



**GROUND WATER DEPARTMENT**  
**GOVERNMENT OF UTTAR PRADESH**  
Lucknow-226002



**GEOPHYSICAL BOREHOLE-LOGGING REPORT**

1. **Date of Logging:** 06/07/2023  
2. **Village:** Madhuban  
3. **Location:** Pond  
4. **Block:** Balha  
5. **District:** Bahraich  
6. **Latitude & Longitude:** 27.9363 & 81.5162.  
7. **Drilling depth:** 330m bgl  
8. **Logging depth:** 310 m bgl  
9. **Logging Company:** UP Ground Water Department  
10. **Bore hole drilled by:** R R Enterprises.  
11. **Recorded Geophysical log data:** SP, Natural gamma & Resistivity (16 N & 64 N).  
12. (i) **Resistivity of Mud (Rm):** 12.60 ohm-m. (ii) **Resistivity of fresh water (Rf):** 12.30 ohm-m.  
13. **On the basis of interpretation of recorded log data in open hole detail report is made is as follows:-**

- (a) **Acquifer:** The depth zones with high resistivity and relatively low Natural Gamma radioactivity values are referred as Aquifer Zones.  
(b) **Clay:** The depth zones with less resistivity and relatively high Natural Gamma radioactivity values are referred as Clay zones.

**Based on the downhole Geophysical Parameters following information (Granular zones) deciphered:-**

S.No	Depth Range (m bgl)	Thickness (meter)	Lithology	Acquifer Recommendation	Remark (Quality of aquifer water)
1.	0-10	10	Top Soil		Good
2.	10-31	21	Medium to fine sand	Recommended	Good
3.	31-38	7	Clayey sand		Good
4.	38-62	24	Medium to fine sand	Recommended	Good
5.	62-71	9	Clay		Good
6.	71-111	40	Medium to fine sand	Recommended	Good
7.	111-121	10	Clayey sand		Good
8.	121-131	10	Fine sand	Recommended	Good
9.	131-155	24	Medium to fine sand	Recommended	Good
10.	155-168	13	Clay		Good
11.	168-183	15	Fine sand	Recommended	Good
12.	183-213	30	Medium to fine sand	Recommended	Good
13.	213-220	7	Clay		Good
14.	220-253	33	Medium to fine sand	Recommended	Good
15.	253-258	5	Clay		Good
16.	258-263	5	Fine sand	Recommended	Good
17.	263-270	7	Clay		Good
18.	270-278	8	Fine sand	Recommended	Good
19.	278-282	4	Clayey sand		Good
20.	282-309	27	Medium to fine sand	Recommended	Good

14. **Note:-**

- (i) All Zones are intermixed with kankar.  
(ii) Zone 1,2,3,4 & 5 is intermixed with thin layers of kankar.

15. **Quality of the formation water is good up to Logging depth. Log Attached.**

*Rajeev Kumar*  
Rajeev Kumar

(Geophysicist)



century-geo.com

**MADUBAN  
NANPARA**

COMPANY LUCKNOW - GWD  
 WELL MADUBAN  
 WELL EXT NANPARA  
 FIELD BAHRAICH  
 COUNTY IND  
 STATE BP  
 COUNTRY IND  
 API NO. 12345678199999999

COMPANY : LUCKNOW - GWD  
 WELL : MADUBAN  
 WELL EXT : NANPARA  
 FIELD : BAHRAICH  
 COUNTY : IND  
 STATE : UP  
 COUNTRY : IND  
 API NO. : 12345678199999999  
 UNIQ ID : 049-005-42968

SECTION: 5 TOWNSHIP: 53N RANGE: 73W

LOCATION : POND  
 LAT GPS UTM 27.9369  
 LON GPS UTM 81.5162

DISPLAY7\_JL63w

PERMANENT DATUM  
 DRI MEASURED FROM  
 LOG MEASURED FROM  
 ELEV. PERM. DATUM

GL	Elevations:	Other Services:
GL	KB	DF
M	GL	M
M	4227	M
M		M

DATE	TIME		
DEPTH DRILLER	960	M	
DEPTH LOGGER		M	
FIRST READING		M	
LAST READING		M	
BIT SIZE	8.75	CM	
CASING -- DRILLER	87	M	
CASING -- LOGGER		M	
CASING O.D.		CM	
CASING TYPE	SURFACE		
FLUID TYPE	MUD		
FLUID DENSITY		G/CC	
FLUID VISCOSITY			
FLUID PH			
MUD SOURCE	FLOW LINE		
RM @ MEAS TEMP	.179 @ 68.5 C		
RMC @ MEAS TEMP	@ C		
RMC @ MEAS TEMP	@ C		
CIRC STOPPED	0830		
RIG NUMBER			

RECORDED BY PAUL GARGER  
 WITNESSED BY DAVID DORMIER  
 REMARKS 1  
 REMARKS 2 NENE, 743'FNL, 661'FEEL  
 REMARKS 3

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS











