

M/S VSAIPPL-SMC JV, Ghazipur (U.P)
Actual Strata Chart of RANEEPUR REORGANISATION WATER SUPPLY SCHEME, BLOCK-MARDAH, ZONE
1, GRAM PANCAHYAT- RANEEPUR TW 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	24	Kankad Clay
3	24	32	Sandy Clay
4	32	44	Very Fine Sand with Kankad
5	44	52	Kankad Clay
6	52	64	Kankad with Fine Sand
7	64	88	Kankad Clay
8	88	94	Kankad with Fine Sand
9	94	154	Kankad Clay
10	154	170	Sandy Clay with Kankad

Drilling and assembly		MS Ring Collar length	BGL including MS Ring Collar	
300 mm	600MM		AGL 0.50	0
6.010	P.P.		0.000	5.510
6.010	P.P.		0.000	11.520
6.010	P.P.		0.000	17.530
6.010	P.P.		0.000	23.540
6.010	P.P.		0.000	29.550
6.010	P.P.		0.000	35.560
1.940	S.P.		0.000	37.500
3.000	S.P.		0.000	40.500
6.000	P.P.		0.000	46.500
6.000	P.P.		0.000	52.500
2.000	P.P.		0.000	54.500
6.010	S.P.		0.000	60.510
1.000	S.P.		0.000	61.510
3.000	P.P.		0.000	64.510
				71.000

Logging Report

18.06.2023

S.N.	Depth Range		Thickn ess	Remark
	From	to		
1	34	41	7	Good
2	54	62	8	Good
3	89	93	4	Moderate

1. Quality of ground water is deteriorating marginal to saline below 117 bgl to till depth logged.
 2. Please ensure pre-monsoon water level before lower the well assembly.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	450.000	LPM		
2	Cear Depth of bore 600mm	0	Mbgl	71.000	Mbgl
3	Cear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	200	Mbgl	170.000	Mbgl
5	Plane pipe 300MM	0	m	53.060	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	11.950	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	18	m	0.000	m
11	Date of lowering			23.06.2023	



(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

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Mob. : + 91 - 9415141232, 9554034123
E-mail : geo.instrument@outlook.com

DPK
Q = 4
60 + 1
200X

INSTRUMENTS & TECHNIC'S

(A Division of Geophysical Exploration and Instrumentation)

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

SIT:UP: PJM:23-24:LS: 827
dt: 20-09-2023

Actual
300X300

GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: Ranipur (Zone-1)
Block: Mardah
District: Ghazipur
State: Uttar Pradesh
Date of Logging: 18-06-2023
Drilling depth: 200.0 m bgl
Logging Depth: ~~170.0~~ m bgl
Rm - ~~13.0~~ Ω m Rw - ~~15.0~~ Ω m

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

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

No.	Depth Range (m bgl)	Thickness (meters)	Remarks (Quality of aquifer water)
1	34 - 41	07	Good
2	54 - 62	08	Good
3	89 - 93	04	Moderate

1. Quality of ground water is deteriorating marginal to saline below 117.0 m bgl to till depth logged.

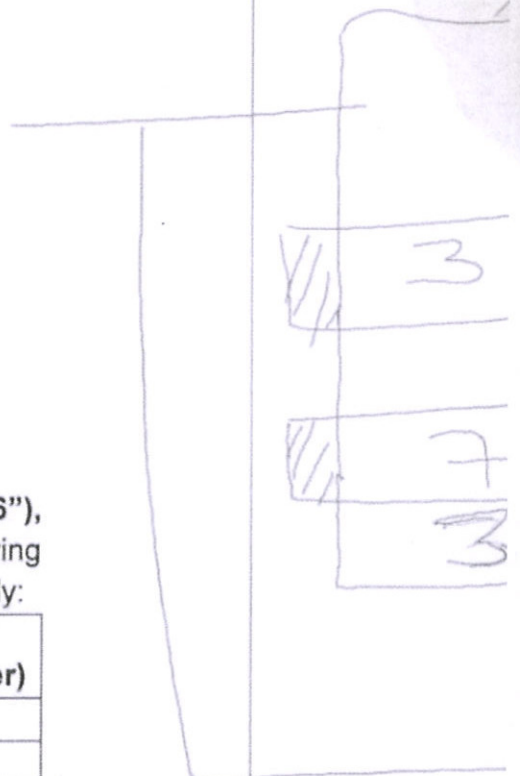
2. Please ensure pre-monsoon water level before lower the well assembly.

Verified as per logs provided

G.Sh
21/06/23

For Geo Instruments & Technic's

S. Shukla
(S. Shukla)



अधीक्षण अभियन्ता,
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना ब्लॉक-मरदह, जोन 1, ग्राम पंचायत-रानीपुर TW2. जनपद गाजीपुर में 200x150 एम0एम0 व्यास साइज के 200/180 मीटर गहरे नलकूप का निर्माण किया जाना है एवं उक्त नलकूप से 450 ली०प्र०मि० श्राव लिया जाना प्रस्तावित है।

अनुबन्ध सं०- 478/ED/PHASE 2/2022-23/X दिनांक 27.02.2023 के माध्यम से M/s VSAIPPL-SMC IV, District-Ghazipur द्वारा नलकूप निर्माण कार्य सम्पादित कराया जा रहा है। दिनांक 18.06.2023 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	
1	34	41	7	Good	1	0	14	Clay
2	54	62	8	Good	2	14	24	Kankad Clay
3	89	93	4	Moderate	3	24	32	Sandy Clay
1. Quality of ground water is deteriorating marginal to saline below 117 bgl to till depth logged. 2. Please ensure pre-monsoon water level before lower the well assembly.					4	32	44	Very Fine Sand with Kankad
					5	44	52	Kankad Clay
					6	52	64	Kankad with Fine Sand
					7	64	88	Kankad Clay
					8	88	94	Kankad with Fine Sand
					9	94	154	Kankad Clay
					10	154	170	Sandy Clay with Kankad

अनुबन्ध में उपरोक्त नलकूप से 450 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 12 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, Kankad with fine sand का है एवं लॉगिंग रिपोर्ट के अनुसार केवल 12 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 450 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 12 मीटर की लम्बाई में Enterance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 12 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 24.00 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 64.50 मीटर गहरे नलकूप जिसमें 12 मीटर स्लाटेड पाइप का उपयोग किया जायेगा, आपको तकनीकी स्वीकृति हेतु संलग्न कर प्रेषित है। कृपया अनुमोदन करना चाहें।

संलग्नक- लॉगिंग रिपोर्ट की छायाप्रति



संगणक

जून० इंजी० सहायक अभियन्ता
अधीक्षण अभियन्ता

अधिशारी अभियन्ता

VARIATION STATEMENT AGAINST C.A. NO-478/ED/PHASE-2/2022-23/X, Date- 27-02-2023

For Construction of 170/64.51 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 Block - Mardah, Zone 1, Gram Panchayat - Raneepur
TW2 Water Supply Scheme in District - Ghazipur

Sl No	Item of work	Unit	Rate	Cost As Per Cover Agreement (200/180 mts. deep 200 X 150 mm. dia assembly size)		Expenditure as per Actual Work Executed at Site due to adverse Geophysical Condition (170/64.51 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 transportalon, 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		-	71	230,158.95
4	500 MMØ	Rmt	2,717.19	65	176,617.39		-
5	450 MMØ	Rmt	2,454.95	35	85,923.19	29	71,193.50
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	70	194,224.11
8	DC/RC Drilling from 200 Mtr. To 300 Mtr.				-		-
	500 MMØ	Rmt	3,363.28		-		-
9	450 MMØ	Rmt	3,158.99		-		-
10	DC/RC Drilling from 300 Mtr. To 400 Mtr.				-		-
11	450 MMØ	Rmt	3,703.10		-		-
12	Tubewell Assembly:				-		-
13	MSERW plain pipe As per IS 4270				-		-
14	300 MMØ	Rmt	3,794.68		-	53.06	201,345.72
15	200 MMØ	Rmt	2,546.43	60	152,785.80		-
16	150 MMØ	Rmt	1,897.34	102	193,528.68		-
17	MSERW slotted pipe as per IS 8110				-		-
18	150 MMØ	Rmt	2,796.08	18	50,329.44		-
19	200 MMØ	Rmt	3,828.43		-		-
20	300 MMØ	Rmt	5,181.33		-	11.95	61,916.85
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	180	84,783.54	65.01	30,620.99
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		-	64.51	31,565.65
27	200 MMØ MSERW Plane/Slotted Pipe	Rmt	389.45	60	23,367.24		-
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	80	35,390.38		-
31	200 MMØ MSERW Plane/Slotted Pipe	Rmt	589.97		-		-
32	300 MMØ MSERW Plane/Slotted Pipe	Rmt	881.17		-		-
	Total Amount				1,284,015.91		1,009,434.61
	Say				1,284,016.00		1,009,435.00

Net Savings Amount Rs. 274,581.00
Net Savings In Percentage 21.38%



M/S VSAIPL SMC JV, Ghazipur

[Signature]
(TPIA Rep.)

Medhaj Techno Concept Pvt. Ltd., Ghazipur

[Signature]
(Computer)

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

[Signature]
Junior Engin Ass. Engineer

[Signature]
Div. Accountant

[Signature]
Ex. Engineer Sup. Engineer

Circle office (E/M), UPJN, Vns

अधीक्षण अभियन्ता
मण्डल कार्यालय (वि०/या०)
उ०प्र० जल निगम (ग्रामीण)
वाराणसी।

RANEELUR REORGANISATION WATER SUPPLY SCHEME

"UNDER JAL JEEVAN MISSION"

TEHSIL - GHAZIPIUR, BLOCK - MARDAH

DISTRICT - GHAZIPIUR

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.								
1.1	2.01	Transportation, Installation Dismantling of Rig machine and logging of bore hole					1	156159.07	Job	156,159.07
1.2		DC/RC Drilling up to 100Mtr.								
1.2.1	2.06	500 MMØ	1	65			65	2717.19	Rmt	176,617.39
1.2.2	2.05	450 MMØ	1	35			35	2454.95	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	2774.63	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	3158.99	Rmt	-
1.5		DC/RC Drilling from 301 MT. To 400 Mtr.Deep								
1.5.1	2.17	450 MMØ	1	0			0	3703.10	Rmt	-
1.6	2.2	DTH Drilling upto 200.0 Mtr.Deep - 165/200 MMØ (in over burden/Hard Rock).	1	0			0	0.00	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						0.00		
1.8.2	3.03	200 MMØ	1	60			60	2546.43	Rmt	152,785.80
1.9		150 MMØ	1	102			102	1897.34	Rmt	193,528.68
1.9.1	3.08	MSERW Pipe slotted pipe as per IS 8110								
		150 MMØ	1	18.00			18	2796.08	Rmt	50,329.44

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-Raneepur TW2 ,Zone 1 ,Block - Mardah, Scheme-Raneepur 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)	Date: of testing 07-06-2023					
Depth of TW (m):	64.510					
S. N.	Pressure in kg/cm2		Depth of air line at the time of testing (m)	Discharge by 'V' Notch		
	Starting Pressure	Running Pressure	In mtr.	Inch	LPM	At start
1	4.60	3.90	7.00	6 3/4	1008	6000
2	4.30	3.70	6.00	6 1/4	831	5400
3	2.40	1.90	5.00	6	751	4500
					After 5 min	After 10 min
					3300	3100
					3000	2800
					2600	2400
					After 15 min	After 20 min
					2900	2800
					2600	2500
					2200	2000

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



(.....) 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)

Job Code:		Compressor unit Capacity	As per DPR:	400 PSI	
Block:	Mardah	Compressor unit Capacity	As per Site:	250 PSI	
Scheme GP	Raneepur Reorganisation WSS	Compressor unit Hours	As per DPR:	40	
	Raneepur TW2,Zone 1		As per Site:	48:00	
Lowering Depth(mtr):	64.51	Cumm Gravel(cumt)	As per DPR:	45.3	
		Cumm Gravel(cumt)	As per Site:	43.77	
SI No	Date	Start Time	End Time	Total Hours	Remarks
1	28-Jun-23	10:30 AM	4:35 PM	6:05	
2	29-Jun-23	11:00 AM	4:50 PM	5:50	
3	30-Jun-23	10:00 AM	4:00 PM	6:00	
4	1-Jul-23	7:00 AM	12:35 PM	5:35	
5	2-Jul-23	9:00 AM	1:00 PM	4:00	
6	3-Jul-23	8:24 AM	2:34 PM	6:10	
7	4-Jul-23	10:30 AM	3:00 PM	4:30	
8	5-Jul-23	11:00 AM	4:50 PM	5:50	
9	6-Jul-23	10:00 AM	2:00 PM	4:00	
		Total		48:00	
					
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	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.)

Yeild Test Report of GP - Raneepur TW2, Zone 1, Block - Mardah, Scheme- Raneepur Reorganisation WSS by
1 Cusec O.P. Unit

Size of Ventury		4" X 3"		Column Pipe Lowered:		30.00				
Static water level(m):		10.00		Date:		16/8/2023				
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	35.00	946	10.00	15.10	5.10	550	300	250	200	100
2	28.00	840	10.00	14.40	4.40	350	200	150	50	Tr
3	22.00	746	10.00	14.10	4.10	100	50	Tr	Tr	Cl

Remark- Recommended discharge 450 L.P.M. at 4.1m depression after running 20 minute bypass.



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)					
Job Code:		Op unit	As per DPR:	1 Cusec	
Block:	Mardah	Capacity	As per Site:	1 Cusec	
Scheme	Raneepur Reorganisation WSS	Op unit	As per DPR:	70	
GP	Raneepur TW2, Zone 1	Hours	As per Site:	90:00	
Lowering Depth(mtr):	64.510				
SI No	Date	Start Time	End Time	Total Hours	Remarks
1	06-08-2023	6:00 AM	12:50 PM	6:50	
2	07-08-2023	7:20 AM	2:00 PM	6:40	
3	08-08-2023	8:30 AM	5:30 PM	9:00	
4	09-08-2023	6:30 AM	2:00 PM	7:30	
5	10-08-2023	6:00 AM	2:00 PM	8:00	
6	11-08-2023	6:30 AM	2:45 PM	8:15	
7	12-08-2023	6:00 AM	3:00 PM	9:00	
8	13-08-2023	6:00 AM	1:05 PM	7:05	
9	14-08-2023	6:00 AM	2:50 PM	8:50	
10	15-08-2023	7:20 AM	5:00 PM	9:40	
11	16-08-2023	8:30 AM	5:40 PM	9:10	
			Total	90:00	
		<i>Jal</i>	<i>Al</i>	<i>[Signature]</i>	<i>[Signature]</i>
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	Division Office(E/M) , U.P.Jal Nigam(Rural), Varanasi			