

**M/S E.R. TECHNOLOGIES** 

(Govt. Contractor of PH & Civil Works & Electrical Works)

(Specialist in: Deep Tube well, Sick Tube well, Geological and Hydro-Geological Survey, Electric Logging of Borehole, Videography of Borehole, Water Sample & Soil Testing etc.

Ref. ....

Dated 07/02/2024

# REPORT OF ELECTRIC LOGGING OF BOREWELL DRILLED AT SITE VILLLAGE SISAIYA GOSAI, BLOCK SAMRERA, DISRICT BUDAUN, UTTAR PRADESH UNDER JAL JEEVAN MISSION

#### Introduction:

The borehole at the site was drilled to a depth of 130.00 meters, and the electric logging was conducted up to 130.00-meter depth using a continuous logger on Feb 07, 2024. The purpose of this logging was to assess the various subsurface strata and properties encountered during drilling, with a focus on resistivity measurements (LON -64" and SHN-16) and self-potential (SP) data. This report provides an analysis of the interpreted data and offers recommendations for further actions under the Jal Jeevan Mission.

Name of agency	PNC , UP Borinmg & Pipes		
Location	Sisaiya Gosai		
Block	Samrera		
District	Budaun, U.P		
Depth drilled (mbgl)	130		
Depth logged (mbgl)	130		
Water level (m)	10		
LON -64" Resistivty (N-64)	Ohm.m (Blue)		
SHN-16 Resistivity (N-16)	Ohm.m (Red)		
Self-Potential (SP)	Mv (Green)		

Sr. No	(m)		Zone Thickness(m)	LON -64'' N Resistivity (ohm.m)	Probable Strata	Expected water Quality
	From	То				
1	0.00	6.00	6.00	<20	Top Soil	-
2	6.00	14.00	8.00	47	Medium Sand	-
3	14.00	19.00	5.00	36	Clay	-
4	19.00	28.00	9.00	56	Medium Coarse Sand	-
5	28.00	31.00	3.00	25	Clay	-
6	31.00	36.00	5.00	53	Medium Coarse Sand	-
7	36.00	38.00	2.00	24	Clay	-
8	38.00	49.00	11.00	59	Medium Coarse Sand	-
9	49.00	52.00	3.00	25	Clay	-
10	52.00	71.00	19.00	57	Medium Coarse Sand	Good
11	71.00	78.00	7.00	28	Clay	-
12	78.00	95.00	17.00	55	Medium Coarse Sand	Good

Regd. Office: 7-A Shanti Nagar, Rajpura Sirhind Bye Pass Road, Near St. Xavier's School



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## SITE VILLLAGE SISAIYA GOSAI, BLOCK SAMRERA, DISRICT BUDAUN

13	95.00	100.00	5.00	25	Clay	-
14	100.00	114.00	14.00	55	Medium Coarse Sand	Good
15	114.00	123.00	9.00	28	Clay	-
16	123.00	130.00	7.00	38	Fine Sand	-

## **Recommendations:**

Based on the interpreted strata data from the electric logging, the following recommendations are provided:

### 1. Screen Installation:

It is recommended to install screens against the **bold-marked strata** indicated in the interpretation above. These screens will help facilitate water inflow from the identified permeable zones.

#### 2. Expected Water Quality:

The expected water quality in the zones marked as "Good" is anticipated to be favorable.

### 3. Tubewell Development:

To optimize water yield, it is advised to develop the tubewell using a high-capacity air compressor.

Interpretation Done By...

PARKÁSH KUMAR Hydrogeologist

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