



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

**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. Date of Logging: 03/07/2023
2. Village: Gandhi-01
3. Location: Forest
4. Block: Sirsiya
5. District: Shrawasti
6. Latitude & Longitude: 27.7821 & 82.0773.
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): 17.70 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 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.	0-12	12	Top soil		Good
2.	12-18	6	Clayey sand		Good
3.	18-22	4	Fine sand	Recommended	Good
4.	22-34	12	Sandy clay		Good
5.	34-42	8	Medium to fine sand	Recommended	Good
6.	42-48	6	Sandy clay		Good
7.	48-51	3	Medium to fine sand	Recommended	Good
8.	51-62	11	Clay		Good
9.	62-80	18	Medium to fine sand	Recommended	Good
10.	80-87	7	Clay		Good
11.	87-102	15	Medium to fine sand	Recommended	Good
12.	102-110	8	Clay		Good
13.	110-116	6	Medium to fine sand	Recommended	Good
14.	116-130	14	Clay		Good
15.	130-151	21	Medium to fine sand	Recommended	Good
16.	151-165	14	Clay		Good

**14. Note:-**

- (i) All Zones are intermixed with kankar.
- (ii) Zone 1,2,3,4,5 & 7 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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