



**GROUND WATER DEPARTMENT**  
**GOVERNMENT OF UTTAR PRADESH**  
Lucknow-226002



**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. **Date of Logging:** 06/08/2023
2. **Village:** Pure Prasad
3. **Location:** Bagicha
4. **Block:** Sirsiya
5. **District:** Shravasti
6. **Latitude & Longitude:** 27.7349 & 82.0154.
7. **Drilling depth:** 165m bgl
8. **Logging depth:** 165 m bgl
9. **Logging Company:** UP Ground Water Department
10. **Bore hole drilled by:** ALL/SGC.
11. **Recorded Geophysical log data:** SP, Natural gamma & Resistivity (16 N & 64 N).
12. (i) **Resistivity of Mud (Rm):** 7.50 ohm-m. (ii) **Resistivity of fresh water(Rf):** 7.50 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.	0-13	13	Top soil		Good
2.	13-40	27	Medium to coarser sand	Recommended	Good
3.	40-55	15	Sandy clay		Good
4.	55-58	3	Medium to fine sand	Recommended	Good
5.	58-67	9	Sandy clay		Good
6.	67-82	15	Medium to fine sand	Recommended	Good
7.	82-91	9	Fine sand	Recommended	Good
8.	91-109	18	Clay		Good
9.	109-127	18	Medium to fine sand	Recommended	Good
10.	127-136	9	Clay		Good
11.	136-139	3	Medium to fine sand	Recommended	Good
12.	139-148	9	Fine sand	Recommended	Good
13.	148-160	12	Fine sediments		Good
14.	160-165	5	Medium to fine sand	Recommended	Good

**14. Note:-**

(i) All Zones are intermixed with kankar.

(ii) Zone 2,7,8, & 12,13 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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