

# REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- MIRJAPUR SONAURA, BLOCK- BEHJAM,  
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 16.Jun.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 = 22.53 Ohms.

Drilling Water Resistivity = 23.60 Ohms.

Approx Water Level = 6 Mtr.

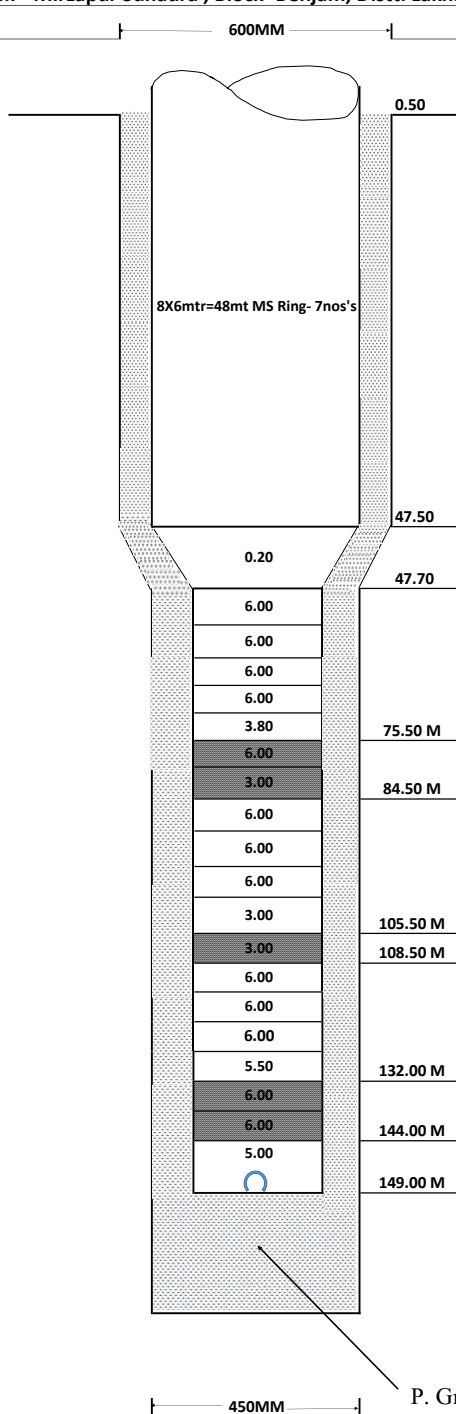
S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 12	7	Fine sand	
3.	12 - 16	4	Clay kankar	
4.	16 - 35	19	Medium sand	Good
5.	35 - 45	10	Clay kankar	
6.	45 - 50	5	Fine to Medium sand	Good
7.	50 - 65	15	Clay kankar	
8.	65 - 68	3	Fine sand	Good
9.	68 - 75	7	Clay kankar	
10.	75 - 85*	10	Medium sand	Good
11.	85 - 105	20	Clay kankar	
12.	105 - 110*	5	Medium sand	Good
13.	110 - 132	22	Clay kankar	
14.	132 - 145*	13	Medium sand	Good
15.	145 - 151	6	Clay kankar	
16.	151 - 161*	10	Medium sand	Good
17.	161 - 165	4	Clay kankar	

## COMPLETION PLAN OF TUBEWELL

<b>NAME OF WORK</b>	:- Construction of T.W- of G.P - Mirzapur Sunaura Block- Behjam Distt. Lakhimpur,
<b>NAME OF PROGRAMME</b>	:- JJM-3,
<b>NAME OF CLIENT</b>	:- SW.S.M. & U.P.JAL NIGAM
<b>NAME OF CONTRACTOR</b>	:- M/S NCC Limited
<b>NAME OF TPI</b>	:- Ceinsys Tech Limited
<b>CONTRACT AGREEMENT</b>	:- 12/ED/Phase-3/2021-22 Dated on 07.01.2022
<b>COVER AGREEMENT</b>	:- 260/ED/Phase3/2022-23/X,

**Lowered Assembly Chart of T.W. of G.P- Mirzapur Sunaura , Block- Behjam, Distt. Lakhimpur,**

Strata	
0-5	Surface Clay
5-15	Clay Kankar
15-20	Fine sand
20-30	Clay Kankar
30-40	Medium sand
40-48	Clay Kankar
48-60	Medium sand
60-75	Clay Kankar
75-85	Medium sand
85-105	Clay Kankar
105-110	Medium sand
110-132	Clay Kankar
132-145	Fine to Medium Sand
145-151	Clay Kankar
151-161	Medium sand
161-165	Clay Kankar



ABSTRACT		
1-	Type of Rig Machine	R.C. CUM D.C.
2-	Required Discharge	670 LPM
3-	Bore Size (MM)	600x450
4-	Assembly size (MM)	300x150
5-	Drilling Starting Date	06-10-2023
6-	Drilling Completion Date	15/06/2023
7-	Total Depth of Drilling	165 Mtr
8-	Logging Date	16/06/2023
9-	Logging Depth	165.00 mtr

Logging Report By Water Investigation Ceter				
S. No.	Depth Range (mbgl)	Thickness (M.)	Lithology	Remarks
1	75-85	10	Mediun Sand	Good
2	105-110	5	Mediun Sand	Good
3	132-145	13	Mediun Sand	Good
4	151-161	10	F. to M Sand	Good

<b>(G.Shukla )</b> Verified by Asst Hydrologist Circle Office (E&M) U.P Jal Nigam (Rural)	<b>(A.K Singh)</b> Verified By Geophysicist GIC Lucknow.
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11 Details of Lowered Assembly		
(i)	300 mm Dia Housing Pipe	48.00 Meter
(ii)	150 mm Dia M.S Slotted Pipe	24.00 Meter
(iii)	150 mm Dia M.S Plain Pipe	77.30 Meter
(iv)	300 X 150 mm Dia M.S Reducer	0.20 Meter
Total		149.50
AGL		0.50
BGL		149.00
Date Of Lowering		18/06/2023

Recommended & Prepared by

Verified & Checked By

Recommended By

Approved By

M/s NCC LTD.

TPI  
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