



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. **Date of Logging:** 18/12/2023
2. **Village:** Dafrauli
3. **Location:** Govt. Primary School
4. **Block:** Dariyabaad
5. **District:** Barabanki
6. **Latitude & Longitude:** 26.9454 & 81.5155.
7. **Drilling depth:** 170 m bgl
8. **Logging depth:** 170 m bgl
9. **Logging Company:** UP Ground Water Department
10. **Bore hole drilled by:** Verma boring.
11. **Recorded Geophysical log data:** SP, Natural gamma & Resistivity (16 N & 64 N).
12. **(i) Resistivity of Mud (Rm):** 19.50 ohm-m. **(ii) Resistivity of fresh water (Rf):** 26.70 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.	8-27	21	Medium to coarser sand	Recommended	Good
2.	35-44	9	Medium to fine sand	Recommended	Good
3.	51-60	9	Medium to fine sand	Recommended	Good
4.	68-74	6	Medium to fine sand	Recommended	Good
5.	84-93	9	Medium to fine sand	Recommended	Good
6.	95-107	12	Medium to coarser sand	Recommended	Good
7.	110-134	24	Medium to coarser sand	Recommended	Good
8.	146-155	9	Fine sand	Recommended	Good

14. **Note:-**

(i) All Zones are intermixed with kankar.

(ii) Zone 1, 5 & 7 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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