### GROUND WATER SURVEY CONSULTANCY

GEOLOGISTS, GEOPHYSICISTS & TUBEWELL ENGINEERS

#### GEO-PHYSICAL WELL ELECTOLOGGING REPORT

Ref No:- 47

Date:- 08-04-2022

#### NAME OF SITE

Gram Panchayat- Tah Khurd Kalan BLOCK- Khutar

DISTT- Shahjahanpur

#### NAME OF AGENCY

M/s NCC Ltd. Shahjahanpur



#### GROUND WATER SURVEY CONSULTANCY

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ISO; 9001: 2015



# REPORT ON GEOPHYSICAL WELL LOGGING

# GRAM PANCHAYAT- TAH KHURD KALAN, BLOCK- KHUTAR DISTT- SHAHJAHANPUR UNDER JAL JIVAN MISSION

#### Introduction:

A Deep bore hole was drilled 141 mtrs. depth. and Logged depth 140 mtrs. at above site. Was drilled by M/S NCC Ltd., Shahajahanpur.

On the request of M/S NCC Ltd., Shahajahanpur. a Geophysical well Logging in the above bore hole using IGIS Well Logger on 08.Apr.2022.

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

| S.No. | Defth range(m) | Thickness(m) | Lithology           | Expected<br>Water Quality |
|-------|----------------|--------------|---------------------|---------------------------|
| 1.    | 0 - 5          | 5            | Surface soil        |                           |
| 2.    | 5 - 10         | 5            | Dry sand            |                           |
| 3.    | 10 - 20        | 10           | Clay kankar         |                           |
| 4.    | 20 - 28        | 8            | Fine to Medium sand | Good                      |
| 5.    | 28 - 32        | 4            | Clay kankar         |                           |
| 6.    | 32 - 40        | 8            | Medium sand         | Good                      |
| 7.    | 40 - 54        | 14           | Clay kankar         |                           |
| 8.    | 54 - 57*       | 3            | Fine to Medium sand | Good                      |
| 9.    | 57 - 69        | 12           | Clay kankar         |                           |
| 10.   | 69 - 78*       | 9            | Medium sand         | Good                      |
| 11.   | 78 - 88        | 10           | Clay kankar         |                           |
| 12.   | 88 - 91*       | 3            | Medium sand         | Good                      |
| 13.   | 91 - 100       | 9            | Clay kankar         |                           |
| 14.   | 100 - 112*     | 12           | Medium sand         | Good                      |
| 15.   | 112 - 117      | 5            | Clay kankar         |                           |
| 16.   | 117 - 133*     | 16           | Medium sand         | Good                      |
| 17.   | 133 - 140      | 7            | Clay kankar         |                           |



## Conclusions and Recommendations :-

- 1. The Lithology broadly tallies with that of drill cutting starta chart.
- The zones marked with asterisk (\*) appear to be aquifer zones for possible development of tubewell.
- The Quality of water is expected Good.
  - Expected discharge is 900 to 1000 L.P.M.
  - 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. 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.

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Agra \*

**Ground Water Survey Consultancy** 

Geophysicist



