## REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village: Ayyad Nagar (South- North) 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 : 8<sup>th</sup> March, 2022

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

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At

## Village: Ayyad Nagar (South- North) Hapur, Uttar Pradesh

## Introduction:

A deep borehole 145m (475 Feet) was drilled by working agency *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 borehole using IGIS's Logger dated on 8<sup>th</sup> March, 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 mudwash samples.

Depth in m			Expected Litholog	Expected Quality
0	-	3	Surface Soil	
3	-	14	Fine sand	
14	-	39*	Medium sand	Good
39	-	43	Sandy clay	
43	-	47*	Fine sand	Good
47	-	49	Sandy clay	
49	-	53*	Fine sand	Good
53	-	60	Sandy clay	
60	-	78*	Medium sand	Good
78	-	87	Clay	
87	-	109*	Medium sand	Good
109	) _	119	Clay	
119	) _	122*	Fine sand	Good
122	2 -	128	Clay	
128	-	133*	Medium sand	Good
133	-	145	Clay	

Global Groundwater Consultants Consulting Geologists and Geophysists Conclusions and Recommendations:

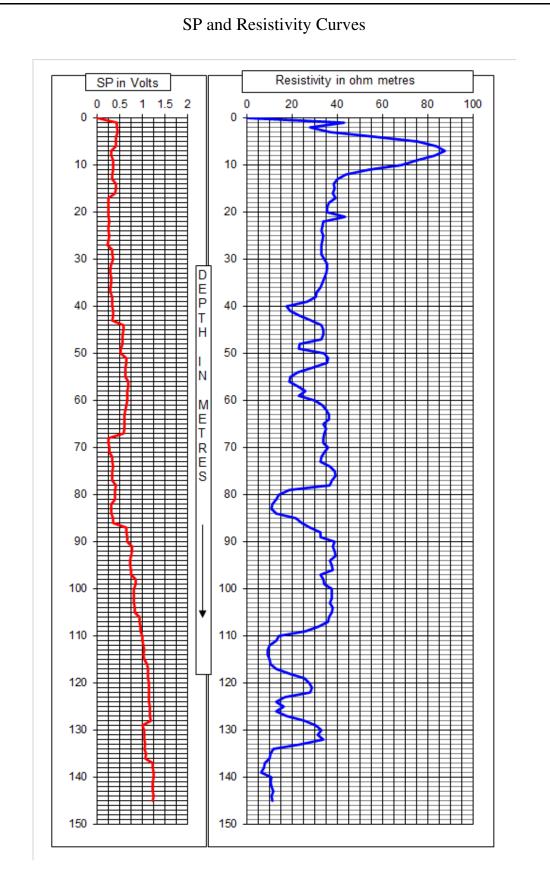
- 1. The litholog inferred broadly tallies with that of the well-site litholog.
- 2. The zones marked with asterisk (\*) appear to be Aquifer Zones for possible development of tubewell.
- 3. As per thickness of the Aquifer the expected discharge is 40,000 LPH to 50,000 LPH.
- 4. Water Level is 14 m below 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.

Sign. Date: Mew Delth for Global Groundwater Consultants

(M. RAVI KANTH)

Chief Executive

Global Groundwater Consultants Consulting Geologists and Geophysists



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Photo of the Site at the time of Logging