p>Core broken over last 8 m. Minor gouge at 108.05 m</p> <p>Lower contact sharp at 60 degrees to c.a.</p> |
| 110.65 | 114.39 | <p>Rhyolite</p> <p>Light green – grey massive rhyolite</p> <ul style="list-style-type: none"> · Strong silica alteration and moderate sercitic alteration · Trace to 1-2% disseminated py – Thin pyrite mineralization along minor chloritic veinlets. <p>End of unit marked by 3 cm pyrite stringer at 80° to c.a.</p> <p>Lower contact sharp</p> |
| 114.48 | 141.78 | <p>Mafic Tuff</p> <p>Light to dark green mafic tuff</p> <ul style="list-style-type: none"> · Locally magnetic · Top 10 m characterized by (1-3mm) plag phenocrysts. Abundance epidote amygdules. Cg granular texture |

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- Below 10 m unit is locally magnetc, patchy epidote alteration and finer grained white plag phenos
- Potassic felsic dyke 129.06-130.34 m
- Trace pyrite. Few chalcopyrite blebs.

141.78	145.14	Rhyolite Dark grey to apple green massive rhyolite
		· Euhedral plag phenos to 143.26 m. Unit becomes increasingly silica/sercite altered below that depth. Alteration strong over last 2 m · Trace to 1% fg dessiminated pyrite. Lower contact sharp at 80°
145.14	150.49	Mafic Tuff? Dark green fg mafic tuff.
		· Plag phyric · 3cm py stringer at 147.34 m · Lower contact graditional · Felsic dyke 146.19 – 146.35 m
150.49	159.80	Felsic Tuff Light grey to green-grey felsic tuff?
		· Massive and fg in upper 5m. Lower 4 m plag phyric (mafic looking) but occasional quartz pheno. · 1% disseminated py Lower contact graditional
159.80	203.3	Mafic Tuff / (Fragmental)? Light to dark green mafic tuff
		· Mg-cg, plag phyric · Epidote altered · Intermixed with monolithic fragmental. Fragments are pinkish white and are carbonated/silicified. Groundmass is light green, fg, and chloritic · Local trace to 1% disseminated pyrite. Minor chalcopyrite flake visible.
203.3		End of Hole

Hole ID: BJN 00-04		Company: Billiton / Celtic Minerals		Core Geochemistry
Type	From	To	Length	Description
Cu, Pb, Zn, Ag				
43176	17.36	20.36	3.0	1-2% py stringer l(1-2mm) in chloritic mafic .
43177	20.56	23.36	3.0	2-4% py stringer and pyrite blebs . Occasional cpy bleb
43178	75.9	78.9	3.0	1-2 % py in chloritic mafic. Trace cpy.
43179	78.9	81.9	3.0	1-2 % py in chloritic mafic. Trace cpy.
Whole Rock				
36206	113.3	113.6	0.30	Strong Silica/Sericite altered rhyolite (dyke?)