



**GROUND WATER DEPARTMENT**  
**GOVERNMENT OF UTTAR PRADESH**

Lucknow-226002



**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. **Date of Logging:** 22/06/2023
2. **Village:** Durgapur KP
3. **Location:** Govt.School
4. **Block:** Sirsiya
5. **District:** Shravasti
6. **Latitude & Longitude:** 27.6960 & 82.0174.
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):** 12.60 ohm-m. (ii) **Resistivity of fresh water(Rf):** 11.70 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.	10-21	11	Medium to fine sand	Recommended	Good
3.	21-24	3	Sandy Clay		Good
4.	24-29	5	Medium to fine sand	Recommended	Good
5.	29-33	4	Sandy clay		Good
6.	33-51	18	Medium to fine sand	Recommended	Good
7.	51-60	9	Sandy clay		Good
8.	60-66	6	Medium to fine sand	Recommended	Good
9.	66-72	6	Sandy clay		Good
10.	72-78	6	Medium to fine sand	Recommended	Good
11.	78-86	8	Fine sediments		Good
12.	86-89	3	Medium to fine sand	Recommended	Good
13.	89-101	12	Clayey sand		Good
14.	101-103	2	Fine sand		Good
15.	103-108	5	Clay		Good
16.	108-114	6	Medium to fine sand	Recommended	Good
17.	114-122	8	Clayey sand		Good
18.	122-124	2	Fine sand		Good
19.	124-130	6	Clayey sand		Good