

Bore Details

The proposal is for the extraction of 30000kl per annum.

The bore to be used for the extraction is located on Lot 6 Repatriation Rd. Water from this bore will be sent to a 250000 ltr tank located on Lot 12 Foti Rd. The site for the tank is a raised level envelope which presently has a sea container located on it and the site requires no clearing. The tank dimensions are approx. 2m high by 15m diameter.

The rate of flow from the production bore will be restricted to 3750 l/hr (90000 l/ day).

A meter will be installed at the loading dock to record the water leaving the property. A meter is not required at the bore given that we will be metering the water leaving the property.

Bore log. The bore was installed approximately 30 years ago by Harrington Drilling who are located in Greenough. The bore is 48m deep. The depth to bedrock (granite) was 18m. A 150mm PVC casing (2x 6m plain and 1x6m slotted) was installed to bedrock and then cemented and sealed and then gravel packed. The bore was then drilled a further 30m into the granite basement rock and a 100 mm PVC casing was installed (1x6m plain and 4x6m slotted) into the basement rock. Then 18m of plain 100mm PVC continued inside the 150mm casing to the ground surface. The 150mm PVC casing was cemented to a depth of 3m into the bore to prevent surface runoff entering the bore hole.

The bore drilling log from 30 years ago is not very detailed. It describes a very shallow layer (< 1 m) of top soil alluvium over in situ weathered brown kaolinitic clay with intermittent quartz sands

Near the basement granite rock the kaolinitic clays contained more sand and fresh feldspars and this material contained some water which was in a permeable layer above the rock.

Further drilling into the basement rock (18m-48m) encountered hard rock and many broken fractures. These fractures contained significant quantities of water.

A monitoring bore is located approximately 1 m from the production bore.