

**Billiton Exploration Canada Ltd.
Diamond Drill Log**

PROJECT: Buchans Junction **DRILLED BY:** Petro Drilling **DATE STARTED:** July 25, 1999 **AZIMUTH:** Vertical **LOCATION:** 78 + 00E 91 + 50 E **HOLE #:** BJ-99-02

PROPERTY: **LOGGED BY:** Barry Greene **DATE COMPLETED:** July 28, 1999 **DIP:** Vertical

SHEET #: 1

LICENCE: 6167M **CORE SIZE:** NQ **TOTAL DEPTH:** 183.0m

FROM Au	TO	DESCRIPTION	SAMPLE #	FROM	TO	LENGTH	%REC	Cu	Pb	Zn
0	6m	Overburden casing								
6	14.17m	Mafic dyke – dark green, badly broken and fault gouge - contacts not preserved. - gouge core angles @ 10-20 degree TCA								
13.17	22.45m	Laminated and massive chert / siltstone light olive green, laminated and massive, siliceous. - bedding angles @ 80-90 degree TCA - strong fracturing fault breccia and gouge with badly broken core from casing to 22.56m - tr. py locally - brittle healed fault fractures in chert / siltstone sequence to 20.56m. - sharp basal contact on broken pieces of core. - 20.3m – bedding scar marks indicate younging downhole.								
21.45	166.36m	Hematitic Mafic flow Maroon to red, strongly hematitic. - amygduloidal with 1-2mm to 8mm round calcite filled amygdules. - 24.84 – 26.78m – Interflow or interpillow arkose consisting of fine grainy rock and salt and pepper texture. 30% white qtz grains, 30 – 40% hematitic grains and feldspar grains. General impression of graded bedding indicates coarsening upward sequence or younging downhole. - no mineralization or hydrothermal alteration. 68.14 – 75.31m - 50-60% light green epidote alteration along fractures, brecciation and with calcite-epidote veins orientated @ 5 degree TCA.								

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77.27 - 77.56m - dark green, px. phyric mafic dyke. sharp contacts @ 45 degree TCA at top and 80 degree TCA at the base. Weakly epidote altered chill margins.

84.0 - 84.29m - dark green mafic dyke. Fine grained px. phyric. Broken upper contacts, 70 degree basal contact.

92.91 - 100.90m - Alternating green and hematized calcite amygdular mafic flow. The green intervals may in part be dykes, but well defined contacts or chill margins are not easily resolved.

98.55 - 98.82m Mafic (diabase) dyke... broken upper contact, nebulous basal contact.

100.60 - 101.86m - fine, granular arkosic wacke. Akin to interval higher in hole between 24.84 - 26.78m. Light reddish - maroon hematite hue due to granular lithic hematitic content. upper contact @ 35 degree TCA, basal contact @ 65 degree TCA.

142.47 - 143.01m - Apple green, bleached late mafic dyke. Plag. phyric with plag xtols to 2mm and altered to sericite. sharp contacts @ 85 degree TCA

161.18 - 162.0m - Late mafic dyke ... sharp contacts at 85 degree TCA. Not bleached as dyke above between 142.47 - 143.01m.

165.36 183.0m Brecciated Hematitic Basalt

- Subround to subangular unsorted, ungraded. Brecciation may be hyaloclastic and without any re-sedimentation.
- Consists of tiny <1cm to 10cm size fragments of red to maroon, amygdoloidal hematitic basalt with a matrix support. Matrix consists of light green chlorite / sericite with 5-10% amorphous creamy white specks of leucoxene.
- No hydrothermal alterations or mineralization to bottom of hole

183.0m - END OF HOLE