



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. Date of Logging: 06/07/2023
2. Village: Itaunga
3. Location: Pond
4. Block: Ikauna
5. District: Shravasti
6. Latitude & Longitude: 27.5300 & 81.9469.
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): 13.50 ohm-m. (ii) Resistivity of fresh water (Rf): 12.90 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.	15-23	8	Fine sand	Recommended	Good
3.	23-28	5	Medium to fine sand	Recommended	Good
4.	28-67	39	Fine sand	Recommended	Good
5.	67-70	3	Medium to fine sand	Recommended	Good
6.	70-74	4	Sandy clay		Good
7.	74-88	14	Medium to fine sand	Recommended	Good
8.	88-97	9	Clay		Good
9.	97-132	35	Medium to fine sand	Recommended	Good
10.	132-144	12	Clay		Good
11.	144-165	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 K. mar

(Geophysicist)