

REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- PAHARAPUR, BLOCK- LAKHIMPUR,
DISTT-LAKHIMPUR KHIRI
UNDER
JAL JIVAN MISSION

Introduction :

A Deep bore hole was drilled 170 mtrs. depth. and Logged depth ~~165~~ mtrs. at above site. Was drilled by M/s NCC, Lakhimpur Khiri.

On the request of M/s NCC, Lakhimpur Khiri. a Geophysical well Logging in the above bore hole using IGIS Well Logger on 21.Dec.2022.

Logging Para meters - Self potential, short normal (N-16), Long Normal (N-64), Lateral. Details of major Aquifer formations explored from logging of bore hole combined with the study of Strata Chart prepared from drill cuttings are given in the following table:-

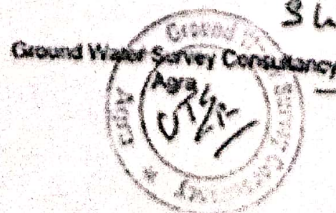
Mud Resistivity = ~~22.17~~ Ohms.

Drilling Water Resistivity = ~~24.72~~ Ohms.

Approx Water Level = 8 Mtr.

S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 8	3	Dry sand	
3.	8 - 20	12	Clay kankar	
4.	20 - 40	20	Medium sand & kankar	
5.	40 - 60	20	Clay kankar	Good
6.	60 - 86*	26	Medium sand	
7.	86 - 105	19	Clay kankar	Good
8.	105 - 126*	21	Medium sand	
9.	126 - 131	5	Clay kankar	Good
10.	131 - 154*	23	Medium sand	
11.	154 - 165	11	Clay kankar	Good

S.No. 6-66-29 (9m)
and 76-86 (10m)



— Logging performed as per
SWSM guidelines

— Groundwater quality
interpreted by firm as
per their logger
calibration

Scanned with CamScanner

TUESDAY - DECEMBER

WX-50 • 340-025

 $42m^3$

Reg. Dist. - 830 LPM

A-size - $340 \times 150 \text{ mm}$
30

L-depth - 165 m.

Report - 21¹²/22

$$1. \quad 60 - 86 = 26 \begin{cases} 60 - 69 = 9 \\ 76 - 86 = 10 \div 9 \end{cases}$$

2. $105 - 126 = 21 \Rightarrow 8$

3. $131 - 154 = 23 = \text{C}$

Hand-drawn diagram of a stepped shaft with dimensions and a table of calculations.

The shaft has a total length of 100 units. The dimensions of the steps are as follows:

- Step 1: 0.20 units (top)
- Step 2: 0.20 units
- Step 3: 0.20 units
- Step 4: 0.20 units
- Step 5: 0.20 units
- Step 6: 0.20 units
- Step 7: 0.20 units
- Step 8: 0.20 units
- Step 9: 0.20 units
- Step 10: 0.20 units
- Step 11: 0.20 units
- Step 12: 0.20 units
- Step 13: 0.20 units
- Step 14: 0.20 units
- Step 15: 0.20 units
- Step 16: 0.20 units
- Step 17: 0.20 units
- Step 18: 0.20 units
- Step 19: 0.20 units
- Step 20: 0.20 units

The table below shows the calculations for the shaft's dimensions and weight.

Step	Length (mm)	Radius (mm)	Area (mm ²)	Volume (mm ³)	Weight (N)
1	0.20	6.0	113.1	22.6	0.22
2	0.20	6.0	113.1	22.6	0.22
3	0.20	6.0	113.1	22.6	0.22
4	0.20	6.0	113.1	22.6	0.22
5	0.20	6.0	113.1	22.6	0.22
6	0.20	6.0	113.1	22.6	0.22
7	0.20	6.0	113.1	22.6	0.22
8	0.20	6.0	113.1	22.6	0.22
9	0.20	6.0	113.1	22.6	0.22
10	0.20	6.0	113.1	22.6	0.22
11	0.20	6.0	113.1	22.6	0.22
12	0.20	6.0	113.1	22.6	0.22
13	0.20	6.0	113.1	22.6	0.22
14	0.20	6.0	113.1	22.6	0.22
15	0.20	6.0	113.1	22.6	0.22
16	0.20	6.0	113.1	22.6	0.22
17	0.20	6.0	113.1	22.6	0.22
18	0.20	6.0	113.1	22.6	0.22
19	0.20	6.0	113.1	22.6	0.22
20	0.20	6.0	113.1	22.6	0.22
Total	100.0			450.0	4.50