## REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village: Nizampur-Hiranpura, Garh mukteshwar 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 : 5<sup>th</sup> July 2023

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

1

## At Village: Nizampur-Hiranpura, Garhmukteshwar Hapur, Uttar Pradesh

## Introduction:

A deep borehole 125 (410 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 5<sup>th</sup> July 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.

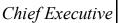
Depth in m			Expected Litholog	Expected Quality
0	-	3	Surface Soil	
3	-	15	Medium sand	
15	-	30*	Medium sand	Good
30	-	36	Sandy clay	
36	-	53*	Medium sand	Good
53	-	55	Sandy clay	
55	-	60*	Medium sand	Good
50	-	63	Sandy clay	
53	-	89*	Medium sand	Good
<u>89</u>	-	91*	Fine sand	Good
91	-	113*	Medium sand	Good
13	-	125	Sandy clay	

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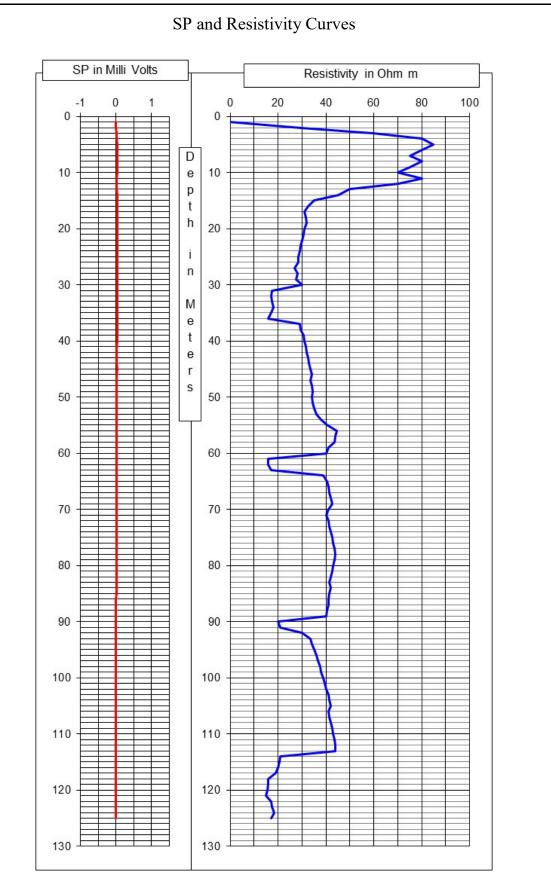
## Conclusions and Recommendations:

- 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 15 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.

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3

