

Ref : MTL/WL/22-23/ 97

Date 22.10.2022

## **REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE**

A deep borehole was drilled by working agency M/s. GVPR Engineers Limited as a part of their scope of work of development of Tubewell under Jal Jeevan Mission Project of SWSM, MTL conducted a Geophysical Resistivity logging in the above borehole.

Village Name	Toosawari
Block	Umarda
District	Kannauj, U.P.
Drilling Depth	200 Mtr BGL
Logged Depth	199.3 Mtr BGL
Type of Log	S.P & Resistivity
Machine Used	IGIS
Logging Date	22.10.2022

The following aquifer zones have been deciphered with the help of logging machine.

Sr. No.	Depth Range(mtr BGL)	Thickness (mtr)	Expected Litholog	Expected Quality
1	0 – 11		Top soil	
2	12 – 16		Sand with Clay	
3	17 – 26	9	Medium to fine Sand	Good
4	27 – 30		Sand with Clay	
5	31 – 36	5	Medium to fine Sand	Good
6	37 – 38		Sand with Clay	
7	39 – 43	4	Medium to fine Sand	Good
8	44 – 46		Sand with Clay	
9	47 – 51	4	Medium Sand	Good
10	52 – 55.5		Sand with Clay	
11	56 – 61	5	Medium Sand	Good
12	62 – 64		Sand with Clay	
13	65 – 71	6	Medium Sand	Good
14	72 – 75		Silty Sand	
15	76 – 79	3	Coarse to edium Sand	Good
16	80 – 84		Sand with Clay	
17	85 – 94	9	Medium to fine Sand	Good
18	95 – 101		Clay with Silt	
19	102 – 106	4	Medium Sand	Good
20	107 – 111		Sand with Clay	
21	112 – 119	7	Medium to fine Sand	Good
22	120 – 127		Clay with Kankar	
23	128 – 136	8	Medium to fine Sand	Good
24	137 – 139		Sand with Clay	
25	140 – 147	7	Medium Sand	Good
26	148 – 165		Clay with Kankar	
27	166 – 182		Clay with Silt	
28	183 – 199.3		Clay	

## Conclusions and Recommendations:

1. The litholog inferred broadly tallies with that of the well-site litholog.
2. Water Level is 8 Mtr below ground level.
3. The Quality of water is Good. However, it is recommended to have a chemical and bacteriological analysis of the water sample before using it for human consumption or for any other use.
4. All projections and recommendations are subject to the inherent limitations of the technique employed and there could be variations as the underground conditions are not always amenable to physical interpretations.
5. Logging Performed as per SWSM Guideline.
6. Logger machine is calibrated and accordingly ground water quality interpreted.

For Geo-Technical Consultant,



Anand Kumar  
(Hydrogeologist)



Authorized Signatory



# GEO – TECHNICAL CONSULTANT

(Division of MACHTECH)

Plot no. 61 Vikaskung, Near Tower, Dibiyapur – 206244, District – Auraiya, Uttar Pradesh (India)

E-mail: [machteertools55@gmail.com](mailto:machteertools55@gmail.com) , Mobile Number :- 9265018387

