

JAL JEEVAN MISSION
COMPLETION PLAN OF TUBEWELL



State Water & Sanitation Mission
NAMAMI GANGE AND RURAL WATER SUPPLY DEPARTMENT
Government of Uttar Pradesh

Name of Scheme: Sarsawan
Tubewell No. & Location:

Programme: Jal Jeevan Mission,

Block: Amanpur

District: Kasganj

Type of Rig M/c: DC

Static water level: 4.20 Mtr.

Size of Bore: 600X500 MM dia

Number & Location of tube-well Executed:-

Name of Agency : M/s PNC-SPML(JV) Kasganj

C.A. No:- 240/ED/2021-22/III & Dt-17.01.2022

Depth B. GL Meter	Boring Chart	Stratam	Lowered Assembly	ASSEMBLY DETAILS
0-5		surface soil		300 m.m. Dia Housing pipe G.L. to 41.50 MBGL.
5-22		Clay kankar		300 m.m. Dia Housing pipe G.L. to 41.50 MBGL.
22-31		Medium sand		300X200 m.m. Dia Reducer pipe 41.50 M to 41.70 MBGL.
31-42		Clay kankar		200 m.m. Dia Blind pipe 41.70 M to 44.72 MBGL.
42-55		Medium sand		200 m.m. Dia slotted pipe 44.72 M to 53.72 MBGL.
55-72		Clay kankar		200 m.m. Dia Blind pipe 53.72 M to 71.90 MBGL.
72-82		Medium sand		200 m.m. Dia slotted pipe 71.90 M to 80.90 MBGL.
82-88		Clay kankar		200 m.m. Dia Blind pipe 80.90 M to 87.97 MBGL.
88-95		Medium sand		200 m.m. Dia slotted pipe 87.97 M to 93.97 MBGL.
95-100		Clay kankar		200 m.m. Dia Blind pipe 93.97 M to 100.01 MBGL.
100-107		Medium sand		200 m.m. Dia slotted pipe 100.01 M to 106.01 MBGL.
107-121		Clay kankar		200 m.m. Dia Blind pipe 106.01 M to 112.05 MBGL.

Required Discharge : 640 LPM

Depth of 600 MM bore : GL. To 47.50 MBGL.

Depth of 500 MM bore : 47.50 MBGL. To 121.0 MBGL.

ABSTRACT

1. Drilling Started on :- 04.06.2022
 2. Drilling Completed on :- 05.06.2022
 3. Assembly Lowered on :- 08.06.2022
 4. Assembly Lowered :- 112.55 mtr
- Blind Pipe 300 m.m. dia :- 42.00 mtr
Blind Pipe 200 m.m. dia :- 40.35 mtr
Slotted Pipe 200 m.m. dia :- 30.00 mtr
Reducer 300x200 m.m. :- 2 mtr

Annexures: 1. Logging Report, 2. Water Test Report



[Signature]
TPI

J.E.

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Executive Engineer

Executive Engineer
Division Office (E/M)
U.P. Jal Nigam (Rural)
Agra

REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- SANSWA MOHAN NAGLA, BLOCK- AMAPUR
DISTT- KASGANJ
UNDER
JAL JIVAN MISSION

Introduction:

A Deep bore hole was drilled 122 mtrs. depth. and Logged depth 121 mtrs. at above site. Was drilled by M/S PNC-SPML-JV, Kasganj.

On the request of M/S PNC-SPML-JV, Kasganj. a Geophysical well Logging is conduct at above bore hole using IGIS Well Logger on 08.June. 2022.

Logging Para meters - Self potential, short normal (N-10), Long Normal (N-54), 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:-

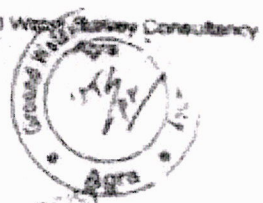
Mud Resistivity = 17.06 Ohms.

Drilling Water Resistivity = 10.50 Ohms.

Approx Water Level = 9 Mtr.

S.No.	Depth range(m)	Thickness(m)	Lithology	Expected Water Quality
1.	0 - 5	5	Surface soil	
2.	5 - 22	17	Clay kankar	
3.	22 - 31	9	Medium sand	Good
4.	31 - 42	11	Clay kankar	
5.	42 - 55*	13	Medium sand	Good
6.	55 - 72	17	Clay kankar	
7.	72 - 82*	10	Medium sand	Good
8.	82 - 88	6	Clay kankar	
9.	88 - 95*	7	Medium sand	Good
10.	95 - 100	5	Clay kankar	
11.	100 - 107*	7	Medium sand	Good
12.	107 - 121	14	Clay kankar	

Logging performed
per SWPM guidelines
- groundwater quality interpreted
by firm as shown in log.



ASSISTANT ENGINEER
MISRA NAGLA
UPA NAGLA (RURAL)
PRAYAGRAH



Quality Assurance

QA Testing Laboratories Pvt. Ltd.

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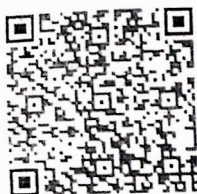
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IAS-ANZ



M54009131N

**An ISO 9001:2015, 14001:2015, 45001:2018 & ISO/IEC 17025:2017 Accredited Laboratory**

TEST CERTIFICATE

(This Certificate is not Valid without Hologram)

Test Report No : QAL/WT/22090100776
 Sample Name : Borewell Water
 Sample Code : -
 Issued To : PNC INFRATECH LIMITED
 KM-15 (LHS) Etah-Kasganj Road, Village Ramai Hetam
 Shah Etah Uttar Pradesh-207125.

Sample Submitted By : PNC INFRATECH LIMITED
 Mig By : NA
 Sample Description : Physical & chemical Analysis of water sample
 Location : GP-Sarsawan (P63) Block-Amanpur (B1) District

Issue Date : 07/09/2022
 Sample Received On : 01/09/2022
 Reference No : PNC/JJM/KSG/2020-21/0421
 Sampling Date : 01/09/2022
 Sampling Quantity : 2 Ltr.
 Batch No./Lot No. : NA
 Date of Mfg. : NS
 Date of Exp. : NS
 Date of Starting : 01/09/2022
 Date of Completion : 07/09/2022

S.No.	Test Parameter	Units	Results	Specification as per IS:10500:2012		Test Method
				Acceptable Limit	Permissible Limit	
1	Turbidity	NTU	0.5	1 max.	5 max.	IS : 3025 (P-10)
2	pH value at 25°C	-	7.57	6.5-8.5	No relaxation	IS : 3025 (P-11)
3	Total Hardness as CaCO ₃	mg/l	196	200 max	600 max.	IS : 3025 (P-21)
4	Iron (as Fe)	mg/l	0.014	1 max	-	IS : 3025 (P-53)
5	Chloride (as Cl)	mg/l	14.0	250 max.	1000 max.	IS : 3025 (P-32)
6	Sulphates (as SO ₄)	mg/l	8.64	200 max.	400 max.	IS : 3025 (P-24)
7	Total Alkalinity (as CaCO ₃)	mg/l	32	200 max.	600 max.	IS : 3025 (P-23)
8	Fluoride (as F)	mg/l	0.019	1 max.	1.5 max.	IS : 3025 (P-60)
9	Total Dissolved Solid (TDS)	mg/l	316	500 max.	2000 max.	IS : 3025 (P-16)
10	Nitrate (as NO ₃)	mg/l	0.33	45 Max	No Relaxation	IS : 3025 (P-34)
11	Copper (as Cu)	mg/l	ND	0.05 Max	1.5 Max	IS : 3025 (P-42)
12	Manganese (as Mn)	mg/l	0.014	0.1 Max	0.3 Max	IS : 3025 (P-59)
13	Cadmium (as Cd)	mg/l	ND	0.003 Max	No Relaxation	IS : 3025 (P-41)
14	Total Arsenic (as As)	mg/l	ND	0.01 Max	0.05 Max	IS : 3025 (P-37)
15	Lead (as Pb)	mg/l	ND	0.01 Max	No Relaxation	IS : 3025 (P-47)
16	Zinc (as Zn)	mg/l	0.026	5 Max	15 Max	IS : 3025 (P-49)
17	Boron (as B)	mg/l	0.012	0.5 Max	1.0 Max	IS : 3025 (P-57)
18	Nickel (as Ni)	mg/l	ND	0.02 Max	No Relaxation	IS : 3025 (P-54)

SAMPLE COLLECTED BY US

End of Report

Upendra Kumar
 Technical Manager
 Authorized By (Sign & Stamp):

Dileep Kumar
 Quality Manager
 Approved By (Sign & Stamp):

Note: a) This report is not reproduced wholly or in partially and forbidden to be used as an evidence in the court of law and ought not to be used in any advertisement media without our special permission in writing. b) The data reported in this TEST CERTIFICATE are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to those items of product which have been tested and do not apply to the other products even though declared to be identical. c) Except by special arrangement, the test items will not be retained by the company not more than one month. d) Report refers to the sample received by M/s QA Testing Laboratories Pvt. Ltd. e) This report is valid for the tested sample only.

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TEST CERTIFICATE

(This Certificate is not Valid without Hologram)

Test Report No : QAL/WT/22090100776

Issue Date : 07/09/2022

Sample Name : Borewell Water

Sample Received On : 01/09/2022

S.No.	Test Parameter	Units	Results	Specification as per IS:10500:2012		Test Method
				Acceptable Limit	Permissible Limit	
19	Total Chromium (as Cr)	mg/l	0.004	0.05 Max	No Relaxation	IS : 3025 (P-52)

Note ND = Not Detected

SAMPLE COLLECTED BY US

End of Report

Upendra Kumar
Technical Manager

Authorized By (Sign & Stamp):

Dileep Kumar
Quality Manager

Approved By (Sign & Stamp):

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TEST REPORT OF TUBEWELL DEVELOPMENT BY AIR COMPRESSOR



State Water & Sanitation Mission
NAMAMI GANGE AND RURAL WATER SUPPLY DEPARTMENT
Government of Uttar Pradesh

Date of Test :- 20.07.2022

Name of Gram Panchayat : Sarsawan

Depth of Tubewell : 112.20 Mtr

Static Water Level:- 4.20 mtr

Before Development:- 108.90 mtr

After Development:- 111.50 mtr

Sl. No.	Depth of Airline(Mt.)	Discharge in LPM.	Sand Contents in PPM						Remarks
			Start	5 Min	10 Min	15 Min	20 Min	25 Min	
1	90	470	2500	2350	2100	1900	1700	1550	
2	69		2450	2200	1900	1600	1450	1100	
3	51		2300	2150	1800	1650	900	650	
							400		

Recommended discharg 470 LPM

YIELD TEST REPORT OF TUBEWELL BY O.P. UNIT

Date of Test : 05.08.2022

S.W.L 4.20 mtr.

Depth of Tubewell : 112.20

Before Development:- 111.50mtr

After Development:- 111.30 mtr

Discharge in LPM.	R.W.L. in Mtrs.	Depression in Mts.	SAND CONTENT IN PPM						Remarks
			Starting	5 Min	10 Min	15 Min	20 Min	25 Min	
940	6.05	1.85	200	150	100	50	Tr	Tr	Recommended discharge 470 LPM at 1.10 M depression Pump should be run 10 minutes in bypass before injecting in rising main
705	5.75	1.55	100	50	Tr	Tr	Tr	Tr	
470	5.30	1.10	50	Tr	Cl	Cl	Cl	Cl	

Recommended discharge 470 LPM at 1.10 Mtr depression

WATER TEST RESULTS

Date of Test:-07.09.2022

Sl. NO	PARAMETERS	UNIT	Requirement (Acceptable Limit) as per IS 10500	Maximum Permissible Limit (in absence of alternate source) as per IS 10500	RESULT
1	Calcium (as Ca)	mg/L	75	200	
2	Chloride (as Cl)	mg/L	250	1000	14
3	Colour	Hazen Units	5.0	15	
4	Fluoride (as F)	mg/L	1.0	1.5	0.019
5	Iron (as Fe)	mg/L	1	No Relaxation	0.014
6	Magnesium (as Mg)	mg/L	30	100	
7	Nitrate (as NO ₃)	mg/L	45	No Relaxation	0.33
8	Odour	NA	Agreeable	Agreeable	
9	pH	NA	6.5 to 8.5	No Relaxation	7.57
10	Sulphate (as SO ₄)	mg/L	200	400	8.64
11	Taste	NA	Agreeable	Agreeable	
12	Total dissolved Solids (TDS)	mg/L	500	2000	316
13	Total Alkalinity (as CaCO ₃)	mg/L	200	600	32
14	Total Arsenic (as As)	mg/L	0.01	No Relaxation	ND
15	Total Hardness (as CaCO ₃)	mg/L	200	600	196
16	Turbidity	NTU	1	5	0.5
17	Total Coliform Bacteria	MPN/ 100 mL	Shall not be detectable in any 100 mL sample	Shall not be detectable in any 100 mL sample	
18	E. Coli	MPN/ 100 mL	Shall not be detectable in any 100 mL sample	Shall not be detectable in any 100 mL sample	

Unmesh Kumar
(PNC SPML JV)

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