

REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- PATVAN, BLOCK- PASGAWAN, 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 07.June.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 = 22.800 hms.

Drilling Water Resistivity = 23.66 Ohms.

Approx Water Level = 9 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 - 20 | 5 | Fine sand | Good |
| 4. | 20 - 25 | 5 | Clay kankar | |
| 5, | 25 - 31 | 6 | Fine to Medium sand | Good |
| 6. / | 31 - 45 | 14 | Clay kankar | |
| X. | 45 - 58* | 13 | Medium sand | Good |
| 8. / | 58 - 65 | 7 | Clay kankar | |
| 9. | 65 - 73* | 8 | Medium sand | Good |
| 10. / | 73 - 81 | 8 | Clay kankar | |
| W. | 81 - 101* | 20 | Medium sand | Good |
| 12./ | 101 - 118 | 17 | Clay kankar | |
| 13. | QH8 - 127* | 97 | Medium sand | Good |
| 14. | 127 - 134 | 7 | Clay kankar | |
| 15. 17 | 3 134 - 152* | 18 17 | Medium sand | Good |
| 16. | 152 - 160 | 8 | Clay kankar | |
| 17. | 160 - 165* | 5 | Fine to Medium sand | Good |

GSh 08/08/23

Ground Water Survey Consultancy

- Logging performed
as per SWSM guidlines
- Groundwater quality
witespreted by firm
as per their logger
calibration.