

REPORT ON GEOPHYSICAL WELL LOGGING AT

GRAM PANCHAYAT- PRATAPPUR MOHAMAD KHAN, BLOCK- SAHAWAR
DISTT- KASGANJ
UNDER
JAL JIVAN MISSION

Introduction :

A Deep bore hole was drilled 118 mtrs. depth. and Logged depth 115 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 21.July. 2022.

Logging Para meters - Self potential, short normal (N-16), Long Normal (N-64), Lateral. Details of major equifer formations explored from logging of bore hole combined with the study of Strata Chart prepared from drill cuttings are given in the following table:-

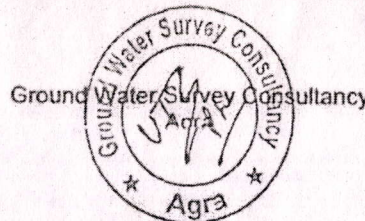
18→

Mud Resistivity = 17.01 Ohms.

Drilling Water Resistivity = 18.13 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 - 14	9	Clay kankar	
3.	14 - 30	16	Medium sand	Good
4.	30 - 45	15	Clay kankar	
5.	45 - 62*	17	Medium sand	Good
6.	62 - 67	5	Clay kankar	
7.	67 - 69	2	Fine sand	Good
8.	69 - 81	12	Clay kankar	
9.	81 - 84*	3	Fine to Medium sand	Good
10.	84 - 93	9	Clay kankar	
11.	93 - 97*	4	Fine to Medium sand	Good
12.	97 - 115	18	Clay Kankar	



Logging performed as per SWS as guidelines. Groundwater quality checked by firm as per their log calibration.

ASSISTANT HYDROLOGIST
YANTRIK MANDAL
U.P. JAL VIVAN MISSION
PRAYAGRAJ

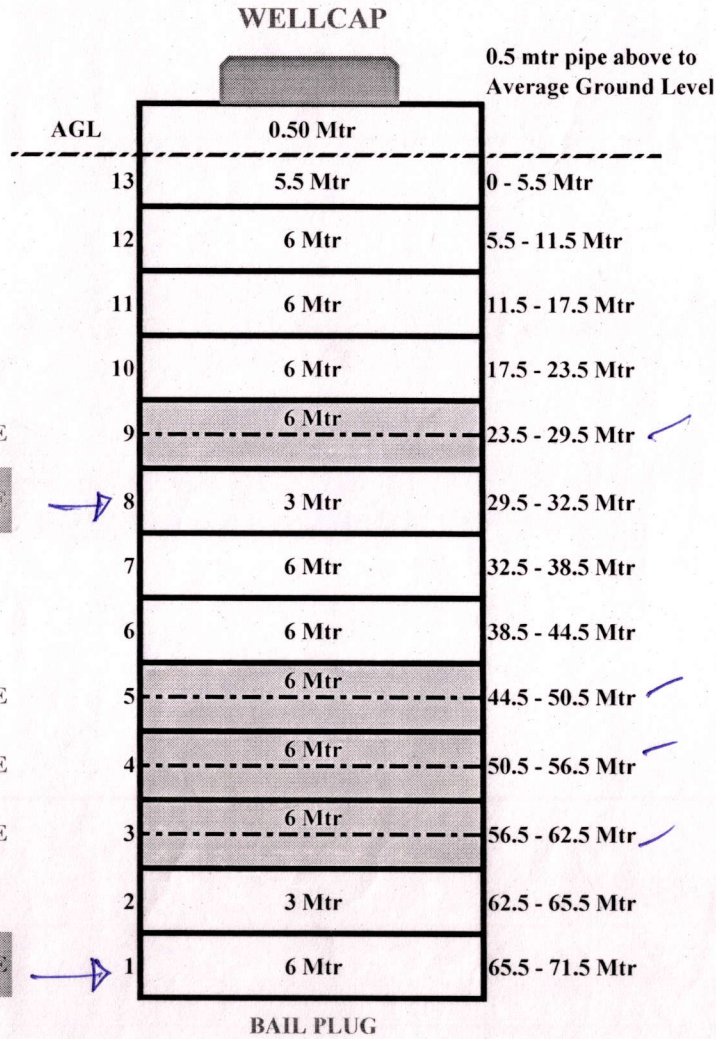
ASSEMBLY CHART OF W/S Scheme - Pratappur Mohmadkhan

Block - Sahawar

:- AS PER DPR

DRILLING :- 110 MTR
 TOTAL LOWERING :- 100 MTR
 200 MM PLAIN PIPE :- 76 MTR
 200 MM SLOTTED PIPE :- 24 MTR
 ASSEMBLY SIZE :- 200 MM

RIG MACHINE :- DC
 DRILLING START :- 15-07-2022
 DRILLING END :- 20-07-2022
 LOGGING :- 21-07-2022
 REQUIRED DISCHARGE :- 350 LPM
 WATER LEVEL :- 09 Mtr



STRATA CHART	
Depth in Mtr	Type of Strata
0 - 12	Surface Clay Soil
12 - 18	Clay Kankar
18 - 21	Medium Sand
21 - 39	Fine Sand Kankar
39 - 45	Clay Kankar
45 - 51	Fine Sand Kankar
51 - 72	Kankar
72 - 81	Medium Sand
81 - 90	Fine to Medium Sand
90 - 99	Clay Kankar
99 - 111	Clay

Consume 200mm Plain Pipe	47.5 ✓	Rmt
Consume 200mm Slotted Pipe	24 ✓	Rmt
200mm AGL	0.5 ✓	Rmt
Total Lowering	72 ✓	Rmt
AS Per DPR PEA Gravel	28.00	Cum

Proposed Assembly chart

(m)
24/07/22

PNC-SPML-JV

TPI

UPJN

KASGANJ WATER PROJECT

CLIENT - JAL NIGAM/SWSM

PIPE ASSEMBLY AND LOWERING CHART FOR TUBEWELL

BLOCK NAME :- SAHAWAR	LOWERING DATE :- 26/07/22	AS PER DPR :-	DRILLING :- 110	MTR
GP NAME :- PRATPUR MOH. KHAN	RIG MACHINE TYPE :- DC		LOWERING :- 100	MTR
DPR NO. :-	REQUIRED DISCHARGE :- 350	LPM	SIZE OF BORE :- 500	MM
	WATER LEVEL :- 09	MTR	ASSEMBLY SIZE :- 200	MM

ACTUAL ASSEMBLY CHART		ASSEMBLY DETAILS
<p style="text-align: center;">WELL CAP</p> <p style="text-align: center;">0.50</p>		<p>1. Drilling Started : 15/07/2022</p> <p>2. Drilling Completed : 20/07/22</p> <p>3. Logging Date : 21/07/2022</p> <p>4. Actual Drilling Depth : 90.60 MTR</p> <p>5. 200MM AGL Pipe:- 0.50 MTR</p> <p>6. 200MM PLAIN PIPE:- 47.54 ✓ MTR</p> <p>7. 200MM Slotted Pipe:- 24.10 ✓ MTR</p> <p>TOTAL LOWERING :- 72.14 ✓ MTR</p> <p>8. AS per DPR P Gravel : 28 CUM MT</p>
	23.51 - 29.54	
	24.52 - 62.59	
	71.64	

Handwritten Signature
PNC REPRESENTATIVE

Handwritten Signature
TPI REPRESENTATIVE

UPJN (R) REPRESENTATIVE

O.P. Unit Development Report

Date	District :- Kasganj													
	Grampanchayat (GP) :- Pootaputte	Mohammed Khan	Block :- Sahawel	Depression Head (Metre)	Start Reading (PPM)	After 5 Min (PPM)	After 10 Min (PPM)	After 15 Min (PPM)	After 20 Min (PPM)	PNC Engineer Signature	TPI Engineer Signature			
	Timer Start Time Reading	Timer Stop Time Reading	Total Working Time	SWL (Metre)	RWL (Metre)	Depression Head (Metre)	Start Reading (PPM)	After 5 Min (PPM)	After 10 Min (PPM)	After 15 Min (PPM)	After 20 Min (PPM)	PNC Engineer Signature	TPI Engineer Signature	
9/10/2022	456.0	462.0	6:00											
10/10/22	462.0	471.0	9:00											
11/10/22	471.0	479.0	8:00											
12/10/22	479.0	486.0	7:00											
13/10/22	486.0	494.0	8:00											
14/10/22	494.0	503.0	9:00											
15/10/22	503.0	510.0	7:00											
15/10/22	510.0	514.0	4:00											
16/10/22	514.0	522.0	8:00											
16/10/22	522.0	525.0	3:00											
17/10/22	525.0	530.0	5:00											
17/10/22	530.0	533.0	3:00	9.0	10.7	35 1.7	40	10	5	05	05			
Total Hours Working :- 77:00														

Note -> only Testing Result verified.
 MKS
 HGS

PNC Engineer Signature
 TPI Engineer Signature
 UPJN Signature

**TUBE WELL DEVELOPMENT DETAILS
YIELD TEST REPORT BY O.P. UNIT**

DISTRICT :- KASGANJ
BLOCK :- PRATAPPUR MD. KHAN (SAHAWAR)
NAME OF SCHEME :-

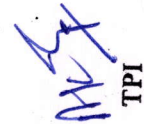
Date :- 17/10/2022

Discharge in L.P.M.	Starting W.L.	Running W.L.	Dipression Meter	Sand Contents in PPM							Remarks	
				Start	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min		
900	9.00	10.7	1.7	50	40	10	5					

Recommended Discharge :- 350

L.P.M At 350 M. Depression


PNC


TPI

UPJN

O.P. Unit Development Report

Grampanchayat (GP) :- Pantabher		Block :- Mehradke Phoen				District :- Kasganj						Block :- Sahasur		
Date	Timer Start Time Reading	Timer Stop Time Reading	Total Working Time	SWL (Metre)	RAWL (Metre)	Depression Head (Metre)	Start Reading (PPM)	After 5 Min (PPM)	After 10 Min (PPM)	After 15 Min (PPM)	After 20 Min (PPM)	PNC Engineer Signature	TPI Engineer Signature	
01/10/22	456	459	3:00											
10/10/22	459	465	6:00											
11/10/22	465	472	7:00											
12/10/22	472	479	7:00											
13/10/22	479	485	6:00											
14/10/22	485	491	6:00											
15/10/22	491	505	6:00											
16/10/22	505	511	6:00											
17/10/22	511	517	7:00											
18/10/22	517	523	6:00											
19/10/22	523	530	7:00											
20/10/22	530	536	6:00											
21/10/22	536	542	6:00											
22/10/22	542	549	7:00											
23/10/22	549	555	6:00											
24/10/22	555	561	6:00											
25/10/22	561	567	6:00											
26/10/22	567	573	6:00											
27/10/22	573	579	6:00											
28/10/22	579	585	6:00											
29/10/22	585	591	6:00											
30/10/22	591	597	6:00											
31/10/22	597	603	6:00											
01/11/22	603	609	6:00											
02/11/22	609	615	6:00											
03/11/22	615	621	6:00											
04/11/22	621	627	6:00											
05/11/22	627	633	6:00											
06/11/22	633	639	6:00											
07/11/22	639	645	6:00											
08/11/22	645	651	6:00											
09/11/22	651	657	6:00											
10/11/22	657	663	6:00											
11/11/22	663	669	6:00											
12/11/22	669	675	6:00											
13/11/22	675	681	6:00											
14/11/22	681	687	6:00											
15/11/22	687	693	6:00											
16/11/22	693	699	6:00											
17/11/22	699	705	6:00											
18/11/22	705	711	6:00											
19/11/22	711	717	6:00											
20/11/22	717	723	6:00											
21/11/22	723	729	6:00											
22/11/22	729	735	6:00											
23/11/22	735	741	6:00											
24/11/22	741	747	6:00											
25/11/22	747	753	6:00											
26/11/22	753	759	6:00											
27/11/22	759	765	6:00											
28/11/22	765	771	6:00											
29/11/22	771	777	6:00											
30/11/22	777	783	6:00											
31/11/22	783	789	6:00											
01/12/22	789	795	6:00											
02/12/22	795	801	6:00											
03/12/22	801	807	6:00											
04/12/22	807	813	6:00											
05/12/22	813	819	6:00											
06/12/22	819	825	6:00											
07/12/22	825	831	6:00											
08/12/22	831	837	6:00											
09/12/22	837	843	6:00											
10/12/22	843	849	6:00											
11/12/22	849	855	6:00											
12/12/22	855	861	6:00											
13/12/22	861	867	6:00											
14/12/22	867	873	6:00											
15/12/22	873	879	6:00											
16/12/22	879	885	6:00											
17/12/22	885	891	6:00											
18/12/22	891	897	6:00											
19/12/22	897	903	6:00											
20/12/22	903	909	6:00											
21/12/22	909	915	6:00											
22/12/22	915	921	6:00											
23/12/22	921	927	6:00											
24/12/22	927	933	6:00											
25/12/22	933	939	6:00											
26/12/22	939	945	6:00											
27/12/22	945	951	6:00											
28/12/22	951	957	6:00											
29/12/22	957	963	6:00											
30/12/22	963	969	6:00											
31/12/22	969	975	6:00											
01/01/23	975	981	6:00											
02/01/23	981	987	6:00											
03/01/23	987	993	6:00											
04/01/23	993	999	6:00											
05/01/23	999	1005	6:00											
06/01/23	1005	1011	6:00											
07/01/23	1011	1017	6:00											
08/01/23	1017	1023	6:00											
09/01/23	1023	1029	6:00											
10/01/23	1029	1035	6:00											
11/01/23	1035	1041	6:00											
12/01/23	1041	1047	6:00											
13/01/23	1047	1053	6:00											
14/01/23	1053	1059	6:00											
15/01/23	1059	1065	6:00											
16/01/23	1065	1071	6:00											
17/01/23	1071	1077	6:00											
18/01/23	1077	1083	6:00											
19/01/23	1083	1089	6:00											
20/01/23	1089	1095	6:00											
21/01/23	1095	1101	6:00											
22/01/23	1101	1107	6:00											
23/01/23	1107	1113	6:00											
24/01/23	1113	1119	6:00											
25/01/23	1119	1125	6:00											
26/01/23	1125	1131	6:00											
27/01/23	1131	1137	6:00											
28/01/23	1137	1143	6:00											
29/01/23	1143	1149	6:00											
30/01/23	1149	1155	6:00											
31/01/23	1155	1161	6:00											
01/02/23	1161	1167	6:00											
02/02/23	1167	1173	6:00											
03/02/23	1173	1179	6:00											
04/02/23	1179	1185	6:00											
05/02/23	1185	1191	6:00											

Compressure Development Report

Grampanchayat(GP) :- Prathappur Md. Khan		District :- Kasganj								
		Block:- Sahawak								
Date	Timer Start Reading	Timer Stop Reading	Total Working Time	Start Reading (PPM)	After 5 Min (PPM)	After 10 Min (PPM)	After 15 Min (PPM)	After 20 Min (PPM)	PNC Engineer Signature	TPI Engineer Signature
23/9/22	449.1	453.1	4:00							
23/9/22	453.1	457.1	4:00							
24/9/22	457.1	461.1	4:00							
24/9/22	461.1	465.1	4:00							
25/9/22	465.1	469.1	4:00							
25/9/22	469.1	471.9	2:48							
26/9/22	471.9	475.9	4:00							
26/9/22	475.9	479.0	3:06							
27/9/22	479.0	483.0	4:00	6000	3000	2200	1200	2200		
28/9/22	483.0	486.1	3:06	4000	2200	1200	500	500		
				1600	800	700	500			
				1100	500	300	200			
Total Hours Working :- 37:00									Aditya	M.S.I
									Aditya	T.P.I

Notes: Only Testing Result
verified
M.S.I
T.P.I

**TUBE WELL DEVELOPMENT DETAILS
TEST REPORT BY COMPRESSOR**

DISTRICT :- KASGANJ
 BLOCK :- SAHAWAR
 NAME OF WSS :- PRATAPPUR MD. KHAN
 DATE :- 28/09/2022
 STATIC W/L 9.0...mtr
 TEST OF WATER.....Sweet

Discharge in L.P.M.	Start	Sand Contents in PPM							Remarks
		5 Min	10 Min	15 Min	20 Min	25 Min	30 Min		
27m	1800	500	600	400					
350	48m 1600	800	700	500					
60m	1100	500	300	200					

Aditya
PNC

AKS
TPI

Ambedkar
UPJN

Compressure Development Report

Grampanchayat(GP) :- <u>Raxtapur, Mohamad</u>		Block:-									
		District :- Kasganj									
Date	Timer Start Reading	Timer Stop Reading	Total Working Time	Start Reading (PPM)	After 5 Min (PPM)	After 10 Min (PPM)	After 15 Min (PPM)	After 20 Min (PPM)	PNC Engineer Signature	TPI Engineer Signature	
23/9/22	449.1	453.1	4:00								
11	453.1	457.1	4:00								
24/9/22	457.1	461.1	4:00								
11	461.1	465.1	4:00								
25/9/22	465.1	469.1	4:00								
11	469.1	471.9	2:48								
26/9/22	471.9	475.9	4:00								
11	475.9	479.0	3:06								
27/9/22	479.0	483.0	4:00	6000	3500	2200	1200	1200			
28/9/22	483.0	486.1	3:06	6000	2200	1200	500				
Total Hours Working :-			37:00								

Notes - Only Testng times result
verified. (A.S. / P.S. / D.M.E.)

Ajay
 PNC Engineer Signature

TPI Engineer Signature

UPJN Signature

**JAL JEEVAN MISSION
COMPLETION PLAN OF TUBEWELL**

Name of Scheme: PRATAP PUR MUHAMMAD KHAN Programme: Jal Jeevan Mission, Block: SAHAWAR District: Kasganj

Tubewell No. & Location: 01

Type of Rig M/c: Static water level: 9.00Mtr.

Size of Bore: 500x500 MM dia

Number & Location of tube-well Executed:-

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

C.A. No :- 263/ED/PHASE-2/2022-23 DT- 24.12.2022

Depth B. GL	Boring Chart	Stratam	Lowered Assembly	ASSEMBLY DETAILS
0-0		Surface Soil		200m.m. Dia Housing/Blind pipe G.L 0.50 MGL.
5		Clay Kankar		200m.m Dia Housing/Blind pipe G.L 23.51 MBGL
14		Clay Kankar		200 m.m. Dia Slotted pipe 23.51 M to 29.54 MBGL.
30		medium Sand		200 m.m. Dia Blind pipe 29.54 M to 44.52 MBGL.
45		Clay Kankar		200 m.m. Dia Slotted pipe 44.52 M to 62.59 MBGL.
62		medium Sand		200 m.m. Dia Blind pipe 62.59 M to 71.64 MBGL.
67		Clay Kankar		
69		Fine Sand		Required Discharge: 350 LPM Depth of 500 MM bore : GL. To 115 MBGL.
81		Clay Kankar		
84		Fine to med. Sand		
93		Clay Kankar		
97		Fine Sand to medium Sand		
110		Clay Kankar		
115		Clay Kankar		

ABSTRACT

1. Drilling Started on :- 15.07.2022
 2. Drilling Completed on :- 20.07.2022
 3. Assembly Lowered on :- 26.07.2022
 4. Assembly Lowered :- 72.14Mtr
- Blind Pipe 200 m.m. dia - 48.04 Mtr
Slotted Pipe 200 m.m. dia - 24.10 Mtr

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

PNC-SPML-JV

TPI

J.E.

A.E.

Executive Engineer

TEST REPORT OF TUBEWELL DEVELOPMENT BY AIR COMPRESSOR

Date of Test :- 30.09.2022		Name of Gram Panchayat : PRATAP PUR MUHAMMAD KHAN			Before Development:- 66.00 mtr					
Depth of Tubewell : 72mtr		Static Water Level:- 9.02 mtr			After Development:- 71.14 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		30 Min
1	60	350	2150	2000	1900	1800	500	600	400	
2	51		1950	1800	1700	1600	800	700	500	
3	27		1500	1300	1200	1100	500	300	200	

Recommended discharge 350 LPM

YIELD TEST REPORT OF TUBEWELL BY O.P. UNIT

Date of Test : 17.10.2022		S.W.L 9.02 mtr.								
Depth of Tubewell : 72.00Mtr		Before Development:- 71.14 mtr		After Development:- 70.80 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		30 Min
700	11.70	2.70	150	100	50	Tr	Tr	Cl	Cl	Recommended discharge 350 LPM at 1.90 M depression Pump should be run 10 minutes in bypass before injecting in rising main line
525	11.32	2.30	100	50	Tr	Tr	Cl	Cl	Cl	
350	10.92	1.90	50	Tr	Tr	Tr	Cl	Cl	Cl	

Recommended discharge 350 LPM at 1.90 Mtr depression

WATER TEST RESULTS

Date of Test:- 13.11.2022

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	11
3	Colour	Hazen Units	5.0	15	
4	Fluoride (as F)	mg/L	1.0	1.5	0.026
5	Iron (as Fe)	mg/L	1	No Relaxation	0.018
6	Magnesium (as Mg)	mg/L	30	100	
7	Nitrate (as NO ₃)	mg/L	45	No Relaxation	0.36
8	Odour	NA	Agreeable	Agreeable	
9	pH	NA	6.5 to 8.5	No Relaxation	7.62
10	Sulphate (as SO ₄)	mg/L	200	400	28.80
11	Taste	NA	Agreeable	Agreeable	
12	Total dissolved Solids (TDS)	mg/L	500	2000	389
13	Total Alkalinity (as CaCO ₃)	mg/L	200	600	112
14	Total Arsenic (as As)	mg/L	0.01	No Relaxation	ND
15	Total Hardness (as CaCO ₃)	mg/L	200	600	190
16	Turbidity	NTU	1	5	0.3
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	mL			

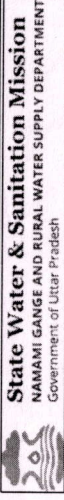
(PNC-SPML-JV)

TPI

J.E.

A.E.

Executive Engineer



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

M/S PNC-SPML(JV) KASGANJ

Testing Development Details by Air Compressor

District :- Kasganj		Block :- Sahawar		Name of WSS :- Pratappur muhammad khan									
Date of Test :- 30.09.2022		Before Development :- 66 mtr		Static Water Level :- 9.00 mtr									
Depth of Tubewell :- 72 mtr		After Development :- 71.14 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	30 Min				
1	60		2150	2000	1900	1800	500	600	400	27			
2	51	350	1950	1800	1700	1600	800	700	500	51			
3	27		1500	1300	1200	1100	500	300	200	60			
M/S PNC-SPML-JV		T.P.I		J.E. UPJN (Rural) E&M							A.E. UPJN (Rural) E&M		

Umesh Kumar

J.E. UPJN (Rural) E&M

M/S PNC-SPML(JV) KASGANJ

Yield test report of TW by OP Unit at : PRATAPPUR MUHAMMAD KHAN Rural Water Supply Scheme Block SAHAWAR Under Jal Jeewan Mission Programme District Kasganj

- 1) Date of Test :- 17.10.2022
- 2) T.W. Depth :- 72.14
- 3) Size of T.W. :- 500x 500
- 4) Taste of Water :- Portable
- 5) Size of orifice :- 4"X3"
- 6) C.A. No. :- 67/ED/Phase/-2/2022/23/V1-25.08.2022

S.No.	Discharge In LPM	SWL in Mtr	RWL in Mtr	Depression in Mtr.	Sand contents in PPM						Remark	
					Starting	after 5 Min	after 10 Min	after 15 Min	after 20 Min	after 25 Min		after 30 Min
1	700	9.02	11.70	2.70	150	100	50	Tr	Tr	Cl	Cl	Recommended discharge 350 LPM at 1.90 Mtr depression. Pump should be run 20 minutes in-bypass before injecting in rising main line
2	525	9.02	11.32	2.30	100	50	Tr	Tr	Cl	Cl	Cl	
3	350	9.02	10.92	1.90	50	Tr	Tr	Tr	Cl	Cl	Cl	

Recommended discharge 350 LPM at 1.90 Mtr depression

Umam Kumar

T.P.I

J. E. UPJN (Rural) E&M

J.E. UPJN (Rural) E&M

A.E. UPJN (Rural) E&M