

REPORT ON GEO-PHYSICAL ELECTRICAL
LOGGING OF BOREHOLE

at

Village : Acharya Khera (Gunga Khera), Baraut
Baghpat, Uttar Pradesh

For

State Water Sanitation Mission (Jal Jeevan Mission)
UP Jal Nigam(Rural), Baghpat, U.P

Submitted Through

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

Conducted by



GLOBAL GROUND WATER CONSULTANTS

(Consulting Geologists & Geophysicists)

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Date : 14th June 2023

REPORT ON GEO-PHYSICAL RESISTIVITY LOGGING OF BOREHOLE

At
Village: Acharya Khera (Gunga Khera), Baraut
Baghpat, Uttar Pradesh

Introduction:

A deep borehole 143 (469 Feet) was drilled by working agency *M/s. LC Infra Projects Private Limited, Baghpat, U.P.* As a part of their scope work for development of tubewells under Jal Jeevan Mission Project of SWSM. GGWC conducted a Geophysical Resistivity logging in the above borehole using IGIS's Logger dated on 14th 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 mud-wash samples.

<i>Depth in m</i>	<i>Expected Litholog</i>	<i>Expected Quality</i>
0 - 3	Surface Soil	
3 - 8	Sandy clay	
8 - 22	Fine sand	
22 - 37*	Medium sand	Good
37 - 40	Clay	
40 - 53*	Medium sand	Good
53 - 57	Clay	
57 - 78*	Medium sand	Good
78 - 86*	Medium to fine sand	Good
86 - 94	Clay	
94 - 104*	Fine sand	Good
104 - 116	Clay	
116 - 120*	Medium sand	Good
120 - 130	Clay	
130 - 140*	Medium sand	Good
140 - 143	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 60,000 LPH to 70,000 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. 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.*

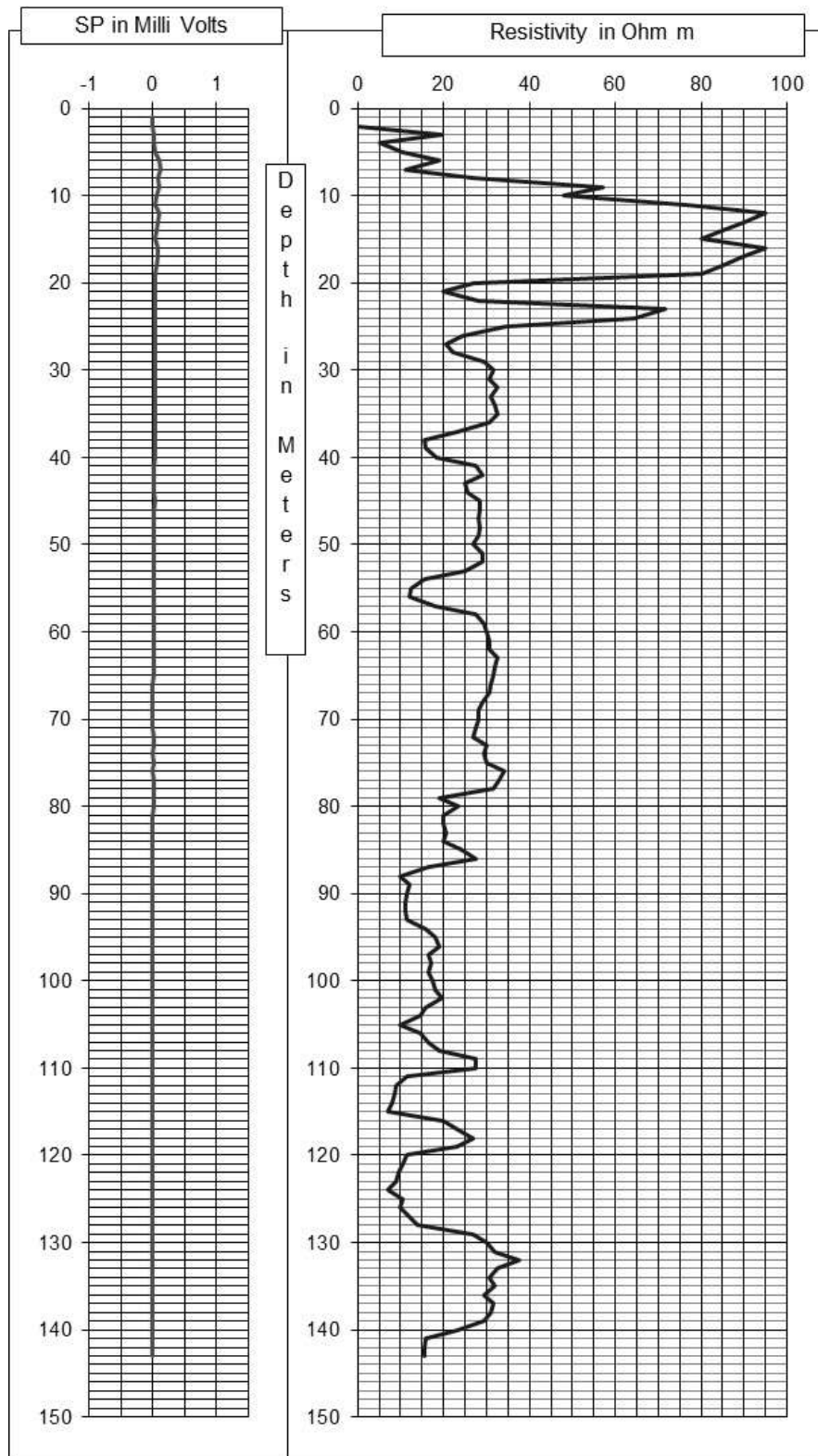
for Global Groundwater Consultants



A handwritten signature in black ink, appearing to be "K. K. Singh".

Chief Executive

SP and Resistivity Curves



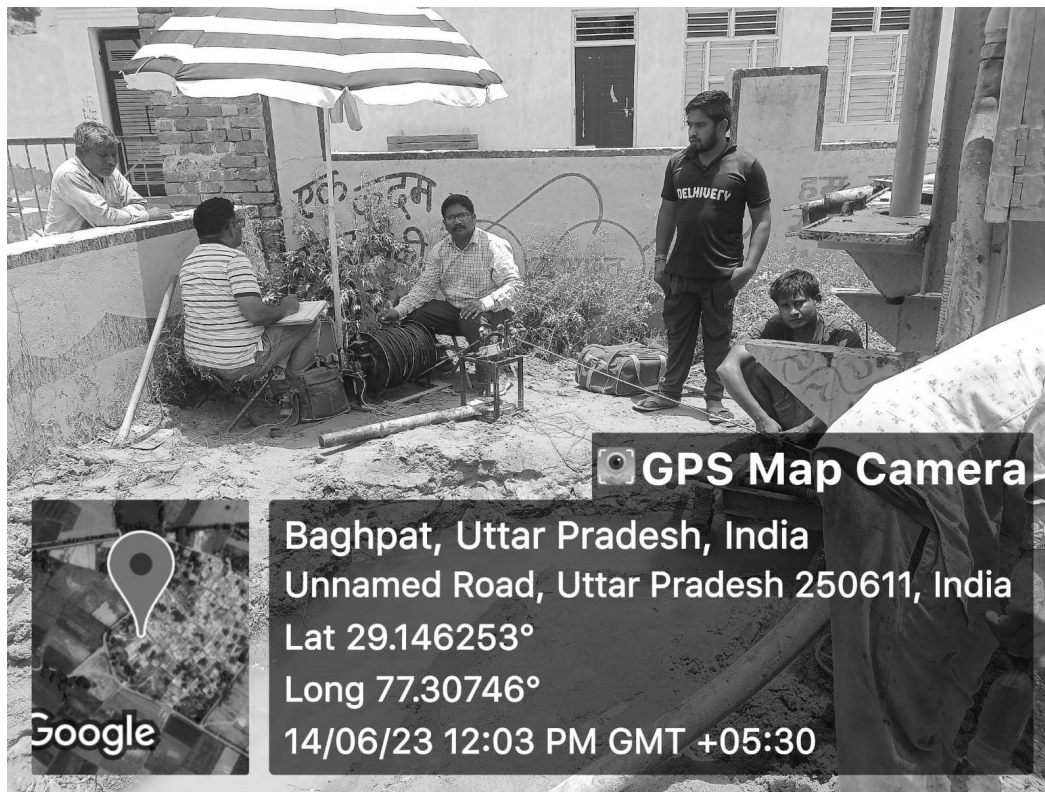


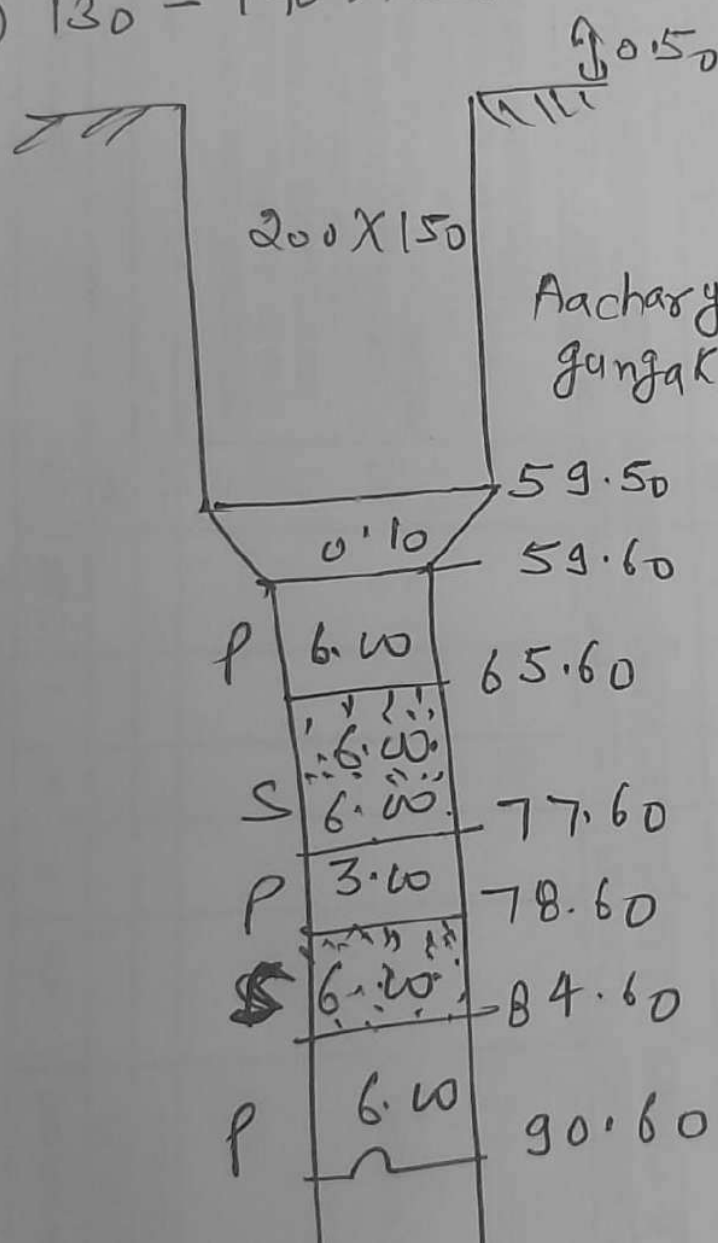
Photo of the Site at the time of Logging

Aacharya Kheda gungakhed badoth baghbat

- ① 40-53
- ② 57-78 → M.Sand
- ③ 78-86 → M.R
- ④ 94-104 → Pils
- ⑤ 116-120 → M.Sand
- ⑥ 130-140 → M.Sand

w.L = 21 MTR
(70 lpm)

200 → 60 MTR
150 → 60 MTR
150 → 6 MTR
126 MTR



Aacharya Kheda gungakhed badoth (Baghbat)

59.50
59.60

65.60

77.60

78.60

84.60

90.60