



**GROUND WATER DEPARTMENT**  
**GOVERNMENT OF UTTAR PRADESH**  
Lucknow-226002



**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. Date of Logging: 28/06/2023  
2. Village: Katiyara Deoli  
3. Location: Primary School  
4. Block: Ram Nagar  
5. District: Barabanki  
6. Latitude & Longitude: 27.0747 & 81.3757.  
7. Drilling depth: 165m bgl  
8. Logging depth: 165 m bgl  
9. Logging Company: UP Ground Water Department  
10. Bore hole drilled by: MVIPL.  
11. Recorded Geophysical log data: SP, Natural gamma & Resistivity (16 N & 64 N).  
12. (i) Resistivity of Mud (Rm): 13.80 ohm-m. (ii) Resistivity of fresh water (Rf): 13.80 ohm-m.

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

(a) Acquirer: 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	Acquirer Recommendation	Remark (Quality of acquirer water)
1.	0-15	15	Top soil		Good
2.	15-45	30	Medium to fine sand	Recommended	Good
3.	45-53	8	Sandy Clay		Good
4.	53-59	6	Medium to fine sand	Recommended	Good
5.	59-66	7	Fine sand		Good
6.	66-156	90	Medium to fine sand	Recommended	Good
7.	156-165	9	Clay		Good

14. Note:-

- (i) All Zones are intermixed with kankar.  
(ii) Zone 1, 2, & 3 is intermixed with thin layers of kankar.

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

16. Log Attached.



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