



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
 Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. Date of Logging: 27/09/2023
 2. Village: Ambaur - 1
 3. Location: Ram Janki Temple
 4. Block: Maṣauli
 5. District: Barabanki
 6. Latitude & Longitude: 26.7860 & 81.3937.
 7. Drilling depth: 165m bgl
 8. Logging depth: 165 m bgl
 9. Logging Company: UP Ground Water Department
 10. Bore hole drilled by: Verma boring.

Recorded Geophysical log data: SP, Natural gamma & Resistivity (16 N & 64 N).

12. (i) Resistivity of Mud (Rm): 5.40 ohm-m. (ii) Resistivity of fresh water (Rf): 5.50 ohm-m.

13. On the basis of interpretation of recorded log data in open hole detail report is made is as follows:-

(a) **Acquifer:** The depth zones with high resistivity and relatively low Natural Gamma radioactivity values are referred as Aquifer Zones.

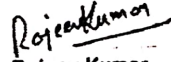
(b) **Clay:** The depth zones with less resistivity and relatively high Natural Gamma radioactivity values are referred as Clay zones.

Based on the downhole Geophysical Parameters following information (Granular zones) deciphered:-

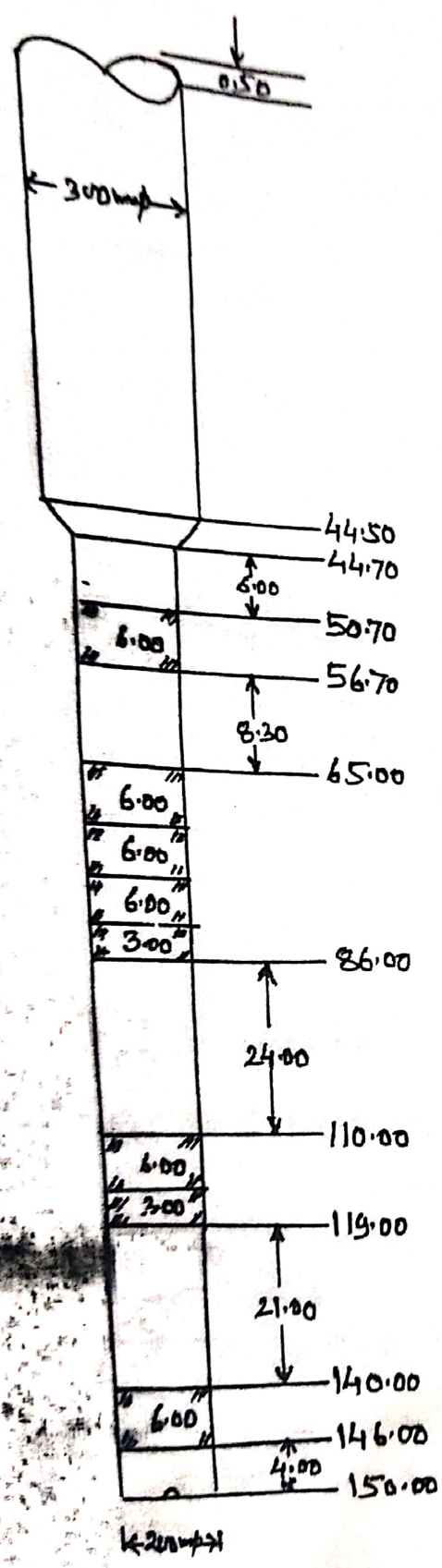
S.No	Depth Range (m bgl)	Thickness (meter)	Lithology	Acquifer Recommendation	Remark (Quality of aquifer water)
1.	0-5	5	Top Soil		Good
2.	5-20	15	Sandy clay		Good
3.	20-26	6	Clay		Good
4.	26-59	33	Medium to coarser sand	Recommended	Good
5.	59-65	6	Clay		Good
6.	65-86	21	Medium to coarser sand	Recommended	Good
7.	86-95	9	Fine sand	Recommended	Good
8.	95-110	15	Clay		Good
9.	110-119	9	Medium to fine Sand	Recommended	Good
10.	119-125	6	Clayey sand		Good
11.	125-140	15	Clay		Good
12.	140-152	12	Medium to fine sand	Recommended	Good
13.	152-164	12	Clay		Good

14. Note:-

- (i) All Zones are Intermixed with kankar.
 (ii) Zone 1,2,3 & 4 is intermixed with thin layers of kankar.
 15. Quality of the formation water is good up to Logging depth.
 16. Log Attached.


Rajeev Kumar
 Geophysicist
 National Hydrology Project
 Ground Water Department Ltd. U.P.

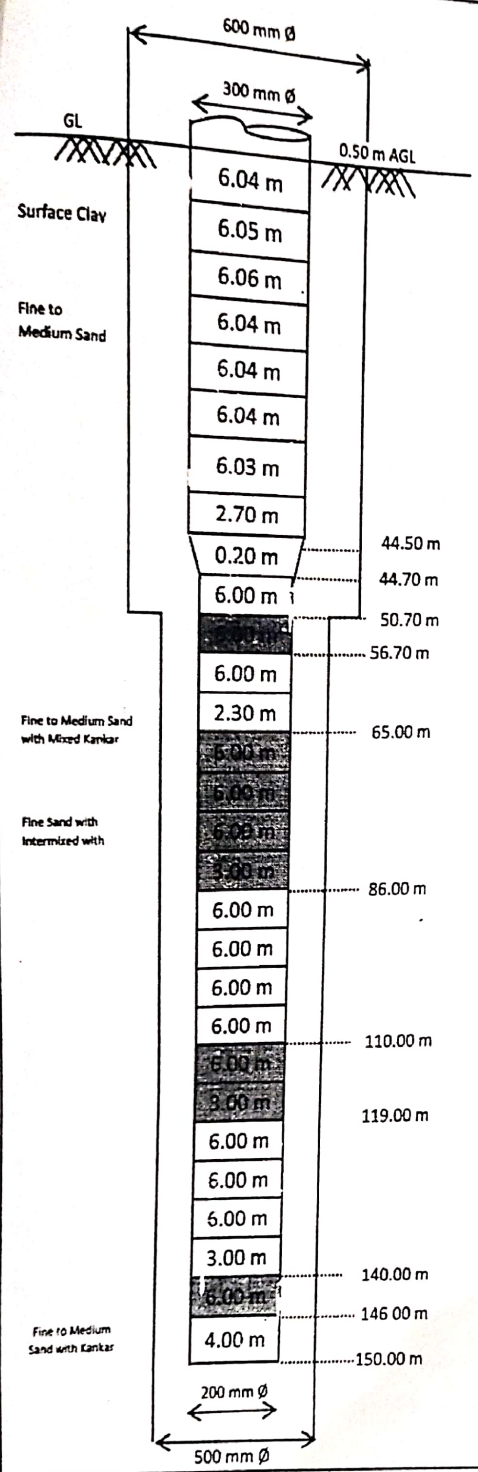
Proposed TW Assembly chart of Ambaur w/s scheme block - Masauli Distt - Barak



- 1- Discharge - 1530
 - 2- Assembly size - 300x200
 - 3- Bore ϕ = 600x500
 - 4- Logging Report pt - 279
-
- 1- 0 - 5 = 5 Topsoil
 - 2- 5 - 20 = 15 Sandy clay
 - 3- 20 - 26 = 6 clay
 - 4- 26 - 59 = 33 Medium to fine sand
 - 5- 59 - 65 = 6 clay
 - 6- 65 - 86 = 21 Medium to fine sand
 - 7- 86 - 95 = 9 Fine sand
 - 8- 95 - 110 = 15 clay
 - 9- 110 - 119 = 9 Medium to fine sand
 - 10- 119 - 125 = 6 clayey sand
 - 11- 125 - 140 = 15 clay
 - 12- 140 - 152 = 12 Medium to fine sand
 - 13- 152 - 164 = 12 clay

OFFICE OF THE EXECUTIVE ENGINEER
 DIVISION OFFICE (E/M), UTTAR PRADESH JAL NIGAM (RURAL), AYODHYA
 Actual Strata Chart & T.W. Assembly lowered of 600 x 500 mm of Ambaur-1, W55 BLOCK-Masauli
 Under Jal Jeevan Mission, Distt- Barabanki

Latitude - 26.879926°
 Longitude - 81.405978°



ACTUAL T.W. ASSEMBLY			
BORE SIZE	600 mm x 500 mm		
T.W. ASSEMBLY	300 mm x 200 mm		
DISCHARGE	1530 LPM <i>275 LPM</i>		
WORKING HEAD			
PUMP	15 HP		
LOGGING REPORT	27/09/2023		
Date of Lowering	30/09/2023		
S.NO.	DEPTH RANGE	THICKNESS	REMARKS
1	0-5	5	GOOD
2	5-20	15	GOOD
3	20-26	6	GOOD
4	26-59	33	GOOD
5	59-65	6	GOOD
6	65-86	21	GOOD
7	86-95	9	GOOD
8	95-110	15	GOOD
9	110-119	9	GOOD
10	119-125	6	GOOD
11	125-140	15	GOOD
12	140-152	12	GOOD
13	152-164	12	GOOD

1- Housing Pipe 300 mm ϕ	= 45.00 m
2- Plain Pipe 150 mm ϕ	= 63.30 m
3- Slotted Pipe 150 mm ϕ	= 42.00 m
4- Reducer (300 x 150) mm ϕ	= 0.20 m
Total Assembly	= 150.50 m
Less AGL	= (-)0.50 m
Total Lowering (BGL)	= 150.00 m

M/s VTL - GAJA ENGINEERING PVT LTD JV Contractor
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