

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

Actual Strata Chart of Arsadpur (Jangipur) REORGANISATION WATER SUPPLY SCHEME, BLOCK-BIRNO, ZONE 7, GRAM PANCAHYAT-BHIKHANAPUR T.W-2
Under Jal Jeevan Mission, District- Ghazipur(U.P.)

PHYSICAL STRATA			
S.No.	BGL in meter		Formation
	From	to	
1	0	14	Clay
2	14	20	Kankad
3	20	24	Kankad Clay
4	24	38	Very Fine Sand with <i>Kankad</i>
5	38	50	Kankad Clay
6	50	60	Very Fine Sand with <i>Kankad</i>
7	60	112	Kankad Clay
8	112	168	Fine sand with Kankad
9	168	201	Kankad Clay

		Drilling and assembly 300 mm 600MM	MS Ring Collar length	BGL including MS Ring Collar
		← 300 mm →	↓	↓
		← 600MM →	AGL 0.50	0
6.010	P.P.		0.000	5.510
6.000	P.P.		0.000	11.510
6.000	P.P.		0.000	17.510
6.020	P.P.		0.000	23.530
6.010	P.P.		0.000	29.540
1.210	P.P.		0.000	30.750
6.020	S.P.		0.000	36.770
6.020	P.P.		0.000	42.790
6.020	P.P.		0.000	48.810
2.440	P.P.		0.000	51.250
4.000	S.P.		0.000	55.250
0.750	P.P.		0.000	56.000
				59.500

Logging Report


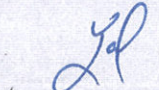


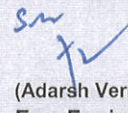
21.08.2023

S.N.	Depth Range		Thickn ess	Remark
	From	to		
1	15	20	5	Good
2	24	37	13	Good
3	51	59	8	Good

Note-

1. Quality of groundwater is deteriorating to marginal beneath 60.0 m bgl till depth logged.
2. Please ensure pre – monsoon water level before lowering the well assembly.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	360.000	LPM		
2	Clear Depth of bore 600mm	0	Mbgl	59.500	Mbgl
3	Clear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	360	Mbgl	201.000	Mbgl
5	Plane pipe 300MM	0	m	46.480	m
6	Plane pipe 200MM	60	m	0.000	m
7	Plane pipe 150MM	258	m	0.000	m
8	Slotted pipe 300MM	0	m	10.020	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	12	m	0.000	m
11	Date of lowering	28.08.2023			

 Company Repr. M/S VSAIPPL-SMC	 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 Division Office(E/M) ,U.P. Jal Nigam(Rural), Varanasi	 (Adarsh Verma) Exe. Engineer Division Office(E/M) ,U.P. Jal Nigam(Rural), Varanasi
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अधीक्षण अभियन्ता,
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना ब्लॉक-बिरनो, जोन 7, ग्राम पंचायत-भीखनपुर
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 360 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 21.08.2023 को
नलकूप के बोर की इलेक्ट्रिक लॉगिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

Logging Report				PHYSICAL STRATA				
S.N.	Depth Range		Thickness	Remark	S.No.	BGL in meter		Formation
	From	to				From	to	
1	15	20	5	Good	1	0	14	Clay
2	24	37	13	Good	2	14	20	Kankad
3	51	59	8	Good	3	20	24	Kankad Clay
Note- 1. Quality of groundwater is deteriorating to marginal beneath 60.0 m bgl till depth logged. 2. Please ensure pre - monsoon water level before lowering the well assembly.					4	24	38	Very Fine Sand with Kankad
					5	38	50	Kankad Clay
					6	50	60	Very Fine Sand with Kankad
					7	60	112	Kankad Clay
					8	112	168	Fine sand with Kankad
					9	168	201	Kankad Clay

अनुबन्ध में उपरोक्त नलकूप से 360 ली०प्र०मि० श्राव प्राप्त करने हेतु Entrance Velocity 0.015m/sec पर 12 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लॉगिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 10 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 Fine Sand With Kankad का है एवं लॉगिंग रिपोर्ट के अनुसार केवल 10 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 360 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 10 मीटर की लम्बाई में Entrance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 10 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 20 मीटर पाइप के बराबर आयेगी, जो Aquifer structure के दृष्टिगत उचित होगा एवं वास्तविक श्राव यील्ड टेस्ट के उपरान्त डिप्रेशन 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 56 मीटर गहरे नलकूप जिसमें 10 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

जूनि० 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 201/56 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 Arsadour (Jangipur) REORGANISATION WATER SUPPLY SCHEME, BLOCK-BIRNO, ZONE 7, GRAM PANCAHYAT-BHIKHANAPUR 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 (201/56 mts. deep 300 X 300 mm. dia assembly size)	
				Qty	Amount (Rs)	Qty	Amount (Rs)
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
2	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.						
3	DC/RC Drilling up to 100 Mtr.						
4	600 MMØ	Rmt	3,241.68			59.5	1,92,879.68
5	500 MMØ	Rmt	2,717.19	65	1,76,617.35		
6	450 MMØ	Rmt	2,454.95	35	85,923.25	40.5	99,425.48
7	DC/RC Drilling from 100Mtr. To 200 Mtr.						
8	600 MMØ	Rmt	3,551.98				
9	500 MMØ	Rmt	3,033.75				
10	450 MMØ	Rmt	2,774.63	100	2,77,463.00	100	2,77,463.00
11	DC/RC Drilling from 200 Mtr. To 300 Mtr.						
12	500 MMØ	Rmt	3,363.28				
13	450 MMØ	Rmt	3,158.99	100	3,15,899.00	1	3,158.99
14	DC/RC Drilling from 300 Mtr. To 400 Mtr.						
15	450 MMØ	Rmt	3,703.10	60	2,22,185.90		
16	Tubwell Assembly:						
17	MSERW plain pipe As per IS 4270						
18	300 MMØ	Rmt	3,794.68			46.48	1,76,376.73
19	200 MMØ	Rmt	2,546.43	60	1,52,785.80		
20	150 MMØ	Rmt	1,897.34	258	4,89,513.72		
21	MSERW slotted pipe as per IS 81103						
22	150 MMØ	Rmt	2,796.08	12	33,552.96		
23	200 MMØ	Rmt	3,828.43				
24	300 MMØ	Rmt	5,181.33			10.02	51,916.89
25	MS Borewell cap fixture including fitting charges						
26	MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure.						
27	MS fittings such as ring & centre guide	Job	32,249.78	1	32,249.78	1	32,249.78
28	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	56.5	26,612.63
29	Lowering of MSERW Plain/Slotted Pipe up to 100 Mtr. Deep						
30	300 MMØ MSERW Plane/Slotted Pipe	Rmt	489.31			56	27,401.58
31	200 MMØ MSERW Plane/Slotted Pipe	Rmt	389.45	60	23,367.00		
32	150 MMØ MSERW Plane/Slotted Pipe	Rmt	385.45	40	15,418.00		
33	Lowering of MSERW Plane/Slotted Pipe from 100 Mtr. To 200 Mtr. Deep						
34	150 MMØ MSERW Plane/Slotted Pipe	Rmt	442.38	100	44,238.00		
35	200 MMØ MSERW Plane/Slotted Pipe	Rmt	589.97				
36	300 MMØ MSERW Plane/Slotted Pipe	Rmt	881.17				
37	Lowering of MSERW Plane/Slotted Pipe from 200 Mtr. To 300 Mtr. Deep						
38	150 MMØ MSERW Plane/Slotted Pipe						
39	200 MMØ MSERW Plane/Slotted Pipe		569.55	100	56,955.15		
40	300 MMØ MSERW Plane/Slotted Pipe		678.69				
41	Lowering of MSERW Plane/Slotted Pipe from 300 Mtr. To 400 Mtr. Deep		896.96				
42	150 MMØ MSERW Plane/Slotted Pipe						
43	200 MMØ MSERW Plane/Slotted Pipe		498.30	30	14,949.04		
Total Amount					22,52,713.63		10,43,643.82
Say					22,52,714.00		10,43,644.00

Net Savings Amount Rs. 12,09,070.00
Net Savings In Percentage 53.67%

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

Circle office (E/M), UPIN, Vns

JALARAM BOREWELL TESTING

2, Sahjanand Market, Opposite Khodiyar Restaurant,
Highway, Mehsana, Gujarat -384002

Ref./ UP-13/ 08 – 2023

Dated: 21-08-2023

GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: **Bhikhanpur TW 2 Zone – 7**Block: **Birno**District: **Ghazipur**State: **Uttar Pradesh**Date of Logging: **21-08-2023**Drilling Depth: **360.0 m bgl**Logging Depth: **201.0 m bgl**Borehole Drilled by: **M/S VSAIPPL – SMC – JV, U.P.**

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

Sl. No.	Depth Range (m bgl)	Thickness (meter)	Remark (Quality of Aquifer Water)
01	15 – 20	05	Good
02	24 – 37	13	Good
03	51 – 59	08	Good

Note: 1) **Quality of groundwater is deteriorating to marginal beneath 60.0 m bgl till depth logged**

2) **Please ensure pre – monsoon water level before lowering the well assembly.**

For Jalaram Borewell Testing



(A Goswami)

ESTIMATE FOR
BHIKHANAPUR GROUP OF 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 MT. To 200 Mtr.Deep									
1.3.1	450 MMØ					200	2,779	Rmt	5,55,904	
1.3.2	Development / Flushing of tubewell						2,900	Hrs	-	
1.4	DC/RC Drilling from 201 Mtr. To 300 Mtr.Deep									
1.4.1	450 MMØ					200	3,163	Rmt	6,32,684	
1.5	DC/RC Drilling from 301 Mtr. To 400 Mtr.Deep & above									
1.5.1	450 MMØ					120	3,708	Rmt	4,44,995	
1.4	Tube Well Assembly								-	
1.4	MSERW plain pipe,As per IS 4270								-	
1.4.1	200 MMØ					120	2,550	Rmt	3,06,000	
1.4.2	150 MMØ					516	1,900	Rmt	9,80,400	
1.5	MSERW Pipe slotted pipe as per IS 8110									
1.5.1	300 MMØ					0	5,189	Rmt	-	
1.5.2	150 MMØ					24	2,800	Rmt	67,200	
1.5.2	MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure					2	32,295	LS	64,590	
1.5.3	MS fittings such as ring & centre guide					660	472	Rmt	3,11,309	
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	200 MMØ MSERW Plane/Slotted Pipe					80	390	Rmt	31,200	
2.2	Lowering from 101 Mtr. To 200 Mtr. Deep									
2.2.1	200 MMØ MSERW Plane/Slotted Pipe					200	591	Rmt	1,18,160	
2.3	Lowering from 201 Mtr. To 300 Mtr. Deep									
2.3.1	200 MMØ MSERW Plane/Slotted Pipe					200	680	Rmt	1,35,928	
2.4	Lowering from 301 Mtr. To 400 Mtr. Deep & above									
2.4.1	200 MMØ MSERW Plane/Slotted Pipe					60	499	Rmt	29,940	
2.5	Supplying and unconsolidated packing of gravel with suitable size					159.00	7,500	Cum	11,92,500	As per RFP.
3.0	Development of Tube well									As per RFP.
3.1	Transportation, Installation Dismantling of 250/400/600 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 1/3 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					200	994	Hr.	1,98,886	
	Total								68,67,309	
							Say (In Lacs)		68.67	