Bore construction report (Form A)

WaterNSW

You can enter and submit this report directly via our online drillers portal.
Keep electronic records by registering at driller.waternsw.com.au

Section 1 Driller's details

Driller's licence number	
Class of licence	
Driller's name	
Assistant driller	
Contractor	

New bore ☐ Replacement bore ☐

Deepened ☐ Enlarged ☐

Reconditioned ☐ Other (specify) ☐

Final depth **m**

Section 2 Approval details

Work approval number	
Name of approval holder	
Intended use	
Completion date	

Section 3 Drilling details

From (m)	To (m)	Hole diameter (mm)	Drilling method (See code table 3)

Section 4 Water bearing zones

From (m)	To (m)	Thickness (m)	SWL (m)	Estimated yield (L/s)		Test method	DDL at end of test (m)	Duration		Salinity (Conductivity or TDS)	
				Individual aquifer	Cumulative	See code 4		hrs	min	Cond (µ/S/cm)	TDS (mg/L)

Section 5 Casing/Liner details

Material Code 5	OD (mm)	Wall thickness (mm)	From (m)	To (m)

Method Fixing Code 5

Casing support method	See code 5					
Type of casing bottom	See code 5					
Centralisers installed?*	☐ Yes	☐ No	(*Indicate on sketch)			
Sump installed?	☐ Yes	☐ No	From	**m**	To	**m**
Pressure cemented?	☐ Yes	☐ No	From	**m**	To	**m**
Casing protector cemented in place?	☐ Yes	☐ No				

Section 6 Water entry design

General							Screen	Slot details		
Material Code 5	OD (mm)	Wall Thickness (mm)	From (m)	To (m)	Opening type See code 6	Fixing See code 5	Aperture (mm)	Length (mm)	Width (mm)	Alignment See code 6

Section 7 Gravel pack

Type	Grade	Grain size (mm) From	Grain size (mm) To	Depth (m) From	Depth (m) To	Quantity Litres	Quantity m^3
Rounded ☐	Graded ☐						
Crushed ☐	Ungraded ☐						
Bentonite/Grout seal ☐ Yes ☐ No							
Method of placement of gravel pack	See code 7						

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Bore construction report (Form A)

Work approval number

Section 8 Bore development

Chemical used for breaking down drilling mud? ☐ Yes ☐ No						Name							
Method	Bailing/Surging ☐		Jetting ☐		Airlifting ☐		Backwashing ☐		Pumping ☐		Other		
Duration		hrs		hrs		hrs		hrs		hrs		hrs	

Section 9 Disinfection on completion

Chemical(s) used	Quantity applied (Litres)	Method of application

Section 10 Pumping tests on completion

Test type		Date	Pump intake depth (m)	Initial water level (SWL) (m)	Pumping rate (L/s)	Water Level at end of pumping (DDL) (m)	Duration of test (hrs)	Recovery		
								Water level (m)	Time taken hrs	Time taken mins
Multi stage (stepped drawdown)	Stage 1									
	Stage 2									
	Stage 3									
	Stage 4									
Single stage (constant rate)										
Height of measuring point above ground level					m	Test method		See code 4		

Section 11 Work partly backfilled or abandoned

Original depth of work		m	Is work partly backfilled? ☐ Yes ☐ No			
Is work abandoned? ☐ Yes ☐ No			Method of abandonment	Backfilled ☐	Plugged ☐	Capped ☐
Has any casing been left in the work? ☐ Yes ☐ No			From	m	To	m

Sealing/fill type	From depth (m)	To depth (m)	Sealing/fill type	From depth (m)	To depth (m)
See code 11			See code 11		

Section 12 Site chosen by

Hydrogeologist ☐ Geologist ☐ Driller ☐ Diviner ☐ Client ☐ Other

Section 13 Location

Lot No		DP No		
Work location co-ordinates	Latitude		Longitude	
GPS ☐ Yes ☐ No		AMG/AGD ☐ or MGA/GDA ☐		(See explanation)

Please mark the work site with "X" on the CLID provided map.
Indicate also the distances in metres from the (2) adjacent boundaries, and attach the map to this Form A package.

Section 14 Signatures

Driller's name	Driller's signature	Date
		/ /
Approval holder name	**Approval holder signature**	**Date**
		/ /

Bore construction report (Form A)

Work approval number

Section 15 Driller's rock/Strata description (Lithology)

Depth		Description				Work construction sketch
From (m)	To (m)	1. Rock type	2. Colour	3. Grain size	4. Texture	
		See code 15				
0						

Section 16 Work not constructed by drilling rig

Method of excavation Hand dug ☐ Back hoe ☐ Dragline ☐ Dozer ☐ Other

Depth (m)	Length (m)	Width (m)	Diameter (m)	Lining material	Dimensions of liner (m)	From depth (m)	To depth (m)

Section 17 Please attach copies of the following if available

Geologist log ☐ Yes ☐ No
Geophysical log ☐ Yes ☐ No
Laboratory analysis of water sample ☐ Yes ☐ No
Sieve analysis of aquifer material ☐ Yes ☐ No
Pumping test(s) ☐ Yes ☐ No
Installed pump details ☐ Yes ☐ No

Please submit forms to customer.helpdesk@waternsw.com.au or send to **WaterNSW, PO Box 398, Parramatta NSW 2124**

Code tables

Section 3 Drilling method			
1	Auger - Hollow Flight	**9**	Rotary - Percussion - (Down Hole Hammer)
2	Auger - Solid Flight	**10**	Rotary - Percussion - Foam injection
3	Cable Tool - Drill and Drive Casing	**11**	Rotary - Reverse circulation - Air
4	Cable Tool - Mud stabilised	**12**	Rotary - Reverse circulation - Mud
5	Rotary Air	**13**	Rotary - Coring
6	Rotary - Air/foam	**14**	Jetted - Air
7	Rotary - Mud	**15**	Jetted - Water
8	Rotary - Water	**16**	Other - See page 2, No 11

Section 4 Water bearing zones							
Test method				**Flow measuring device**			
1	Airlift	**6**	Pump - Helical Rotor	**A**	Container of known volume	**F**	Weir - Rectangular
2	Bailer	**7**	Pump - Jet	**B**	Flow meter	**G**	Weir - V Notch - 60°
3	Pump - Centrifugal	**8**	Pump - Turbine	**C**	Flume	**H**	Weir - V Notch - 90°
4	Pump - Cylinder	**9**	Freeflow	**D**	Orifice, plate & manometer	**I**	Other
5	Pump - Electric submersible			**E**	Ultra sonic meter		

Section 5 Casing/Liner details									
Material						**Method of fixing**			
1	A.B.S.	**6**	PVC - Class 12	**11**	Steel - Stainless	**1**	Glued	**6**	Welded - Butt
2	Aluminium	**7**	PVC - Class 15	**12**	Steel - Stainless 304	**2**	Kwik-lock	**7**	Welded - Collar
3	Concrete cylinder	**8**	PVC - Class 18	**13**	Steel - Stainless 316	**3**	Packer	**8**	Other
4	Fibre glass (FRP)	**9**	Steel - ERW	**14**	Other	**4**	Riveted		
5	PVC - Class 9	**10**	Steel - Galvanised			**5**	Screwed		

Casing support method				Type of casing bottom			
1	Driven into small hole	**5**	Held in clamp	**1**	Open end	**5**	Casing shoe
2	Seated on bottom	**6**	Other	**2**	End cap	**6**	Wash down shoe
3	Seated on backfill			**3**	Plug - concrete	**7**	Cementing shoe
4	Cemented			**4**	Plug - wood	**8**	Other

Section 6 Water entry design					
Opening type				**Slot alignment**	
1	Casing - Bridge slot	**7**	Casing - Plasma-cut slot	**D**	Diagonal
2	Casing - Drilled holes	**8**	Casing - Perforated in hole	**H**	Horizontal
3	Casing - Hand sawn slot	**9**	Screen - gauze / mesh	**V**	Vertical
4	Casing - Louvre slot	**10**	Screen - round wire	**For MATERIAL and FIXING codes** please refer to codes in Section 5 Casing/Liner details.	
5	Casing - Machine slotted	**11**	Screen - wedge wire		
6	Casing - Oxy cut slot				

Section 7 Gravel pack - method of placement					
1	Poured or shovelled into annulus	**2**	Placed through tremie pipe	**3**	Reverse circulated

Section 11 Work partly backfilled or abandoned - Sealing material							
1	Cement grout	**3**	Bentonite	**5**	Clay	**7**	Gravel
2	Concrete	**4**	Drilled cuttings	**6**	Sand	**8**	Coarse stone

Section 15 Driller's rock/Strata description					
Reporting sequence	1 Rock type	2 Colour	3 Grain size	4 Texture	To save confusion, write the full name of colour and abbreviate the following: light = lt, dark = dk, fine grained = fg, medium grained = mg, coarse grained = cg. Texture can relate to: weathered, fractured, broken, hard, soft etc.
Example	Sandstone	Dk Grey	mg	Fractured	