

# APPLICATION FOR BOREHOLE DRILLING PERMIT (FORM E)

To be completed in duplicate (2)

## BOREHOLE COMPLETION REPORT

### WATER POINT INFORMATION

#### 1. IDENTIFICATION AND LOCATION DATA

Type of water point:

Borehole       Dug well       Augured shallow well

Location: Longitude: \_\_\_\_\_ Latitude: \_\_\_\_\_ Altitude (m): \_\_\_\_\_

Address:

Water point ownership:       Private       Public       Institutional

Water point use:       Domestic       Livestock  
 Irrigation       Industrial

Reason for water point abandonment (if applicable)       Low yield       Water quality

Date abandoned (if applicable):

#### 2. SITE SELECTION DATA

Name of landowner where borehole is constructed and water will be used:

Date: \_\_\_\_\_ Method of selection:       Resistivity       Seismic  
 Electromagnetic       None  
 Other (Specify) \_\_\_\_\_

**Note:** Attach site selection results (where applicable)

#### 3. CONSTRUCTION DATA

Contractor:

Method of construction:       Air Rotary       Cable Tool       Mud Rotary  
 Augured       Dug       Other (Specify) \_\_\_\_\_

Date of completion:

Total well depth after completion (m):

Water well diameter:

mm: _____	From: _____	To: _____
mm: _____	From: _____	To: _____
mm: _____	From: _____	To: _____
mm: _____	From: _____	To: _____

Permanent casing/well ring diameter (mm):

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Permanent casing/well ring material:	<input type="checkbox"/> PVC <input type="checkbox"/> Concrete <input type="checkbox"/> Carbon Fiber	<input type="checkbox"/> Mild Steel <input type="checkbox"/> Augured <input type="checkbox"/> Other (Specify): _____
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Borehole sealing:	<input type="checkbox"/> None <input type="checkbox"/> Cement	<input type="checkbox"/> Bentonite <input type="checkbox"/> Other (Specify): _____
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Filter slot size & intervals:	mm: _____	From: _____	To: _____
	mm: _____	From: _____	To: _____
	mm: _____	From: _____	To: _____
	mm: _____	From: _____	To: _____

Borehole filters:	<input type="checkbox"/> Gravel Pack	<input type="checkbox"/> Natural Pack
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Method of development:	<input type="checkbox"/> Air Lift <input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Bailed	<input type="checkbox"/> Compressed Air
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### 4. INSTALLATION DATA

Type of Pump:	<input type="checkbox"/> Submersible Pump <input type="checkbox"/> Hand Pump <input type="checkbox"/> Bucket	<input type="checkbox"/> Mild Steel <input type="checkbox"/> Centrifugal Pump <input type="checkbox"/> Other (Specify): _____
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Date of pump installation: (day/month/year): \_\_\_\_\_

Name of pump:	Pump capacity (m <sup>3</sup> /h):
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Pump installation intake depth (mbgl): \_\_\_\_\_

Riser pipe material:	<input type="checkbox"/> Galvanized Iron <input type="checkbox"/> Stainless Steel	<input type="checkbox"/> PVC <input type="checkbox"/> Other (Specify): _____
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Riser pipe diameter (mm): \_\_\_\_\_

Pumping rod material:	<input type="checkbox"/> Galvanized Iron <input type="checkbox"/> Steel Pipe	<input type="checkbox"/> Wire <input type="checkbox"/> Other (Specify): _____
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Pumping rod diameter (mm): \_\_\_\_\_

*NOTE: Fill out Secion 4 where appropriate*

### 5. HYDROGEOLOGICAL DATA

Depth to bedrock (mbgl): \_\_\_\_\_

Overall geological setting: \_\_\_\_\_

#### **Lithology (mbgl)**

From (m)	To (m)	Description

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Water strike, Aquifer and yield:

Water Strike (mbgl)	Aquifer	Yield (m <sup>3</sup> /h)

### 6. HYDROCHEMICAL DATA

Date of sampling (day/month/year):

Sampling method:     Pumping     Air-lifting     Bucket     Other (Specify):

Sampling preservation:     None                       Acid                       Other (Specify):

Analyzed by: Name \_\_\_\_\_ Organization \_\_\_\_\_

Parameter	Unit	Results	Date	Field/lab
Turbidity	FTU			
Temperature (Time of sampling)	°C			
Conductivity	µS/cm			
pH				
Total alkalinity (CaCO <sub>3</sub> )	mg/l			
Hardness (CaCO <sub>3</sub> )	mg/l			
Magnesium (Mg <sup>2+</sup> )	mg/l			
Sodium (Na <sup>+</sup> )	mg/l			
Potassium (K <sup>+</sup> )	mg/l			
Carbonate (CO <sub>3</sub> <sup>+</sup> )	mg/l			
Bicarbonate (HCO <sub>3</sub> <sup>-</sup> )	mg/l			
Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l			
Chloride (Cl <sup>-</sup> )	mg/l			
Nitrate (NO <sub>3</sub> <sup>-</sup> )	mg/l			
Ammonium (NH <sub>4</sub> <sup>+</sup> )	mg/l			
Total Iron (Fe <sup>2+</sup> + Fe <sup>3+</sup> )	mg/l			
Manganese (Mn <sup>2+</sup> )	mg/l			

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Fluoride (F)	mg/l			
Free Carbon dioxide (CO <sub>2</sub> )	mg/l			
Total dissolved solids	mg/l			
Faecal Coliform	No/100ml			

### 7. YIELD TEST, FLOW AND WATER LEVEL DATA

Test carried out by:      Organization:      Name:      Title

Date of test:      Duration of test (hrs):

**A. Step test:**     Yes /    No

Step	Pump rate (m <sup>3</sup> /h)	Yield (m <sup>3</sup> /h)	Drawdown (m)	Specific capacity (m <sup>3</sup> /h/m)
1				
2				
3				
4				

**B. Constant Rate test:**     Yes /    No

Average pumping rate during test (m<sup>3</sup>/h):

Statistic Water Level (mbgl):      Date measured:

Pumping water level (Dynamic Water Level)(mbgl)      Drawdown (m):

Transmissivity (m<sup>2</sup>/day):      Specific Capacity (m<sup>3</sup>/h/m):

**C. Natural Flow:**     Yes /    No

**D. Air Lift test:**     Yes /    No

**NOTE: Pumping test results should be attached to application**

### OTHER INFORMATION (This may be relevant information not mentioned in the sections above)

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### 8. DETAILS OF ORGANIZATION SUBMITTING DATA

Name:

Address:

Telephone #:      Fax #:

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Email:

Name of responsible officer:

Title:

Signature:

Date of Submission:

Stamp of organization