



An Australian Government Initiative

# Groundwater Education Investment Fund Project

## Borehole Infrastructure Report

<b>Funding</b>	SuperScience	<b>Project</b>	SuperScience
<b>Borehole Type</b>	Piezometer/Monitoring BH	<b>Location</b>	Upper Maule's creek
<b>Unique Well ID</b>	ELMC02 (GW273265)	<b>Installed By</b>	NSW Office of Water
<b>Completion Date</b>	23/06/2012	<b>Depth Installed [m]</b>	14
<b>Drilled By</b>	NSW Office of Water	<b>Depth Drilled [m]</b>	14
<b>Monument Type</b>	Round Blue Swing Top	<b>Drilled Diameter/Method</b>	Rotary Hammer Tubex
<b>Monument Diameter/Width [mm]</b>	170	<b>Screen Depth [m]</b>	12.5-13.5m
<b>Top of Monument from GL [m]</b>	1.04	<b>Screen Type</b>	Slotted PVC
<b>PVC Casing to TOM [mm]</b>	-18	<b>Level of Bentonite [m]</b>	1-2
<b>Elevation (AHD71)</b>	356.135	<b>Casing Size/Type</b>	50mm PVC Class 18/32mmPoly
<b>Easting</b>	228683.0693	<b>SWL After Development [m]</b>	6.2
<b>Northing</b>	6627765.053	<b>Development Details</b>	Air lifted 2 hrs



Comments
<p>This borehole is situated within a multiple bore groundwater investigation site and located within a transect. This site is situated up stream from a major groundwater site and incorporates climate stations, video surveillance and auto sampling of flood events.</p>

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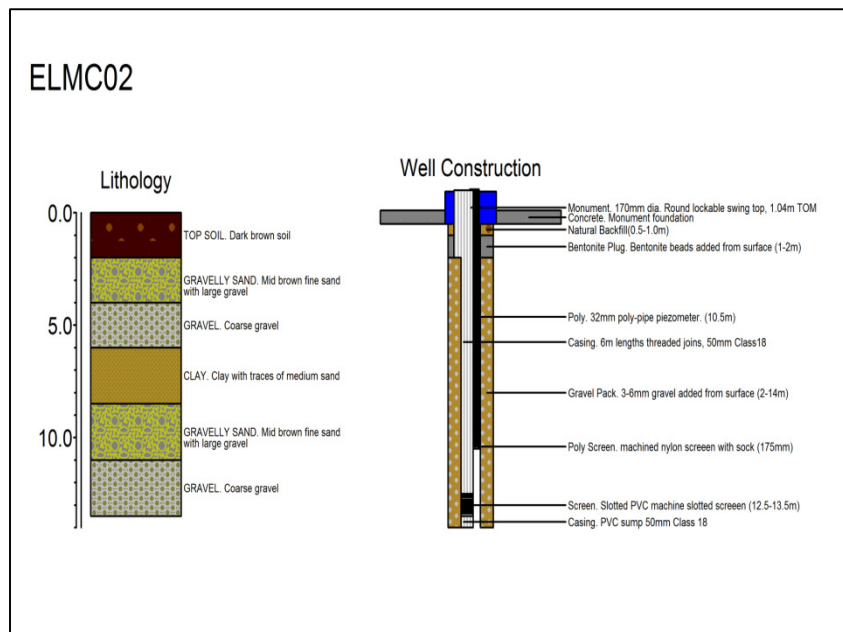


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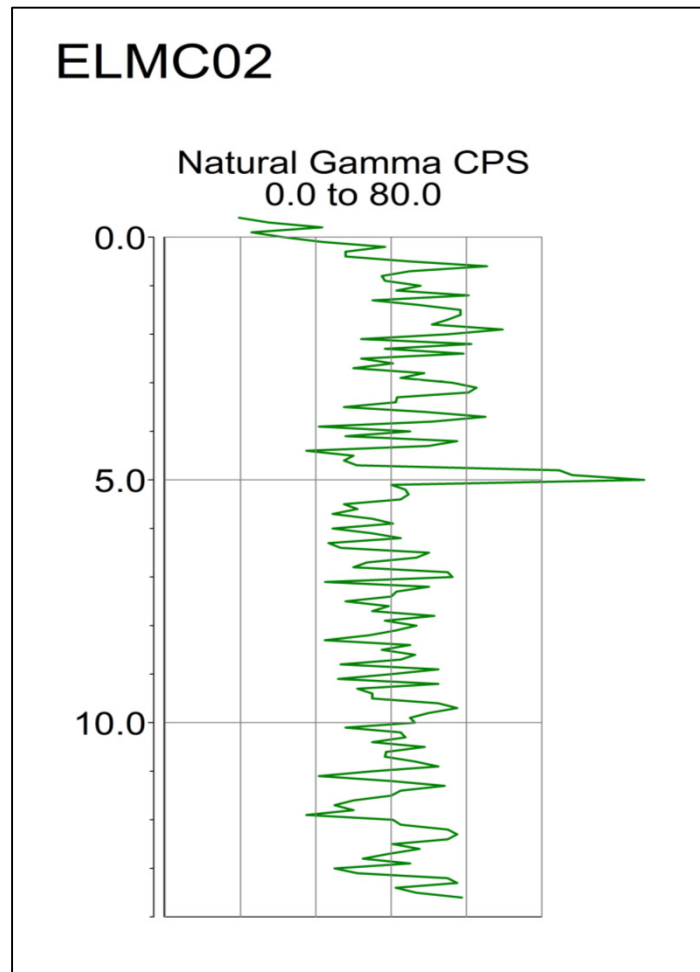
## Stratigraphic Bore Log

Samples of the drill cuttings were obtained during drilling of the borehole and stored for future reference. Standard borehole information is documented in the bore log below.



## Geophysics Log

The portable Geovista logging system was used to collect geophysical data from 13.5m to surface. The natural gamma sonde (NGRS) is predominantly used for qualitative evaluations of stratigraphic characteristics, argillaceous sediments and clay minerals.





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### Slug Test

A standard slug test was performed using a real-time water level logger and differential pressure using nitrogen to test the borehole permeability. The results of the slug test are to be shown graphically below. Full data sets are available from the report author.

### Groundwater Quality

Basic chemical analysis of the dissolved solutes and concentration of ions in the borehole have not yet been performed. The testing will include hydrogen ion activity (pH) and fluid electrical conductivity (EC). Data from the chemical analysis will be shown below.

Date	0/01/1900		Ca <sup>2+</sup>	0.00	[mg/L]
Time	0:00		K <sup>+</sup>	0.00	[mg/L]
SWL	0.00	[m]	Mg <sup>2+</sup>	0.00	[mg/L]
Field pH	0.0		Na <sup>+</sup>	0.00	[mg/L]
EC	0	[μS/cm]	Si	0.00	[mg/L]
Temp	0.0	[°C]	Cl <sup>-</sup>	0.00	[mg/L]
Alkalinity	0.00	[meq/L]	NO <sub>3</sub> <sup>-</sup>	0.00	[mg/L]
O <sub>2</sub>	0.00	[mg/L]	SO <sub>4</sub> <sup>2-</sup>	0.00	[mg/L]