## REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village: Kalyanpur, 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 : 28<sup>th</sup> June 2023

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

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## At Village: Kalyanpur, Garhmukteshwar Hapur, Uttar Pradesh

## Introduction:

A deep borehole 130 (426 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 28<sup>th</sup> June 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	-	7	Fine sand	
7	-	12	Sandy clay	
12	-	25*	Medium sand	Good
25	-	27*	Fine sand	Good
27	-	37*	Medium sand	Good
37	-	40	Clay	
40	-	47*	Medium sand	Good
47	-	49	Sandy clay	
49	-	67*	Medium sand	Good
67	-	71	Clay	
71	-	80*	Medium sand	Good
80	-	83*	Fine sand	Good
83	-	99*	Medium sand	Good
99	-	105	Clay	
105	-	110*	Fine sand	Good
110	) _	130	Clay kankar	

## Conclusions and Recommendations:

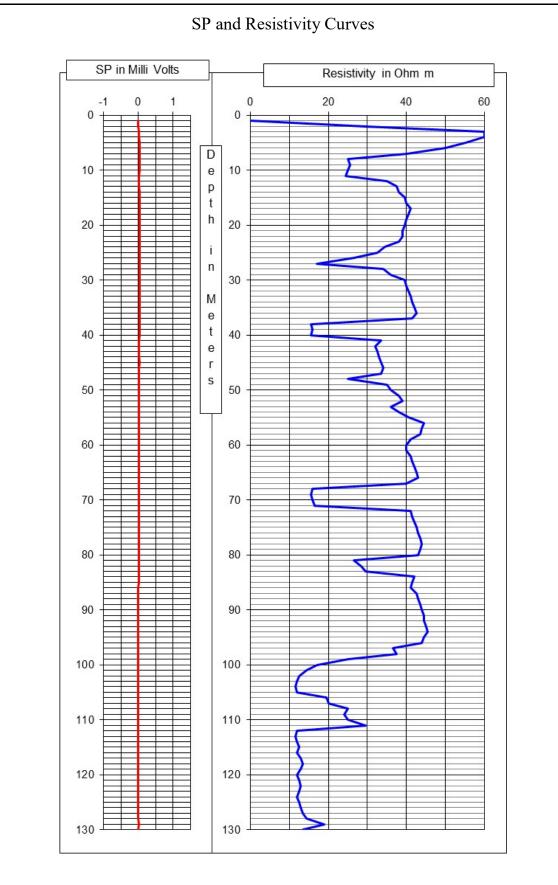
- 1. The litholog inferred broadly tallies with that of the well-site litholog.
- 2. The zones marked with asterisk (\*) appear to be Aquifer Zones for possible development of tubewell.
- 3. As per thickness of the Aquifer the expected discharge is 60,000 LPH to 70,000 LPH.
- 4. Water Level is 8 m below 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



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