



GROUND WATER DEPARTMENT
GOVERNMENT OF UTTAR PRADESH
Lucknow-226002



GEOPHYSICAL BOREHOLE-LOGGING REPORT

1. **Date of Logging:** 08/07/2023
2. **Village:** Nari Mahripur
3. **Location:** Govt School
4. **Block:** Itiathok
5. **District:** Gonda
6. **Latitude & Longitude:** 27.2149 & 82.0347.
7. **Drilling depth:** 165m bgl
8. **Logging depth:** 165 m bgl
9. **Logging Company:** UP Ground Water Department
10. **Bore hole drilled by:** Rays Power Infra Pvt Ltd.

11. **Recorded Geophysical log data:** SP, Natural gamma & Resistivity (16 N & 64 N).

12. (i) **Resistivity of Mud (Rm):** 17.40 ohm-m. (ii) **Resistivity of fresh water (Rf):** 18.0 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.	10-16	6	Clayey sand		Good
3.	16-48	32	Medium to fine sand	Recommended	Good
4.	48-53	5	Fine sediments		Good
5.	53-60	7	Fine sand	Recommended	Good
6.	60-110	50	Medium to fine sand	Recommended	Good
7.	110-120	10	Clay		Good
8.	120-124	4	Fine sand	Recommended	Good
9.	124-136	12	Clayey sand		Good
10.	136-148	12	Fine sand	Recommended	Good
11.	148-165	17	Medium to fine sand	Recommended	Good

14. **Note:-**

- (i) All Zones are intermixed with kankar.
(ii) Zone 1,2,3 & 4 is intermixed with thin layers of kankar.

15. **Quality of the formation water is good up to Logging depth.**

16. **Log Attached.**

Rajeev Kumar
Rajeev Kumar
Geophysicist
National Hydrology Project
Ground Water Department Lko. U.P


Rohit Kumar Sullere

Sean

JUNIOR ENGINEER
DIVISION OFFICE (E/M)
U.P. JAL NIGAM RURAL GONDA