

## M/S VSAIPPL-SMC JV, Ghazipur (U.P)

**Actual Strata Chart of Arsadpur (Jangipur) REORGANISATION WATER SUPPLY SCHEME, BLOCK-BIRNO, ZONE 11, GRAM PANCAHYAT-MANNPUR T.W-2 Under Jal Jeevan Mission, District- Ghazipur(U.P.)**

PHYSICAL STRATA			
S.No.	BGL in meter		Formation
	From	to	
1	0	10	Clay
2	10	24	Kankad Clay
3	24	58	Very Very Fine Sand with Kankad
4	58	92	Kankad Clay
5	92	166	Very Fine Sand with Kankad
6	166	248	Kankad Clay

Drilling and assembly 300 mm 600MM		MS Ring Collar length	BGL including MS Ring Collar
6.020	P.P.	AGL 0.50	0
6.020	P.P.		5.520
6.020	P.P.		11.540
6.060	P.P.		17.600
6.030	P.P.		23.630
6.020	P.P.		29.650
1.100	P.P.		30.750
6.010	S.P.		36.760
3.990	S.P.		40.750
3.500	P.P.		44.250
3.500	S.P.		47.750
4.500	P.P.		52.250
3.500	S.P.		55.750
6.020	P.P.		61.770
			68.000

**Logging Report**

10.08.2023

S.N.	Depth Range		Thickn ess	Remark
	From.	to		
1	25	41	16	Good
2	44	48	4	Good
3	52	56	4	Good

**Note-**

1. Fine bands of kankar are intermixed with almost all the zones.
2. Quality of groundwater is deteriorating to marginal to saline below 90.0 m bgl till depth logged..

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	480.000	LPM		
2	Clear Depth of bore 600mm	0	Mbgl	68.000	Mbgl
3	Clear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	360	Mbgl	248.000	Mbgl
5	Plane pipe 300MM	0	m	45.270	m
6	Plane pipe 200MM	60	m	0.000	m
7	Plane pipe 150MM	252	m	0.000	m
8	Slotted pipe 300MM	0	m	17.000	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	18	m	0.000	m
11	Date of lowering	16.08.2023			

 (.....) <b>Company Repre.</b> M/S VSAIPPL-SMC	 (.....) <b>TPIA</b> Medhaj Techno Concept Pvt. Ltd., Ghazipur	 (A. Srivastava) Junior Engineer Division Office (E/M), U.P. Jal Nigam (Rural), Varanasi	 (Nitish Kumar) Assistant Engineer	 (Adarsh Verma) Exe. Engineer
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VARIATION STATEMENT AGAINST C.A. NO-475/ED/PHASE-2/2022-23/VII, Date-27-02-2023

For Construction of 248/61.77 mts. deep 300 X 300 mm. dia assembly size T.W. In spite of 360/330 mts. deep 200 X 150 mm. dia assembly size T.W. by D.C. Rig Machine at Arsadpur (Janjpur) REORGANISATION WATER SUPPLY SCHEME, BLOCK-BIRNO, ZONE 11, GRAM PANCAHYAT-MANNPUR T.W-2

Sl No	Item of work	Unit	Rate	Cost As Per Cover Agreement (360/330 mts. deep 200 X 150 mm. dia assembly size)		Expenditure as per Actual Work Executed at Site due to adverse Geophysical Condition (248/61.77 mts. deep 300 X 300 mm. dia assembly size)	
				Qty	Amount (Rs)	Qty	Amount (Rs)
1	2	3	4	5	6	7	8
1	Transportation, Installation Dismantling of Rig machine and logging of bore hole.	Job	1,56,159.07	1	1,56,159.07	1	1,56,159.07
	Tubewell construction: Drilling of Borehole for Tubewell construction by DC/RC/DTH Rig Machine including transportaion, erection, dismantling of Rig and associated T&P complete in all respect including required all material labour etc.						
2	DC/RC Drilling up to 100 Mtr.						
3	600 MMØ	Rmt	3,241.68			68	2,20,433.92
4	500 MMØ	Rmt	2,717.19	65	1,76,617.35		
5	450 MMØ	Rmt	2,454.95	35	85,923.25	32	78,558.40
6	DC/RC Drilling from 100Mtr. To 200 Mtr.						
	600 MMØ						
	500 MMØ	Rmt	3,551.98				
7	450 MMØ	Rmt	3,033.75				
8	DC/RC Drilling from 200 Mtr. To 300 Mtr.						
	500 MMØ						
	450 MMØ	Rmt	2,774.63	100	2,77,463.00	100	2,77,463.00
9	450 MMØ	Rmt	3,363.28				
10	DC/RC Drilling from 300 Mtr. To 400 Mtr.						
	450 MMØ	Rmt	3,158.99	100	3,15,899.00	48	1,51,631.52
11	450 MMØ						
12	Tubwell Assembly:	Rmt	3,703.10	60	2,22,185.90		
13	MSERW plain pipe As per IS 4270						
14	300 MMØ						
15	200 MMØ	Rmt	3,794.68			45.27	1,71,785.16
16	150 MMØ	Rmt	2,546.43	60	1,52,785.80		
17	MSERW slotted pipe as per IS 81103	Rmt	1,897.34	252	4,78,129.68		
18	150 MMØ						
19	200 MMØ	Rmt	2,796.08	18	50,329.44		
20	300 MMØ	Rmt	3,828.43				
21	MS Borewell cap fixture including fitting charges	Rmt	5,181.33			17	88,082.54
22	MS fittings such as clamp, ball plug, reducer, well cap, girder & support structure.						
23	MS fittings such as ring & centre guide	Job	32,249.78	1	32,249.78	1	32,249.78
24	Lowering of Tube well Assembly: Lowering of above assembly with welding of parts complete in all respect with all required material, T&P, labour, etc.	Rmt	471.02	330	1,55,436.60	62.27	29,330.42
25	Lowering of MSERW Plain/Slotted Pipe up to 100 Mtr. Deep						
26	300 MMØ MSERW Plane/Slotted Pipe						
27	200 MMØ MSERW Plane/Slotted Pipe	Rmt	489.31			61.77	30,224.93
28	150 MMØ MSERW Plane/Slotted Pipe	Rmt	389.45	60	23,367.00		
29	Lowering of MSERW Plane/Slotted Pipe from 100 Mtr. To 200 Mtr. Deep	Rmt	385.45	40	15,418.00		
30	150 MMØ MSERW Plane/Slotted Pipe						
31	200 MMØ MSERW Plane/Slotted Pipe	Rmt	442.38	100	44,238.00		
32	300 MMØ MSERW Plane/Slotted Pipe	Rmt	589.97				
33	Lowering of MSERW Plane/Slotted Pipe from 200 Mtr. To 300 Mtr. Deep	Rmt	881.17				
34	150 MMØ MSERW Plane/Slotted Pipe						
35	200 MMØ MSERW Plane/Slotted Pipe		569.55	100	56,955.15		
36	300 MMØ MSERW Plane/Slotted Pipe		678.69				
37	Lowering of MSERW Plane/Slotted Pipe from 300 Mtr. To 400 Mtr. Deep		896.96				
	150 MMØ MSERW Plane/Slotted Pipe						
38	200 MMØ MSERW Plane/Slotted Pipe		498.30	30	14,949.04		
	Total Amount				22,58,106.07		12,35,918.74
	Say				22,58,106.00		12,35,919.00

Net Savings Amount Rs. 10,22,187.00  
Net Savings In Percentage 45.27%

(Company Rep.)  
M/S VSAIPL-SMC JV, Ghazipur

(TPIA Rep.)  
Mehaj Techno Concept Pvt. Ltd., Ghazipur

(Computer)  
(Junior Engi)  
Ass. Engineer

Div. Accountant  
Ex. Engineer  
Sup. Engineer

Division Office(E/M), Division Office(E/M), U.P. Jal Nigam(Rural), Varanasi

Circle office  
(E/M), UPIN, Vns



# GEO INSTRUMENTS & TECHNIC'S

(A Division of Geophysical Exploration and Instrumentation)

Sales & Service Dealer : Uptron Borehole logging system, UPTRON INDIA LTD., LUCKNOW

Ref:GIT:UP: PJM:23-24:LS:K-104

Dated: 11-08-2023

## GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: Maanpur  
Block: Birno  
District: Ghazipur  
State: Uttar Pradesh  
Date of Logging: 10-08-2023  
Drilling Depth: 250.0m bgl  
Logging Depth: 248.0 m bgl  
Rm - 14.0  $\Omega$ m Rw - 15.0  $\Omega$ m

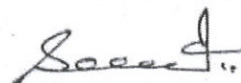
Borehole Drilled by: M/s VSAIPPL-SMC (JV), Ghazipur, Uttar Pradesh

Based on the interpretation of Self Potential (SP), Short Normal (N-16"), Long Normal (N-64") and Lateral (6') geophysical logs following informations/granular zones have been deciphered with respect to Salinity only:

Sl. No.	Depth Range (m bgl)	Thickness (meter)	Remark (Quality of Aquifer Water)
1.	25 - 41	16	Good
2.	44 - 48	04	Good
3.	52 - 56	04	Good

Note: 1. Fine bands of kankar are intermixed with almost all the zones.  
2. Quality of Ground water is deteriorating marginal to saline below 90.0 m bgl to till depth logged.

For Geo Instruments & Technic's

  
(S. Shukla)

अधीक्षण अभियन्ता,  
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना ब्लॉक-बिरनो, जोन 11, ग्राम पंचायत-माननपुर  
T.W-2. जनपद गाजीपुर में 200x150 एम0एम0 व्यास साइज के 360/330 मीटर गहरे नलकूप का निर्माण  
किया जाना है एवं उक्त नलकूप से 480 ली०प्र०मि० श्राव लिया जाना प्रस्तावित है।

अनुबन्ध सं०- 475/ED/PHASE 2/2022-23/VII दिनांक 27.02.2023 के माध्यम से M/s VSAIPPL-SMC  
IV, District-Ghazipur द्वारा नलकूप निर्माण कार्य सम्पादित कराया जा रहा है। दिनांक 10.08.2023 को  
नलकूप के बोर की इलेक्ट्रिक लॉगिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

S.N.	Depth Range		Thickness	Remark	PHYSICAL STRATA			
	From	to			S.No.	BGL in meter		Formation
						From	to	
1	25	41	16	Good	1	0	10	Clay
2	44	48	4	Good	2	10	24	Kankad Clay
3	52	56	4	Good	3	24	58	Very Very Fine Sand with Kankad
Note- 1.Fine bands of kankar are intermixed with almost all the zones. 2.Quality of groundwater is deteriorating to marginal to saline below 90.0 m bgl till depth logged..					4	58	92	Kankad Clay
					5	92	166	Very Fine Sand with Kankad
					6	166	248	Kankad Clay

अनुबन्ध में उपरोक्त नलकूप से 480 ली०प्र०मि० श्राव प्राप्त करने हेतु Entrance Velocity 0.015m/sec पर 18 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लॉगिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 17 मीटर ही स्लाटेड पाइप डाली जा सकती है।

Physically encountered Strata एवं लॉगिंग रिपोर्ट का निरीक्षण करने पर पाया गया कि उक्त के अन्तर्गत Very Very Fine Sand with Kankad का है एवं लॉगिंग रिपोर्ट के अनुसार केवल 17 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 480 ली०प्र०मि० श्राव प्राप्त किया जाना सम्भव नहीं है। ऐसी स्थिति में 150 मि०मी० स्लाटेड पाइप के स्थान पर 300 मि०मी० व्यास साइज की स्लाटेड पाइप का उपयोग किया जाय तो 17 मीटर की लम्बाई में Entrance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 17 मीटर लम्बाई में 150 मि०मी० के स्थान पर 300 मि०मी० व्यास साइज की स्लाटेड पाइप का उपयोग किया जाय तो Opening entrance area 150 मि०मी० व्यास साइज के 34 मीटर पाइप के बराबर आयेगी, जो Aquifer structure के दृष्टिगत उचित होगा एवं वास्तविक श्राव यील्ड टेस्ट के उपरान्त डिप्रेसन की मानकों के गणना के दृष्टिगत स्पष्ट हो पायेगा। अनुबन्ध में निहित प्राविधान के अनुसार श्राव की प्रतिपूर्ति फर्म की स्वयं का उत्तर दायित्व में है, अतएव श्राव प्रतिपूर्ति न होने पर फर्म द्वारा द्वितीय नलकूप निर्माण कराते हुए पूरा किया जायेगा एवं भुगतान के संबंध में राज्य पेयजल स्वच्छता मिशन (एसडब्लू०एस०एम०) द्वारा सक्षम स्तर से स्वीकृति उपरान्त नियमानुसार किया जायेगा।

अतः प्राप्त एक्यूफर के दृष्टिगत 300x300 मि०मी० व्यास साइज के 62 मीटर गहरे नलकूप जिसमें 17 मीटर स्लाटेड पाइप का उपयोग किया जायेगा, आपको तकनीकी स्वीकृति हेतु संलग्न कर प्रेषित है। कृपया अनुमोदन करना चाहें।

संलग्नक- लॉगिंग रिपोर्ट की छायाप्रति

M/s VSAIPPL-SMC JV  
District - Ghazipur

संगणक

जूनियर इंजीनियर

सहायक अभियन्ता

अधिशासी अभियन्ता

अधीक्षण अभियन्ता



**ESTIMATE FOR**  
**MANPUR AND BABU RAIPUR GRAM PANCHAYAT WATER SUPPLY SCHEME**  
**UNDER - JJM**  
**BLOCK- VIRNO, DISTRICT- GHAZIPUR**  
**Estimate of Cost of Tubewell construction**

Sl No.	Item of work	No.	L	B	H/D	Qty	Rate	Unit	Amount	Remarks
1	Drilling of Borehole for Tube well construction by DC/RC/DTH Rig Machine including transportation, erection, dismantling of Rig and associated T&P complete in all respect including required all material labor etc.									As per RFP.
1.1	Transportation, Installation Dismantling of Rig machine and logging of bore hole					2	1,56,378	Job	3,12,756	
1.2	DC/RC Drilling up to 100Mtr.									
1.2.1	500 MMØ					130	2,721	Rmt	3,53,730	
1.2.2	450 MMØ					70	2,458	Rmt	1,72,087	
1.3	DC/RC Drilling from 101 Mtr. To 200 Mtr.Deep									
1.3.1	450 MMØ									
1.3.2	Development / Flushing of tubewell					200	2,779	Rmt	5,55,704	
1.4	DC/RC Drilling from 201 Mtr. To 300 Mtr.Deep									
1.4.1	450 MMØ									
1.5	DC/RC Drilling from 301 Mtr. To 400 Mtr.Deep & above					200	3,163	Rmt	6,32,684	
1.5.1	450 MMØ									
1.4	<b>Tube Well Assembly</b>					120	3,708	Rmt	4,44,995	
1.4	MSERW plain pipe,As per IS 4270								-	
1.4.1	200 MMØ								-	
1.4.2	150 MMØ					120	2,550	Rmt	3,06,000	
1.5	MSERW Pipe slotted pipe as per IS 8110					504	1,900	Rmt	9,57,600	
1.5.1	300 MMØ									
1.5.2	150 MMØ					0	5,189	Rmt	-	
1.5.2	MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure					36	2,800	Rmt	1,00,800	
1.5.3	MS fittings such as ring & centre guide					2	32,295	LS	64,590	
2.0	Lowering of above assembly with welding of parts complete in all respect with all required material, T&P, labour, etc.					660	472	Rmt	3,11,309	
2.1	Lowering up to 100 Mtr. Deep									As per RFP.
2.1.1	300 MMØ MSERW Plane/Slotted Pipe									
2.1.2	200 MMØ MSERW Plane/Slotted Pipe					120	490	Rmt	58,800	
2.2	Lowering from 101 Mtr. To 200 Mtr. Deep					80	390	Rmt	31,200	
2.2.1	200 MMØ MSERW Plane/Slotted Pipe									
2.3	Lowering from 201 Mtr. To 300 Mtr. Deep					200	591	Rmt	1,18,160	
2.3.1	200 MMØ MSERW Plane/Slotted Pipe									
2.4	Lowering from 301 Mtr. To 400 Mtr. Deep & above					200	680	Rmt	1,35,928	
2.4.1	200 MMØ MSERW Plane/Slotted Pipe									
2.5	Supplying and unconsolidated packing of gravel with suitable size					159.00	499	Rmt	29,940	
3.0	Development of Tube well						7,500	Cum	11,92,500	As per RFP.
3.1	Transportation, Installation Dismantling of 250/400/600 PSI Compressor					2	92,152	Job	1,84,304	As per RFP.
3.2	Charges for Development by 600 PSI Compressor per hour					120	4,214	Hrs	5,05,662	
3.3	Transportation, Installation Dismantling of 1/3 Cusec OP Unit and Yield test, water test					2	1,05,237	Job	2,10,474	
3.4	Charges for Development of TW by 1 cusec OP Unit									
	<b>Total</b>					200	994	Hr.	1,98,886	
									68,78,109	
									<b>Say (In Lacs)</b>	68.78

# M/S VSAIPPL-SMC JV, Ghazipur (U.P.)

Regd. Office-#10,APIIC Building,Type-III, I.E, Prashanth Nagar Kukatpally,Hyderabad-500072  
Under Jal Jivan Mission, District- Ghazipur(U.P.)

Yield Test Report Of T.W at Mannpur GP (Zone-11,TW-2) Tubewell under Arsadpur(Jangipur) Village  
WSS, Block-Birno by 1 Cusec O.P. Unit

Size of Ventury 4" X 3" Column Pipe Lowered(m): 30.00

Static water level(m): 12.20 Required Discharge(LPM)- 480 LPM Date: 27-12-2023

S.N.	Discharge		Running Water Level (m)	Depression (m)	Sand content in P.P.M.				
	Inch	LPM			At start	After 5 min	After 10 min	After 15 min	After 20 min
1	43.00	1041	19.30	7.10	700	300	200	150	100
2	25.00	795	17.40	5.20	450	200	150	100	50
3	9.00	484	15.90	3.70	100	50	Tr	Tr	Cl

Remark- Recommended discharge 480 LPM L.P.M. at 3.7 m depression after running 20 minute bypass.

(.....)  
Company Repre.

M/S VSAIPPL-SMC  
JV, Ghazipur (U.P.)

(.....)  
TPIA  
Medhaj Techno Concept Pvt.  
Ltd., Ghazipur

(.....)  
Junior Engineer  
Division Office (E&M), U.P. Jal Nigam(Rural), Varanasi

(.....)  
Abhishek Srivastava  
Assistant Engineer





(.....)  
Nitish Kumar  
Assistant Engineer

(.....)  
Adarsh Verma  
Executive Engineer



**M/S VSAIPPL-SMC JV, Ghazipur (U.P)**

<b>Block:</b>	VIRNO		<b>Op unit Capacity</b>	As per DPR:	1 cusec
				As per Site:	1 cusec
<b>Scheme</b>	ARSADPUR(JANGIPUR) REORGANISATION WSS		<b>Op unit Hours</b>	As per DPR:	100
<b>GP</b>	MANNPUR Z-11,T.W-2			As per Site:	98.51 Hrs
	<b>Compressor Testing Date :</b>			<b>20-09-2023</b>	
<b>SI No</b>	<b>Date</b>	<b>Start Time</b>	<b>End Time</b>	<b>Total Hours</b>	<b>Remarks</b>
1	16-12-2023	08:23:00	09:54:00	1:31	
2		10:26:00	11:54:00	1:28	
3		12:20:00	13:42:00	1:22	
4		14:46:00	16:19:00	1:33	
5		17:02:00	18:48:00	1:46	
6		19:40:00	21:32:00	1:52	
7		22:10:00	23:33:00	1:23	
8	17-12-2023	00:10:00	01:47:00	1:37	
9		08:00:00	09:56:00	1:56	
10		10:13:00	11:31:00	1:18	
11		12:25:00	13:36:00	1:11	
12		14:45:00	16:09:00	1:24	
13		17:11:00	18:48:00	1:37	
14		19:42:00	21:30:00	1:48	
15	22:07:00	23:45:00	1:38		
16	18-12-2023	00:13:00	01:45:00	1:32	
17		08:21:00	09:54:00	1:33	
18		10:27:00	11:54:00	1:27	
19		12:21:00	13:55:00	1:34	
20		15:48:00	17:16:00	1:28	
21		18:06:00	19:21:00	1:15	
22	19:41:00	21:30:00	1:49		
23	19-12-2023	08:26:00	09:54:00	1:28	
24		10:18:00	11:54:00	1:36	
25		12:20:00	13:41:00	1:21	
26		14:46:00	16:18:00	1:32	
27		17:02:00	18:48:00	1:46	
28		19:40:00	21:31:00	1:51	
29		22:10:00	23:30:00	1:20	
30	20-12-2023	00:10:00	01:45:00	1:35	
31		08:45:00	09:40:00	0:55	
32		10:44:00	11:50:00	1:06	
33		12:50:00	13:20:00	0:30	
34		15:56:00	17:18:00	1:22	
35		18:02:00	19:10:00	1:08	
36	19:40:00	20:30:00	0:50		
37	21-12-2023	08:55:00	09:50:00	0:55	
38		10:34:00	11:53:00	1:19	
39		12:50:00	13:20:00	0:30	
40		15:56:00	17:18:00	1:22	
41		18:02:00	19:10:00	1:08	
42		19:40:00	20:30:00	0:50	
43	22-12-2023	08:18:00	09:40:00	1:22	
44		10:48:00	11:50:00	1:02	
45		12:51:00	13:20:00	0:29	
46		15:56:00	17:18:00	1:22	
47		18:02:00	19:10:00	1:08	
48		19:47:00	20:34:00	0:47	

M/S VSAIPPL-SMC JV, Ghazipur (U.P)					
<b>Block:</b>	VIRNO		<b>Op unit Capacity</b>	<b>As per DPR:</b>	1 cusec
				<b>As per Site:</b>	1 cusec
<b>Scheme</b>	ARSADPUR(JANGIPUR) REORGANISATION WSS		<b>Op unit Hours</b>	<b>As per DPR:</b>	100
<b>GP</b>	MANNPUR Z-11,T.W-2			<b>As per Site:</b>	98.51 Hrs
			<b>Compressor Testing Date :</b>	20-09-2023	
<b>SI No</b>	<b>Date</b>	<b>Start Time</b>	<b>End Time</b>	<b>Total Hours</b>	<b>Remarks</b>
49	23-12-2023	08:55:00	10:16:00	1:21	
50		10:44:00	11:55:00	1:11	
51		12:40:00	13:50:00	1:10	
52		15:56:00	17:26:00	1:30	
53		18:12:00	19:20:00	1:08	
54		19:40:00	21:10:00	1:30	
55	24-12-2023	08:45:00	10:10:00	1:25	
56		10:44:00	11:50:00	1:06	
57		12:50:00	14:20:00	1:30	
58		15:46:00	17:16:00	1:30	
59		18:02:00	19:10:00	1:08	
60		19:51:00	21:13:00	1:22	
61	25-12-2023	08:35:00	10:09:00	1:34	
62		10:44:00	11:57:00	1:13	
63		12:42:00	14:12:00	1:30	
64		15:46:00	17:18:00	1:32	
65		18:12:00	19:23:00	1:11	
66		19:40:00	21:02:00	1:22	
67	26-12-2023	08:35:00	10:05:00	1:30	
68		10:44:00	11:55:00	1:11	
69		12:42:00	14:14:00	1:32	
70		15:46:00	17:17:00	1:31	
71		17:45:00	19:21:00	1:36	
72	27-12-2023	08:35:00	10:05:00	1:30	
73		10:44:00	11:56:00	1:12	
			<b>Total</b>	<b>98:51</b>	
			<b>Total (Hrs)</b>	<b>98.51 Hrs</b>	
					
<b>Site Incharge</b>		<b>TPIA</b>	<b>Junior Engineer</b>	<b>Assistant Engineer</b>	<b>Exe. Engineer</b>
M/S VSAIPPL-SMC JV, Ghazipur (U.P)		M/s Medhaj Techno Concept Pvt. Ltd., Ghazipur	Construction Division Office(E/M) ,U.P.Jal Nigam(Rural), Varanasi		



# M/S VSAIPPL-SMC JV, Ghazipur (U.P.)

Regd. Office-#10, APIIC Building, Type-III, I.E, Prashanth Nagar Kukatpally, Hyderabad-500072

Under Jal Jivan Mission, District- Ghazipur(U.P.)

Test Report of Mannpur GP (Zone-11, TW-2) Tubewell under Arsadpur Jangipur WSS, Block-Birno Development By 250 PSI Air Compressor

Size of tube well (mm): 300 X 300 RPM 1350

Static water level (m): 9.30 Discharge by-90 'V' notch (Rectangular)

S. N.	Pressure in kg/cm2		Depression In mtr.	Depth of air line at the time of testing (m)	Discharge by 'V' Notch		LPM	Sand content in P.P.M.			
	Starting Pressure	Running Pressure			Inch	LPM		At start	After 5 min	After 10 min	After 15 min
	1	4.20	3.40	8.00	53.00	7	1104	6100	3400	3200	3000
2	3.40	2.80	6.00	45.00	6 1/2	917	5600	3100	2900	2700	2600
3	2.00	1.50	5.00	31.00	6	751	5100	2900	2700	2500	2300

Depth of T/W (m): 61.770 Required Discharge- 480 LPM Date of testing 20-09-2023

Remark- Recommended for further development by O.P. Unit



Company Repre.  
M/S VSAIPPL-SMC  
JV, Ghazipur (U.P.)

(.....)  
TPIA  
Medhaj Techno Concept Pvt.  
Ltd., Ghazipur

(Abhishek Srivastava)  
Junior Engineer

(Nitish Kumar)  
Assistant Engineer

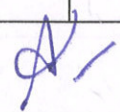
(Adarsh Verma)  
Executive Engineer

Division Office (E&M), U.P. Jal Nigam(Rural), Varanasi




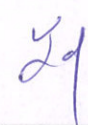
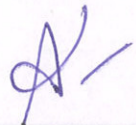

**M/S VSAIPPL-SMC JV, Ghazipur (U.P)**

<b>Block:</b>	VIRNO	<b>Compressor unit Capacity</b>	<b>As per DPR:</b>	600 PSI	
			<b>As per Site:</b>	250 PSI	
<b>Scheme</b>	ARSADPUR (JANGIPUR )	<b>Compressor unit Hours</b>	<b>As per DPR:</b>	60	
<b>GP</b>	Mannpur Z-11 T,W-2		<b>As per Site:</b>	58.00 Hrs	
<b>Lowering Depth(mt):</b>	61.77				
<b>Lowering Date :</b>	16.08.2023	<b>Cumm Gravel(cumt)</b>	<b>As per DPR:</b>	79.50	
		<b>Cumm Gravel(cumt)</b>	<b>As per Site:</b>	56.43	
<b>SI No</b>	<b>Date</b>	<b>Start Time</b>	<b>End Time</b>	<b>Total Hours</b>	<b>Remarks</b>
1	9-Sep-23	7:30 AM	9:00 AM	1:30	
2		10:00 AM	11:15 AM	1:15	
3		12:00 PM	1:23 PM	1:23	
4		2:00 PM	3:10 PM	1:10	
5		4:00 PM	5:00 PM	1:00	
6	10-Sep-23	8:29 AM	9:14 AM	0:45	
7		10:00 AM	10:50 AM	0:50	
8		1:00 PM	2:00 PM	1:00	
9		4:20 PM	5:10 PM	0:50	
10		6:00 PM	7:10 PM	1:10	
11	11-Sep-23	7:29 AM	8:20 AM	0:51	
12		10:00 AM	10:45 AM	0:45	
13		12:00 PM	1:03 PM	1:03	
14		2:00 PM	3:10 PM	1:10	
15		4:00 PM	5:00 PM	1:00	
16	12-Sep-23	8:20 AM	9:14 AM	0:54	
17		10:10 AM	10:42 AM	0:32	
18		1:10 PM	2:10 PM	1:00	
19		4:30 PM	5:20 PM	0:50	
20		6:00 PM	7:10 PM	1:10	
21	13-Sep-23	7:29 AM	8:20 AM	0:51	
22		10:00 AM	10:45 AM	0:45	
23		12:00 PM	1:03 PM	1:03	
24		2:00 PM	3:10 PM	1:10	
25		4:00 PM	5:00 PM	1:00	
26	14-Sep-23	8:19 AM	9:24 AM	1:05	
27		10:00 AM	10:40 AM	0:40	
28		1:10 PM	2:00 PM	0:50	
29		4:20 PM	5:30 PM	1:10	
30		6:05 PM	7:10 PM	1:05	
31	15-Sep-23	9:06 AM	10:20 AM	1:14	
32		11:20 AM	12:16 PM	0:56	
33		2:01 PM	3:30 PM	1:29	
34		4:00 PM	5:10 PM	1:10	
35		6:29 PM	7:04 PM	0:35	
36	16-Sep-23	10:00 AM	11:10 AM	1:10	
37		12:00 PM	12:40 PM	0:40	
38		1:30 PM	2:10 PM	0:40	
39		3:00 PM	4:06 PM	1:06	
40		5:00 PM	6:00 PM	1:00	

29 



**M/S VSAIPPL-SMC JV, Ghazipur (U.P)**

<b>Block:</b>	VIRNO	<b>Compressor unit Capacity</b>	<b>As per DPR:</b>	600 PSI	
			<b>As per Site:</b>	250 PSI	
<b>Scheme</b>	ARSADPUR (JANGIPUR )	<b>Compressor unit Hours</b>	<b>As per DPR:</b>	60	
<b>GP</b>	Mannpur Z-11 T,W-2		<b>As per Site:</b>	58.00 Hrs	
<b>Lowering Depth(mt):</b>	61.77				
<b>Lowering Date :</b>	16.08.2023	<b>Cumm Gravel(cumt)</b>	<b>As per DPR:</b>	79.50	
		<b>Cumm Gravel(cumt)</b>	<b>As per Site:</b>	56.43	
<b>SI No</b>	<b>Date</b>	<b>Start Time</b>	<b>End Time</b>	<b>Total Hours</b>	<b>Remarks</b>
41	17-Sep-23	9:00 AM	10:10 AM	1:10	
42		11:00 AM	12:06 PM	1:06	
43		2:00 PM	3:00 PM	1:00	
44		4:00 PM	5:10 PM	1:10	
45		6:29 PM	7:04 PM	0:35	
46	18-Sep-23	10:00 AM	11:10 AM	1:10	
47		12:00 PM	12:40 PM	0:40	
48		1:30 PM	2:10 PM	0:40	
49		3:00 PM	4:06 PM	1:06	
50		5:00 PM	6:00 PM	1:00	
51	19-Sep-23	8:00 AM	9:14 AM	1:14	
52		10:10 AM	11:10 AM	1:00	
53		1:30 PM	2:10 PM	0:40	
54		3:20 PM	4:26 PM	1:06	
55		5:30 PM	6:18 PM	0:48	
56	20-Sep-23	9:20 AM	10:00 AM	0:40	
57		11:05 AM	12:00 PM	0:55	
58		2:10 PM	3:04 PM	0:54	
59		4:26 PM	5:00 PM	0:34	
60		6:19 PM	7:04 PM	0:45	
			<b>Total</b>	<b>58:00</b>	
			<b>Total (Hrs)</b>	<b>58.00 Hrs</b>	
					
<b>Site Incharge</b>	<b>TPIA</b>	<b>Junior Engineer</b>	<b>Assistant Engineer</b>	<b>Exe. Engineer</b>	
M/S VSAIPPL-SMC JV, Ghazipur (U.P)	M/s Medhaj Techno Concept Pvt. Ltd., Ghazipur	Construction Division Office(E/M) ,U.P.Jal Nigam(Rural), Varanasi			





# QA Testing Laboratories Pvt. Ltd.

(Govt. Approved Testing Laboratories)

B-76, Sector-64, Gautam Buddha Nagar, Noida-201301 (Uttar Pradesh)

Tel.: +91-120-4133953 • Mobile: +91-8287945370 • E-mail: admin@qatestinglaboratories.com

Website : www.qatestinglaboratories.com

CIN : U51100UP2018PTC108293 • GSTIN : 09AAACQ5609C1ZN



JAS-ANZ



M54009131N



ISO 9001:2015, 14001:2015, 45001:2018 & ISO/IEC 17025:2017 Accredited & BIS Recognised Laboratory

## TEST CERTIFICATE

(This Certificate is not Valid without Hologram)



Test Report No : QAL/WT/240111002556  
Sample Name: : Tube Well Water  
Sample Code : -  
Issued To : VSAIPPL-SMC JV  
District-Ghazipur.

Issue Date : 18/01/2024  
Sample Received On : 11/01/2024  
Reference No : VSAIPPL-SMC/UPJN/23-24/64  
Sampling Date : 11/01/2024  
Sampling Quantity : 2Ltr.  
Batch No./Lot No. : NA  
Date of Mfg. : NS  
Date of Exp. : NS  
Date of Starting : 11/01/2024  
Date of Completion : 18/01/2024

Sample Submitted By : VSAIPPL-SMC JV  
Mfg. By : NA  
Sample Description : Physical, Chemical & Heavy Metals Analysis Of Water  
Location : Distt.-Ghazipur Block-Birno GP-Maanpur TW-2

S.No.	Test Parameter	Units	Results	Specification as per IS:10500:2012		Test Method
				Acceptable Limit	Permissible Limit	
1	Color	Hazen	1	5 max.	15 max.	IS : 3025( P-4)
2	Turbidity	NTU	0.2	1 max.	5 max.	IS : 3025( P-10)
3	pH value at 25°C	-	7.43	6.5-8.5	No Relaxation	IS : 3025 (P-11)
4	Total Hardness as CaCO3	mg/l	165	200 max	600 max.	IS : 3025 (P-21)
5	Calcium (as Ca)	mg/l	40.9	75 max	200 max	IS : 3025 (P-40)
6	Iron (as Fe)	mg/l	0.026	1 max	-	IS : 3025 (P-53)
7	Magnesium (as Mg)	mg/l	15.3	30 max	100 max	IS : 3025 (P-46)
8	Chloride (as Cl)	mg/l	23	250 max.	1000 max.	IS : 3025 (P-32)
9	Free Residual Chlorine	mg/l	Nil	0.2 max.	1 Max	IS : 3025 (P-26)
10	Sulphates (as SO4)	mg/l	9.1	200 max.	400 max.	IS : 3025 (P-24)
11	Total Alkalinity (as CaCO3)	mg/l	119	200 max.	600 max.	IS : 3025 (P-23)
12	Fluoride (as F)	mg/l	0.032	1 max.	1.5 max.	IS : 3025 (P-60)
13	Total Dissolved Solid (TDS)	mg/l	372	500 max.	2000 max.	IS : 3025 (P-16)
14	Total Coliform Bacteria	MPN/10 0 ml	Absent	Shall not be detectable in any 100 ml sample	Shall not be detectable in any 100 ml sample	IS : 1622
15	E coli	MPN/10 0 ml	Absent	Shall not be detectable in any 100 ml sample	Shall not be detectable in any 100 ml sample	IS : 1622

SAMPLE COLLECTED BY US

\*\*\*End of Report\*\*\*

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

Deep 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 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.





# QA Testing Laboratories Pvt. Ltd.

(Govt. Approved Testing Laboratories)

B-76, Sector-64, Gautam Buddha Nagar, Noida-201301 (Uttar Pradesh)

Quality Assurance

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Website : www.qatestinglaboratories.com

CIN : U51100UP2018PTC108293 • GSTIN : 09AAACQ5609C1ZN

IAS-ANZ



M54009131N



ISO 9001:2015, 14001:2015, 45001:2018 & ISO/IEC 17025:2017 Accredited & BIS Recognised Laboratory

## TEST CERTIFICATE

(This Certificate is not Valid without Hologram)



Test Report No : QAL/WT/240111002556

Issue Date : 18/01/2024

Sample Name: : Tube Well Water

Sample Received On : 11/01/2024

S.No.	Test Parameter	Units	Results	Specification as per IS:10500:2012		Test Method
				Acceptable Limit	Permissible Limit	
16	Nitrate (as NO <sub>3</sub> )	mg/l	0.34	45 max	No Relaxation	IS : 3025 (P-34)
17	Copper (as Cu)	mg/l	ND	0.05 max	1.5 max	IS : 3025 (P-42)
18	Manganese (as Mn)	mg/l	0.016	0.1 max	0.3 max	IS : 3025 (P-59)
19	Mercury (as Hg)	mg/l	ND	0.001 max	No Relaxation	IS : 3025 (P-48)
20	Cadmium (as Cd)	mg/l	ND	0.003 max	No Relaxation	IS : 3025 (P-41)
21	Selenium (as Se)	mg/l	ND	0.01 max	No Relaxation	IS : 3025 (P-56)
22	Total Arsenic (as As)	mg/l	ND	0.01 max	0.05 max	IS : 3025 (P-37)
23	Lead (as Pb)	mg/l	ND	0.01 max	No Relaxation	IS : 3025 (P-47)
24	Zinc (as Zn)	mg/l	0.024	5 max	15 max	IS : 3025 (P-49)
25	Cobalt	mg/l	ND	-	-	IS : 3025 (P-2)
26	Aluminium (as Al)	mg/l	ND	0.03 max	0.2 max	IS : 3025 (P-55)
27	Boron (as B)	mg/l	0.012	0.5 max	1.0 max	IS : 3025 (P-57)
28	Barium (as Ba)	mg/l	0.014	0.7 max	No Relaxation	IS:13428
29	Silver (as Ag)	mg/l	ND	0.1 max	No Relaxation	IS:13428
30	Molybdenum (as Mo)	mg/l	ND	0.07 max	No Relaxation	IS : 3025 (P-2)
31	Nickel (as Ni)	mg/l	ND	0.02 max	No Relaxation	IS : 3025 (P-54)
32	Total Chromium (as Cr)	mg/l	ND	0.05 max	No Relaxation	IS : 3025 (P-52)
33	Antimony (as Sb)	mg/l	ND	-	-	IS :3025 (P-2)

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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# GEO INSTRUMENTS & TECHNIC'S

(A Division of Geophysical Exploration and Instrumentation)

Sales & Service Dealer : Upton Borehole logging system, UPTRON INDIA LTD., LUCKNOW

Ref:GIT:UP: PJM:23-24:LS:K-104

Dated: 11-08-2023

## GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: Maanpur  
Block: Birno  
District: Ghazipur  
State: Uttar Pradesh  
Date of Logging: 10-08-2023  
Drilling Depth: 250.0m bgl  
Logging Depth: 248.0 m bgl  
Rm – 14.0  $\Omega$ m Rw – 15.0  $\Omega$ m

Borehole Drilled by: M/s VSAIPPL-SMC (JV), Ghazipur, Uttar Pradesh

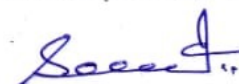
Based on the interpretation of **Self Potential (SP)**, **Short Normal (N-16")**, **Long Normal (N-64")** and **Lateral (6')** geophysical logs following informations/granular zones have been deciphered with respect to **Salinity** only:

Sl. No.	Depth Range (m bgl)	Thickness (meter)	Remark (Quality of Aquifer Water)
1.	25 – 41	16	Good
2.	44 – 48	04	Good
3.	52 – 56	04	Good

Note: 1. Fine bands of kankar are intermixed with almost all the zones.

2. Quality of Ground water is deteriorating marginal to saline below 90.0 m bgl to till depth logged.

For Geo Instruments & Technic's

  
(S. Shukla)