

REPORT ON GEO-PHYSICAL ELECTRICAL  
LOGGING OF BOREHOLE

at

Village: Asafpur Khar Kheri  
Block : Baraut, Bhagpat, Uttar Pradesh

For

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

*Submitted Through*

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



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Date : 10<sup>th</sup> December, 2022.

## REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

At  
**Village: Asafpur Khar Kheri**  
 Block : Baraut, Bhagpat, Uttar Pradesh

**Introduction:**

A deep borehole 153m (501 Feet) was drilled by working agency *M/s. L.C.Infra Projects Private Limited, Bhagpat, 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 borehole using IGIS's Logger dated on 10<sup>th</sup> December, 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 mud-wash samples.

| <i>Depth in m</i> | <i>Expected Litholog</i> | <i>Expected Quality</i> |
|-------------------|--------------------------|-------------------------|
| 0 - 3             | Surface Soil             |                         |
| 3 - 6             | Sandy clay               |                         |
| 6 - 16            | Medium sand              |                         |
| 16 - 21           | Fine sand                |                         |
| 21 - 36*          | Medium sand              | Good                    |
| 36 - 39           | Clay                     |                         |
| 39 - 54*          | Medium sand              | Good                    |
| 54 - 58           | Clay                     |                         |
| 58 - 77*          | Medium sand              | Good                    |
| 77 - 83*          | Fine sand                | Good                    |
| 83 - 90           | Sandy clay               |                         |
| 90 - 107*         | Very fine sand           | Good                    |
| 107 - 125         | Clay with kankar         |                         |
| 125 - 130*        | Fine sand                | Good                    |
| 130 - 140         | Sandy clay               |                         |
| 140 - 153         | Clay with 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 30,000 LPH to 40,000 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.*

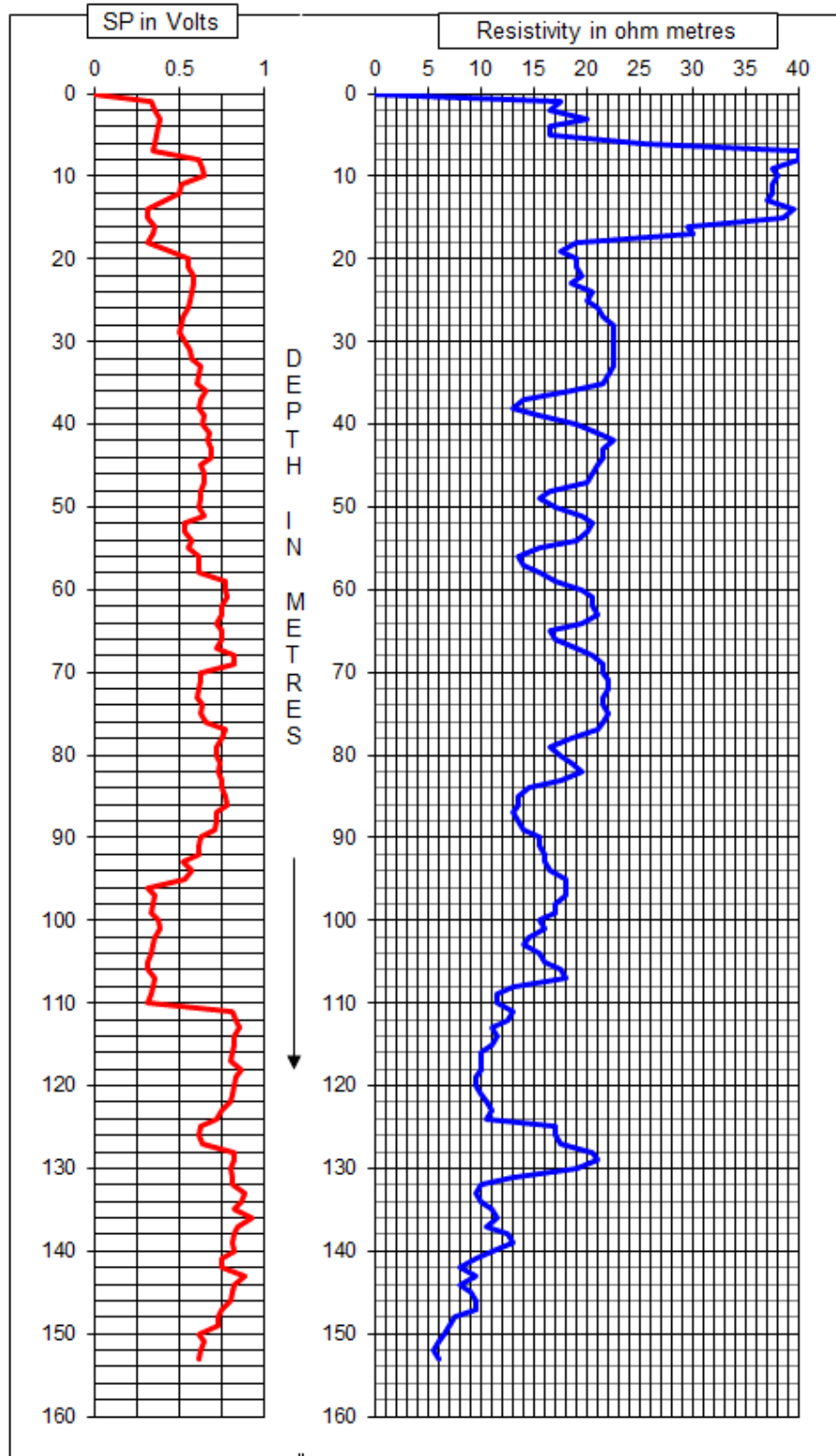
*for Global Groundwater Consultants*



*(M. RAVI KANTH)*

*M.Ravi Kanth  
Hydrogeologist*

### SP and Resistivity Curves



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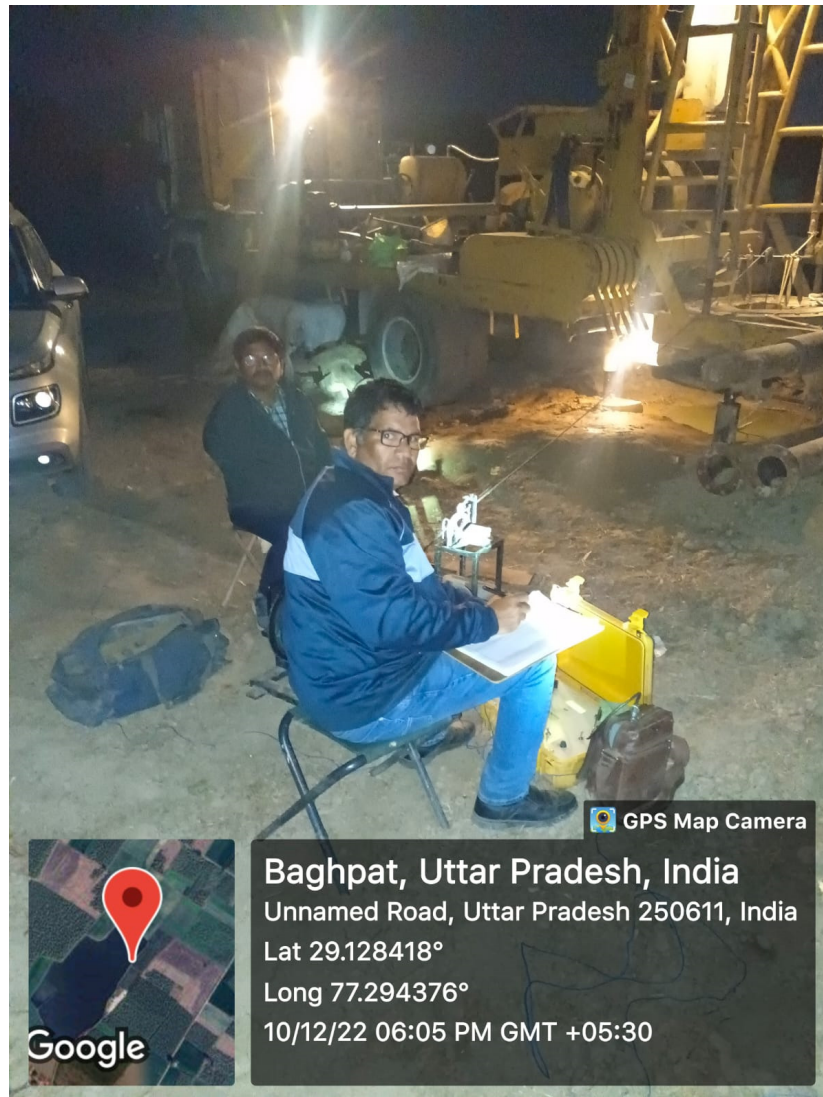


Photo of the Site at the time of Logging