

# REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- SAMASTPUR MACHHUA, BLOCK- ATRAULI, DISTT- ALIGARH  
UNDER  
JAL JIVAN MISSION

**Introduction :**

A Deep bore hole was drilled 120 mtrs. depth. and Logged depth ~~119~~ mtrs. at above site. Was drilled by M/s Kalpataru Power Transmission limited, Aligarh.

On the request of M/s Kalpataru Power Transmission limited, Aligarh. a Geophysical well Logging in the above bore hole using IGIS Well Logger on 27.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 = 13.58 ~~Ohms~~.

Drilling Water Resistivity = 14.77 ~~Ohms~~.

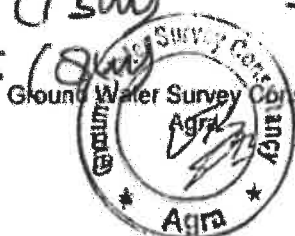
Approx Water Level = 6 Mtr.

S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 10	5	Clay	
3.	10 - 21	11	Fine sand	Medium
4.	21 - 24	3	Clay kankar	
5.	24 - 31	10	Medium sand	Medium
6.	31 - 38	7	Clay kankar	
7.	38 - 50*	12	Medium sand	Medium
8.	50 - 67	17	Clay kankar	
9.	67 - 77*	10	Fine to Medium sand	Medium
10.	77 - 82	5	Kankar	
11.	82 - 98*	16	Fine to Medium sand	Medium
12.	98 - 105	7	Clay	
13.	105 - 115*	10	Medium sand	Medium
14.	115 - 119	4	Clay kankar	

Sr NO 11 - 85 - 98 (13m)

Sr NO 13 - 107 - 115

G.Sh.



- Logging performed as per ISRM guidelines  
- Groundwater quality interpreted by ferns as per their logger caliber

82  
18  

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100 mtr

Block - diamond with Alignment  
Assumed → '225' PM"

Shole

38-50 → 12 mtr

67-77 → 10 mtr

82-98 → 16 mtr

(85-98)

6.00	
6.00	
6.00	
6.00	
6.00	
6.00	
1.50	
6.00	49.00
6.00	42.00
6.00	
6.00	
3.00	
6.00	76.00
6.00	76.00
6.00	
1.50	83.50
6.00	89.50
6.00	95.50

200 mm dia Plain pipe → 78.00 mtr

200 mm dia Slotted pipe → 18.00 mtr

Retal 96.00 mtr

AQL → 0.50 mtr

Bar 95.50 mtr



PROJECT - STATE WATER AND SANITATION MISSION PROJECT ALIGARH

REQUEST FOR INSPECTION (RFI)

Format No : JJM/ALIGARH/KPTL/01

RFI no: JJM/ALIGARH/KPTL/DHANI PUR/

Date : 29/03/2023

Contractor Name: Kalpataru Power Transmission Limited.

LOA No- 3155/W-25 (Aligarh)/2021-22 dated 01.11.2022

Location of Work

DISTRICT: ALIGARH BLOCK: DHANI PUR SCHEME: SARMASTPUR MACHUA

Following civil items are ready for inspection :

Date :

- SBC, Tube Well, Excavation, PCC, RCC, Drilling, Logging, Lowering, OP Unit, Column, Shuttering, Brick Work, Plaster Work, Painting, Stand Post, Rising Main, Backfilling, M.S. Wicket Gate/ Window, Interlocking Tile, HDPE Pipeline, Others

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

Date :

- Instrumentation, Welding, Valves, Chain Pully, DG Set, Pump Set, Stabilizer, Pannel, Sloar, Chlorinating Plant, Lighting, EMF Meter, Level / Pressure Transmitter, RTU, Earthing cable, Starter, Piping- DI, HDPE, MS, MDPE, Others

Work Description :

TUBEWELL MS PIPE LOWERING WORK

On Date : 30/03/2023

Time : 10:00AM

Submitted By AMITRAJAN KUMAR

Date: 29/03/23

Time 10:00 AM

Sign Amit Rajan Kumar

TPI (Aarvee)

Receved By M.F.KHAN

Date

Time

Sign

Comments :

Civil Department

E&M , I/C Department

NAME : APPROVED

NAME : APPROVED

DESIG : APPROVED AS NOTED

DESIG : APPROVED AS NOTED

SIGN: REJECTED

SIGN: REJECTED



**KALPA-TARU**

KALPATARU POWER TRANSMISSION LIMITED

**aarvee associates**  
architects engineers & consultants pvt. ltd.



**PIPE ASSEMBLY AND LOWERING CHART FOR TUBE WELL**

31/03/2023

District:- Aligarh

Block:- **DHANIPUR**

Scheme:- **SAMRASTPUR MACHHWA**

Rig No/ Type DC:- **DC**

Size of Bore:- **500mm**

Under:- JJM

Assembly Size:- **2020X200mm**

Required LPM:- **A15**

Contractor:- **KPTL**

CHART		PIPE LENGTH	ASSEMBLY DETAILS
AGL		Pipe No. =	Drilling Started Date:- 22/03/23 DPR Drilling Depth:- 110m
		Pipe No. =	Logging Started Date:- 27/02/23 Logging Completed Date:- 27/02/23
		Pipe No. =	Lowering Started Date :- 29/03/23 Lowering Completed Date :- 31/03/23
	0.60	Pipe No. = 18 = 6.06	Housing Pipe Φ :- MM M Above AGL Φ :- 202 MM 0.60 M
		Pipe No. = 17 = 6.05	Plain Pipe Φ :- 202 MM 78.5M Slotted Pipe Φ :- 200 MM 18 M
		Pipe No. = 16 = 6.06	Lowered Assembly:- 96.57 M Total Assembly+ AGL :- 95.97+0.6 M
		Pipe No. = 15 = 6.05	Actual Drilling Depth:- 119 M MS H Frame:- 01
		Pipe No. = 14 = 6.06	MS Ring:- - 17 MS Reducer:- - 0
		Pipe No. = 13 = 6.06	MS Bail Plug:- - 01 MS Clamp:- - 01
		Pipe No. = 12 = 1.50	MS Well Cap:- - 01 Centre Guide:- - 03
43.30		Pipe No. = 11 = 6.06	
49.30		Pipe No. = 10 = 6.05	
		Pipe No. = 9 = 6.06	
		Pipe No. = 8 = 6.06	
		Pipe No. = 7 = 3.00	
70.47		Pipe No. = 6 = 6.05	
76.47		Pipe No. = 5 = 6.00	
		Pipe No. = 4 = 1.50	
		Pipe No. = 3 = 6.00	
83.97		Pipe No. = 2 = 6.00	
89.97		Pipe No. = 1 = 6.00	
Bail Plug	95.97		

*Shahed*  
Contractor  
Representative

*[Signature]*  
TPI  
Representative

Client  
Representative