# REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village: Bhawa

Dhaulana, 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: 13th December 2023

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

# At Village: Bhawa

### Dhaulana, Hapur, Uttar Pradesh

#### Introduction:

A deep borehole 135 (443 Feet) was drilled *M/s. L.C Infra Projects Private Limited, Ghaziabad, 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 13<sup>th</sup> December 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 mudwash samples.

Depth in m			Expected Litholog	Expected Quality
0		3	Surface Soil	
	-			C 1
3	-	19*	Medium sand	Good
19	-	21*	Fine sand	Good
21	-	56*	Medium to coarse sand	Good
56	-	64	Clay	
64	-	76*	Fine sand	Good
76	-	82	Clay	
82	-	90*	Medium sand	Good
90	-	97	Sandy clay	
97	-	107	Clay	
107	7 -	116	Sandy clay kankar	
116	<b>ó</b> -	135	Clay	

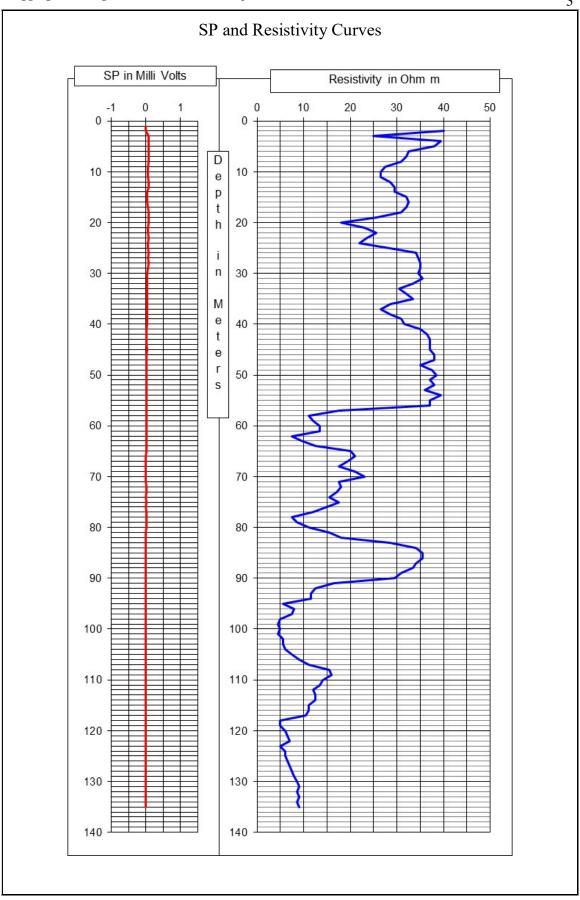
### Conclusions and Recommendations:

- 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 the thickness of the Aquifer the expected discharge is 60,000 LPH to 80,000 LPH.
- 4. Water Level is 12 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



Global Groundwater Consultants Consulting Geologists and Geophysists



Photo of the Site at the time of Logging