



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. Date of Logging: 03/08/2023
2. Village: Mishrauliya
3. Location: Masjid
4. Block: Ikauna
5. District: Shravasti
6. Latitude & Longitude: 27.4308 & 82.0555.
7. Drilling depth: 165m bgl
8. Logging depth: 165 m bgl
9. Logging Company: UP Ground Water Department
10. Bore hole drilled by: Vishwanath Project Ltd.
11. Recorded Geophysical log data: SP, Natural gamma & Resistivity (16 N & 64 N).
12. (i) Resistivity of Mud (Rm): 12.90 ohm-m.
(ii) Resistivity of fresh water (Rf): 14.10 ohm-m.
13. On the basis of interpretation of recorded log data in open hole detail report is made 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. | 35-75 | 40 | Medium to fine sand | Recommended | Good |
| 2. | 80-95 | 15 | Medium to fine sand | Recommended | Good |
| 3. | 103-115 | 12 | Medium to fine sand | Recommended | Good |
| 4. | 120-135 | 15 | Fine sand | Recommended | Good |
| 5. | 140-161 | 21 | Medium to fine sand | Recommended | 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.

Rajeev Kumar
Geophysicist
National Hydrology Project
Ground Water Department, Lucknow