

**HOLE #: BJN00-01    Page 1 of 3**  
**Billtion Exploration Canada Ltd. / Celtic Minerals Ltd.**  
**Diamond Drill Log**

**DRILLED BY:** Petro Drilling (NQ)    **LOCATION:** L-10+00 E 5+50 S    **Grid Map Reference:** 12A / 16    **Claim #:** 7402M  
**Location:** UTM NAD 27, Zone 21    539748.04 E, 5417720.72 N (Handheld GPS)    **PROPERTY:** Buchans Junction North (Joe Glodes)    **LOGGED BY:** Trevor Rice    **DATE STARTED:** 06/05/00  
**DATE COMPLETED:** 06/07/00    **DATE LOGGED:** 06/25/00    **TOTAL Meterage:** 169.78 m    **AZIMUTH:** 138°    **Dip of Hole at: Collar** -50° → 138°    **at:** 169.78 m -50° → 133.5°  
NOTE: Geochem sheet at back / Casing left in hole

| FROM   | TO      | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| 0      | 10.88 m | Overburden<br>~ 20 cm casing above surface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 10.88  | 104.00  | <p>Mafic Tuff</p> <p>Dark to light green and olive green weakly-magnetic mafic tuff. Massive to laminated in appearance. Where visible fabric at 75-85° to c.a.</p> <ul style="list-style-type: none"> <li>- Strong epidote alteration pervasive throughout unit. Appears as patchy blobs (1-5 cm) calcite filled amygdules (1-2 mm), and calcite in f.g. groundmass parallel to fabric.</li> <li>- Locally carbonate altered (&lt; 3%); appears as tiny veinlets and stretched to well-rounded crystals</li> <li>- Chloritic alteration along tiny fracture planes</li> <li>- Lower contact consider a facies change</li> </ul> <p>Mineralization</p> <ul style="list-style-type: none"> <li>· Sparse local stringer and disseminated pyrite, Usually not exceeding 1-2% over any 1.0 m section</li> <li>· Rare chalcopyrite blebs noted</li> </ul> <p>From 12.28-15.13 m</p> <ul style="list-style-type: none"> <li>- Light grey plag phenocrystic rhyolitic dyke? Trace disseminated pyrite and local thin discontinuous pyrite stringers (tr – 1%) Upper contact sharp at 60° to c.a.</li> </ul> <p>Discontinuous 0.4cm pyrite stringer in fabric at contact. Lower contact sharp at 80° to c.a.</p> <p>At 44.50 - 5cm gouge seam at 85° to c.a.</p> <p>From 55.0-61.05m</p> <ul style="list-style-type: none"> <li>· Mafic tuff has strong fabric. Minor quartz and carbonate flooding (5%) 1-2% stringer pyrite veinlets parallel to fabric and intermixed with carbonate alteration. chalcopyrite flakes noted at 60.35 m</li> <li>· Fault gouge noted in section 58.98 – 60.35 m a high angle to c.a. (~80°).</li> </ul> <p>From 61.05-64.74</p> <ul style="list-style-type: none"> <li>· Black grey mafic dyke. Moderately magnetic</li> <li>· Well-rounded mafic phenocrysts altered to chlorite</li> <li>· Upper contact chilled at 80° to c.a.</li> <li>· Lower contact chilled at 15° to c.a. Minor quartz and epidote veining at lower contact (fault related)</li> </ul> <p>From 64.74-73.15m</p> <ul style="list-style-type: none"> <li>· Well developed fabric in mafic tuff. Minor quartz – chlorite flooding</li> <li>· Section has pyrite stringer mineralization , two local sections up to 3 cm contain 30% sulphide (py)</li> </ul> <p>From 94.17-94.20</p> <ul style="list-style-type: none"> <li>· Maroon coloured semi-iron formation (30% magnetite)</li> </ul> <p>From 94.2-102.3</p> <ul style="list-style-type: none"> <li>· Two pyrite stringer noted in top 0.6m. Upper stringer is 4.5 cm (70° to c.a.) long and associated with carbonate/ chlorite flooded over 20 cm. Stringer is only 1-2 cm wide</li> <li>· Trace disseminated to local thin stringer py rest of interval</li> </ul> <p>From 102.3-102.6</p> <ul style="list-style-type: none"> <li>· Thin felsic dyke</li> </ul> |
| 104.00 | 169.78  | Mafic Tuff                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Green-dark grey locally magnetic mafic crystal tuff.

- Unlike upper unit, rock is more massive and uniform
- Rock can be fine grained or contain well-rounded to subrounded plag phenocrysts. Phenocrysts can be 1-3 mm in size and be replaced with calcite/carbonate. Matrix is generally fine grained and bright green in color. Usually mafics altered to chlorite.
- Interval best defined as alternating sections of fine grained and plag phenocrystic tuff
- Fabric at 75-85° to c.a.
- Little epidote alteration
- Suspect quartz phenos?

Mineralization

- Sparse. Usually not more than trace -2% over any 1 m section. Consists of disseminated and thin stringer pyrite. Rare cpy blebs

From 115.94-119.39m

- Light grey massive plag, phyric rhyolitic dyke. Both contacts sharp at 80° to c.a.
- Trace -1% disseminated and thin (<2mm) stringer pyrite.

From 123.98-128.71

- Felsic dyke like above
- Trace disseminated pyrite
- Both contacts sharp. Upper contact at 70° to c.a. Lower contact at 50° to c.a.

From 137.35-141.24

- Cg sediment? Mafic fragmental
- Fragments consist of calcite, plag, and possibly quartz. Fragments are oblong shaped (1-2cm)
- Groundmass is green coloured and mafic-looking (chlorite alteration). Trace to 1% disseminated and blebby pyrite in groundmass.
- Contacts gradational. May be coarsing downhole

From 141.64-142.24

- Black grey aphyritic moderately magnetic dyke
- Both contacts chilled at 50° to c.a.

From 145.36-145.56m

- Diabase dyke. Needle-like (1-3m) laths of plag. Moderately magnetic.
- Black in colour

| Hole ID: BJN 00-01 |        | Company: Billiton / Celtic Minerals |        | Core Geochemistry                                                                      |
|--------------------|--------|-------------------------------------|--------|----------------------------------------------------------------------------------------|
| Type               | From   | To                                  | Length | Description                                                                            |
| Cu, Pb, Zn, Ag     |        |                                     |        |                                                                                        |
| 43151              | 10.88  | 12.28                               | 1.4    | Mafic tuff – local stringer pyrite (< 2mm thick) 2%                                    |
| 43152              | 12.28  | 15.13                               | 2.85   | Felsic dyke – trace disseminated py                                                    |
| 43153              | 55.05  | 58.05                               | 3      | Epidotized laminated mafic tuff – local thin stringer pyrite ~1% (loc. 2%)             |
| 43154              | 58.05  | 61.05                               | 5      | As above                                                                               |
| 43155              | 64.74  | 67.74                               | 3      | Laminated mafic tuff – pyrite stringers – 2 @ 3cm each (30% sulphides)                 |
| 43156              | 67.74  | 70.15                               | 2.41   | As above – thin py stringer – 1%                                                       |
| 43157              | 70.15  | 73.05                               | 3      | As above – thin py stringer trace – 1%, 2 cm py stringer (40% sulphide) @ 72.9 m       |
| 43158              | 78.28  | 81.28                               | 3      | Laminated mafic tuff (little epidote) = local py stringers ~1%                         |
| 43159              | 94.27  | 97.2                                | 3      | Mafic tuff – 2 py stringer and disseminated py (3cm (50%py) stringer and 1cm stringer) |
| 43160              | 97.2   | 99.3                                | 2.1    | Mafic tuff – thin stringer and disseminated py – 1%                                    |
| 43161              | 99.3   | 102.3                               | 3      | As above                                                                               |
| 43162              | 115.94 | 117.44                              | 1.5    | Felsic rhyolite – trace to 1% disseminated and stringer pyrite                         |
| 43163              | 117.44 | 119.39                              | 1.95   | Felsic rhyolite – disseminated py – trace                                              |
| 43164              | 137.35 | 139.35                              | 2      | Sediment? Mafic fragmental – 1-2% blebby py                                            |
| 43465              | 139.35 | 141.24                              | 1.89   | As above                                                                               |
| 43166              | 158.82 | 161.82                              | 3      | Plag phyrlic mafic tuff – 1-2% stringer and disseminated pyrite                        |
| 43167              | 161.82 | 164.82                              | 3      | Plag phyrlic mafic tuff – 1% disseminated pyrite                                       |
| 43168              | 166.78 | 169.78                              | 3      | As above – with tiny (< 2m) stringer pyrite                                            |
|                    |        |                                     |        |                                                                                        |
| <b>Whole Rock</b>  |        |                                     |        |                                                                                        |
| 36201              | 127.3  | 127.6                               | .303   | Felsic rhyolite – dyke?                                                                |
| 36202              | 165.51 | 165.81                              | .30    | Mafic tuff? Chloritized felsic.                                                        |