

REPORT ON GEO-PHYSICAL ELECTRICAL  
LOGGING OF BOREHOLE

at  
Village: Badarkhs  
Garhmukteshwar, Hapur, Uttar Pradesh.

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

*Submitted Through*

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



GLOBAL GROUND WATER CONSULTANTS  
(Consulting Geologists & Geophysicists)  
84- III Floor, Humayun pur, Safdarjung Enclave, New Delhi - 110 029  
Phone: 9818-888824; 9818-007038.

Date : 11<sup>th</sup> April 2024

## REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

At  
**Village: Badarkha**  
 Garhmukteshwar, Hapur, Uttar Pradesh

**Introduction:**

A deep borehole 146 (479 Feet) was drilled *M/s. L.C Infra Projects Private Limited, Hapur, U.P.*, as a part of their scope of work of development of tubewell under Jal Jeevan Mission project of SWSM, GGWC conducted a Geophysical Resistivity logging in the above bore hole using IGIS's Logger dated on 11<sup>th</sup> April 2024.

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	Fine sand	
10 - 18*	Fine sand	Good
18 - 45	Medium sand	Good
45 - 53	Clay kankar	
53 - 77*	Medium sand	Good
77 - 82	Clay	
82 - 125*	Medium sand	Good
125 - 140	Sandy clay	
140 - 146	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 60,000 LPH to 80,000 LPH.
4. Water Level is 10 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

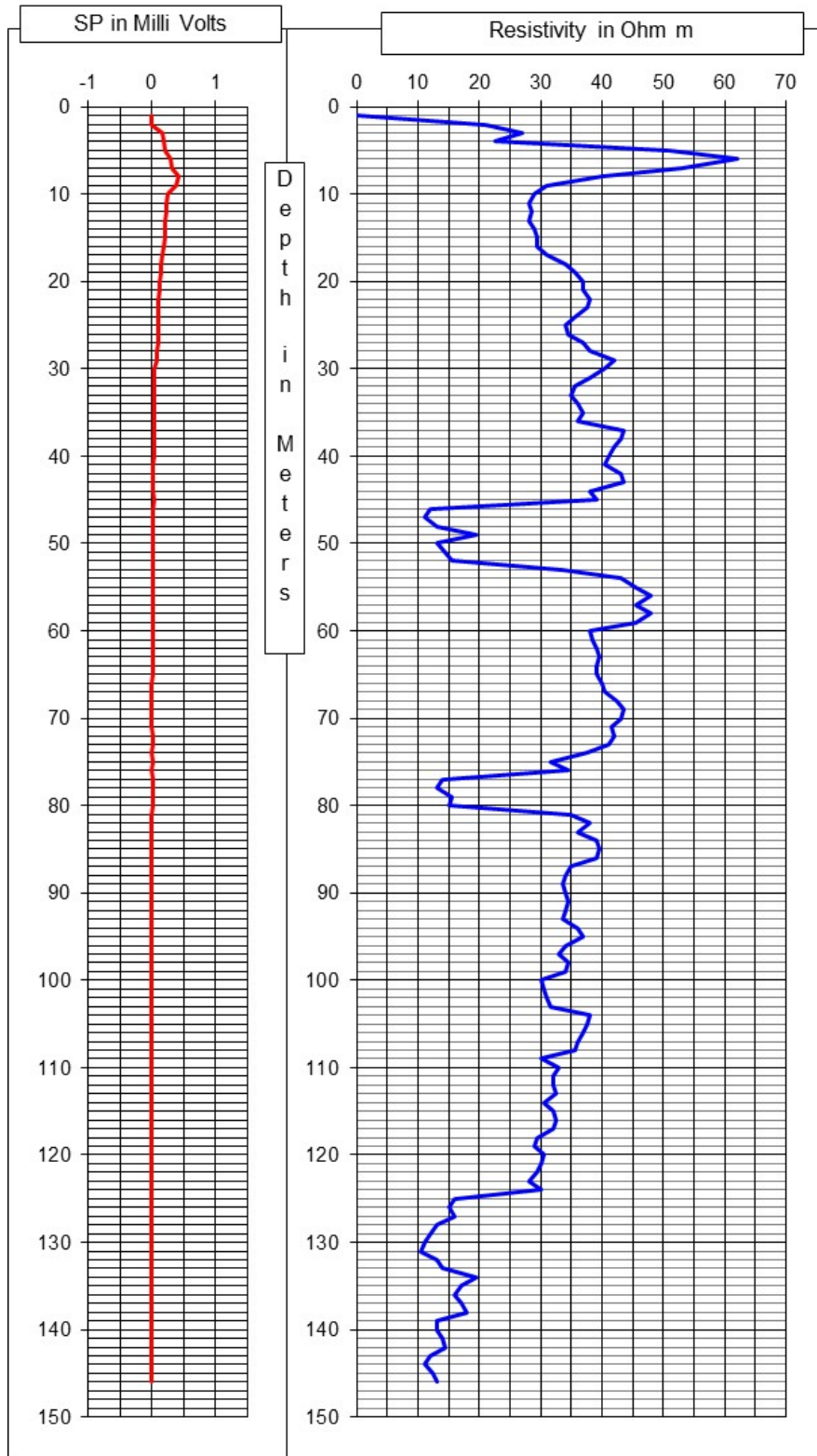




Photo of the Site at the time of Logging