

DIAMOND DRILL LOG

335027

Drill hole: GL1
Co-ordinates
 Easting: 584684mE
 Northing: 5364662mN
Azimuth: 057 degrees magnetic
Dip: -55 degrees
RL: 39m
Final depth: 46.0m
Hole commenced: 10th January 1996
Hole completed: 17th January 1996
Driller: Nick Poltock
Rig: Custom built man portable
Core size: 0m to 23.7m TT55, 23.7m to E.O.H. TT45
Logged by: Grant MacDonald

Summary: The hole intersected massive medium grey to beige green siltstones and lesser medium grey shaley siltstones with thermal metamorphic 'spotting' often visible. A zone of quartz veining was intersected between 24.8m and 29.5m with the main Royal Tasman No.1 reef intersected at the expected depth between 38.1m and 40.3m. There is only trace sulphide in only some of this quartz veining.

Log:
 0m to ~0.5m No core
 0.5m to 7.3m Weakly weathered siltstone with 'spotting' indicating thermal metamorphism. 'Spots' are generally around 2mm in diameter. At 5.2m is a minor puggy fault associated with a 2cm thick quartz vein.
 7.3m to 11.4m Medium grey moderately siliceous siltstone with mottled appearance due to 'spotting'. Below 8.5m is an increase in quartz veining. These veins are extensional quartz-clay (after sericite?) and are generally at low angles to the core axis with the fibre orientation perpendicular to the orientation of the vein.
 11.4m to 13.8m Beige green zone apparently due to increased quartz veining. Some quartz veins >5cm can be seen to be due to silica flooding of siltstone. There is no sulphide associated with this veining.
 13.8m to 17.0m Pale grey siltstone with occasional minor zones of silicification/veining. There are no sulphides but some silicification/veining contains ferruginous fractures.
 17.0m to 18.3m Medium grey chloritic (?) shaley siltstone with a gross banded texture at ~50degrees to the core axis. The banding is due to carbonate alteration of the shaley matrix around metamorphic

	'spots'. The core becomes beige green downhole. There is a minor puggy/broken core zone at ~15.0m.
18.3m to 23.0m	Light grey to beige green siltstone with mottled appearance in parts due to 'spotting'. There is a broad moderately puggy zone of broken core from 22.1m to 23.3m.
23.0m to 31.0m	Beige green siltstone with a number of significant quartz veins. The siltstone between these larger veins is cut by extensional quartz veins <10mm. None of these veins are mineralised but occasionally contain a dark mineral (chlorite?) along with the quartz. Major quartz veins are listed;
24.8m to 25.0m	Vein with trace pyrite on fracture surfaces and minor chlorite(?).
27.15m to 27.40m	Quartz vein with no sulphides or chlorite.
27.90m to 29.00m	Quartz vein with no sulphides but occasional ferruginous fractures and minor chlorite(?).
29.00m to 29.50m	Beige green siltstone with ~40% extensional quartz veining.
31.0m to 38.1m	Medium grey to beige green siltstone with only very minor quartz veining. Bedding at 33.5m is at 45 degrees to the core axis.
38.1m to 40.3m	Massive white quartz reef, interpreted to be the Royal Tasman No. 1 reef. The quartz is microcrystalline or 'marbly' in appearance and contains no sulphides. The upper contact with the wall rocks is sharp and discrete but in broken core. The lower contact is less discrete with occasional quartz veining in the wall rocks adjacent to the contact. 38.1m to 39.3m assayed 0.018 ppm Au. 39.3m to 40.3m assayed 0.023 and 0.021 ppm Au.
40.3m to 46.0m	Medium grey siltstone with occasional extensional quartz veins adjacent to the contact with the reef. The quartz contains no sulphides but minor chlorite (?). The siltstone near to this contact contains irregular, diffuse but distinct red patches to a few ten mm's across.
46.0m E.O.H.	