

# REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- AGAR KHURD, BLOCK- PHOOLBEHAD, DISTT-LAKHIMPUR KHIRI  
UNDER  
JAL JIVAN MISSION

**Introduction :**

A Deep bore hole was drilled 165 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 22.Mar.2023.

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:-

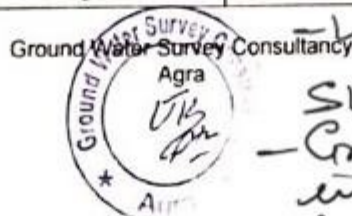
Mud Resistivity = 24.86 Ohms.

Drilling Water Resistivity = 25.48 Ohms.

Approx Water Level = 7 Mtr.

| S.No. | Depth range(m) | Thickness(m) | Lithology    | Expected Water Quality |
|-------|----------------|--------------|--------------|------------------------|
| 1.    | 0 - 5          | 5            | Surface soil |                        |
| 2.    | 5 - 15         | 10           | Clay kankar  |                        |
| 3.    | 15 - 35        | 20           | Medium sand  | Good                   |
| 4.    | 35 - 39        | 4            | Clay kankar  |                        |
| 5.    | 39 - 41        | 2            | Fine sand    | Good                   |
| 6.    | 41 - 47        | 6            | Clay kankar  |                        |
| 7.    | 47 - 50        | 3            | Fine sand    | Good                   |
| 8.    | 50 - 60        | 10           | Clay kankar  |                        |
| 9.    | 60 - 73*       | 13           | Medium sand  | Good                   |
| 10.   | 73 - 75        | 2            | Clay kankar  |                        |
| 11.   | 75 - 95*       | 20           | Medium sand  | Good                   |
| 12.   | 95 - 100       | 5            | Clay kankar  |                        |
| 13.   | 100 - 110*     | 10           | Medium sand  | Good                   |
| 14.   | 110 - 115      | 5            | Clay kankar  |                        |
| 15.   | 115 - 132*     | 17           | Medium sand  | Good                   |
| 16.   | 132 - 135      | 3            | Clay kankar  |                        |
| 17.   | 135 - 147*     | 12           | Medium sand  | Good                   |
| 18.   | 147 - 152      | 5            | Clay kankar  |                        |
| 19.   | 152 - 160      | 8            | Fine sand    | Good                   |
| 20.   | 160 - 165      | 5            | Clay         |                        |

G.Sa  
24/03/23



- Logging performed as per  
SWSM guidelines.  
- Groundwater quality  
interpreted by formulas  
per their logger calibration

NCC  
Jm<sup>2</sup>

Aggar Agar plurd, phosBehor.

Dischey 1200Lpm

300 X 150mm  
42.

Repost - 22<sup>8</sup>/23

$$60 - 73 = 13$$

$$75 - 95 = 20 = 12$$

$$140 - 110 = 10 \Rightarrow 9$$

$$115 - 132 = 17 \Rightarrow 15$$

$$135 - 147 = 12.$$

|     |      |       |
|-----|------|-------|
|     |      | 0.5   |
|     |      | 47.5  |
|     | 0.20 | 47.7  |
|     | 6.0  |       |
|     | 6.0  |       |
|     | 6.0  |       |
|     | 6.0  |       |
|     | 4.0  |       |
|     |      | 82.5  |
| 6.0 |      |       |
| 6.0 |      |       |
|     |      | 94.5  |
|     | 6.0  |       |
|     |      | 100.5 |
| 6.0 |      |       |
| 3.0 |      |       |
|     |      | 109.5 |
|     | 6.0  |       |
|     |      | 115.5 |
| 6.0 |      |       |
| 6.0 |      |       |
| 3.0 |      |       |
|     |      | 130.5 |
|     | 6.0  |       |
|     |      | 136.5 |