

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

Actual Strata Chart of MARDHA REORGANISATION WATER SUPPLY SCHEME, BLOCK-MARDHA, ZONE 3, GRAM PANCAHYAT- KARDAH KATHAULI TW1 Under Jal Jeevan Mission, District- Ghazipur(U.P.)

PHYSICAL STRATA				Drilling and assembly 300 MM 600MM	BGL including MS Ring Collar
S.No.	BGL in meter		Formation		
	From	to			
1	0	4	Clay		
2	4	18	Kankad Clay		
3	18	56	Very Fine Sand with Kankad		
4	56	59	Clay		
5	59	64	Fine Sand with Kankad		
6	64	68	Clay		
7	68	92	Kankad with fine sand		
8	92	114	Kankad Clay		
9	114	126	Fine Sand with Kankad		
10	126	148	Kankad Clay		
11	148	160	Kankad with very fine sand		
12	160	183	Kankad Clay		

		AGL 0.50		
6.020	P.P.		5.520	
6.010	P.P.		11.530	
6.020	P.P.		17.550	
6.000	P.P.		23.550	
6.030	P.P.		29.580	
1.170	P.P.		30.750	
6.000	S.P.		36.750	
6.020	P.P.		42.770	
5.480	P.P.		48.250	
6.000	S.P.		54.250	
0.500	S.P.		54.750	
0.750	P.P.		55.500	
			58.500	

Logging

Date-17-01-2024

S.N.	Depth Range		Thickn ess	Remark
	From	to		
1	20	37	17	Good
2	48	55	7	Good
3	59	62	3	Moderate

Note-

1. Fine band of kankar are intermixed with almost all the Zones.
2. Quality of ground water is deteriorating marginal to saline below 68.0 m bgl to till depth logged.
3. Please ensure pre-monsoon water level before lower the well assembly.

DETAILS		AS PER DPR		ACTUAL	
1	Proposed Discharge	500.000	LPM		
2	Cear Depth of bore 600mm.	0	Mbgl	58.500	Mbgl
3	Cear Depth of bore 500mm	65	Mbgl	0.000	Mbgl
4	Clear Depth of bore 450mm	200	Mbgl	183.000	Mbgl
5	Plane pipe 300MM	0	m	43.500	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	12.500	m
9	Slotted pipe 200MM	0	m	0.000	m
10	Slotted pipe 150MM	18	m	0.000	m
11	Date of lowering			28-01-2024	



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

(A.Srivastava)
 Junior Engineer

(Nitish Kumar)
 Assistant Engineer

(Adarsh Verma)
 Exe. Engineer

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

GEO INSTRUMENTS & TECHNIC'S

(A Division of Geophysical Exploration and Instrumentation)

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

Ref:GIT:UP: PJM:23-24:LS:K- 599

Dated: 17-01-2024

GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: **Kardah Kathauli Zone – 3**
Block: **Mardah**
District: **Ghazipur**
State: **Uttar Pradesh**
Date of Logging: **17-01-2024**
Drilling Depth: **205.0 m bgl**
Logging Depth: **183.0 m bgl**
Rm – **10.0 Ωm** Rw – **12.0 Ωm**

Latitude: **25.823323** Longitude: **83.558847**

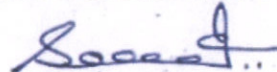
Borehole Drilled by: M/s VSAIPPL SMC JV, Ghazipur, Uttar Pradesh.

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.	20 – 37	17	Good
2.	48 – 55	07	Good
3.	59 – 62	03	Moderate

- Note: 1. Fine bands of kankar are intermixed with almost all the zones.
2. Quality of ground water is deteriorating marginal to saline below 68.0 m bgl to till depth logged.
3. Please ensure pre-monsoon water level before lower the well assembly.

For Geo Instruments & Technic's


(S. Shukla)

महोदय,

जल जीवन मिशन कार्यक्रम अन्तर्गत **मरदह पुनर्गठन पेयजल योजना, ब्लॉक-मरदह, जोन 3, ग्राम पंचायत- करदाह कठौली TW1**. 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- 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 17.01.2024 को नलकूप के बोर की इलेक्ट्रिक लागिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

Date-17-01-2024					PHYSICAL STRATA			
S.N.	Depth Range		Thickness	Remark	S.No.	BGL in meter		Formation
	From	to				From	to	
1	20	37	17	Good	1	0	4	Clay
2	48	55	7	Good	2	4	18	Kankad Clay
3	59	62	3	Moderate	3	18	56	Very Fine Sand with Kankad
Note- 1. Fine band of kankar are intermixed with almost all the Zones. 2. Quality of ground water is deteriorating marginal to saline below 68.0 m bgl to till depth logged. 3. Please ensure pre-monsoon water level before lower the well assembly.					4	56	59	Clay
					5	59	64	Fine Sand with Kankad
					6	64	68	Clay
					7	68	92	Kankad with fine sand
					8	92	114	Kankad Clay
					9	114	126	Fine Sand with Kankad
					10	126	148	Kankad Clay
					11	148	160	Kankad with very fine sand
					12	160	183	Kankad Clay

अनुबन्ध में उपरोक्त नलकूप से 500 ली०प्र०मि० श्राव प्राप्त करने हेतु Entrance Velocity 0.015m/sec पर 18 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लागिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 12.50 मीटर ही स्लाटेड पाइप डाली जा सकती है।

Physically encountered Strata एवं लागिंग रिपोर्ट का निरीक्षण करने पर पाया गया कि उक्त के अन्तर्गत Aquifer Very Fine Sand with Kankad का है, निकटवर्तीय पेयजल योजनाओं यथा पलहीपुर इत्यादि नलकूपों के सैलाइन स्ट्रेटा प्राप्त होने के दृष्टिगत अधिकतम संभव स्लॉट डालकर भविष्य में उक्त योजना के अन्य नलकूपों के सैलाइन स्ट्रेटा प्राप्त होने की संभावना के दृष्टिगत संदर्भित नलकूप से साव को बढ़ाकर उक्त जोन में वांछित साव की प्रति पूर्ति की जा सकेगी।

अतः प्राप्त एक्वूफर का प्रभावी क्षेत्रफल बढ़ाकर अधिक साव प्राप्त करने के दृष्टिगत 300x300 मि०मी० व्यास साइज के 55.50 मीटर गहरे नलकूप जिसमें 12.50 मीटर स्लाटेड पाइप का उपयोग किए जाने की तकनीकी स्वीकृति हेतु संबंधित अभिलेख संलग्न कर प्रेषित है। कृपया अनुमोदन करना चाहें।
संलग्नक- लागिंग रिपोर्ट की छायाप्रति

M/s VSAIPPL-SMC JV
District - Ghazipur

संगणक

जूनि० इंजी०

सहायक अभियन्ता

अधिशाली अभियन्ता

(Handwritten signatures and stamps)

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

For Construction of 183/55.5 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 MARDAH REORGANISATION WATER SUPPLY SCHEME, BLOCK-MARDAH, ZONE 3, GRAM PANCAHYAT- KARDAH KATHAULI TW1

SL No	Item of work	Unit	Rate	Cost As Per Cover Aggrement (200/180 mts. deep 200 X 150 mm. dia assembly size)		Expenditure as per Actual Work Executed at Site due to adverse Geophysical Condition (183/55.5 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 transportation, erection, dismantling, of Rig and associated T&P complete in all respect including required all material labor etc.						
2.01	Transportation, installation, Dismantling of Rig machine and logging of bore hole		156159.071	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	2192.706		-		-
2.05	450 MMØ	Rmt	2454.948	35	85,923.19	41.5	1,01,880.35
2.06	500 MMØ	Rmt	2717.191	65	1,76,617.39		-
2.07	600 MMØ		3241.68		-	58.5	1,89,638.00
2.08	DC/RC Drilling from 101 MT. To 200 Mtr.Deep				-		-
2.09	450 MMØ	Rmt	2774.630	100	2,77,463.01	83	2,30,294.30
2.10	500 MMØ	Rmt	3033.747		-		-
2.11	600 MMØ	Rmt	3551.980		-		-
2.12	DC/RC Drilling from 201 Mtr. To 300 Mtr.Deep				-		-
2.13	450 MMØ	Rmt	3158.991		-		-
2.14	500 MMØ	Rmt	3363.285		-		-
2.15	600 MMØ	Rmt	3771.872		-		-
2.16	DC/RC Drilling from 301 Mtr. To 400 Mtr.Deep & above				-		-
2.17	450 MMØ	Rmt	3703.098		-		-
2.18	500 MMØ	Rmt	3907.392		-		-
2.19	600 MMØ	Rmt	4315.989		-		-
2.20	DTH Drilling upto 200.0 Mtr. Deep				-		-
2.21	200/165 MMØ (in over burden Hard Rock)		1248.250		-		-
2.22	Development Flushing of tubewell		2895.940		-		-
3.00	Tubewell Assembly:				-		-
3.01	MSERW Pipe plain pipe as per IS 4270				-		-
3.02	100 MMØ	Rmt	926.202		-		-
3.03	150 MMØ	Rmt	1897.340	102	1,93,528.68		-
3.04	200 MMØ	Rmt	2546.430	60	1,52,785.80		-
3.05	300 MMØ		3794.680		-	43.5	1,65,068.58
3.06	MSERW Pipe slotted pipe as per IS 8110				-		-
3.07	100 MMØ	Rmt	1364.936		-		-
3.08	150 MMØ	Rmt	2796.080	18	50,329.44		-
3.09	200 MMØ	Rmt	3828.433		-		-
3.10	300 MMØ	Rmt	5181.326		-	12.5	64,766.57
3.11	M5 fittings such as clamp, bail plug, reducer, well cap. Girder & support structure	Job	32249.787	1	32,249.79	1	32,249.79
3.12	M5 fittings such as ring & centre guide		471.020	180	84,783.54	56	26,377.10
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	177.571		-		-
4.03	150 MMØ MSERW Plane/Slotted Pipe	Rmt	385.460	40	15,418.38		-
4.04	200 MMØ MSERW Plane/Slotted Pipe	Rmt	389.454	60	23,367.24		-
4.05	300 MMØ MSERW Plane/Slotted Pipe	Rmt	489.314	0	-	55.5	27,156.93
4.06	Lowering from 101 Mtr. To 200 Mtr. Deep				-		-
4.07	150 MMØ MSERW Plane/Slotted Pipe	Rmt	442.380	80	35,390.38		-
4.08	200 MMØ MSERW Plane/Slotted Pipe	Rmt	589.973	0	-		-
4.09	300 MMØ MSERW Plane/Slotted Pipe	Rmt	881.175		-		-
Total Amount					12,84,015.91		9,93,590.69
Say					12,84,016.00		9,93,591.00

Net Savings Amount Rs. 2,90,425.00
Net Savings In Percentage 22.62%



(TPIA Rep.)
(Computer)
M/S VSAIPF SMC JV, Ghazipur Medhaj Techno Concept
Pvt. Ltd., Ghazipur

(Junior En): Junior Engineering
Ass. Engineer
Div. Accountant
Divisional Office(E/M), U.P. Jal Nigam(Rural), Varanasi

Ex. Engineer
Sup. Engineer
Circle office (E/M), UPJN, Vns