The Chief Executive Officer,
Water Resources Management Authority,
P.O. Box 45250 – 00100
**NAIROBI**

**Form: WRMA 009A**
Catchment: TANA
WRMA ID:WRMA

Water Resources Management Authority

# *BOREHOLE COMPLETION RECORD*

*(To be submitted in triplicate)* *(Rule 33)*

Borehole No: **C -**
Borehole Name: **TORORET PRIMARY SCHOOL BOREHOLE**
Formation: **VOLCANIC**

| **PARTICULARS OF APPLICANT** | | **DETAILS** | |
|---|---|---|---|
| 1. Full name of applicant(s) (In Block Letters) | | **TORORET PRY SCHOOL** | |
| 2. Category of Applicant - Individual, Group [Association, Society], Company, Institution | | **INSTITUTION** | |
| 3. ID Number of Applicant (Individual) or Certificate of Incorporation or Registration for Groups or Companies | | - | |
| 4. PIN Number | | | |
| **Physical Address where water is to be used (see sketch)** | | **Contact Address of Applicant** | |
| 5. L/R Number(s) | | 6. Box Number | - |
| 7. Village(s)/Ward(s) | | 8. Town | - |
| 9. Sub-location(s) | **MEDUNGI** | 10. Post Code | - |
| 11. Location(s) | **ORONKAE** | 12. Telephone Contact (Landline) | - |
| 13. Division(s) | **PIRAR** | 14. Telephone Contact (Mobile) | - |
| 15. Sub-County | **TRANSMARA WEST** | 16. Email Contact | - |
| 17. County | **NAROK** | 18. | |
| **PARTICULARS OF CONTRACTOR** | | **BETTERLINE WATER LIMITED.** | |
| 19. Box Number | **27277** | 22. License Number | **WD/WC/4010** |
| 20. Town | **NAIROBI** | 23. Gazetted On | **02/02/2021** |
| 21. Post Code | **00100** | 24. Drilling Supervisor | **MR. IKUA WAWERU** |
| 22. Telephone Contact (Landline) | **+254736948511** | 25. Type and Make of Drill Rig | **MAX DRILL 2023** |
| 23. Telephone Contact (Mobile) | **+254722619402** | | |
| 24. Email Contact | **info@betterlinewater.com** | | |
| **INTENDED USE OF WATER** | | | |
| Public W.S.; Irrigation.; Industries.; Domestic.; Stock, other | | DOMESTIC | |
| **PARTICULARS OF BOREHOLE** | | | |
| *Type of Borehole*: - Drilled; Driven; Bored; Jetted; Other | | DRILLED | |
| *Borehole Construction* (also *see* sketch page 3) | | | |

| | | | | | |
|---|---|---|---|---|---|
| Drilling started (date) | 28.09.2024 | Drilling completed (date) | 30.09.2024 | All work completed (date) | 30.9.2024 |
| Total Depth: Reported (m) | 180 | Measured (m) | 180 | Final (back-filled) Depth (m) | NIL |
| Hole Diameter (mm) | 215 | From (m) | 0 | To (m) | 180 |
| Hole Diameter (mm) | | From (m) | | To (m) | |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Permanent Casing** | | | | | | | | | |
| **Plain** | | | | | | | | | |
| Type | Mild steel | Diam (mm) | 228 | Length (m) | 6 | From (m) | 0 | To (m) | 6 |
| Type | | Diam (mm) | 152 | Length (m) | 132 | From (m) | 0<br>46<br>70<br>88<br>106<br>124<br>142<br>154 | To (m) | 40<br>64<br>82<br>100<br>118<br>130<br>148<br>180 |
| **Slotted or Perforated:** | | | | | | | | | |
| **Size and Description of Openings** | | | | | | | | | |
| Type | Mild steel | Diam (mm) | 152 | Length (m) | 48 | From (m) | 40<br>64<br>82<br>100<br>118<br>130<br>148 | To (m) | 46<br>70<br>88<br>106<br>124<br>142<br>154 |
| | | | | | | | | | |
| **Type and Make** | | | **Mild Steel -** | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Diameter (mm) | | Length (m) | | Set from (m) | | To (m) | |
| | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Gravel Pack** | | | | | |
| Size of grains (mm) | 2-3mm | Roundness (good, fair, poor) | GOOD | Volume inserted in annular Space (m3) | 4.2 |
| | | From (m) | 0 | To (m) | 180 |
| **Open Hole** | | | | | |
| Diam (mm) | - | From (m) | - | To (m) | - |

| | | | |
|---|---|---|---|
| **Aquifer** | | | |
| 1st Water Struck at (m) | 40-46 | Water Rest Level (m) | 2.99 |
| 2nd Water Struck at (m)<br>3rd water struck at (m) | 55-85 | Water Rest Level (m) | 2.99 |
| Main Aquifer Struck at (m) | | Water Rest Level (m) | 2.99 |

| | | | | | |
|---|---|---|---|---|---|
| Water bearing material | Fractured SEDIMENTS | From (m) | | To (m) | |
| Other Aquifers, Remarks, etc (also *see* log on page3) | -GOOD | | | | |

| | | | | | |
|---|---|---|---|---|---|
| ***Yield*: SWL (m)** | 2.99m | PWL (m below surface) | 144.77m | Discharge (litres per minute) | 93.33L |
| After pumping (hours) | | 24 | Recovered to SWL in (minutes) | | 60 |
| Expected production discharge (litres per hour) | | 5600L | With pump set at (m below surface) | | 168m |

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| *Pumping Test Record* in Summary (Detailed test records on attached sheets): (all depth measurements to be in metres below ground surface) | | |
|---|---|---|
| | **Test No. 1** | **Test No. 2** |
| Date of Test (day, month, year) | 09.10.2024 TO 10.10.2024 | |
| Depth of Borehole at time of test (m) | 180 | |
| Water Entry (perforations or screen setting at time of test) | Refer to page 2 | |
| Static Water (SWL) before test (m) | 2.99 | |
| Type of Pump (Bailler) used | SP 8-50 | |
| Depth of Pump intake (m) | 168 | |
| Discharge (in litres per minute) | 93.33 | |
| Pumping Water Level (PWL m) | 144.77 | |
| After pumping continuously for (hours) | 24 | |
| Time of Recovery to Original SWL (minutes) | 60 | |
| Rate of Recovery-WL after 5 minutes (m) | 17.82m (12.57%) | |
| Rate of Recovery-WL after 20 minutes (m) | 67.02m (54.84%) | |
| Rate of Recovery-WL after 60 minutes (m) | 9.9m (95.06%) | |
| Rate of Recovery-WL after 120 minutes (m) | | |

(Additional pumping tests to be mentioned in REMARKS and included with file).

Government representative witnessing the test……..…….

| **Quality of Water** | | | | | |
|---|---|---|---|---|---|
| Sample (Yes/No) | YES | Collected at (hour) | 1918HRS | On (date) | 10.10.2024 |
| Sediment | | Taste | - | Odour | |
| Colour (Pt. Co. APHA) | | Temperature (0c) | - | Spec. Conductivity ($\mu mho/cm^3$) | |

| | |
|---|---|
| *Remarks*: (drilling difficulties, gravel-pack details, all pertinent information about the drilling and completion of the hole) | Drilling formation good |

| *Drilling Supervisor* | | *Drilling Contractor* | |
|---|---|---|---|
| Signature | | Signature | |
| Name | MR. IKUA WAWERU | Name | BETTERLINE WATER LTD |
| DATE | 30.9.2024 | | 30.09.2024 |

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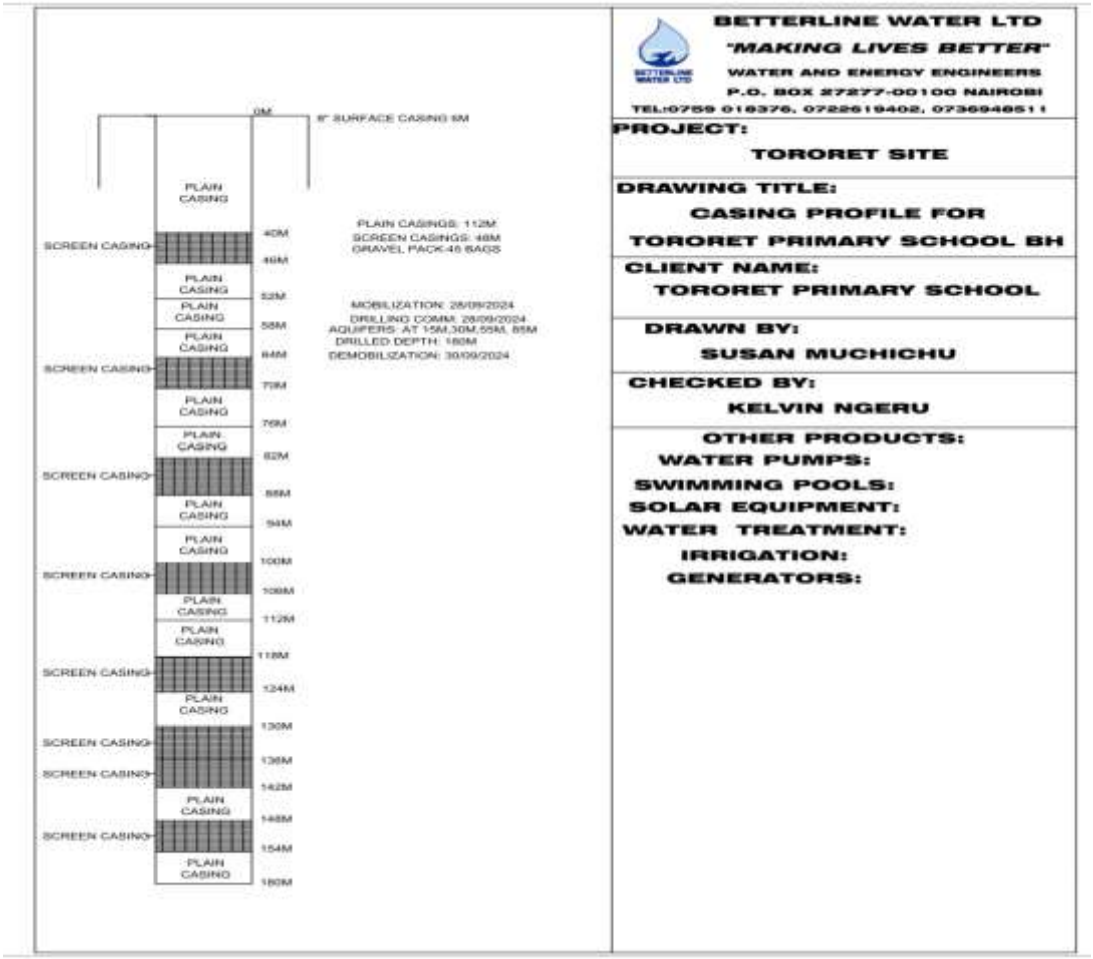
1. *Driller's Log.*

| Depth (m) | Resistivity (Ohm-m) | Geological nature |
|---|---|---|
| 0 – 1 | 50.3 | Lateritic soil |
| 1 – 13 | 18 | Sandy-loam soil |
| 13- 112 | 97 | Partially weathered volcanics |
| >112 | 19 | Highly weathered volcanics/sediments |

2. *Sketch of Borehole Construction*:




(Geologist's log on attached sheets) .

Remarks or additional information on Driller's log, or on sketch of Borehole:

Formations encountered are basically Sediments. Borehole sketch not drawn to scale, it shows the casing design…….

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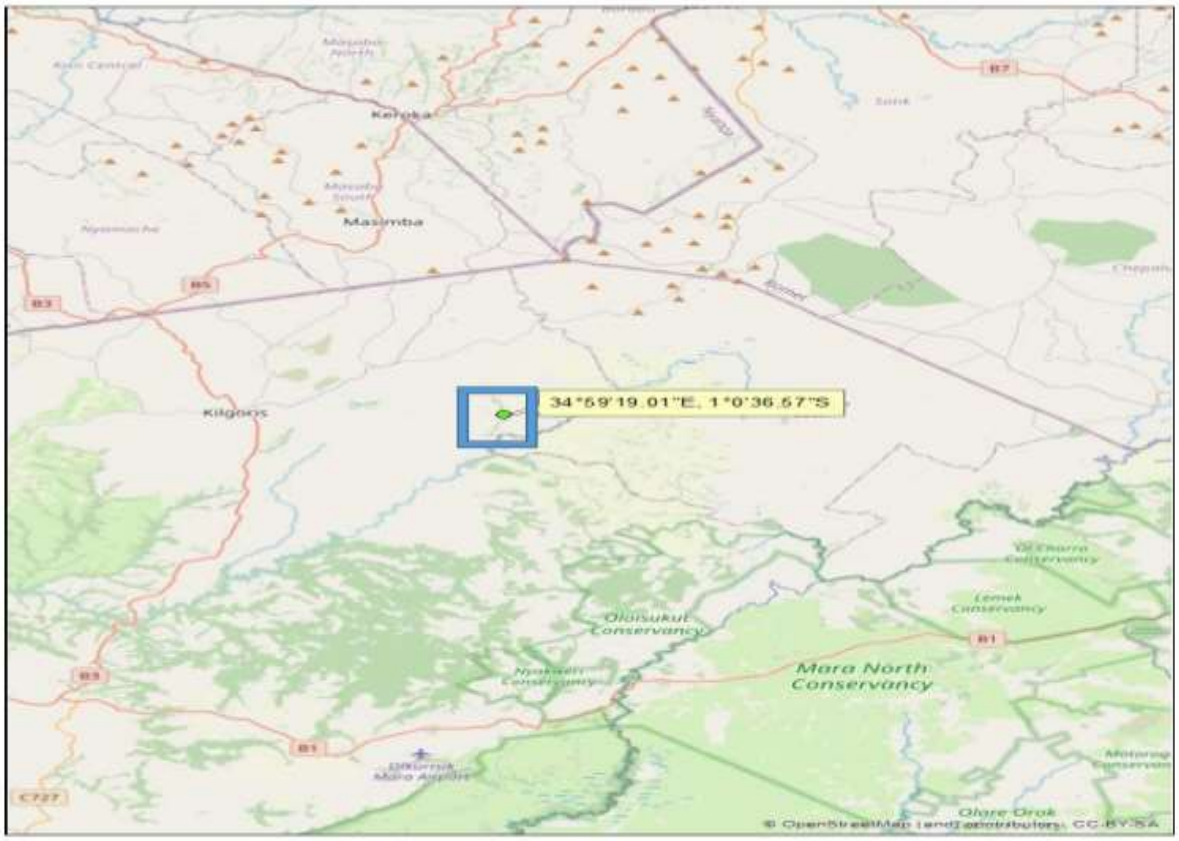
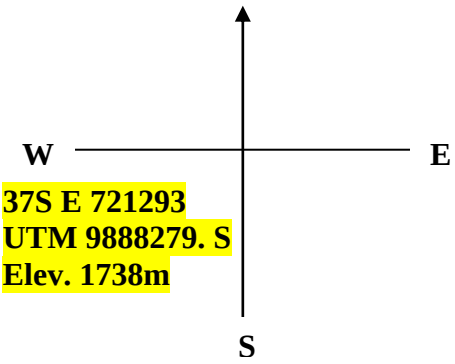
13. *Location Sketch*: (To be sketched by the driller on the site, showing roads, tracks and prominent land marks, with road distances to the nearest town or trading centre and to water source).




**37S E 721293**
**UTM 9888279. S**
**Elev. 1738m**

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For Official Use Only

Entered on Schedule…….. (Yes/No) Water Sample Received……..(Yes/No)
Drilling Samples Received..…….. (Yes/No) Chemical Analysis Received……..(Yes/No)
Drilling Samples Filed…….. (Yes/No) Geologist's Log Available……..(Yes/No)
Location Plotted on Maps…….. (Yes/No)

Hydro geological Report No……of……

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(*Date*)

Geophysical Curve No…….of……..

(*Date*)

Borehole Data entered and checked by (Name)….....Signature……

**Permit details**

Permit Number ……..... Authorised abstraction ……..… $m^3/d$

Authorised water use(s) ……...

Pump intake depth …… m bgl Maximum authorised abstraction rate ……. $m^3/hr$

All Borehole Completion Records duly completed should be sent to the appropriate WRMA Regional Office.