



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. Date of Logging: 29/08/2023
2. Village: Gehua Bhari
3. Location: Govt School
4. Block: Sirsiya
5. District: Shravasti
6. Latitude & Longitude: 27.7039 & 82.1077.
7. Drilling depth: 165m bgl
8. Logging depth: 165 m bgl
9. Logging Company: UP Ground Water Department
10. Bore hole drilled by: DSA Construction.
11. Recorded Geophysical log data: SP, Natural gamma & Resistivity (16 N & 64 N).

12. (i) Resistivity of Mud (Rm): 12.0 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 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 acquifer water)
1.	0-10	10	Top Soil		Good
2.	10-20	10	Medium to fine sand	Recommended	Good
3.	20-35	15	Fine Sediments		Good
4.	35-68	33	Medium to fine sand	Recommended	Good
5.	68-70	2	Clay		Good
6.	70-76	6	Medium to fine sand	Recommended	Good
7.	76-91	15	Medium to fine sand	Recommended	Good
8.	91-100	9	Clay		Good
9.	100-112	12	Medium to fine sand	Recommended	Good
10.	112-118	6	Medium to coarser sand	Recommended	Good
11.	118-130	12	Medium to fine sand	Recommended	Good
12.	130-139	9	Sandy clay		Good
13.	139-145	6	Medium to fine sand	Recommended	Good
14.	145-148	3	Fine sand		Good
15.	148-156	8	Medium to fine sand	Recommended	Good
16.	156-165	9	Sandy Clay		Good

14. Note:-

- (i) All Zones are intermixed with kankar.
(ii) Zone 1,3,5 & 4 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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