

**M/S VSAIPPL-SMC JV, Ghazipur (U.P)**  
 Actual Strata Chart of BHOJAPUR WSS, BLOCK - BIRNO, TW NO 1  
 Under Jal Jeevan Mission, District- Ghazipur (U.P.)

**PHYSICAL STRATA**

S.No.	BGL in meter		Formation
	From	to	
1	0	6	Clay
2	6	12	Clay Kankad
3	12	23	Kankad
4	23	26	Fine Sand
5	27	33	Kankad with Very Fine Sand
6	34	38	Clay Kankad
7	38	47	Clay Kankad
8	47	66	Kankad with Clay
9	66	84	Very Fine Sand with Kankad
10	84	112	Clay Kankad
11	112	220	Sandy Clay with Kankad
12	220	236	Clay Kankad
13	236	310	Fine Sand With Kankad
14	310	330	Sandy Clay

Drilling and assembly 300 mm 600MM		MS Ring Collar length	BGL including MS Ring Collar
		AGL 0.50	0
6.010	P.P.	0.000	5.510
6.010	P.P.	0.000	11.520
6.020	P.P.	0.000	17.540
6.010	P.P.	0.000	23.550
6.010	P.P.	0.000	29.560
6.020	P.P.	0.000	35.580
6.010	P.P.	0.000	41.590
6.010	P.P.	0.000	47.600
6.010	P.P.	0.000	53.610
6.020	P.P.	0.000	59.630
6.010	P.P.	0.000	65.640
4.600	P.P.	0.000	70.240
6.010	S.P.	0.000	76.250
3.500	S.P.	0.000	79.750
6.010	P.P.	0.000	85.760

**Logging**

Date-06/06/2023


S.N.	Depth Range		Thickn m	Remark
	From	to		
1	23	33	10	Good
2	70	80	10	Good
3	236	246	10	Good
4	290	294	4	Moderate
5	322	326	4	Good
6	328	332	4	Good



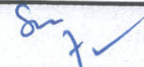
**Note-**

1. Fine bands of kankar are intermixed with almost all the zones.
2. Zone Sl. No. 5 is highly intermixed with fine hands of kankar.
3. Quality of ground water is deteriorating marginal to saline in between 106.0 m to 226.0 bgl.
4. Clay and Kankar intercalation is present in depth range 226.0 to 230.0 m bgl.

S.N.	DETAILS	AS PER DPR		ACTUAL	
		AS PER DPR	UNIT	ACTUAL	UNIT
1	Proposed Discharge	687	LPM		
2	Clear Depth of bore 600mm	65	Mbgl ✓	94.000	Mbgl
3	Clear Depth of bore 500mm	0	Mbgl ✓	0.000	Mbgl
4	Clear Depth of bore 450mm	330	Mbgl ✓	330.000	Mbgl
5	Plane pipe 300MM	60	m ✓	76.750	m
6	Plane pipe 200MM	0	m ✓	0.000	m
7	Plane pipe 150MM	204	m ✓	0.000	m
8	Slotted pipe 300MM	0	m	9.510	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	36	m	0.000	m
11	Date of logging			14/6/2023	

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

  
 TPIA  
 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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# 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: 671

Dated: 07-06-2023

## GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: **Bhojpur**  
Block: **Birno**  
District: **Ghazipur**  
State: **Uttar Pradesh**  
Date of Logging: **06-06-2023**  
Drilling depth: **340.0 m bgl**  
Logging Depth: **338.0 m bgl**  
Rm - **13.0  $\Omega$ m** Rw - **11.0  $\Omega$ m**

Borehole Drilled by: M/s VSAIPPL-SCL (JV), Ghazipur, U. P. India.

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 (meters)	Remarks (Quality of aquifer water)
<del>1.</del>	<del>23 - 33</del>	<del>10</del>	<del>Good</del>
<del>2.</del>	<del>70 - 80</del>	<del>10</del>	<del>Good</del>
<del>3.</del>	<del>236 - 246</del>	<del>10</del>	<del>Good</del>
<del>4.</del>	<del>290 - 294</del>	<del>04</del>	<del>Moderate</del>
5.	320 - 326	06	Good
<del>6.</del>	<del>328 - 332</del>	<del>04</del>	<del>Good</del>

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

2. Zone Sl. No. 5 is highly intermixed with fine bands of kankar.

3. Quality of ground water is deteriorating marginal to saline in between 106.0 to 226.0 m bgl.

4. Clay and Kankar intercalation is present in depth range 226.0 to 230.0 m bgl.

Verified as per logs provided.

For Geo Instruments & Technic's

*S. Shukla*  
(S. Shukla)

G. Sh  
07/06/23



अधीक्षण अभियन्ता,  
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना ब्लॉक - बिरनो, TW 1, ग्राम पंचायत - भोजापुर जनपद गाजीपुर में 300x150 एम0एम0 व्यास साइज के 330/300 मीटर गहरे नलकूप का निर्माण किया जाना है एवं उक्त नलकूप से 687 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 06.06.2023 को नलकूप के बोर की इलेक्ट्रिक लॉगिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

Date- 06/06/2023	S.N.	Depth Range		Thickness	Remark	S.No.	BGL in meter		Formation
		From	to				From	to	
	1	23	33	10	Good	1	0	6	Clay
	2	70	80	10	Good	2	6	12	Clay Kankad
	3	236	246	10	Good	3	12	23	Kankad
	4	290	294	4	Moderate	4	23	26	Fine Sand
	5	322	326	4	Good	5	27	33	Kankad with Very Fine Sand
	6	328	332	4	Good	6	34	38	Clay Kankad
Note- 1.Fine bands of kankar are intermixed with almost all the zones. 2.Zone SI. No. 5 is highly intermixed with fine hands of kankar. 3.Quality of ground water is deteriorating marginal to saline in between 106.0 m to 226.0 bgl. 4. Clay and Kankar intercalation is present in depth range 226.0 to 230.0 m bgl.						7	38	47	Clay Kankad
						8	47	66	Kankad with Clay
						9	66	84	Very Fine Sand with Kankad
						10	84	112	Clay Kankad
						11	112	220	Sandy Clay with Kankad
						12	220	236	Clay Kankad
						13	236	310	Fine Sand With Kankad
						14	310	330	Sandy Clay

अनुबन्ध में उपरोक्त नलकूप से 687 ली०प्र०मि० श्राव प्राप्त करने हेतु Entrance Velocity 0.015m/sec पर 36 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लॉगिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 9.50 मीटर ही स्लाटेड पाइप डाली जा सकती है।

Physically encountered Strata एवं लॉगिंग रिपोर्ट का निरीक्षण करने पर पाया गया कि उक्त के अन्तर्गत Aquifer Very Fine Sand with Kankad का है एवं लॉगिंग रिपोर्ट के अनुसार केवल 9.50 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 687 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 9.50 मीटर की लम्बाई में Entrance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 9.50 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 19 मीटर पाइप के बराबर आयेगी, जो Aquifer structure के दृष्टिगत उचित होगा एवं वास्तविक श्राव यील्ड टेस्ट के उपरान्त डिप्रेषन 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 (एसडब्ल्यूएसएम) द्वारा सक्षम स्तर से स्वीकृति उपरान्त नियमानुसार किया जायेगा।

अतः प्राप्त एक्वफर के दृष्टिगत 300x300 मि०मी० व्यास साइज के 86 मीटर गहरे नलकूप जिसमें 9.50 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 IV  
District - Ghazipur



संगणक

जूनो इंजी०

सहायक अभियन्ता

अधिशासी अभियन्ता

अधीक्षण अभियन्ता

VARIATION STATEMENT AGAINST C.A. NO-475/ED/PHASE-2/2022-23/VII, Date- 27-02-2023

For Construction of 330/85.76 mts. deep 300 X 300 mm. dia assembly size T.W. inspite of 330/300 mts. deep 300 X 150 mm. dia assembly size T.W. by D.C. Rig Machine at Block - Birno, TW 1, Bhojapur Water Supply Scheme in District - Ghazipur

SL No	Item of work	Unit	Rate	Cost As Per Cover Aggrement (330/300 mts. deep 300 X 150 mm. dia assembly size)		Expenditure as per Actual Work Executed at Site due to adverse Geophysical Condition (330/85.76 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	156,159.07	1	156,159.07	1	156,159.07
	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	65	210,708.89	94	304,717.48
4	500 MMØ	Rmt	2,717.19		-		-
5	450 MMØ	Rmt	2,454.95	35	85,923.19	6	14,729.69
6	DC/RC Drilling from 100Mtr. To 200 Mtr.				-		-
	600 MMØ	Rmt	3,551.98		-		-
	500 MMØ	Rmt	3,033.75		-		-
7	450 MMØ	Rmt	2,774.63	100	277,463.01	100	277,463.01
8	DC/RC Drilling from 200 Mtr. To 300 Mtr.				-		-
	500 MMØ	Rmt	3,363.28		-		-
9	450 MMØ	Rmt	3,158.99	100	315,899.12	100	315,899.12
10	DC/RC Drilling from 300 Mtr. To 400 Mtr.				-		-
11	450 MMØ	Rmt	3,703.10	30	111,092.95	30	111,092.95
12	Tubewell Assembly:				-		-
13	MSERW plain pipe As per IS 4270				-		-
14	300 MMØ	Rmt	3,794.68	60	227,680.80	76.75	291,241.69
15	200 MMØ	Rmt	2,546.43		-		-
16	150 MMØ	Rmt	1,897.34	204	387,057.36		-
17	MSERW slotted pipe as per IS 8110				-		-
18	150 MMØ	Rmt	2,796.08	36	100,658.88		-
19	200 MMØ	Rmt	3,828.43		-		-
20	300 MMØ	Rmt	5,181.33		-	9.51	49,274.41
21	MS Borewell cap fixture including fitting charges				-		-
22	MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure.	Job	32,249.79	1	32,249.79	1	32,249.79
23	MS fittings such as ring & centre guide	Rmt	471.02	300	141,305.89	86.26	40,630.15
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.				-		-
25	Lowering of MSERW Plain/Slotted Pipe up to 100 Mtr. Deep				-		-
26	300 MMØ MSERW Plane/Slotted Pipe	Rmt	489.31	60	29,358.84	85.76	41,963.57
27	200 MMØ MSERW Plane/Slotted Pipe	Rmt	389.45		-		-
28	150 MMØ MSERW Plane/Slotted Pipe	Rmt	385.46	40	15,418.38		-
29	Lowering of MSERW Plane/Slotted Pipe from 100 Mtr. To 200 Mtr. Deep				-		-
30	150 MMØ MSERW Plane/Slotted Pipe	Rmt	442.38	100	44,237.98		-
31	200 MMØ MSERW Plane/Slotted Pipe	Rmt	589.97		-		-
32	300 MMØ MSERW Plane/Slotted Pipe	Rmt	881.17		-		-
33	Lowering of MSERW Plane/Slotted Pipe from 200 Mtr. To 300 Mtr. Deep				-		-
34	150 MMØ MSERW Plane/Slotted Pipe	Rmt	569.55	100	56,955.15		-
35	200 MMØ MSERW Plane/Slotted Pipe	Rmt	678.69		-		-
36	300 MMØ MSERW Plane/Slotted Pipe	Rmt	896.96		-		-
	<b>Total Amount</b>				<b>2,192,169.31</b>		<b>1,635,420.93</b>
	<b>Say</b>				<b>2,192,169.00</b>		<b>1,635,421.00</b>

Net Savings Amount Rs. 556,748.00  
Net Savings In Percentage 25.40%

  
Company Rep.)

(TPIA Rep.)

  
(Computer)

(Junior Engi

Ass. Engineer

Div. Accountant

Ex. Engineer

Sup. Engineer

M/S VSAIPL-SMC JV, Ghazipur

Medhaj Techno Concept Pvt. Ltd., Ghazipur

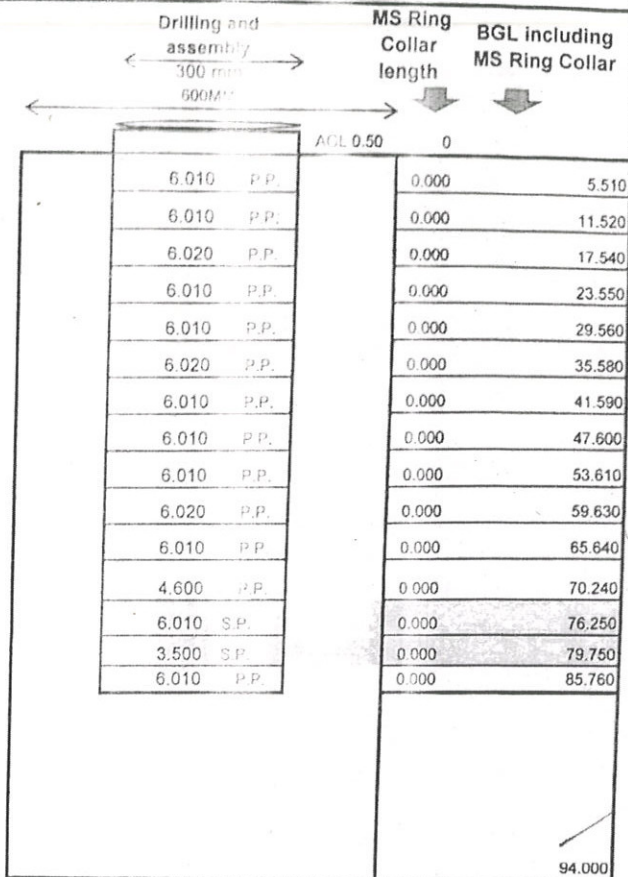
Division Office(E/M), Divis Office(E/M), U.P. Jal Nigam(Rural), Varanasi

Circle office (E/M), UPJN, Vns



**M/S VSAIPPL-SMC JV, Ghazipur (U.P)**  
**Actual Strata Chart of BHOJAPUR WSS, BLOCK - BIRNO, TW NO 1**  
**Under Jal Jeevan Mission, District- Ghazipur(U.P.)**

PHYSICAL STRATA			
S.No.	BGL in meter		Formation
	From	to	
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10	84	112	Clay Kankad
11	112	220	Sandy Clay with Kankad
12	220	236	Clay Kankad
13	236	310	Fine Sand With Kankad
14	310	330	Sandy Clay



**Logging**

Date-06/06/2023

S.N.	Depth Range		Thickn m	Remark
	From	to		
1	23	33	10	Good
2	70	80	10	Good
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6	328	332	4	Good

**Note-**

1. Fine bands of kankar are intermixed with almost all the zones.
2. Zone SI. No. 5 is highly intermixed with fine hands of kankar.
3. Quality of ground water is deteriorating marginal to saline in between 106.0 m to 226.0 bgl.
4. Clay and Kankar intercalation is present in depth range 226.0 to 230.0 m bgl.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	687	LPM		
2	Clear Depth of bore 600mm	65	Mbgl	94.000	Mbgl
3	Clear Depth of bore 500mm	0	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	330	Mbgl	330.000	Mbgl
5	Plane pipe 300MM	60	m	76.750	m
6	Plane pipe 200MM	0	m	0.000	m
7	Plane pipe 150MM	204	m	0.000	m
8	Slotted pipe 300MM	0	m	9.510	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	36	m	0.000	m
11	Date of logging			14/6/2023	



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

*(Signature)* (A. Srivastava) Junior Engineer  
*(Signature)* (Nitish Kumar) Assistant Engineer  
*(Signature)* (Adarsh Verma) Exe. Engineer  
 Division Office (E/M), U.P. Jal Nigam (Rural), Varanasi

BIRNO  
BHOJPUR

**ESTIMATE FOR  
BHOJPUR VILLAGE WATER SUPPLY SCHEME  
UNDER - SWSM  
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	600 MMØ	1	130			130	3,246	Rmt	4,22,009	
1.2.2	450 MMØ	1	70			70	2,458	Rmt	1,72,087	
1.3	DC/RC Drilling from 100 MT. To 200 Mtr.Deep									
1.3.1	450 MMØ	1	200			200	2,779	Rmt	5,55,704	
1.4	DC/RC Drilling from 200 MT. To 300 Mtr.Deep									
1.4.1	450 MMØ	1	200			200	3,163	Rmt	6,32,684	
1.5	DC/RC Drilling from 300 MT. To 400 Mtr.Deep									
1.5.1	450 MMØ	1	60			60	3,708	Rmt	2,22,497	
1.6	DTH Drilling upto 200.0 Mtr.Deep - 165/200 MMØ (in over burden/Hard Rock).	1	0			0	1,250	Rmt	-	
1.7	Development / Flushing of tubewell					0	2,900	Hrs	-	
	Tube Well Assembly									
1.8	MSERW plane pipe									
1.8.1	300 MMØ					120	3,800	Rmt	4,56,000	
1.8.2	150 MMØ					408	1,900	Rmt	7,75,200	
1.9	MSERW Pipe slotted pipe as per IS 8110									
1.9.1	150 MMØ					72	2,800	Rmt	2,01,600	
1.9.2	MS Borewell cap fixture including fitting charges					2	2,000	Nos	4,000	



1.9.3	MS fittings such as clamp, ball plug, reducer, well cap, girder & support structure				2	32,295	Job	64,590	
1.9.4	MS fittings such as ring & centre guide				600	472	Rmt	2,83,008	
2.0	Lowering of above assembly with welding of parts complete in all respect with all required material, T&P, labour, etc.								As per RFP.
2.1	Lowering up to 100 Mtr. Deep								
2.1.1	300 MMØ MSERW Plane/Slotted Pipe				120	490	Rmt	58,800	
2.1.2	150 MMØ MSERW Plane/Slotted Pipe				80	386	Rmt	30,880	
2.2	Lowering from 100 Mtr. To 200 Mtr. Deep								
2.2.1	150 MMØ MSERW Plane/Slotted Pipe				200	443	Rmt	88,600	
2.3	Lowering from 200 Mtr. To 300 Mtr. Deep								
2.3.1	150 MMØ MSERW Plane/Slotted Pipe				200	570.35	Rmt	1,14,070	
2.4	Lowering from 300 Mtr. To 400 Mtr. Deep								
2.4.1	150 MMØ MSERW Plane/Slotted Pipe				0	443	Rmt	-	
2.5	Supplying and unconsolidated packing of gravel with suitable size				156.1	7,500	Cum	11,70,955	As per RFP.
3.0	Development of Tube well								As per RFP.
3.1	Transportation, Installation Dismantling of 600 PSI Compressor				2	92,152	Job	1,84,304	
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 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				200	994	Hr.	1,98,886	
4	Complete cabling for tubewell including all power and controlcables of all equipments at pumphouse and OHT				2	60,000	Job	1,20,000	
	<b>Total</b>							67,84,766	
								Say (In Lacs)	67.85

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

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

Test Report of GP-Bhojapur TW1, Zone 1, Block - Birno, Scheme-Bhojapur Reorganisation WSS, Developed by 250 PSI Compressor

Size of tube well (mm):		300	X	300	RPM		1400								
Static water level (m):		10.00			Discharge by-90 'V' notch (Rectangular)										
Depth of T/W (m):		85.760			Date: of testing			12-07-2023							
S. N.	Pressure in kg/cm <sup>2</sup>		Depression		Discharge by 'V' Notch			Sand content in P.P.M.							
	Starting Pressure	Running Pressure	In kg/cm <sup>2</sup>	In mtr.	Inch	LPM	At start								
1	6.50	5.50	1.00	10.00	6 3/4	1008	6000	After 5 min	3300	After 10 min	3100	After 15 min	2900	After 20 min	2800
2	5.90	5.30	0.60	6.00	5 3/4	675	4900	2800	2600	2400	2300				

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



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

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

TPIA

(Abhishek Srivastava)  
Junior Engineer

(Nitish Kumar)  
Assistant Engineer

(Adarsh Verma)  
Executive 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)**

Job Code:		Compressor unit	As per DPR:	600 PSI
Block:	BIRNO	Capacity	As per Site:	250 PSI
Scheme	BHOJAPUR WSS	Compressor unit	As per DPR:	60
GP	BIRNO TW 1	Hours	As per Site:	58:00
Lowering	85.76	Cumm Gravel(cumt)	As per DPR:	78.05
		Cumm Gravel(cumt)	As per Site:	69.55

SI No	Date	Start Time	End Time	Total Hours	Remarks
1	2-Jul-23	6:30 AM	12:39 PM	6:09	
2	3-Jul-23	7:29 AM	12:04 PM	4:35	
3	4-Jul-23	7:00 AM	12:10 PM	5:10	
4	5-Jul-23	7:00 AM	12:00 PM	5:00	
5	6-Jul-23	7:00 AM	12:26 PM	5:26	
6	7-Jul-23	6:30 AM	11:39 AM	5:09	
7	8-Jul-23	7:29 AM	11:04 AM	3:35	
8	9-Jul-23	7:00 AM	12:10 PM	5:10	
9	10-Jul-23	7:00 AM	3:00 PM	8:00	
10	11-Jul-23	7:00 AM	10:37 AM	3:37	
11	12-Jul-23	6:30 AM	12:39 PM	6:09	
			<b>Total</b>	<b>58:00</b>	

	<i>Yd</i>	<i>Dr</i>	<i>[Signature]</i>	<i>[Signature]</i>
<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	Division Office(E/M) ,U.P.Jal Nigam(Rural),Varanasi		

# M/S VSAIPL-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 Bhojapur GP (Zone-1, TW-1) Tubewell under Bhojapur Village WSS, Block-

Birno by 1 Cusec O.P. Unit

Size of Ventury 4" X 3"

Column Pipe Lowered: 30.00

Static water level(m): 10.10

Required Discharge(LPM)- 687

Date: 24-08-2023

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	18.50	681	16.50	6.40	900	500	300	200	100
2	10.00	503	15.40	5.30	600	350	150	100	50
3	5.50	394	14.60	4.50	200	100	50	Tr	Cl

Remark- Recommended discharge 394 L.P.M. at 4.5 m depression after running 20 minute bypass.



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

(.....)  
TPIA

(Abhishek Srivastava)  
Junior Engineer

(Nitish Kumar)  
Assistant Engineer

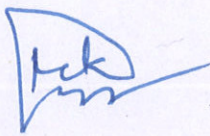
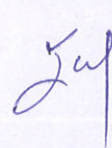
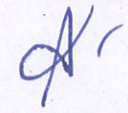
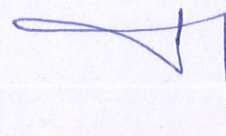
(Adarsh Verma)  
Executive Engineer

Medhaj Techno Concept Pvt.  
Ltd., Ghazipur

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


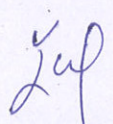

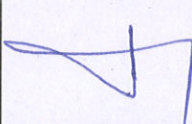
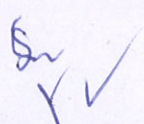


M/S VSAIPPL-SMC JV, Ghazipur (U.P)					
Job Code:		Op unit	As per DPR:	1 Cusec	
Block:	VIRNO	Capacity	As per Site:	1 Cusec	
Scheme	BHOJAPUR VILLAGE WSS	Op unit	As per DPR:	100	
GP	BHOJAPUR TW1	Hours	As per Site:	97:00	
Lowering Depth(mtr): 95.76		Cumm			
Compressor Testing		Gravel(cumt)	As per DPR:	79.33	
Date : 18-07-2023		Cumm			
		Gravel(cumt)	As per Site:	69.55	
SI No	Date	Start Time	End Time	Total Hours	Remarks
1	12-08-2023	8:35 AM	9:54 AM	1:19	
2		10:44 AM	12:14 PM	1:30	
3		12:10 PM	1:30 PM	1:20	
4		3:56 PM	5:18 PM	1:22	
5		6:02 PM	7:32 PM	1:30	
6		7:40 PM	8:50 PM	1:10	
7	13-08-2023	8:45 AM	9:56 AM	1:11	
8		10:44 AM	11:55 AM	1:11	
9		12:30 PM	1:50 PM	1:20	
10		3:56 PM	5:18 PM	1:22	
11		6:02 PM	7:30 PM	1:28	
12	14-08-2023	7:20 PM	8:50 PM	1:30	
13		8:55 AM	9:50 AM	0:55	
14		10:44 AM	11:50 AM	1:06	
15		12:50 PM	1:20 PM	0:30	
16		3:56 PM	5:18 PM	1:22	
17		6:02 PM	7:10 PM	1:08	
18	15-08-2023	7:40 PM	8:30 PM	0:50	
19		8:45 AM	9:40 AM	0:55	
20		10:44 AM	11:50 AM	1:06	
21		12:50 PM	1:20 PM	0:30	
22		3:56 PM	5:18 PM	1:22	
23		6:02 PM	7:10 PM	1:08	
24	16-08-2023	7:40 PM	8:30 PM	0:50	
25		8:55 AM	10:16 AM	1:21	
26		10:44 AM	11:55 AM	1:11	
27		12:40 PM	1:50 PM	1:10	
28		3:56 PM	5:26 PM	1:30	
29		6:12 PM	7:20 PM	1:08	
30	17-08-2023	7:40 PM	9:10 PM	1:30	
31		8:45 AM	10:10 AM	1:25	
32		10:44 AM	11:50 AM	1:06	
33		12:50 PM	2:20 PM	1:30	
34		3:46 PM	5:16 PM	1:30	
35		6:02 PM	7:10 PM	1:08	
36	18-08-2023	7:50 PM	9:10 PM	1:20	
37		8:35 AM	10:05 AM	1:30	
38		10:44 AM	11:55 AM	1:11	
39		12:42 PM	2:12 PM	1:30	
40		3:46 PM	5:16 PM	1:30	
41		6:12 PM	7:20 PM	1:08	
42		7:40 PM	9:00 PM	1:20	



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

Job Code:		Op unit	As per DPR:	1 Cusec	
Block:	VIRNO	Capacity	As per Site:	1 Cusec	
Scheme	BHOJAPUR VILLAGE WSS	Op unit	As per DPR:	100	
GP	BHOJAPUR TW1	Hours	As per Site:	97:00	
<b>Lowering Depth(mtr): 85.76</b>		Cumm			
Compressor Testing		Gravel(cumt)	As per DPR:	79.33	
Date : 18-07-2023		Cumm			
		Gravel(cumt)	As per Site:	69.55	
SI No	Date	Start Time	End Time	Total Hours	Remarks
43	19-08-2023	8:45 AM	10:10 AM	1:25	
44		10:44 AM	11:50 AM	1:06	
45		12:50 PM	2:10 PM	1:20	
46		3:56 PM	5:18 PM	1:22	
47		6:02 PM	7:10 PM	1:08	
48		7:40 PM	9:00 PM	1:20	
49	20-08-2023	8:55 AM	10:16 AM	1:21	
50		10:44 AM	11:55 AM	1:11	
51		12:40 PM	2:00 PM	1:20	
52		3:56 PM	5:26 PM	1:30	
53		6:12 PM	7:20 PM	1:08	
54	7:40 PM	9:00 PM	1:20		
55	21-08-2023	8:45 AM	10:00 AM	1:15	
56		10:44 AM	11:50 AM	1:06	
57		12:50 PM	2:10 PM	1:20	
58		3:56 PM	5:08 PM	1:12	
59		6:02 PM	7:10 PM	1:08	
60	7:40 PM	9:00 PM	1:20		
61	22-08-2023	8:45 AM	10:00 AM	1:15	
62		10:44 AM	11:50 AM	1:06	
63		12:40 PM	2:00 PM	1:20	
64		3:56 PM	5:16 PM	1:20	
65		6:12 PM	7:20 PM	1:08	
66	7:40 PM	9:00 PM	1:20		
67	23-08-2023	8:45 AM	10:10 AM	1:25	
68		10:44 AM	11:50 AM	1:06	
69		12:50 PM	2:10 PM	1:20	
70		3:56 PM	5:18 PM	1:22	
71		6:02 PM	7:10 PM	1:08	
72		7:40 PM	9:09 PM	1:29	
73	24-08-2023	8:45 AM	10:10 AM	1:25	
74		10:44 AM	11:00 AM	0:16	
75		12:50 PM	2:10 PM	1:20	
76		3:56 PM	5:11 PM	1:15	
77		6:02 PM	7:13 PM	1:11	
78		7:40 PM	9:09 PM	1:29	
<b>Total</b>				97:00	
					
Site Incharge		TPIA	Junior Engineer	Assistant Engineer	Exe. Engineer
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		





Quality Assurance

# 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



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/230830001562  
Sample Name: : Tube well Water  
Sample Code : -  
Issued To : VSAIPPL-SMC JV  
District-Ghazipur.

Issue Date : 08/09/2023  
Sample Received On : 30/08/2023  
Reference No : VSAIPPL/UPJN/23/24/34  
Sampling Date : 30/08/2023  
Sampling Quantity : 2 Ltr.  
Batch No./Lot No. : NA  
Date of Mfg. : NS  
Date of Exp. : NS  
Date of Starting : 30/08/2023  
Date of Completion : 08/09/2023

Sample Submitted By : VSAIPPL-SMC JV  
Mfg. By : NA  
Sample Description : Physical, Chemical & Heavy Metals Analysis of water  
Location : Block-Birno GP-Bhojapur

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	Agreeable	1 max.	5 max.	IS : 3025 (P-10)
3	pH value at 25°C	-	Agreeable	6.5-8.5	No Relaxation	IS : 3025 (P-11)
4	Total Hardness as CaCO <sub>3</sub>	mg/l	188	200 max	600 max.	IS : 3025 (P-21)
5	Calcium (as Ca)	mg/l	43.6	75 max	200 max	IS : 3025 (P-40)
6	Iron (as Fe)	mg/l	0.032	1 max	-	IS : 3025 (P-53)
7	Magnesium (as Mg)	mg/l	19.1	30 max	100 max	IS : 3025 (P-46)
8	Chloride (as Cl)	mg/l	18.0	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 SO <sub>4</sub> )	mg/l	6.6	200 max.	400 max.	IS : 3025 (P-24)
11	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	150	200 max.	600 max.	IS : 3025 (P-23)
12	Fluoride (as F)	mg/l	0.034	1 max.	1.5 max.	IS : 3025 (P-60)
13	Total Dissolved Solid (TDS)	mg/l	440	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  
Technician manager

Authorized By (Sign & Stamp):

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.

35

JAS-ANZ

(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

M5400913IN

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/230830001562  
Sample Name: : Tube well Water  
Sample Code : -  
Issued To : VSAIPPL-SMC JV  
District-Ghazipur.

Issue Date : 08/09/2023  
Sample Received On : 30/08/2023  
Reference No : VSAIPPL/UPJN/23/24/34  
Sampling Date : 30/08/2023  
Sampling Quantity : 2 Ltr.  
Batch No./Lot No. : NA  
Date of Mfg. : NS  
Date of Exp. : NS  
Date of Starting : 30/08/2023  
Date of Completion : 08/09/2023

Sample Submitted By : VSAIPPL-SMC JV  
Mfg. By : NA  
Sample Description : Physical, Chemical & Heavy Metals Analysis of water  
Location : Block-Birno GP-Bhojapur

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	Agreeable	1 max.	5 max.	IS : 3025( P-10)
3	pH value at 25°C	-	Agreeable	6.5-8.5	No Relaxation	IS : 3025 (P-11)
4	Total Hardness as CaCO3	mg/l	188	200 max	600 max.	IS : 3025 (P-21)
5	Calcium (as Ca)	mg/l	43.6	75 max	200 max	IS : 3025 (P-40)
6	Iron (as Fe)	mg/l	0.032	1 max	-	IS : 3025 (P-53)
7	Magnesium (as Mg)	mg/l	19.1	30 max	100 max	IS : 3025 (P-46)
8	Chloride (as Cl)	mg/l	18.0	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	6.6	200 max.	400 max.	IS : 3025 (P-24)
11	Total Alkalinity (as CaCO3)	mg/l	150	200 max.	600 max.	IS : 3025 (P-23)
12	Fluoride (as F)	mg/l	0.034	1 max.	1.5 max.	IS : 3025 (P-60)
13	Total Dissolved Solid (TDS)	mg/l	440	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.





Quality Assurance

# QA Testing Laboratories Pvt. Ltd.

(Govt. Approved Testing Laboratories)

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CIN : U51100UP2018PTC108293 • GSTIN : 09AAACQ5609C1ZN

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/230830001562

Issue Date : 08/09/2023

Sample Name: : Tube well Water

Sample Received On : 30/08/2023

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	0.32	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	0.018	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	0.020	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):

Upendra Kumar  
Technical 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.



# VSAIPPL - SMC JV



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

Email: vsainfraprojects@gmail.com. Phone: 040-40113158, 040-2307 8060

Ref. VSAIPPL-SMC JV/EE/UPJN2023-24/34

30<sup>th</sup> Aug 2023

To

**QA TESTING LABORATORIES PVT.LTD,**  
E-26/49, Transport agar, Near Parking No.9,  
Luck now, Uttar Pradesh, 226012

**Sub: Submission of Drinking water for Acidic & Non-Acidic test.**

Dear Sir,

This is reference to the above-mentioned subject; we are submitting the Drinking water for acidic & non-Acidic test for following GP.

Sl. No	District	Block	GP	Sample Source	Date of Sampling
1.	Ghazipur	Mardah	Durkhushi L-2	Tube well Water	27.08.2023
2.	Ghazipur	Birno	Bhojapur	Tube well Water	28.08.2023

For VSAIPPL-SMC (JV)



Authorized Signatory

CC TO:

1. Office of the Executive Engineer, (E&M) Divisional Office Varanasi,
2. M/S Medhaj Techno Concept Pvt Ltd. Ghazipur