## REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at Village: Raghu Nathpur- Chandapura 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



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Date : 3<sup>rd</sup> July, 2022

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE At

## Village: Raghunathpur-Chandapura Hapur, Uttar Pradesh

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## Introduction:

A deep borehole 165m (410 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  $3^{rd}$  July, 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.

Dep	oth in	m	Expected Litholog	Expected Quality
0	-	3	Surface Soil	
3	-	19	Fine sand	
19	-	23	Sandy clay	
23	-	37*	Fine sand	Good
37	-	46	Sandy clay	
46	-	62*	Medium sand	Good
62	-	72	Sandy clay	
72	-	79*	Fine sand	Good
79	-	93	Sandy clay	
93	-	108*	Medium to fine sand	Good
108	-	113	Clay	
113	-	138*	Medium sand	Good
138	-	159	Clay with kankar	
159	) _	165	Sandy 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 thickness of the Aquifer the expected discharge is 90,000 LPH to 1,00,000 LPH.
- 4. Water Level is 19 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

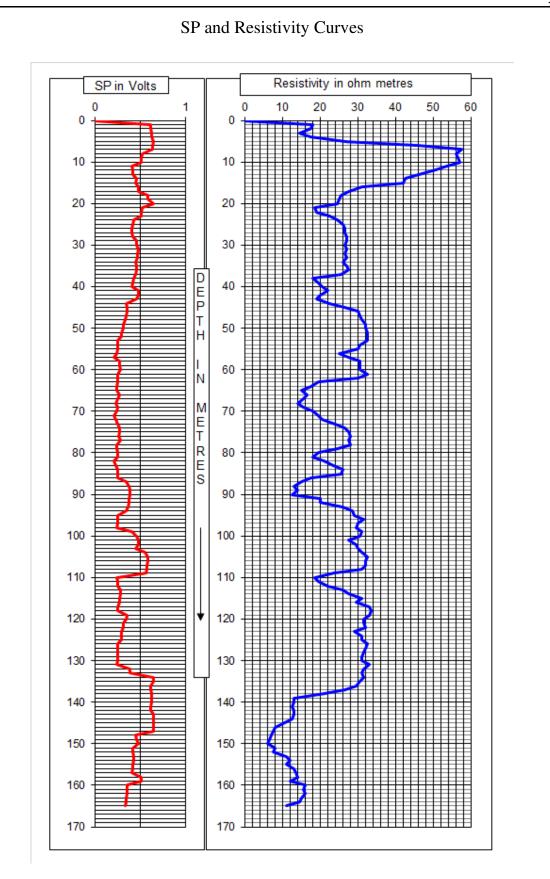
(m. RAVI KANTH)

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Photo of the Site at the time of Logging