

**GRID:** 11+090.5 E

**HOLE:** RCK-03

**COORDINATES:** 9+382N

**BEARING:** 110°

**ANGLE:** -75°

**DEPTH:** 284 FEET

**FROM**

**TO**

**DESCRIPTIONS**

0'

112'

TUFF?  
As in RCK - 02.

112'

117½'

QUARTZ RICH ROUNDED TO SUBROUNDED  
PEBBLES

The very occasional material retrieved was all similar, rounded to subrounded, silicified, brecciated and of local volcanic aspect. Very difficult in advancing through this section.

117½'

158'

HYDROTHERMAL BRECCIA

Composed of variable clasts:

- A) Qtz. eye rhyolite porphyry
- B) Fine grained qtz. breccia
- C) Gray-brown rhyolite tuff
- D) Altered mafic porphyry dike?

Clasts vary from several centimetres to as much as several feet, an example being approx. 2 ft. of dike rock starting at 121½' and a 4 ft. section of gray qtz. Breccia (142'-146'). The latter may not be a clast - but a form of vein breccia. Breccia matrix is dark grey to black, fine grained and incorporating various clasts to 1 cm. It was in essence the fluid initiating hydraulic fracture - incorporating traversed material. Silicification is general - though certain fragments are more intensely replaced, exemplified well at 151' - where a flow banded rhyolite porphyry clast (8 cm) is an example of such.

Logged by

*Cathy L. ...*

Hole Number:

*Rck03*

Sheet Number:

*1*

FROMTODESCRIPTIONS

151½': Amethyst veining and replacement.

Carbon section:

130' - 132'

140' - 141'

150' - 150½'

Pyritization:

1-2% - with certain clasts preferred.

Core recovery: 100% - except 142' - 145' at 35%.

158'                      159½'

MASSIVE CARBON

Most likely a degraded pyrobitumen.

159½'                      165'

HYDROTHERMAL BRECCIA -CLAY RICH

Medium grained carbon and clay rich. Has a qtz. granular surface texture due to the presence of clay.

165'                      183½'

QUARTZ BRECCIA

Tan to white clay rich massive, fine grained quartz breccia. Most quartz is of a light blue cast when wet.

Pyrite: 1-2%

Veining: 172½' - 25° CA

177' - 45° CA

Subtle, thin qtz. veinlets occur throughout the section - many broken up but the vein trend still obvious.

182½' - 183½': Carbonaceous material to 50% pervades breccia matrix.

183½'                      186'

MASSIVE CARBON

As 158' - 159½': Core recovery 25%.

Logged by: Orin C. Grogan

Hole Number: 12603 Sheet Number: 2

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTIONS</u>
186'	192'	<p>HYDROTHERMAL BRECCIA</p> <p>Quartz eye rhyolite porphyry is cut by a fine grained brecciating matrix. This matrix material makes up approx. 10% of the section - occurring as narrow fracture fillings and occasional blow-outs. The section is very siliceous with at times visible but subdued fine quartz replacement. The porphyry is of a green cast, with at times a foliation that may be due to relict flow banding. Pyrite to 2% together with widespread carbon particles.</p>
192'	227'	<p>QUARTZ EYE RHYOLITE PORPHYRY</p> <p>192' - 204': Very siliceous - essentially as described in section 186' - 192', only has not been hydrothermally brecciated.</p> <p>204' - 227': The original porphyry texture is almost totally destroyed by quartz replacement, much of it of a dark gray cast. The foliation noted at 186' - 192' is also absent - occasional appearances of what may be breccia clasts. Notable is the presence of dark gray quartz spherules - up to 2½ cm. in diameter. These rounded features preferentially host pyrite. Coming free under drill pressure - these marble like spheroids create a drilling problem, with extreme wear on drill bits. Recovery is also made difficult.</p> <p>Core recovery:           204' - 206' - 50%                                    206' - 208' - 30%                                    208' - 210' - 50%                                    217½' - 220' - 65%                                    223' - 226' - 14%                                    227' - 228' - 50%</p>
227'	228'	<p>HYDROTHERMAL BRECCIA - CLAY RICH</p> <p>As 159½' - 165½'.</p>

Logged by: John Corby Hole Number: Reh Sheet Number: 3

<u>FROM</u>	<u>TO</u>	<u>DESCRIPTIONS</u>
228'	231'	<p>SILICIFIED QUARTZ BRECCIA (HEMATITE)</p> <p>Variable shaped quartz clasts to 1 cm. A notable mottled colour equally of orange-red and light green throughout the entire section. Appears the colour is within quartz - though at times note the orange-red streaked by drill bit. Upper contact with breccia distinct at 80°C. Vein?</p>
231'	248½'	<p>QUARTZ BRECCIA</p> <p>Section is variably green to dark gray throughout. Abundant dark gray quartz replacements of spheroidal form to 2½ cm. are present. I suggest these are a form of subsurface accretionary lapilli formed within a fluidizing medium. Somewhat distinct from that noted from 204' - 207' - these spheroidal forms consist of a central qtz. eye porphyry crystal surrounded by what appears to be a silicified rock flour of porphyry ground mass. They carry significantly more sulphides than the surrounding quartz breccia mass. Subtle quartz replacement features noted throughout with at times thin vein quartz.</p> <p>237½': Angular carbonaceous fragment incorporated within breccia.</p>
248½'	284'	<p>HYDROTHERMAL BRECCIA</p> <p>Composed of variable clasts:</p> <ul style="list-style-type: none"> <li>a) Quartz eye rhyolite porphyry (some flow banded)</li> <li>b) Fine grained rhyolite tuff (minor).</li> <li>c) Mafic porphyry dike (altered).</li> </ul> <p>Clasts outside the finer grained brecciating matrix vary from ½" - &gt;1 foot.</p> <p>This hydrothermal breccia is distinct in that the brecciating medium is composed almost entirely of finely fragmented quartz rhyolite porphyry. Silicification is of a light gray cast and intense throughout with no clay rich sections which result in a broken up, rough surface texture.</p>

Logged by: John Corley Hole Number: DC203 Sheet Number: 4