



**GROUND WATER DEPARTMENT**  
**GOVERNMENT OF UTTAR PRADESH**  
Lucknow-226010



**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. Date of Logging: 11/04/2023  
2. Village: Gadiya - 1  
3. Location: Near Nala  
4. Block: Banki  
5. District: Barabanki  
6. Latitude & Longitude: 26.935 & 81.1525  
7. Drilling depth: 165 m bgl  
8. Logging depth: 165 m bgl.  
9. Logging Company: UP Ground Water Department  
10. Bore hole drilled by: MVIPL Pvt.Ltd.  
11. Recorded Geophysical log data: SP, Natural gamma & Resistivity (16 N & 64 N, FL, Lateral).  
12. (i) Resistivity of Mud (Rm): 16.50 ohm-m. (ii) Resistivity of fresh water (Rf): 15.60 ohm-m.

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

(a) Aquifer: 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	Aquifer Recommendation	Remark (Quality of aquifer water)
1.	14-20	6	Medium to fine sand	Recommended	Medium
2.	25-31	6	Medium to coarser sand	Recommended	Medium
3.	40-46	6	Medium to coarser sand	Recommended	Good
4.	52-54	2	Medium to fine sand	Recommended	Good
5.	59-74	15	Medium to coarser sand	Recommended	Good
6.	85-91	6	Medium to fine sand	Recommended	Good
7.	122-129	7	Medium to fine sand	Recommended	Good
8.	132-136	4	Medium to fine sand	Recommended	Good
9.	136-141	5	Fine sand	Recommended	Good

14. Note:-

- (i) All Zones are intermixed with kankar.  
(ii) Zone 1 & 5 is intermixed with thin layers of kankar.

15. Quality of the formation water is good up to Logging depth.

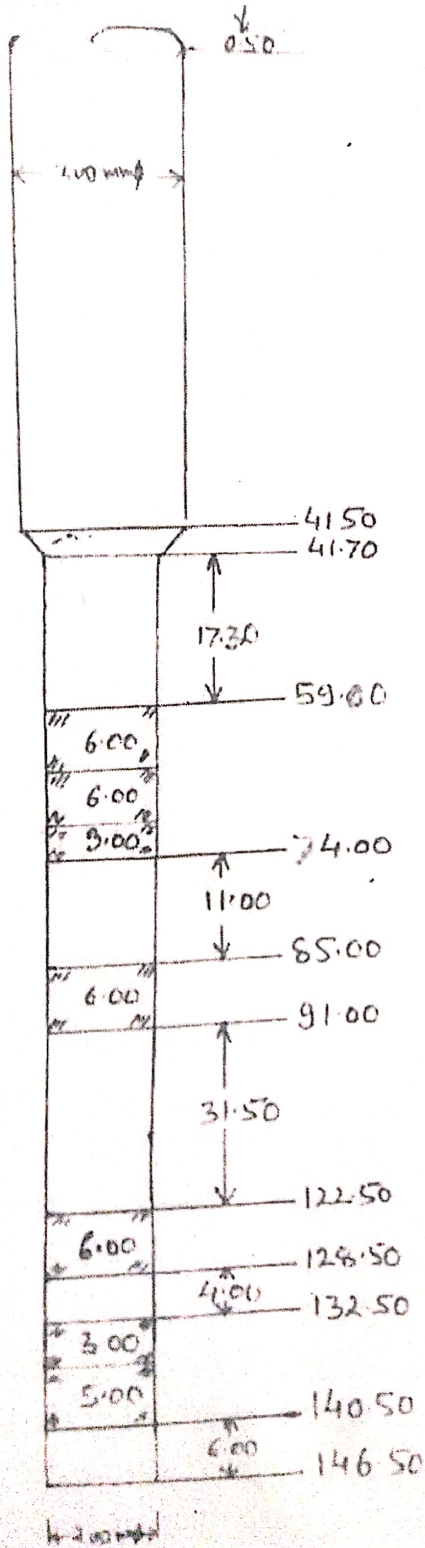
16. Log Attached..

*Rajeev Kumar*  
12/04/2023.  
Rajeev Kumar  
Geophysicist  
National Hydrology Project  
Ground Water Department Lko. U.P.





Proposed Assembly chart of Gradia w/scheme block Banke Distt-  
Barabanki (Zone-1)



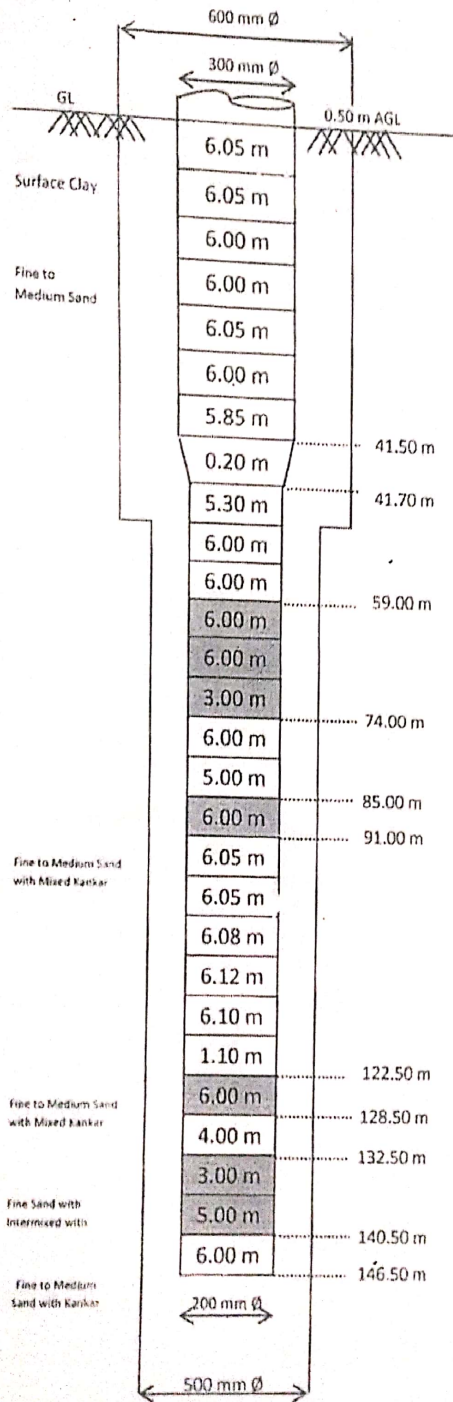
1. Discharge 1380 LPM
2. Motor HP 25 HP
3. Assembly size 300x200mm
4. Base  $\phi$  600x500mm
5. Logging Report 11-4-23

- 1- 14-20=6 medium
- 2- 25-31=6 medium
- 3- 40-46=6
- 4- 52-54=2
- 5- 59-74=15-12
- 6- 85-91=6-6 good
- 7- 122-129=7-6
- 8- 132-136=4-3
- 9- 136-141=5-3



OFFICE OF THE EXECUTIVE ENGINEER  
 DIVISION OFFICE (E/M), UTTAR PRADESH JAL NIGAM (RURAL), AYODHYA  
 Actual Strata Chart & T.W. Assembly lowered of 300 x 200 mm of Gadia, WSS BLOCK-Banki  
 Under Jal Jeevan Mission, Distt- Barabanki

Latitude - 26.934697°  
 Longitude - 81.152128°



ACTUAL T.W. ASSEMBLY			
BORE SIZE	600 mm x 500 mm		
T.W. ASSEMBLY	300 mm x 200 mm		
DISCHARGE	1380 LPM		
WORKING HEAD			
PUMP	2.5 HP		
LOGGING REPORT	11-04-2023		
Date of Lowering	13-04-2023		
S.NO.	DEPTH RANGE	THICKNESS	REMARKS
1	14-20	6	GOOD
2	25-31	6	GOOD
3	40-46	6	GOOD
4	52-54	2	GOOD
5	59-74	15-12	GOOD
6	85-91	6-6	GOOD
7	122-129	7-6	GOOD
8	132-136	4-3	GOOD
9	136-141	5-5	GOOD

1- Housing Pipe 300 mm $\phi$	= 42.00 m
2- Plain Pipe 200 mm $\phi$	= 69.80 m
3- Slotted Pipe 200 mm $\phi$	= 35.00 m
4- Reducer (300 x 200) mm $\phi$	= 0.20 m
<b>Total Assembly</b>	<b>= 147.00 m</b>
<b>Less AGL</b>	<b>= (-)0.50 m</b>
<b>Total Lowering (BGL)</b>	<b>= 146.50 m</b>

M/s VIL - GADIA ENGINEERING PVT LTD JV  
 Contractor

FITCHNER India Ltd.  
 T.P.I.

S.K. Yadav  
 J.E. (E&M)

R. S. Prasad  
 A.E. (E&M)

Mohd. Maaz  
 E.E. (E&M)