# REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village : Baoli, 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 : 17<sup>th</sup> November, 2022

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

# At Village: Baoli,Baraut Baghpat, Uttar Pradesh

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#### Introduction:

A deep borehole 130 (426 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 17<sup>th</sup> November, 2022

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 mudwash samples.

0 - 3 - 13 -	3 13	Surface Soil	
	13		
13 -	13	Clay	
15	27	Clay with kankar	
27 -	36*	Medium sand	Good
36 -	49*	Fine sand	Good
49 -	86*	Medium sand	Good
86 -	95	Sandy clay	
95 -	105*	Fine sand	Good
105 -	109	Sandy clay	
109 -	115*	Medium sand	Good
115 -	130	Clay kanar	

### 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 60,000 LPH to 70,000 LPH.
- 4. Water Level is 21 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

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Chief Executive

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