

Diamond Drill Log

PROJECT: Buchans Junction DRILLED BY: Petro Drilling DATE STARTED: August 2, 1989 AZIMUTH: 150° LOCATION: 90+00E 110+00N HOLE #: BJ 99-04

PROPERTY: LOGGED BY: Barry Greene DATE COMPLETED: August 4, 1999 DIP-85° SHEET #: 1

LICENCE: #167M CORE SIZE: NO DEPTH: 254.80

TOTAL

[illegible]

31.25 @ 37.00m @ mottled to variegated inhomogenous pink potassic
alteration progressing along pervasive microfracture network.
Locally grey microfractures emanating py.

37.00

60.40m

Felsic to intermediate buff.
Light to medium green tuffaceous fragmental containing highly
elongated creamy white felsic frags. locally streaky and approaching
hyalinitic texture e.g. 48.30 @ 48.80m.
- light yellow sericitized long tube pumice locally.
- 30 @ 75cm intervals of strongly siliceous beige to tan-brown rhyolite
(clasts / dykes?) contains 2-3% diorite and stringer py.

52.60 @ small dragfold BFA @ 0 degree TCR

54.20 @ 55.30m another fold causes using in foliation to 0-10 degrees TCR

60.40m @ sharp conformable contact @ 30 degrees TCR

60.48

106.47m

Rhyolite and brecciated rhyolite
Light green to medium green to tan-brown.
Variable altered, deformed (faulted) and pyritic.

64.20 @ 68.32m - chl @ sil with 2% diorite, stringer and
clots of py. Fault brecciated.

68.57 - 83.85m - zone of faulting and tectonic cataclastic brecciation running
along core axis.

- predominantly dark green chloritic fault bx. matrix and white
milky chaotic qtz. flooding.
- very blocky section

82.00 @ 83.85m pinkish grey / green brecciated interval with 1 cm
subround, white silice clasts

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83.85 - 90.25m bleached, light green @ tan rhyolite?

- 1% diorite, py.
- locally 50-60cm of mod. pyritic microfractures.
- local fault related cataclastic brecciation

88.25

106.47m

Light green and pale off-white
- siliceous and locally sericitic
- common dark chloritic @ pyrite filled microfractures
to 3-5% locally
- resescent of early stage Pyrite Bohl boswork zone.
- tr.cpy.sph
- likely a rhyolite but tiny (<1mm) qtz and plag are rare.

106.47

120.15m

Large quartz rhyolite
Mottled, pinkish-grey mafic

- 2-4mm to >1cm size white silica phenocrysts? amygdules?
- pink alteration in matrix to large quartz.
- gradational upper contact over 10-15cm
- sheared / faulted basal contact
- tr. dissemin. py.
- minor tiny specks of cream coloured mineral

120.15 126.27m Rhyolite Equivalent lithology but lacking the prominent quartz.

- more bleached and sericite altered
- minor to tr. pyrite. Basal contact @ 20degrees TCR

126.27 133.82m Akin to 106.47 @ 120.15m but more potassic alteration (pink colour)

- local bright green speck of fuchsite to 3mm size
- tr. pyrite

133.02 144.70m Felsic to intermediate tuff

- light to medium green granular tuff containing 1-2mm qtz. eyes and sericitic pumice.
- locally beige and looks like a fine siltstone
- contacts between variable textures from granular tuff to f.g. siltstone are orientated @ 15 degrees TCR . reflecting a flattening of the fabric down hole.

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144.70 150.77m Large Qtz. Rhyolite 144.70 @ 157.00 @ variably altered large qtz rhyolite

- dark green to beige to light pink
- characteristic qtz. eyes up to 1cm diameter.
- mod. to good sericite alteration and locally good siliceous alteration
- inhomogeneous mod. to good foliation
- light beige / pink where better altered
- green where less altered
- minor to tr. py. throughout
- rhy. intercalated with sericitic beige tuff having much smaller 1-2mm at qtz. eyes.
- tr bright green fuchsite.

157.00 158.77m mod. to strong near-epidote altered felsic tuff

- good foliation @ 60 @ 70 degrees TCR
- weak shear at upper contact
- basal contact is again somewhat nebulous with no real lithological change but rather a change in alteration style.

158.0 @ 158.10m - light grey mudstone or siltstone

158.77 160.00 Intermediate to mafic ash tuff / tuffaceous siltstone

Medium to dark green. fine grained, aphyric ash tuff

- faintly graded sequence. Fining downhole
- weak hematite along fractures except for top two meters

which is strongly hematitic and contains fault gouge @ 160.1 @ 160.73m.

entire hematitic interval contains chaotic quartz veining to 101.05m.

Gauge at 10 N 40 degree TCR

- In places this interval does not appear to be graded and is just a very fine grained green mafic to inter. flow? (not amygdular)

199.08 199.46m

Mafic flow

Variably green N Maroon, amygdular mafic flow

- massive with 100, 3-5mm epidote veinlets throughout
- amygdules are 1as N 0mm and calcite filled.
- unmineralized / unaltered N..fresh
- hematitic interflow material

199.46 224.18

Mafic to intermediate tuff

Maroon at top to 200.92m then sharp end to hematite at

50 N55 degree TCR reflecting end of a tuffaceous mafic agglomerate.

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200.92 N to bottom, medius to dark green mafic sequence having tuffaceous interbeds separated by very fine grained, green non-descript mafic ash tuff / flow.

- entire sequence characterized by 5-8% ribbonny calcite veinlets and fracture fillings.
- minor folding (e.g. 204.7m) with FA @ 20 N25 degree TCR
- becomes less tuffaceous looking and more like a flow over bottom half of interval.

224.18 254.25m

Siliceous Rhyolite (new rhy N not like others)

Pale green, strongly siliceous rhyolite with sparse 1as quartz sanesoritized plagi.

- blotchy light tan-brown alteration to 229.48m
- 1% hairline fractures with black mineral

229.48 N 245.22m strongly siliceous and weakly sericitic

- 1-2 % discrete black chlorite ~~masses~~ and fracture fillings -- also 1% white calcite veinlets at random orientation.
- more common 1-2as qtz. and plagi and Kspar phenocrysts
- becomes slightly pink with increasing K-spar crystals to 2-3% near bottom and start to take on intrusive characteristics.

245.22 254.25m

245.22 N 254.25m N variably hematized to bleached cherty rhyolite.

- again sparse qtz, phenocrysts like 224.18 N 229.48m
- not mineralized
- sharp chilled? basal contact N 45 degree TCR

254.25 254.00

Rhyolitic intrusive

Medium olive green, intrusive textured rock with

equigranular textured Qtz, Plag, K-spr
not mineralized. Weak to moderate peritectic matrix to stals.
254.80m - END OF HOLE