

Water Resources Management Authority

BOREHOLE COMPLETION RECORD

(To be submitted in triplicate)

(Rule 33)

Borehole No: **C –**

Borehole Name: **Naroloong Dispensary**

Formation: **Basement Rocks**

PARTICULARS OF APPLICANT			DETAILS		
1. Full name of applicant(s) (In Block Letters)			NAROLOONG DISPENSARY		
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)	NAROLOONG		8. Town	NAROK	
9. Sub-location(s)	NAROLOONG		10. Post Code	20500	
11. Location(s)	MASURURA		12. Telephone Contact (Landline)	+254710757263	
13. Division(s)	KEIYAN		14. Telephone Contact (Mobile)	+254710757263	
15. District(s)	KEIYAN		16. Email Contact	James.Ayacko@amref.org	
PARTICULARS OF CONTRACTOR			BETTERLINE WATER LTD		
17. Box Number	27277		22. License Number	WD/WC/2769	
18. Town	NAIROBI		23. Gazetted On	02/02/2021	
19. Post Code	00100		24. Drilling Supervisor	MR. WILSON JUMA	
20. Telephone Contact (Landline)	0736948511		25. Type and Make of Drill Rig	MAX DRILL	
21. Telephone Contact (Mobile)	0722619402				
22. 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)	11/09/2023	Drilling completed (date)	17/09/2023	All work completed (date)	27/09/2023
Total Depth: Reported (m)	120	Measured (m)	120	Final (back-filled) Depth (m)	Nil

Hole Diameter (mm)	203	From (m)	0	To (m)	220
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Permanent Casing									
Plain									
Type	Mild steel	Diam (mm)	230	Length (m)	3.6	From (m)	0	To (m)	3.6
Type		Diam (mm)	152	Length (m)	72	From (m)	0 30 54 66 96 114	To (m)	12 48 60 78 108 120
Slotted or Perforated:			Slotted						
Size and Description of Openings									
Type	Mild steel	Diam (mm)	152	Length (m)	48	From (m)	12 48 60 78 108	To (m)	24 54 66 96 114
Screen:									
Type and Make									
Diameter (mm)		Length (m)		Set from (m)		To (m)			
Gravel Pack									
Size of grains (mm)	2-4	Roundness (good, fair, poor)	Good	Volume inserted in annular Space (m3)	8 tonnes				
		From (m)		To (m)					
Open Hole									
Diam (mm)		From (m)		To (m)					
Aquifer									
1 st Water Struck at (m)	15-30	Water Rest Level (m)	4.06						
2 nd Water Struck at (m)	85-100	Water Rest Level (m)							
3 rd water struck at (m)									
Main Aquifer Struck at (m)	85-100	Water Rest Level (m)							
Water bearing material	W/ fractured trachytes, tuffs	From (m)		To (m)					
Other Aquifers, Remarks, etc (also see log on page3)	-								
Yield: SWL (m)	4.06	PWL (m below surface)	99.58	Discharge (litres per minute)	23.33				
After pumping (hours)	24	Recovered to SWL in (minutes)	26.33m(120mins)						
Expected production discharge (litres per hour)	1400	With pump set at (m below surface)	108						

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)	29 th - 30 th Sept.2023	
Depth of Borehole at time of test (m)	120m	
Water Entry (perforations or screen setting at time of test)		
Static Water (SWL) before test (m)	4.06m	
Type of Pump (Bailler) used	SP 3/60	
Depth of Pump intake (m)	108m	
Discharge (in litres per minute)	23.33 l/m	
Pumping Water Level (PWL m)	99.58m	
After pumping continuously for (hours)	24	
Time of Recovery to Original SWL (minutes)		
Rate of Recovery-WL after 5 minutes (m)	96.63m	
Rate of Recovery-WL after 20 minutes (m)	85.64m	
Rate of Recovery-WL after 60 minutes (m)	57.95m	
Rate of Recovery-WL after 120 minutes (m)	26.33m	

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

Government representative witnessing the test.....

Quality of Water					
Sample (Yes/No)	Clear	Collected at (hour)	1649	On (date)	30/09/2023
Sediment		Taste		Odour	
Colour		Temperature (0c)		Spec. Conductivity (µmho/cm ³)	

<i>Remarks:</i> (drilling difficulties, gravel-pack details, all pertinent information about the drilling and completion of the hole)	DRILLING WENT ON WELL WITHOUT ANY CHALLENGE
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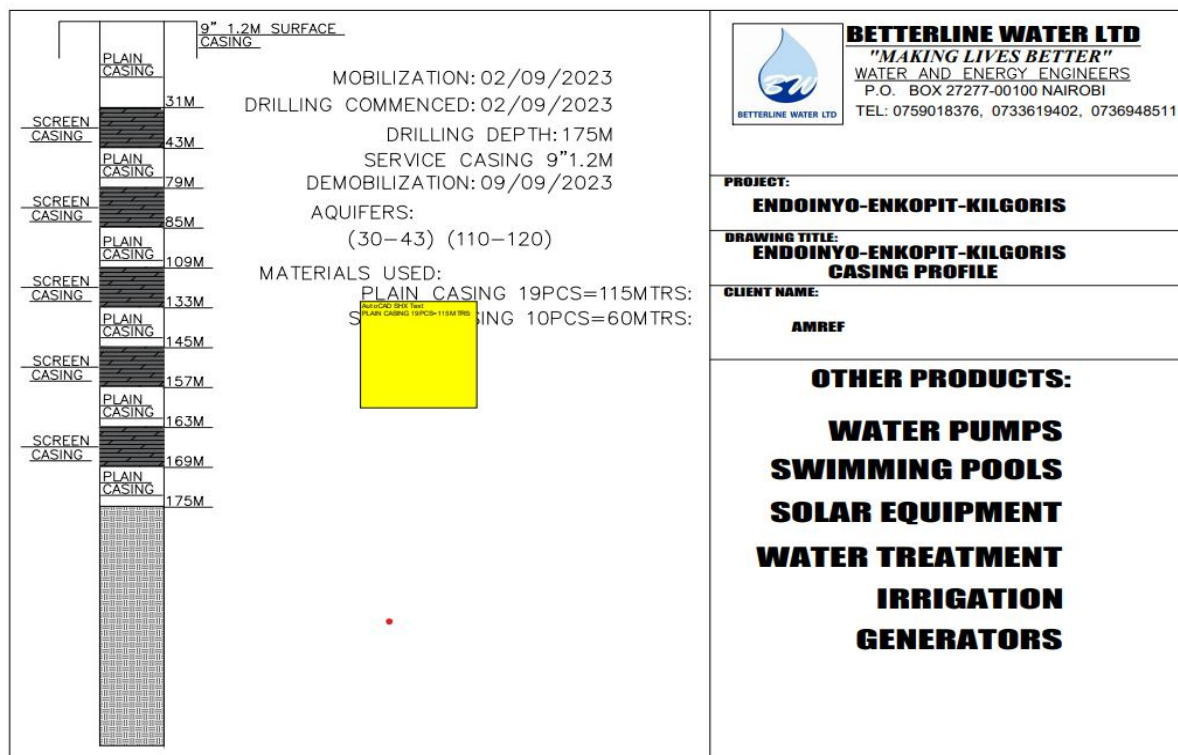
Drilling Supervisor		Drilling Contractor	
Signature		Signature	
Name	WILSON JUMA	Name	BETTERLINE WATER LIMITED
Date	29/09/2023	Date	29/09/2023

Borehole No. **C** -

1. Driller's Log.

DEPTH (m)	GEOLOGICAL NATURE
0.0-5.0	Dry top soil
5.0 - 8.0	Weathered Sub soils
8.0-32.0	Compact Regolith
32.0-63.0	Weathered Basement
63.0-100.0	Weathered /Fractured basement
100.0 – 120.0	Slightly Weathered to Fresh Basement (aquiferous)

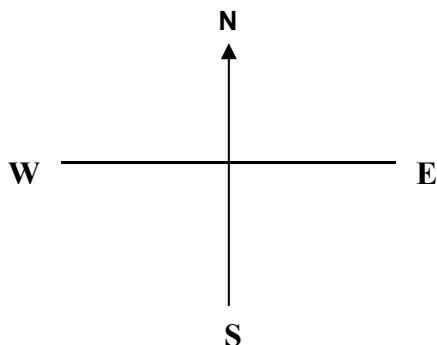
12. Sketch of Borehole Construction:



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

Form:WRA 004
Catchment:
WRMA ID:
File:

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)



UTM SITE COORDINATES

37M 0798608E
UTM 9811375N

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.....
(Date)

Geophysical Curve No.....of.....
(Date)

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

Permit details

Permit Number Authorised abstraction m³/d

Authorised water use(s)

Pump intake depth m bgl Maximum authorised abstraction rate m³/hr

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