

## District Level Water Analysis Laboratory , U.P Jal Nigam (Rural), Aligarh

BUILDINGNO 01, ADHIKSHAN ABHIYANTA KARYALAYA, NIRMAN MANDAL, U.P. JAL NIGAM, RAMGHATROAD, ALIGARH ALIGARH,UTTARPRADESH-202001 (Test Address only )

## Test report

Sample  
Id:

U1485429S24874355

## User Information

Name: Kalpataru power transmission limited Mobile: 6398162959

Email: vikas.om@kalpatarugroup.com Pin Code: 207248

Full Address: Village- Arjunai Simrai , Gram Panchayat- Arjunai Simrai, Block- Aliganj, District- Etah, State- Uttar Pradesh

## Sample description

Source of Sample: Rajkot Village: Rajkot

Gram Panchayat: Rajkot Block: Sakit

District: Etah State: Uttar Pradesh

Address: Remarks:

Latitude: Longitude:

Date &amp; time of sample collection

28.11.2024 | 09:39:00 AM

Date &amp; time of sample received in lab

29.11.2024 | 11:12:00 AM

Date &amp; time of sample analysed

02.12.2024 | 11:17:00 AM

Date &amp; time of report generation

05.12.2024 | 11:22:23 AM

## Test results

S. No.	Parameters tested	Unit of measurement	Requirement (acceptable limit) as per BIS 10500	Permissible limit (in absence of alternate source) as per BIS 10500	Test result value	Method of Analysis	Remarks
1	Calcium (as Ca)*	mg/l	75	200	57.700	EDTA Titrimetric method	
2	Chloride (as Cl)*	mg/l	250	1000	82.300	Argentometric method	
3	Colour*	Hazen units	5	15	1.000	Visual comparison method	
4	E. coli	CFU/100 ml	Shall not be detectable in any 100 ml sample	No Relaxation	0.000	MFT	

S. No.	Parameters tested	Unit of measurement	Requirement (acceptable limit) as per BIS 10500	Permissible limit (in absence of alternate source) as per BIS 10500	Test result value	Method of Analysis	Remarks
5	Fluoride (as F)*	mg/l	1	1.5	0.530	Ion selective electrode method	
6	Iron (As Fe)*	mg/l	1	No Relaxation	0.030	Phenanthroline method or as per IS 15303:2002 Electrothermal atomic absorption/Spectrophotometer method	
7	Magnesium (As Mg)*	mg/l	30	100	21.400	Calculation by APHA	
8	Nitrate (as NO3)*	mg/l	45	No Relaxation	6.400	UV-Visible Spectrophotometer	
9	pH*	NA	6.5-8.5	No Relaxation	7.410	Electrometric method	
10	Sulphate (as SO4)*	mg/l	200	400	39.200	Turbidimetric method	
11	TDS*	mg/l	500	2000	473.000	Gravimetric method	
12	Total Alkalinity (as Calcium Carbonate)*	mg/l	200	600	176.000	Titration method	
13	Total Arsenic (As As)	mg/l	0.01	No Relaxation	0.000	Silver diethyldithiocarbamate (SDDC) method using UV-Visible Spectrophotometer	
14	Total coliform	CFU/ 100 ml	Shall not be detectable in any 100 ml sample	No Relaxation	0.000	MFT	
15	Total Hardness (As CaCO3)*	mg/l	200	600	232.000	EDTA Titrimetric method	
16	Turbidity*	NTU	1	5	1.460	Nephelometric method	

**Note:**

- 1)\*indicates parameters that are NABL accredited.
- 2)This test results related to the sample tested above
- 3)The report shall not to be reproduced in full without approval of authority
- 4)This is the end of the report

**Data prepared by**

Chemist: (Yashwant Singh)

Microbiologist: (Yashwant Singh)

**Authorised signatory**  
Shailender Rajawat (Test Lab Incharge)

\*\*\*\*\*This is an electronically generated report and does not require a signature.\*\*\*\*\*

**Jal Jeevan Mission aims at potable tap water supply to every home**

Let's join hands to ensure drinking water is potable. It helps in preventing water borne diseases and improve public health.

Designed & Developed by NIC. Copyright ©copy NJJM 2024

**Print**

# GROUND WATER SURVEY CONSULTANCY

GEOLOGISTS, GEOPHYSICISTS & TUBEWELL ENGINEERS

## GEO-PHYSICAL WELL ELECTOLOGGING REPORT

Ref No:-B- 355

Date:- 12-10-2024

### NAME OF SITE

GRAM PANCHAYAT- Rajkot

BLOCK- Sakeet

DISTT- Etah

### NAME OF AGENCY

M/s Kalpataru Project International Pvt. Ltd.  
Etah



## GROUND WATER SURVEY CONSULTANCY

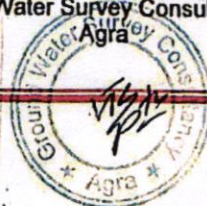
Electric Well Logging, Geophysical Resistivity Survey, Ground Water Investigations.

112 A-Shree Nagar Colony, Firozabad Road, Agra- 282006

(M) : 9412260823, 9794625420, 9761163000, Email : gwsc\_agra@yahoo.com

**ISO ; 9001 : 2015**

Ground Water Survey Consultancy



# REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- RAJKOT, BLOCK- SAKEET, DISTT- ETAH  
UNDER  
JAL JIVAN MISSION

## Introduction :

A Deep bore hole was drilled 110 mtrs. depth. and Logged depth 110 mtrs. at above site. Was drilled by M/s Kalpataru Project International Pvt. Ltd, Etah.

On the request of M/s Kalpataru Project International Pvt. Ltd, Etah. a Geophysical well Logging in the above bore hole using IGIS Well Logger on 12.Oct.2024.

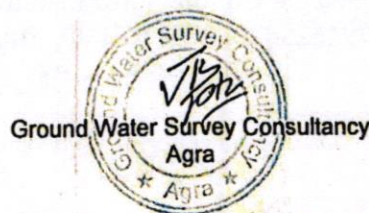
Logging Para meters - Self potential, short normal (N16), Long Normal (N-64), Lateral. Details of major Aquifer formations explored from logging of bore hole combined with the study of Strata Chart prepared from drill cuttings are given in the following table:-

Mud Resistivity = 10.07 Ohms.

Drilling Water Resistivity = 12.51 Ohms.

Approx Water Level = 24 Mtr.

S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 16	11	Clay kankar	
3.	16 - 18	2	Kankar	
4.	18 - 25	7	Clay kankar	
5.	25 - 33	8	Fine to Med sand & kan	Med to Marginally
6.	33 - 40	7	Clay kankar	
7.	40 - 45	5	Fine to Medium sand	Med to Marginally
8.	45 - 57	12	Clay kankar	
9.	57 - 64	7	Kankar sand	saline
10.	64 - 110	46	Clay kankar	



**Conclusions and Recommendations :-**

1. The Lithology broadly tallies with that of drill cutting strata chart.
2. The zones marked with asterisk (\*) appear to be aquifer zones for possible Development of tube well.
3. The Quality of water is expected Medium to Marginally saline.
4. 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.
5. 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.

**Geologist**



**Ground Water Survey Consultancy**

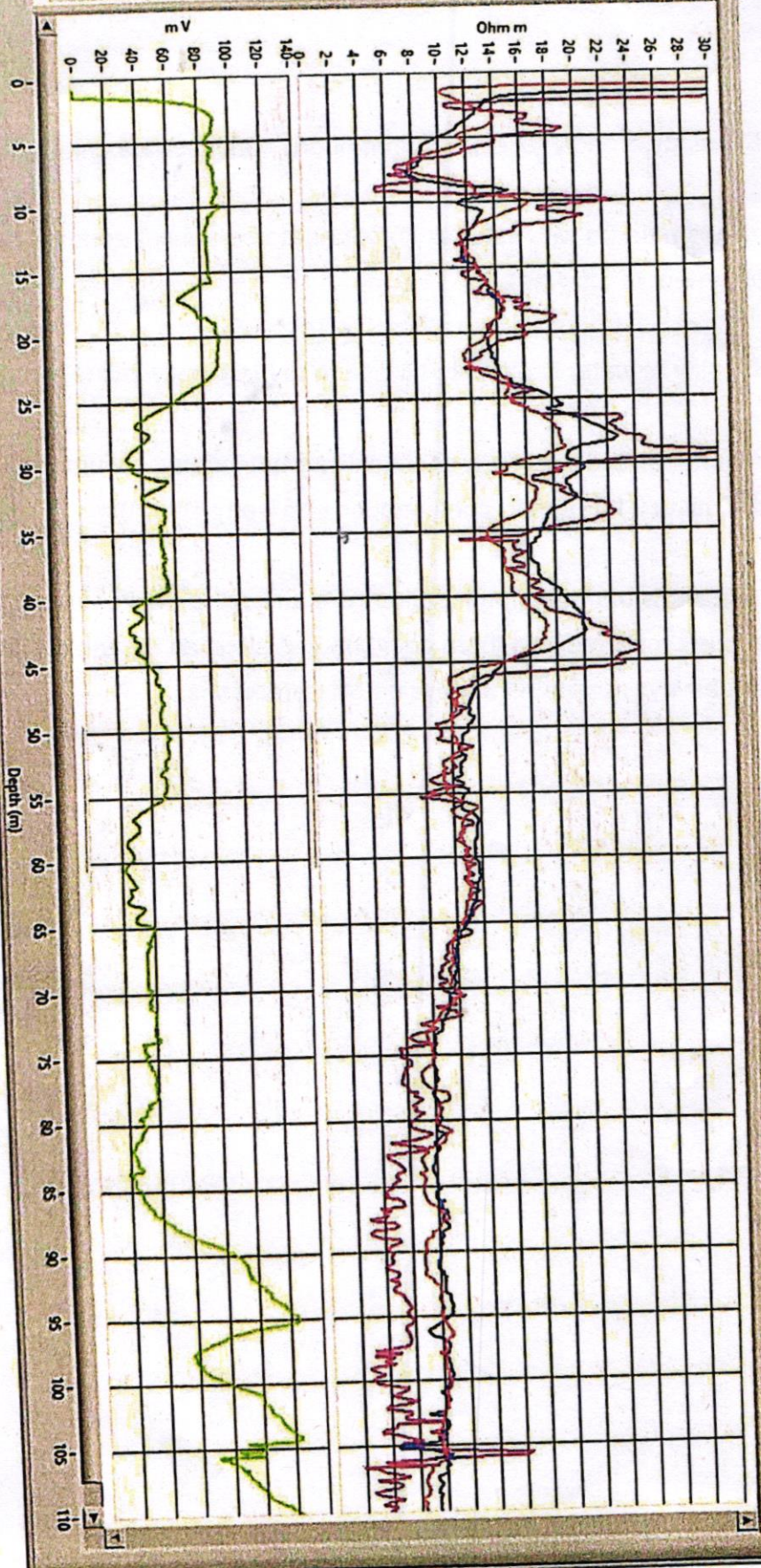
Rhoo a  
 N16 (SN)  
 N64(LN)  
 LAT

Logging Details:  
 Log No. V. P. R. 10/10-11  
 Date of Logging: 12 Oct 2024  
 Log No. V. P. R. 10/10-11  
 Date of Logging: 12 Oct 2024

Logger S. No.:  
 IGIS/S/01/10-11

Logger Model:  
 DMPL-2

Logger Owned by:  
 Ground Water  
 Survey Consultancy  
 Agra UP India





**KALPA-TARU**

**darvee associates**  
architects engineers & consultants pvt ltd



QUALITY MANAGEMENT  
SYSTEM

Format No :  
KPTL/232221F/00023

DEPTH OF  
STARTA

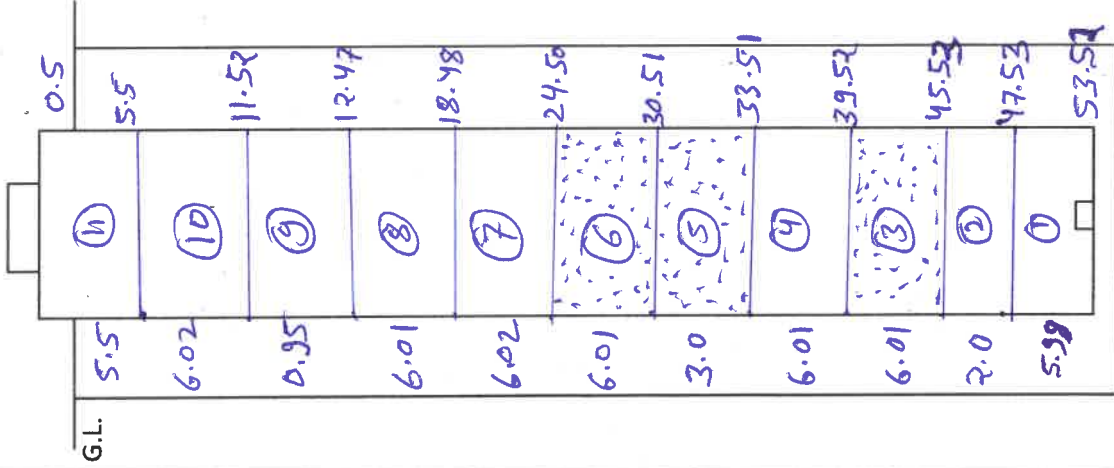
**PROPOSED ASSEMBLY DETAILS**

Block- Sakit  
GP- Rajkot

SL. DPR Details -

- Lowering Date - 16/10/2024
- 1 Water Discharge in LPM - 520
- 2. Bore well Drilling dia- 500mm
- 3. Bore well Drilling depth- 110mtr

**LOGGING REPORT**



SL.	Depth Range	Thickness	Remarks
1	25-33	0.8mtr	
2			
3	40-45	0.5mtr	
4			
5			
6			
7			
8			
9			
10			
11			

**Assembly Details**

**Proposed Assembly for Lowering**

- 1. 300mm dia MS Plain Pipe-
- 2. 200mm dia MS Plain Pipe 39mtr
- 3. 200mm dia MS Slotted Pipe- 15.02 mtr
- 4. 200mm dia LCG Pipe -
- 5. 300/200 mm dia Reducer -
- 6. MS Bail Plug- 01
- 7. MS Ring 300mm-
- 8. MS Ring 200mm- 10
- 9. MSSl Clamp- 01
- 10. Centre Guide - 02
- 11. TW Assembly Support-
- 12. MS Well Cap - 01
- 13. Pea Gravel Packing-

*Pril*

KPTD

TPI

CLIENT (UPIN)



**PROJECT - STATE WATER AND SANITATION MISSION PROJECT ETAH**

**REQUEST FOR INSPECTION (RFI)**

Format No : JMC/232221F/00001

RFI no: JJM/ETAH/JMC/

Date : 07/10/2024

Contractor Name: JMC Projects (I) Ltd.

LOA No- 3563/W-25 (Aligarh)/2021-22 dated 07.01.2022

**Location of Work**

District: Etah Block: Sakit Scheme: Rajkot

Following civil items are ready for inspection :

SBC	<input type="checkbox"/>	Tube Well	<input checked="" type="checkbox"/>	Excavation	<input type="checkbox"/>	PCC	<input type="checkbox"/>	RCC	<input type="checkbox"/>
Shuttering	<input type="checkbox"/>	Brick Work	<input type="checkbox"/>	Plaster Work	<input type="checkbox"/>	Painting	<input type="checkbox"/>	Stand Post	<input type="checkbox"/>
Rising Main	<input type="checkbox"/>	Backfilling	<input type="checkbox"/>	M.S. Wicket Gate/ Window	<input type="checkbox"/>			Interlocking Tile	<input type="checkbox"/>
HDPE Pipeline	<input type="checkbox"/>	Others	<input type="checkbox"/>						

Following Mechanical, Electrical, C&I items are ready for inspection :

Instrumentation	<input type="checkbox"/>	Welding	<input type="checkbox"/>	Valves	<input type="checkbox"/>	Chain Pulley	<input type="checkbox"/>	DG Set	<input type="checkbox"/>
Pump Set	<input type="checkbox"/>	Stabilizer	<input type="checkbox"/>	Pannel	<input type="checkbox"/>	Sloar	<input type="checkbox"/>	Chlorinating Plant	<input type="checkbox"/>
Lighting	<input type="checkbox"/>	EMF Meter	<input type="checkbox"/>	Level / Pressure Transmitter	<input type="checkbox"/>			RTU	<input type="checkbox"/>
Earthing cable	<input type="checkbox"/>	Starter	<input type="checkbox"/>	Piping- DI ( ) HDPE ( ) MS ( ) MDPE ( )	<input type="checkbox"/>			Others	<input type="checkbox"/>

Work Description :

*\* R.F.I B for borewell drilling & logging work.*  
*\* Location - Rajkot*  
*\* Drilling depth - 110mtr. dia - 500mm.*  
*\**

On Date: 10/10/2024 Time: 10:00AM

Submitted By: Sony Banerjee Date: 11/10/24 Time: 5:00pm Sign: [Signature]

TPI (Aarvee)

Received By: \_\_\_\_\_ Date: 12/10/24 Time: \_\_\_\_\_ Sign: [Signature]

Comments : Drilling depth =  
Logging depth =

Civil Department

NAME :	<input type="checkbox"/> APPROVED	NAME :	<input type="checkbox"/> APPROVED	E&M , I/C Department
DESIG :	<input type="checkbox"/> APPROVED AS NOTED	DESIG :	<input type="checkbox"/> APPROVED AS NOTED	
SIGN :	<input type="checkbox"/> REJECTED	SIGN :	<input type="checkbox"/> REJECTED	





**aarvee associates**  
architects engineers & consultants Pvt. Ltd.



**PROJECT - STATE WATER AND SANITATION MISSION PROJECT ETAH**

**REQUEST FOR INSPECTION (RFI)**

Format No : JMC/232221F/00001      RFI no: JJM/ETAH/JMC/      Date : 15/10/24.  
Contractor Name: JMC Projects (I) Ltd.      LOA No- 3563/W-25 (Aligarh)/2021-22 dated 07.01.2022

**Location of Work**

District: <u>ETAH</u>	Block: <u>Sakit</u>	Scheme: <u>Rajkot</u>
Following civil items are ready for inspection :		
SBC <input type="checkbox"/>	Tube Well <input checked="" type="checkbox"/>	Excavation <input type="checkbox"/>
Shuttering <input type="checkbox"/>	Brick Work <input type="checkbox"/>	Plaster Work <input type="checkbox"/>
Rising Main <input type="checkbox"/>	Backfilling <input type="checkbox"/>	M.S. Wicket Gate/ Window <input type="checkbox"/>
HDPE Pipeline <input type="checkbox"/>	Others <input type="checkbox"/>	
Following Mechanical, Electrical, C&I items are ready for inspection :		
Instrumentation <input type="checkbox"/>	Welding <input type="checkbox"/>	Valves <input type="checkbox"/>
Pump Set <input type="checkbox"/>	Stabilizer <input type="checkbox"/>	Pannel <input type="checkbox"/>
Lighting <input type="checkbox"/>	EMF Meter <input type="checkbox"/>	Level / Pressure Transmitter <input type="checkbox"/>
Earthing cable <input type="checkbox"/>	Starter <input type="checkbox"/>	Piping- DI ( ) HDPE ( ) MS ( ) MDPE ( ) <input type="checkbox"/>
		Chain Pulley <input type="checkbox"/>
		Sloar <input type="checkbox"/>
		Chlorinating Plant <input type="checkbox"/>
		RTU <input type="checkbox"/>
		DG Set <input type="checkbox"/>
		Stand Post <input type="checkbox"/>
		Interlocking Tile <input type="checkbox"/>
		RCC <input type="checkbox"/>
		Others <input type="checkbox"/>

**Work Description :**

\* R.F.I for Borewell Lowering work  
\* Lowering depth - 54mtr. 33mtr Plain 15.02mtr slotted  
\* Dia of Lowering - 200mm  
\* Location - Rajkot Sakit

On Date : 16/10/24      Time : 9:00 AM  
Submitted By : Somy Baniwara      Date 15/10/24      Time 10:00 PM      Sign [Signature]  
TPI (Aarvee)      Date 16/10/24      Time      Sign [Signature]

Comments : Total assembly = 54.02 mtr  
200 mm Plain Pipe = 39 mtr  
Slotted Pipe = 15.02 mtr

Civil Department

E&M , I/C Department

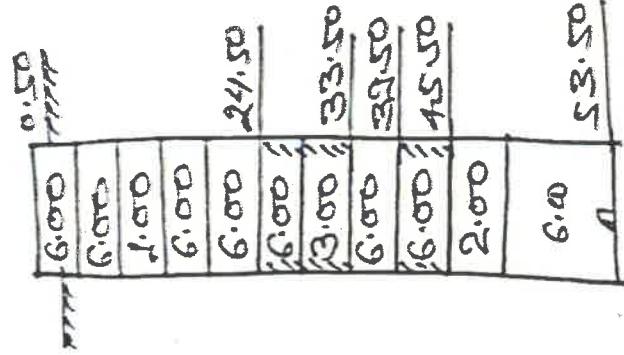
NAME :  APPROVED      NAME :  APPROVED  
DESIG :  APPROVED AS NOTED      DESIG :  APPROVED AS NOTED  
SIGN:  REJECTED      SIGN:  REJECTED

G.P. → Rajkoti,  
 Block-Sakiti Diast Area,  
 Required → 520 LPM

Water Level → 76 feet

76  
 24  
100 m/h

25-53 → 08 m/h  
 40-45 → 05 m/h



ATE → 54 m/h 57 m/h 57 m/h 57 m/h 57 m/h 57 m/h 57 m/h 57 m/h 57 m/h 57 m/h

200 mm dia plain pipe → 59.00 m/h  
 200 mm dia spiral pipe → 15.00 m/h  
Total → 54.00 m/h

# GROUND WATER SURVEY CONSULTANCY

GEOLOGISTS, GEOPHYSICISTS & TUBEWELL ENGINEERS

## GEO-PHYSICAL WELL ELECTOLOGGING REPORT

Ref No:-B- 355

Date:- 12-10-2024

### NAME OF SITE

GRAM PANCHAYAT- Rajkot

BLOCK- Sakeet

DISTT- Etah

### NAME OF AGENCY

M/s Kalpataru Project International Pvt. Ltd.  
Etah



## GROUND WATER SURVEY CONSULTANCY

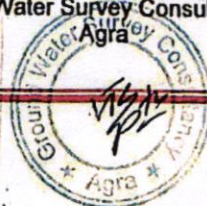
Electric Well Logging, Geophysical Resistivity Survey, Ground Water Investigations.

112 A-Shree Nagar Colony, Firozabad Road, Agra- 282006

(M) : 9412260823, 9794625420, 9761163000, Email : gwsc\_agra@yahoo.com

**ISO ; 9001 : 2015**

Ground Water Survey Consultancy



# REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- RAJKOT, BLOCK- SAKEET, DISTT- ETAH  
UNDER  
JAL JIVAN MISSION

## Introduction :

A Deep bore hole was drilled 110 mtrs. depth. and Logged depth 110 mtrs. at above site. Was drilled by M/s Kalpataru Project International Pvt. Ltd, Etah.

On the request of M/s Kalpataru Project International Pvt. Ltd, Etah. a Geophysical well Logging in the above bore hole using IGIS Well Logger on 12.Oct.2024.

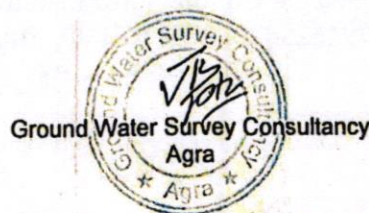
Logging Para meters - Self potential, short normal (N16), Long Normal (N-64), Lateral. Details of major Aquifer formations explored from logging of bore hole combined with the study of Strata Chart prepared from drill cuttings are given in the following table:-

Mud Resistivity = 10.07 Ohms.

Drilling Water Resistivity = 12.51 Ohms.

Approx Water Level = 24 Mtr.

S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 16	11	Clay kankar	
3.	16 - 18	2	Kankar	
4.	18 - 25	7	Clay kankar	
5.	25 - 33	8	Fine to Med sand & kan	Med to Marginally
6.	33 - 40	7	Clay kankar	
7.	40 - 45	5	Fine to Medium sand	Med to Marginally
8.	45 - 57	12	Clay kankar	
9.	57 - 64	7	Kankar sand	saline
10.	64 - 110	46	Clay kankar	



**Conclusions and Recommendations :-**

1. The Lithology broadly tallies with that of drill cutting strata chart.
2. The zones marked with asterisk (\*) appear to be aquifer zones for possible Development of tube well.
3. The Quality of water is expected Medium to Marginally saline.
4. 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.
5. 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.

**Geologist**



**Ground Water Survey Consultancy**

Rhoo a  
 N16 (SN)  
 N64(LN)  
 LAT

Logging Details:  
 Log No. V. P. 10/10-11  
 Date of Logging: 12 Oct 2024  
 Log No. V. P. 10/10-11  
 Date of Logging: 12 Oct 2024

Logger S. No.:  
 IGIS/S/01/10-11

Logger Model:  
 DMPL-2

Logger Owned by:  
 Ground Water  
 Survey Consultancy  
 Agra UP India

