# Bore replacement information template

When replacing a bore, the following templates need to be completed and submitted to DWER Asset Management Group [measurement@water.wa.gov.au](mailto:measurement@water.wa.gov.au).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Location and identification | | | | | | | | | | | | | | |
| **Owner** | | | | | Department of Water and Environmental Regulation | | | | | | | | | |
| **Location** | | | | |  | | | | | | | | | |
| **Mga ref** | | | | | Zone |  | Easting | |  | | Northing | |  | |
| **Survey accuracy** | | | | | Surveyed ±0.1m (horizontal) ±0.003m (vertical) | | | | | | | | | |
| **Purpose / status** | | | | | Monitoring bore | | | | | | | | | |
| **Dwer site ref** | | | | |  | | | | | | | | | |
| Bore construction | | | | | | | | | | | | | | |
| **Drilled by** | | |  | | | | | | | | | | | |
| **Drill method** | | |  | | | | | | | | | | | |
| **Drill date** | | |  | | | | | | | | | | | |
| **Elevation** | | | Surveyed levels (m AHD)  Survey method | | | | | | | | | | | |
|  | | | Ground level | | | | |  | | | | | | |
|  | | | Top of headworks | | | | |  | | | | | | |
|  | | | Top of PVC casing | | | | |  | | | | | | |
|  | | | Cement block | | | | |  | | | | | | |
| **Drilled diameter** | | |  | | | | | Depth (m bgl) | | | | | | |
| Surface Casing | | | | |  | | | | | | |
| Pilot/Main hole | | | | |  | | | | | | |
| **Depth intervals**  **(m bgl)** | | | **Type** | | | | | | **ID**  **(mm)** | | **OD**  **(mm)** | |
|  |  | | 12” Galvanised steel bore cover | | | | | |  | |  | |
|  |  | | Mild steel surface casing 10” NB; 9.3 mm WT | | | | | |  | |  | |
|  |  | | Blank PVC casing 100 ND:  Class 12, Wall thickness 6.3 mm, bell joins | | | | | |  | |  | |
|  |  | | Screen interval  PVC casing 100 ND, 1 mm aperture slots:  Class 12, | | | | | |  | |  | |
|  |  | | Blank PVC casing 100 ND, with PVC end cap:  Class 12, | | | | | |  | |  | |

## Annulus fill

|  |  |  |  |
| --- | --- | --- | --- |
| **Depth**  **intervals**  **(m bgl)** | | **Fill type** | **Cement (SG)** |
| 0 | 6 | Steel surface casing  Cement grouting of 10” NB steel surface casing  Tremmie  Pressure | 1.6 |
|  |  | Natural Pack (Backfilled cuttings) | NA |
|  |  | Bentonite Seal (Pellets) | NA |
|  |  | Graded Gravel Pack (1.6 – 3.2 mm) | NA |

## Geological data

|  |  |
| --- | --- |
| **Sampling interval** | Drill cutting samples at 1 m intervals |
| **Logged by** |  |

## Stratigraphic summary

|  |  |  |
| --- | --- | --- |
| **Depth (m bgl)** | | **Formation** |
|  |  |  |
|  |  |  |

## Hydrogeological summary

|  |  |
| --- | --- |
| **Aquifer screened** |  |
| **Groundwater level** |  |
| **Groundwater level date** |  |

## Bore development

|  |  |
| --- | --- |
| **Bore development method** |  |
| **Duration** |  |
| **Airlift rate** |  |
| **Water level** |  |

## Airlift water quality

|  |  |
| --- | --- |
| **pH** |  |
| **Conductivity (µs/cm)** |  |
| **Temperature** |  |

## Lithology log

| **From** | **To** | **Lithology** | **Lithology description** |
| --- | --- | --- | --- |
| 0 | 2 | SANDY CLAY | Colour, grain size, sorting, sphericity, mineralogy and other observations |
| 2 | 6 | SAND | Example: Pale beige/white, fine to coarse grained, moderately-well sorted, sub-angular to rounded, quartz, trace iron, minor iron staining. |
|  |  | CLAY |  |
|  |  | LIMESTONE |  |
|  |  | SILT |  |
|  |  | SILTY SAND |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **End of hole at XX m bgl.** | | | |

## Location diagrams (examples)



### Local map showing location of bore

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### Photograph of completed headworks for groundwater monitoring bore