# REPORT ON GEO-PHYSICAL ELECTRICAL LOGGING OF BOREHOLE

at

## Tigri village

Khekra, Baghpat, Uttar Pradesh.

for

STATE WATER SANITATION MISSION(JAL JEEVAN MISSION) U.P.Jal Nigam(Rural ) Bhagpat, U.P

Submitted by

### M/s. L.C.Infra Projects Private Limited



Conducted by

### GLOBAL GROUND WATER CONSULTANTS

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18th September, 2023.

## REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE $\mathbf{A} t$

## Fatehpur Chak

Baraut, Baghpat, Uttar Pradesh.

#### Introduction:

A deep borehole 142m (466 Feet) was drilled by working agency *M/s*. *L.C.Infra Projects Private Limited, Baghpat, 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 18<sup>th</sup> September, 2023

Based on the interpretation of the logging, the following lithology has been inferred which tallies fairly well with the well-site litho-log based on mud-wash samples.

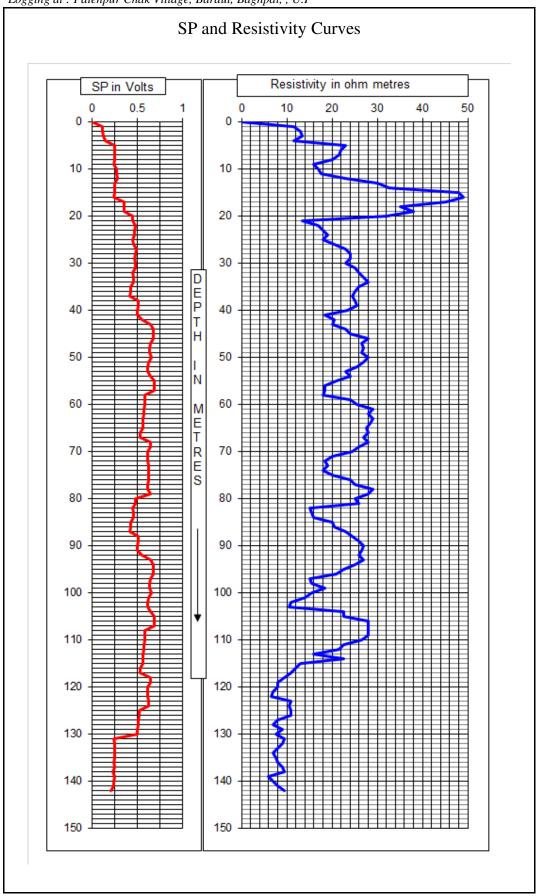
Depth in m			Expected Litholog	Expected Quality
0	-	3	Surface Soil	
3	-	12	Sandy clay	
12	-	22	Sand kankar	
22	-	55*	Medium sand	Good
55	-	59*	Fine sand	Good
59	-	81*	Medium sand	Good
81	-	85*	Fine sand	Good
85	-	96*	Medium sand	Good
96	-	105	Clay with kankar	
105	<u> </u>	114*	Medium to fine sand	Good
114	ļ -	142	Clay with 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 90,000 LPH to 1,20,000 LPH.
- 4. Water Level is 21 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. 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.Ravikanth Hydrogeologist



Global Groundwater Consultants Consulting Geologists and Geophysists



Photo of the site at time of Logging