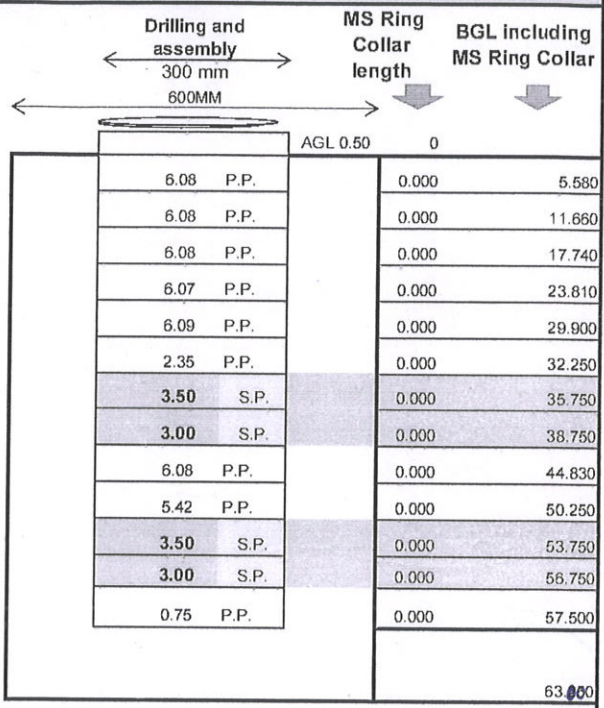


M/S VSAIPPL-SMC JV, Ghazipur (U.P)
Actual Strata Chart of KASIMABAD REORGANISATION WATER SUPPLY SCHEME, BLOCK-KASIMABAD, ZONE
3, GRAM PANCAHYAT-BISUNPUR T.W-1
 Under Jal Jeevan Mission, District- Ghazipur(U.P.)

PHYSICAL STRATA			
S.No.	BGL in meter		Formation
	From	to	
1	0	6	clay
2	6	30	Kankad Clay
3	30	58	very Fine Sand With Kankad
4	58	62	Kankad Clay
5	62	68	Kankad with very fine sand
6	68	96	Kankad Clay
7	96	109	Fine Sand With Kankad
8	109	112	clay
9	112	136	Kankad with very fine sand
10	136	158	Kankad Clay
11	158	164	Fine Sand With Kankad
12	164	200	Kankad Clay



Logging Report
03-10-2023

S.N.	Depth Range		Thickn ess	Remark
	From	to		
1	32	39	7	GOOD
2	50	57	7	GOOD
3	63	67	4	MODERATE
4	98	102	4	MODERATE
5	105	109	4	MODERATE

Note-
All zones are intermixed with kankar. Quality of the formation water is deteriorating to marginal to saline below 112.0 m bgl till depth logged.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	500.000	LPM		
2	Clear Depth of bore 600mm	0	Mbgl	63.000	Mbgl
3	Clear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	180	Mbgl	200.000	Mbgl
5	Plane pipe 300MM	0	m	45.000	m
6	Plane pipe 200MM	60	m	0.000	m
7	Plane pipe 150MM	102	m	0.000	m
8	Slotted pipe 300MM	0	m	13.000	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	18	m	0.000	m
11	Date of lowering			13.10.2023	

 (.....) Company Repre. 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	 (Adarsh Verma) Exe. Engineer
---	---	---	--	-------------------------------------



Aqua Xplore

(Groundwater Assessment & Allied Services)

243/5, New Colony Jiyamau, Hazratganj, Lucknow - 226001
Mob. 9918202546 / 9889323322, Email-aquaxploreko@gmail.com

Advisor- Dr. R. A. Yadav, ex- Manager(Groundwater), U. P. Jal Nigam

Handwritten notes:
Q = 500
60 + 102 + 18
200 x 150
500 x 450

Ref 1003 - K / AX - 2023 Date 03.10.2022

Geophysical Borehole Logging Report

Name of the site : Bishunpura, Block - Kasimabad *Z-3*
District : Ghazipur *Kasimabad WSS*
Date : 03.10.2022
Depth logged : 208.0 mbgl
Depth drilled : 300.0 mbgl- as reported
Logger used : Robertson make
Presence : Representative of M/S VSAIPPL-SMC JV, Ghazipur, U.P.

Based on the interpretation of geophysical logs, following information may be deciphered, particularly with respect to salinity of the formation water;

Sl.No.	Depth range(mbgl)	Thickness(m)	Remarks
1	32.0-39.0	7.0	Good (1 & 2)
2	50.0-57.0	7.0	
3	63.0-67.0	4.0	Moderate (3 to 5)
4	98.0-102.0	4.0	
5	105.0-109.0	4.0	

Note. All zones are intermixed with kankar. Quality of the formation water is deteriorating marginal to saline below 112.0 mbgl till depth logged.

Handwritten notes:
BP = 1
Dred after rain => 62.50
for Aqua Xplore

- CC:
- M/S VSAIPPL-SMC JV, Ghazipur, Uttar Pradesh

अधीक्षण अभियन्ता,
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना **ब्लॉक-कासिमाबाद, जोन 3, ग्राम पंचायत-बिसुनपुर TW-1**. जनपद गाजीपुर में 200x150 एम0एम0 व्यास साइज के 200/180 मीटर गहरे नलकूप का निर्माण किया जाना है एवं उक्त नलकूप से 500 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 03.10.2023 को नलकूप के बोर की इलेक्ट्रिक लॉगिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

PHYSICAL STRATA			Logging Report					
S.No.	BGL in meter		Formation	03-10-2023			Remark	
	From	to		S.N.	Depth Range			Thickness
1	0	6	clay					
2	6	30	Kankad Clay					
3	30	58	very Fine Sand With Kankad	1	32	39	7	GOOD
4	58	62	Kankad Clay	2	50	57	7	GOOD
5	62	68	Kankad with very fine sand	3	63	67	4	MODERATE
6	68	96	Kankad Clay	4	98	102	4	MODERATE
7	96	109	Fine Sand With Kankad	5	105	109	4	MODERATE
8	109	112	clay	Note-				
9	112	136	Kankad with very fine sand	All zones are intermixed with kankar. Quality of the formation water is deteriorating to marginal to saline below 112.0 m bgl till depth logged.				
10	136	158	Kankad Clay					
11	158	164	Fine Sand With Kankad					
12	164	200	Kankad Clay					

अनुबन्ध में उपरोक्त नलकूप से 500 ली०प्र०मि० श्राव प्राप्त करने हेतु Enterance Velocity 0.015m/sec पर 18 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लॉगिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 13 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 13 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 500 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 13 मीटर की लम्बाई में Enterance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 13 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 26.00 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 एक्यूफर के दृष्टिगत 300x300 मि०मी० व्यास साइज के 57.00 मीटर गहरे नलकूप जिसमें 13 मीटर स्लाटेड पाइप का उपयोग किया जायेगा, आपको तकनीकी स्वीकृति हेतु संलग्न कर प्रेषित है। कृपया अनुमोदन करना चाहें।

संलग्नक- लॉगिंग रिपोर्ट की छायाप्रति



सगणक

जूनियो इंजीन

सहायक अभियन्ता

अधिशायी अभियन्ता

अधीक्षण अभियन्ता

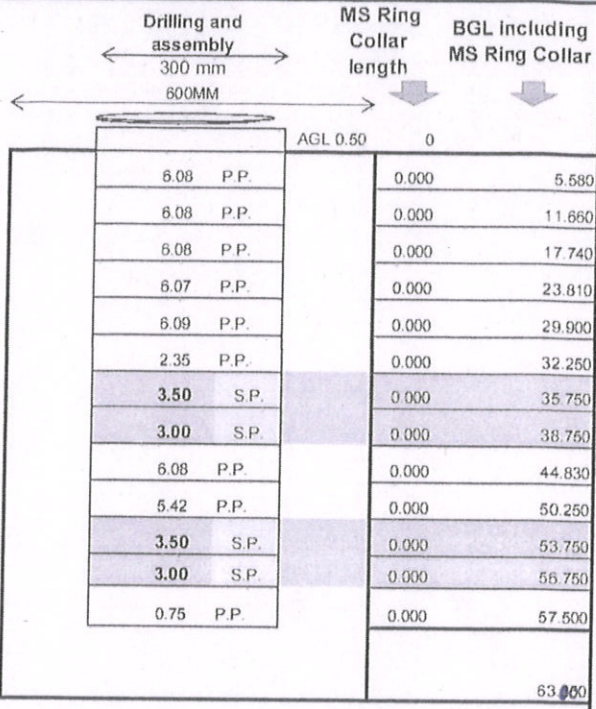
For: Construction of 57.5/200 mts. deep 300 X 300 mm. dia assembly size T.W. inspite of 200/180 mts. deep 200 X 150 mm. dia assembly size T.W. by D.C. Rig Machine at KASIMABAD REORGANISATION WATER SUPPLY SCHEME, BLOCK-KASIMABAD, ZONE 3, GRAM PANCAHYAT-BISUNPURA TW1

SL No	Item of work	Unit	Rate	Cost As Per Cover Aggrement (360/330 mts. deep 200 X 150 mm. dia assembly size)		Expenditure as per Actual Work Executed at Site due to adverse Geophysical Condition (57.5/200 mts. deep 300 X 300 mm. dia assembly size)	
				Qty	Amount (Rs)	Qty	Amount (Rs)
1	2	3	4	5	6	7	8
2.00	Drilling of borehole for tubewell construction by DC/RC/DTH/Rig Machine including transporation, erection, dismantling, of Rig and associated T&P complete in all respect including required all material labor etc.						
2.01	Transporation, installation, Dismantling of Rig machine and logging of bore hole		156159.07	1	1,56,159.07	1	1,56,159.07
2.02	Tube well construction				-		-
2.03	DC/RC Drilling up to 100Mtr.				-		-
2.04	400 MMØ	Rmt	2192.71		-		-
2.05	450 MMØ	Rmt	2454.95	35	85,923.19	37	90,833.09
2.06	500 MMØ	Rmt	2717.19	65	1,76,617.39	63	1,71,183.01
2.07	600 MMØ		3241.68		-		-
2.08	DC/RC Drilling from 101 MT. To 200 Mtr.Deep				-		-
2.09	450 MMØ	Rmt	2774.63	100	2,77,463.01	100	2,77,463.01
2.10	500 MMØ	Rmt	3033.75		-		-
2.11	600 MMØ	Rmt	3551.98		-		-
2.12	DC/RC Drilling from 201 Mtr. To 300 Mtr.Deep				-		-
2.13	450 MMØ	Rmt	3158.99		-		-
2.14	500 MMØ	Rmt	3363.28		-		-
2.15	600 MMØ	Rmt	3771.87		-		-
2.16	DC/RC Drilling from 301 Mtr. To 400 Mtr.Deep & above				-		-
2.17	450 MMØ	Rmt	3703.10		-		-
2.18	500 MMØ	Rmt	3907.39		-		-
2.19	600 MMØ	Rmt	4315.99		-		-
2.20	DTH Drilling upto 200.0 Mtr.Deep				-		-
2.21	200/165 MMØ (in over burden/Hard Rock)		1248.25		-		-
2.22	Development / Flushing of tubewell		2895.94		-		-
3.00	Tubewell Assembly:				-		-
3.01	MSERW Pipe plain pipe as per IS 4270				-		-
3.02	100 MMØ	Rmt	926.20		-		-
3.03	150 MMØ	Rmt	1897.34	102	1,93,528.68		-
3.04	200 MMØ	Rmt	2546.43	60	1,52,785.80		-
3.05	300 MMØ		3794.68		-	45	1,70,760.60
3.06	MSERW Pipe slotted pipe as per IS 8110				-		-
3.07	100 MMØ	Rmt	1364.94		-		-
3.08	150 MMØ	Rmt	2796.08	18	50,329.44		-
3.09	200 MMØ	Rmt	3828.43		-		-
3.10	300 MMØ	Rmt	5181.33		-	13	67,357.24
3.11	MS fittings such as clamp, bail plug, reducer, well cap. Girder & support structure	Job	32249.79	1	32,249.79	1	32,249.79
3.12	MS fittings such as ring & centre guide		471.02	180	84,783.54	58	27,319.14
4.00	Lowering of above assembly with welding of parts complete in all respect with all required material , T&P , labour, etc				-		-
4.01	Lowering up to 100 Mtr. Deep				-		-
4.02	100 MMØ MSERW Plane/Slotted Pipe	Rmt	177.57		-		-
4.03	150 MMØ MSERW Plane/Slotted Pipe	Rmt	385.46	40	15,418.38		-
4.04	200 MMØ MSERW Plane/Slotted Pipe	Rmt	389.45	60	23,367.24		-
4.05	300 MMØ MSERW Plane/Slotted Pipe	Rmt	489.31		-	57.5	28,135.56
4.06	Lowering from 101 Mtr. To 200 Mtr. Deep				-		-
4.07	150 MMØ MSERW Plane/Slotted Pipe	Rmt	442.38	80	35,390.38		-
4.08	200 MMØ MSERW Plane/Slotted Pipe	Rmt	589.97		-		-
4.09	300 MMØ MSERW Plane/Slotted Pipe	Rmt	881.17		-		-
4.10	Lowering from 201 Mtr. To 300 Mtr. Deep				-		-
4.11	150 MMØ MSERW Plane/Slotted Pipe	Rmt	569.55		-		-
4.12	200 MMØ MSERW Plane/Slotted Pipe	Rmt	678.69		-		-
4.13	300 MMØ MSERW Plane/Slotted Pipe	Rmt	896.96		-		-
4.14	Lowering from 301 Mtr. To 400 Mtr. Deep & above				-		-
4.15	150 MMØ MSERW Plane/Slotted Pipe	Rmt	425.93		-		-
4.16	200 MMØ MSERW Plane/Slotted Pipe	Rmt	498.30		-		-
4.17	300 MMØ MSERW Plane/Slotted Pipe	Rmt	643.04		-		-
Total Amount						12,84,015.91	10,21,460.49
Say						12,84,016.00	10,21,460.00

Net Savings Amount Rs. 2,62,556.00
Net Savings In Percentage 20.45%

M/S VSAIPPL-SMC JV, Ghazipur (U.P)
Actual Strata Chart of KASIMABAD REORGANISATION WATER SUPPLY SCHEME, BLOCK-KASIMABAD, ZONE 3, GRAM PANCAHYAT-BISUNPUR T.W-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	30	Kankad Clay
3	30	58	very Fine Sand With Kankad
4	58	62	Kankad Clay
5	62	68	Kankad with very fine sand
6	68	96	Kankad Clay
7	96	109	Fine Sand With Kankad
8	109	112	clay
9	112	136	Kankad with very fine sand
10	136	158	Kankad Clay
11	158	164	Fine Sand With Kankad
12	164	200	Kankad Clay



Logging Report
03-10-2023

S.N.	Depth Range		Thickn ess	Remark
	From	to		
1	32	39	7	GOOD
2	50	57	7	GOOD
3	63	67	4	MODERATE
4	98	102	4	MODERATE
5	105	109	4	MODERATE

Note-
All zones are intermixed with kankar. Quality of the formation water is deteriorating to marginal to saline below 112.0 m bgl till depth logged.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	500.000	LPM		
2	Clear Depth of bore 600mm	0	Mbgl	63.000	Mbgl
3	Clear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	180	Mbgl	200.000	Mbgl
5	Plane pipe 300MM	0	m	45.000	m
6	Plane pipe 200MM	60	m	0.000	m
7	Plane pipe 150MM	102	m	0.000	m
8	Slotted pipe 300MM	0	m	13.000	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	18	m	0.000	m
11	Date of lowering			13.10.2023	

 (.....) Company Repre. 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	 (Adarsh Verma) Exe. Engineer
--	--	--	--	-------------------------------------

KASIMABAD REORGANISATION WATER SUPPLY SCHEME
"UNDER JAL JEEVAN MISSION"
TEHSIL - KHASIMABAD, BLOCK - KHASIMABAD
DISTRICT - GHAZIPUR

Bill of Quantity - TUBEWELL CONSTRUCTION

S.No.	SOR NO	Item of work	No.	L	B	H/D	Qty	Rate	Unit	Amount
1	As per RFP.	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.							Job	15,159.07
1.1	2.01	Transportation, Installation Dismantling of Rig machine and logging of bore hole					1	156159.0708		
1.2	2.06	DC/RC Drilling up to 100Mtr.								
1.2.1	2.06	500 MMØ	1	65			65	2717.1906	Rmt	176,617.39
1.2.2	2.05	450 MMØ	1	35			35	2454.948254	Rmt	85,923.19
1.3		DC/RC Drilling from 101 MT. To 200 Mtr.Deep								
1.3.1	2.09	450 MMØ	1	100			100	2774.630072	Rmt	277,463.01
1.4		DC/RC Drilling from 201 MT. To 300 Mtr.Deep								
1.4.1	2.13	450 MMØ	1	0			0	3158.991212	Rmt	
1.5		DC/RC Drilling from 301 MT. To 400 Mtr.Deep								
1.5.1	2.17	450 MMØ	1	0			0	3703.098394	Rmt	
1.6	2.2	DTH Drilling upto 200.0 Mtr.Deep - 165/200 MMØ (in over burden/Hard Rock).	1	0			0	0	Rmt	
1.7	2.22	Development / Flushing of tubewell	0				0	2895.94	Hrs	
1.8	3.01	Tube Well Assembly								
1.8.1	3.04	MSERW plane pipe						0		
1.8.2	3.03	200 MMØ	1	60			60	2546.43	Rmt	152,785.80
1.9		MSERW Pipe slotted pipe as per IS 8110								
1.9.1	3.08	150 MMØ	1	18.00			18	2796.08	Rmt	50,329.44

1.9.2	3.11	MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure				1	32249.787	Job	32,249.79
1.9.3	3.12	MS fittings such as ring & centre guide		1	180		471.019648	Rmt	84,783.54
2.0	As per RFP.	Lowering of above assembly with welding of parts complete in all respect with all required material, T&P, labour, etc.							
2.1	4	Lowering up to 100 Mtr. Deep							
2.1.1	4.04	200 MMØ MSERW Plane/Slotted Pipe				60	389.454	Rmt	23,367.24
2.1.2	4.03	150 MMØ MSERW Plane/Slotted Pipe				40	385.4596	Rmt	15,418.38
2.2	4.06	Lowering from 100 Mtr. To 200 Mtr. Deep							
2.2.1	4.07	150 MMØ MSERW Plane/Slotted Pipe				80	442.3798	Rmt	35,390.38
2.3	4.1	Lowering from 200 Mtr. To 300 Mtr. Deep							
2.3.1	4.11	150 MMØ MSERW Plane/Slotted Pipe				0	569.55151	Rmt	-
2.4	4.14	Lowering from 300 Mtr. To 400 Mtr. Deep							
2.4.1	4.15	150 MMØ MSERW Plane/Slotted Pipe				0	425.932858	Rmt	-
2.5	5	Supplying and unconsolidated packing of gravel with suitable size				45.3	7489.5	Cum	339,589.04
3.0	6	Development of Tube well							
3.1	6.03	Transportation, Installation Dismantling of 400 PSI Compressor				1	92022.9872	Job	92,022.99
3.2	6.05	Charges for Development by 400 PSI Compressor per hour				40	3267.26941	Hrs	130,690.78
3.3	6.09	Transportation, Installation Dismantling of 1 Cusec OP Unit and Yield test, water test				1	105089.6582	Job	105,089.67
3.4	6.10	Charges for Development of TW by 1 Cusec OP Unit				70	993.037798	Hr.	69,512.65
Total cost for each tubewell									2,020,921.0
Total cost for 3 tubewells									6,062,763.1
4	47	Earth filling of abandoned tubewell in Waterworks campus	0	34.23	0.00		106.8502	Cum	-
Total Cost of Tubewell									6,062,763.08
Total Cost (In Lacs)									60.63