

GEOPHYSICAL BOREHOLE-LOGGING REPORT

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| 1. Date of Logging: 07/08/2023 | 2. Village: Outbapur |
| 3. Location: Govt School | 4. Block: Fatehpur |
| 5. District: Barabanki | 6. Latitude & Longitude: 27.0691 & 81.2640. |
| 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): 3.60 ohm-m. | (ii) Resistivity of fresh water (Rf): 5.40 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.	0-15	15	Top Soil		Good
2.	15-35	30	Medium to coarser sand	Recommended	Good
3.	35-130	95	Medium to fine sand	Recommended	Good
4.	130-136	6	Clayey sand		Good
5.	136-154	18	Clay		Good
6.	154-160	6	Fine sand	Recommended	Good
7.	160-165	5	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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