

Ref : MTL/WL/22-23/ 122

Date 26.11.2022

## **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	Birpur
Block	Saurikh
District	Kunnauj, U.P.
Drilling Depth	200 Mtr BGL
Logged Depth	199.4 Mtr BGL
Type of Log	S.P & Resistivity
Machine Used	IGIS
Logging Date	26.11.2022

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 – 15		Top soil	
2	16 – 20		Sand with Clay	
3	21 – 34	13	Medium Sand	Good
4	35 – 36		Clay	
5	37 – 47	10	Medium to fine Sand	Good
6	48 – 51		Sand with Clay	
7	52 – 58	6	Medium Sand with Kankar	Good
8	59 – 61		Clay	
9	62– 64	2	Medium Sand	Good
10	65 – 72		Clay with Kankar	
11	73 – 78	5	Medium Sand with Kankar	Good
12	79 – 80		Clay	
13	81 – 83	2	Medium Sand with Kankar	Good
14	84 – 86		Clay	
15	87 – 97	10	Medium to fine Sand	Good
16	98 – 101		Clay	
17	102 - 105	3	Medium Sand	Good
18	106 – 122		Clay with Kankar	
19	123 – 127	4	Medium Sand	Good
20	128 – 131		Clay	
21	132– 138	6	Medium Sand	Good
22	139 – 144		Clay	
23	145 – 160	15	Medium Sand	Good
24	161 – 166		Clay	
25	167 – 170		Clay with Kankar	
26	171 – 173		Clay	
27	174 – 199.4		Clay with Silt	

## **Conclusions and Recommendations:**

1. The litholog inferred broadly tallies with that of the well-site litholog.
2. Water Level is 17 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

# GEO – TECHNICAL CONSULTANT

(Division of MACHTECH)

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

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

