



An Australian Government Initiative

Groundwater Education Investment Fund Project

Borehole Infrastructure Report

Borehole Type		Piezometer Monitoring Bore	Location	Wellington Research Station
Unique Well ID		WRS04	Installed By	Water Research Laboratory, UNSW
Completion Date		9th Dec 2009	Depth Installed	17 m
Drilled By		NSW Office of Water	Depth Drilled	17 m
Monument Type		Round-Blue-Swing Top	Drilled Diameter/Method	168 mm, Rotary Air
Monument Diameter/Width		140 mm	Screen Depth	9.5-11 m
T.O.M. offset from G.L. (Top of Open Monument)		1.140 m	Screen Type	Slotted PVC
PVC Casing to T.O.M. offset		-280 mm	Level of Bentonite	7-8 m
Elevation (AHD71)		288.115	Casing Size/Type	50mm Class 18
GPS Easting	(GDA94 Zone 55 Referenced to TS7236)	686831.266	SWL after Development	3.56 m
GPS Northing		6394280.002	Development Details	Air Lifted for 3 hrs several days after installation.
Project Comments: WRS04 is a single piezometer monitoring bore, strategically located in the alluvial ground alongside the river.				



WRS04 detailed elevation point



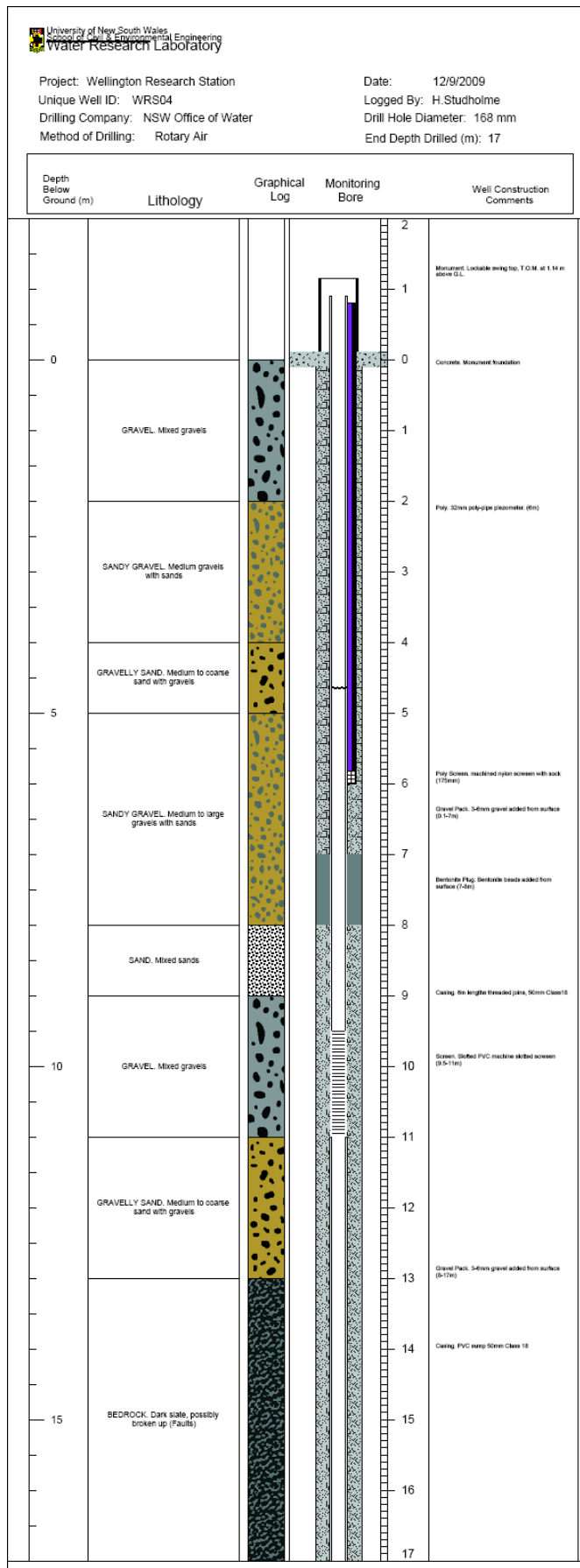
Map of Wellington Research Station

An Appendix includes Stratigraphic Bore Log, Geophysical Log, Slug Test & Chemical Analysis.

Infrastructure Report prepared by: Mr Samuel McCulloch	Contact Details:	Checked by: Prof Ian Acworth
	s.mcculloch@wrl.unsw.edu.au Office : 02 807 19871	

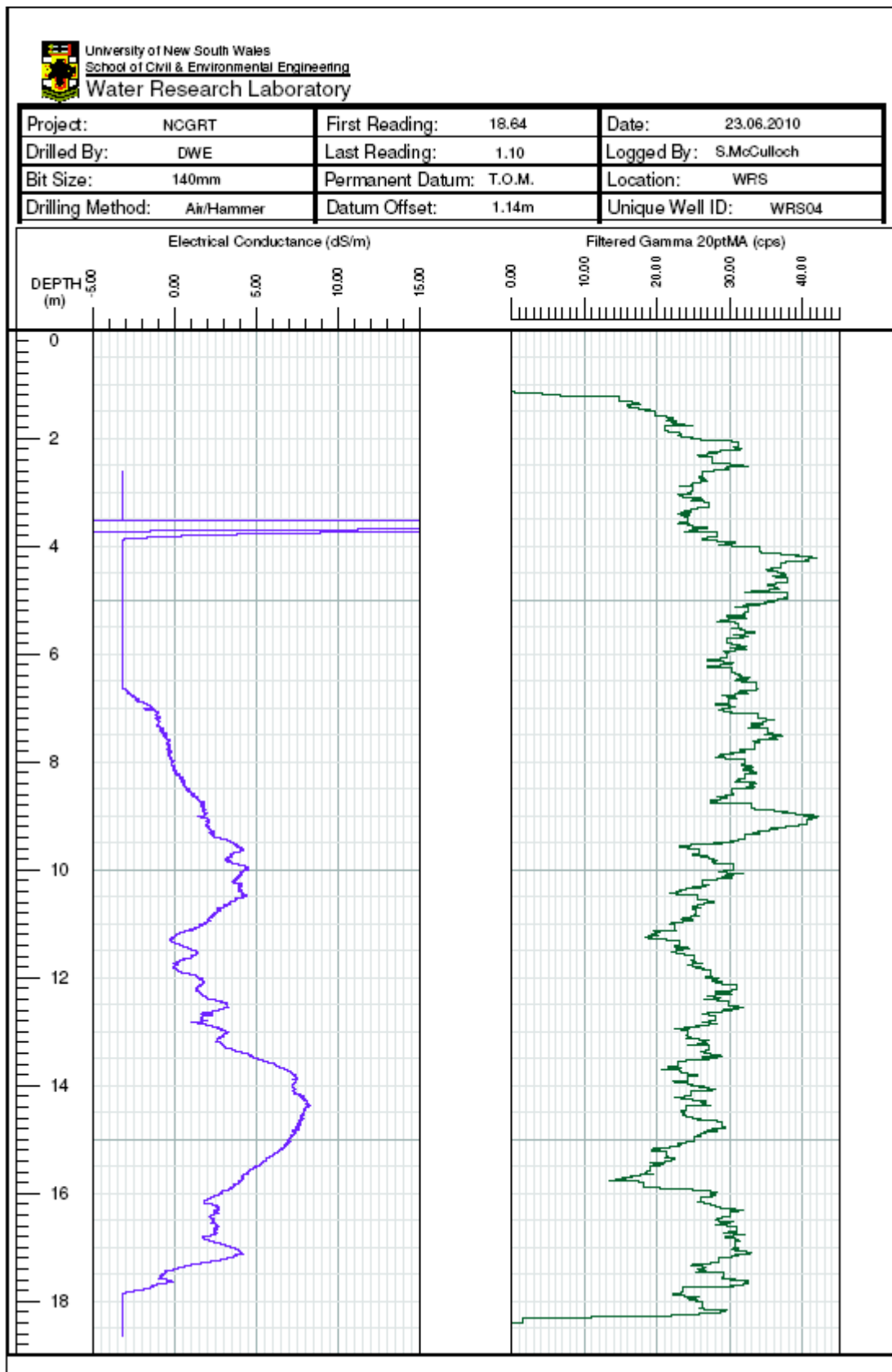
Stratigraphic Bore Log

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.



Geophysical Log

The portable Geovista logging system was used to collect geophysical data from 24m to surface. The Electrical Conductivity sonde (EM39) is used to obtain quantitative information on dissolved salts and apparent bulk conductivity information. The natural gamma sonde (NRGS) is predominantly used for qualitative evaluations of stratigraphic characteristics, argillaceous sediments and clay minerals. The Geophysical log for WRS04 is displayed below.



Slug Test

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

