

REPORT ON GEO-PHYSICAL ELECTRICAL  
LOGGING OF BOREHOLE

at  
Village: Vinaypur  
Khekra, 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*



GLOBAL GROUND WATER CONSULTANTS  
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Date: 22<sup>nd</sup> September 2023

## REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

At  
**Village: Vinaypur**  
 Khekra, Baghpat, Uttar Pradesh

**Introduction:**

A deep borehole 150 (492 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 22<sup>nd</sup> September 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 - 20	Clay	
20 - 24*	Fine sand	Good
24 - 42	Clay kankar	
42 - 59*	Medium to fine sand	Good
59 - 66	Clay	
66 - 77*	Medium to fine sand	Good
77 - 82	Clay	
82 - 92*	Medium to fine sand	Good
92 - 99	Clay kankar	
99 - 129	Clay	
129 - 138*	Fine sand	Saline
138 - 150	Clay	

*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 13 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*



A handwritten signature in blue ink, appearing to be "K. Singh".

*Chief Executive*

### SP and Resistivity Curves

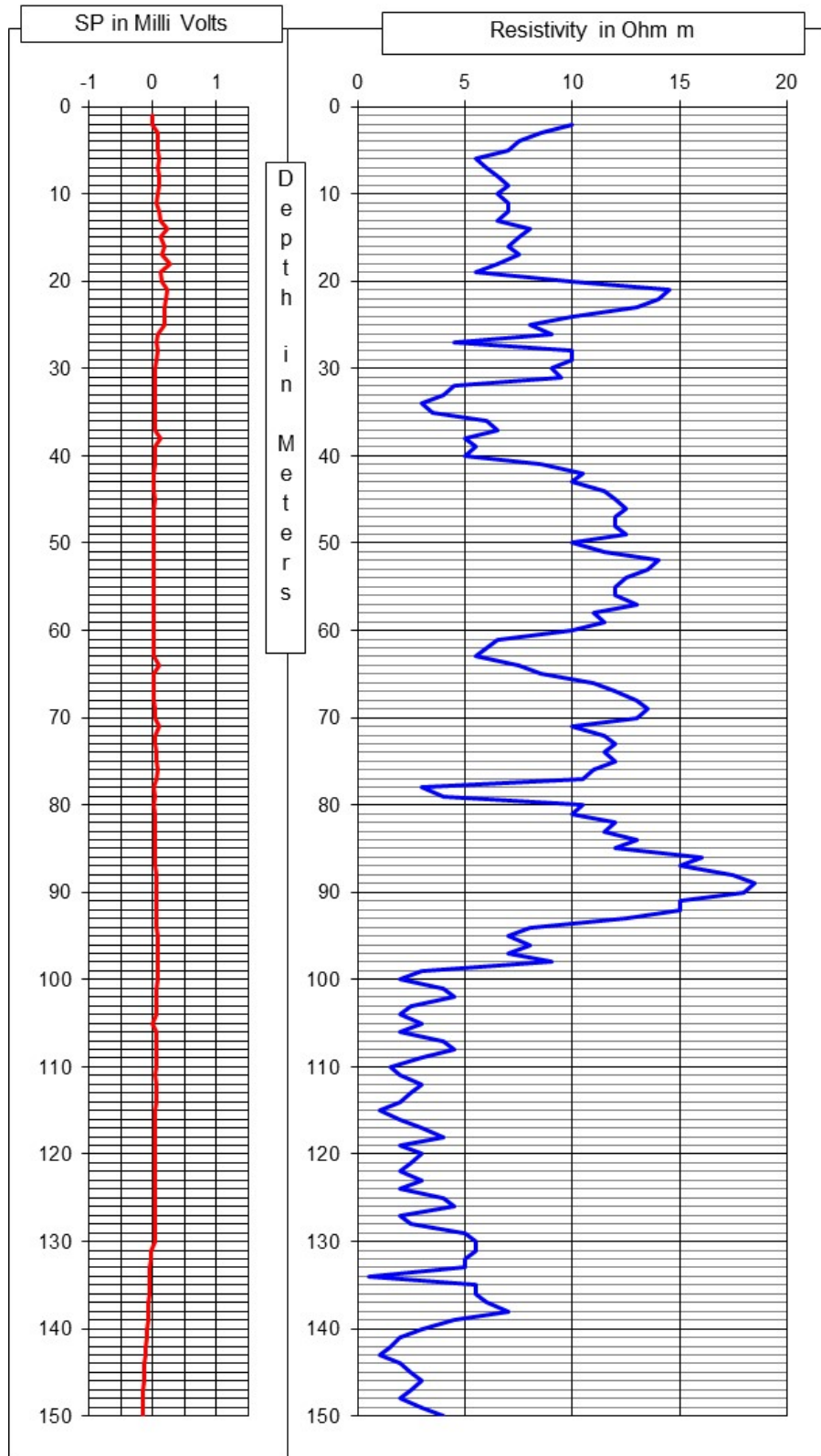




Photo of the Site at the time of Logging