

REPORT ON GEO-PHYSICAL ELECTRICAL
LOGGING OF BOREHOLE

at
Village: Himmatpur Sujti
Baraut, Baghpat, Uttar Pradesh

For
State Water Sanitation Mission (Jal Jeevan Mission)
UP Jal Nigam(Rural), Baghpat, U.P

Submitted Through

M/s. L.C. Infra Projects Private Limited

Conducted by



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Date: 10th October 2023

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

At
Village: Himmatpur Sujti
 Baraut, Baghpat, Uttar Pradesh

Introduction:

A deep borehole 145 (476 Feet) was drilled by working agency *M/s. LC Infra Projects Private Limited, Baghpat, U.P.* as a part of their scope work for development of tubewells under Jal Jeevan Mission Project of SWSM. GGWC conducted a Geophysical Resistivity logging in the above borehole using IGIS's Logger dated on 10th October 2023

Based on the interpretation of the Logging, the following litho logy has been inferred which tallies fairly well with the well-site litho-log based on mud-wash samples.

<i>Depth in m</i>	<i>Expected Litholog</i>	<i>Expected Quality</i>
0 - 3	Surface Soil	
3 - 10	Clay	
10 - 20*	Fine sand	
20 - 28	Clay	
28 - 36*	Medium sand	Good
36 - 42	Clay	
42 - 52*	Medium sand	Good
52 - 55	Sandy clay	
55 - 59*	Medium sand	Good
59 - 64	Sandy clay	
64 - 88*	Medium sand	Good
88 - 95	Sandy clay	
95 - 111	Clay kankar	
111 - 115*	Fine sand	Good
115 - 128	Sandy clay	
128 - 135*	Medium sand	Good
135 - 145	Clay kankar	

Conclusions and Recommendations:

1. The litholog inferred broadly tallies with that of the well-site litholog.
2. The zones marked with asterisk (*) appear to be Aquifer Zones for possible development of tubewell.
3. As per thickness of the Aquifer the expected discharge is 50,000 LPH to 60,000 LPH.
4. Water Level is 25 m below ground level.
5. 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.
6. The shallow aquifers are also recommended for development to get good quantity of water.
7. *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.*

for Global Groundwater Consultants



Chief Executive

SP and Resistivity Curves

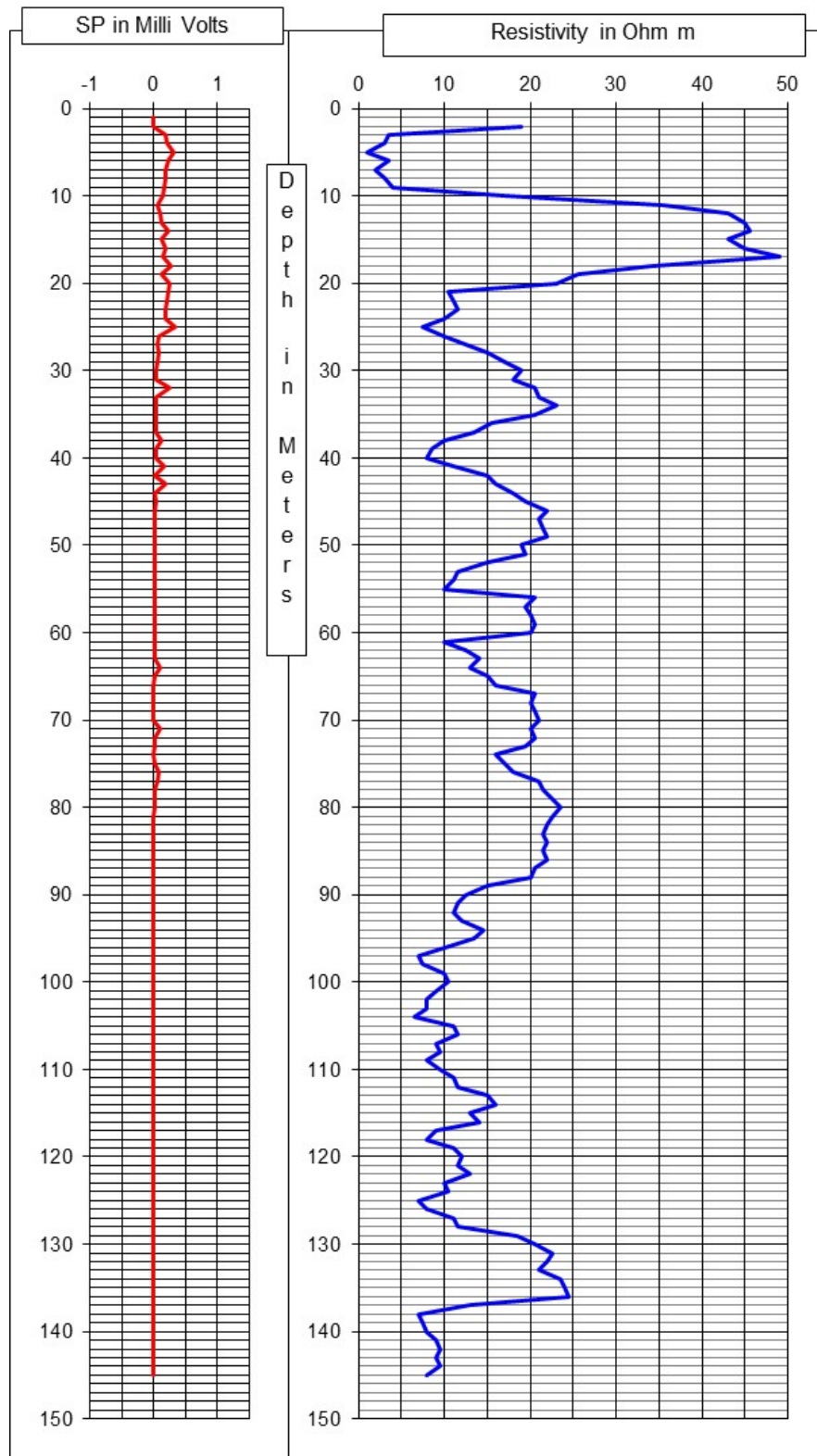




Photo of the Site at the time of Logging