

M/S VSAIPPL-SMC JV, Ghazipur (U.P)
Actual Strata Chart of GOVINDPUR KIRAT REORGANISATION WSS,BLOCK - MARDAH,ZONE 2,GRAM
PANCHAYAT -DURKHUSHI TW 2
Under Jal Jeevan Mission,District- Ghazipur(U.P.)



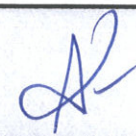

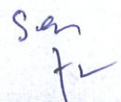
| PHYSICAL STRATA | | | Drilling and assembly 300 MM 600MM | | MS Ring Collar length | BGL including MS Ring Collar |
|-----------------|--------------|-----|--|--|-----------------------------|---------------------------------|
| S.No | BGL in meter | | AGL 0.50 | | 0 | |
| | From | to | Formation | | | |
| 1 | 0 | 12 | Clay | | | 5.510 |
| 2 | 12 | 20 | Clay Kankad | | | 11.510 |
| 3 | 20 | 28 | Kankad with very fine sand | | | 17.510 |
| 4 | 28 | 41 | Very Fine Sand with Kankad | | | 23.520 |
| 5 | 41 | 66 | Clay Kankad | | | 29.530 |
| 6 | 66 | 90 | Sandy Clay with Kankad | | | 35.540 |
| 7 | 90 | 184 | Kankad Clay | | | 41.540 |
| | | | | | | 46.000 |

Logging
Date-21.06.2023

| S.N. | Depth Range | | Thickn ess | Remark |
|------|-------------|----|---------------|--------|
| | From | to | | |
| 1 | 20 | 24 | 4 | Good |
| 2 | 29 | 39 | 10 | Good |

Note-
 1.Fine Band of Kankar are intermixed with almost all the zones.
 2.Quality of ground water is deteriorating marginal to saline below 50 mbgl to till depth logged.
 3.Please ensure pre-monsoon water level before lower the well assembly.

| DETAILS | | AS PER DPR | | ACTUAL | |
|---------|---------------------------|------------|------|---------|------|
| 1 | Proposed Discharge | 600.000 | LPM | | |
| 2 | Cear Depth of bore 600mm | 0 | Mbgl | 46.000 | Mbgl |
| 3 | Cear Depth of bore 500mm | 65 | Mbgl | 0.000 | Mbgl |
| 4 | Clear Depth of bore 450mm | 200 | Mbgl | 184.000 | Mbgl |
| 5 | Plane pipe 300MM | 0 | m | 33.030 | m |
| 6 | Plane pipe 200MM | 60 | m | 0.000 | m |
| 7 | Plane pipe 150MM | 96 | m | 0.000 | m |
| 8 | Slotted pipe 300MM | 0 | m | 9.010 | m |
| 9 | Slotted pipe 200MM | 0 | m | 0.000 | m |
| 10 | Slotted pipe 150MM | 24 | m | 0.000 | m |
| 11 | Date of lowering | 27.06.2023 | | | |

| | | | | |
|--|--|---|---|--|
|  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 |
|--|--|---|---|--|

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: 845

Dated: 23-06-2023

GEOPHYSICAL BOREHOLE LOGGING REPORT

Site: Durkhusi
Block: Mardah
District: Ghazipur
State: Uttar Pradesh
Date of Logging: 21-06-2023
Drilling Depth: 200.0 m bgl
Logging Depth: 184.0 m bgl
Rm - 13.0 Ω m Rw - 12.0 Ω m

Borehole Drilled by: M/s VSAIPPL, Ghazipur, Uttar Pradesh, 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 (meter) | Remark (Quality of Aquifer Water) |
|---------------|---------------------|-------------------|-----------------------------------|
| 1. | 20 - 24 | 04 | Good |
| 2. | 29 - 39 | 10 | Good |

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

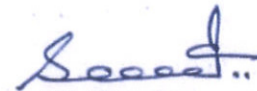
2. Quality of ground water is deteriorating marginal to saline below 50.0 m bgl to till depth logged.

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

Verified as per
logs provided
1

G.Sh
23/06/23

For Geo Instruments & Technic's


(S. Shukla)

अधीक्षण अभियन्ता,
महोदय.

जल जीवन मिशन कार्यक्रम अन्तर्गत पेयजल योजना ब्लॉक - मरदह, जोन 2, ग्राम पंचायत -दुर्बुशी
TW2. जनपद गाजीपुर में 200x150 एम0एम0 व्यास साइज के 200/180 मीटर गहरे नलकूप का निर्माण
किया जाना है एवं उक्त नलकूप से 600 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 21.06.2023 को
नलकूप के बोर की इलेक्ट्रिक लागिंग करायी गयी, जिसका विवरण निम्नानुसार है :-

| S.N. | Depth Range | | Thickness | Remark | S.No. | BGL in meter | | Formation |
|---|-------------|----|-----------|--------|-------|--------------|-----|----------------------------|
| | From | to | | | | From | to | |
| 1 | 20 | 24 | 4 | Good | 1 | 0 | 12 | Clay |
| 2 | 29 | 39 | 10 | Good | 2 | 12 | 20 | Clay 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 50 mbgl to till depth logged. 3. Please ensure pre-monsoon water level before lower the well assembly. | | | | | 3 | 20 | 28 | Kankad with very fine sand |
| | | | | | 4 | 28 | 41 | Very Fine Sand with Kankad |
| | | | | | 5 | 41 | 66 | Clay Kankad |
| | | | | | 6 | 66 | 90 | Sandy Clay with Kankad |
| | | | | | 7 | 90 | 184 | Kankad Clay |

अनुबन्ध में उपरोक्त नलकूप से 600 ली०प्र०मि० श्राव प्राप्त करने हेतु Enterance Velocity 0.015m/sec पर 24 मीटर स्लाटेड पाइप का प्राविधान किया गया है। इलेक्ट्रिक लागिंग के उपरान्त प्राप्त स्ट्रेटा के अनुसार अधिकतम 9 मीटर ही स्लाटेड पाइप डाली जा सकती है।

Physically encountered Strata एवं लागिंग रिपोर्ट का निरीक्षण करने पर पाया गया कि उक्त के अन्तर्गत Very Fine sand with Kankad का है एवं लागिंग रिपोर्ट के अनुसार केवल 9 मीटर स्लाटेड पाइप ही लोवर की जा सकती है, जिससे 600 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 मीटर की लम्बाई में Enterance area को बढ़ाकर आवश्यक वांछित श्राव प्राप्त करने का प्रयास किया जा सकता है। उल्लेखनीय है यदि 9 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 18.00 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 41.50 मीटर गहरे नलकूप जिसमें 9 मीटर स्लाटेड पाइप का उपयोग किया जायेगा, आपको तकनीकी स्वीकृति हेतु 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
अधीक्षण अभियन्ता

अधिसासी अभियन्ता

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

For Construction of 184/41.54 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 2, Gram Panchayat - Durkhushi TW2 Water Supply Scheme in District - Ghazipur

| 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 (184/41.54 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 transportation, 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 | | - | 46 | 149,117.06 |
| 4 | 500 MMØ | Rmt | 2,717.19 | 65 | 176,617.39 | | - |
| 5 | 450 MMØ | Rmt | 2,454.95 | 35 | 85,923.19 | 54 | 132,567.21 |
| 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 | 84 | 233,068.93 |
| 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 | | - | 33.03 | 125,338.28 |
| 15 | 200 MMØ | Rmt | 2,546.43 | 60 | 152,785.80 | | - |
| 16 | 150 MMØ | Rmt | 1,897.34 | 96 | 182,144.64 | | - |
| 17 | MSERW slotted pipe as per IS 8110 | | | | | | |
| 18 | 150 MMØ | Rmt | 2,796.08 | 24 | 67,105.92 | | - |
| 19 | 200 MMØ | Rmt | 3,828.43 | | - | | - |
| 20 | 300 MMØ | Rmt | 5,181.33 | | - | 9.01 | 46,683.75 |
| 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 | 42.04 | 19,801.67 |
| 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 | | - | 41.54 | 20,326.10 |
| 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 | | | | 1,289,408.35 | | 915,311.85 |
| | Say | | | | 1,289,408.00 | | 915,312.00 |

Net Savings Amount Rs. 374,096.00
Net Savings In Percentage 29.01%



[Signature]
(TPIA Rep.)
Medhaj Techno Concept Pvt. Ltd., Ghazipur

[Signature]
(Computer)
[Signature]
(Junior Engi Ass. Engineer)
Division Office(E/M), Divisi- Office(E/M), U.P. Jal Nigam(Rural), Varanasi

[Signature]
Div. Accountant
[Signature]
Ex. Engineer Sub. Engineer
Circle office (E/M), UPJN, Vns

अधीक्षण अभियन्ता
मण्डल कार्यालय (वि०/याँ०)
उ०प्र० जल निगम (ग्रामीण)
वाराणसी।

BOQ - E&M
ZONE 2

State Water and Sanitation Mission (SWSM)

| | | | | | | | | | |
|------------------------------|-------------|--|---|-------|--|------|-------------|-----|--------------|
| 1.9.2 | 3.1.1 | MS fittings such as clamp, bail plug, reducer, well cap, girder & support structure | | | | 1 | 32249.787 | Job | 32,249.79 |
| 1.9.3 | 3.1.2 | MS fittings such as ring & centre guide | 1 | 180 | | 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 | 105089.6682 | 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 | | | | | | | | | 2,026,313.5 |
| Total cost for 3 tubewells | | | | | | | | | 6,078,940.4 |
| 4 | 47 | Earth filling of abandoned tubewell in Waterworks campus | 0 | 34.23 | | 0.00 | 106.8502 | Cum | - |
| Total Cost of Tubewell | | | | | | | | | 6,078,940.40 |
| Total Cost (In Lacs) | | | | | | | | | 60.79 |

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

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


Test Report of GP-Durkhushi TW2, Zone 2, Block - Mardah, Scheme-Govindpur Kirat WSS, Developed by 250 PSI Compressor


| | | | | | | |
|---|-----------------------------|------------------|------------|------------------------|------|--|
| Size of tube well (mm): | 300 | X | 300 | RPM | 1300 | |
| Static water level (m): | 10.00 | | | | | |
| Discharge by-90 'V' notch (Rectangular) | Date: of testing 14-07-2023 | | | | | |
| Depth of TW (m): | 41.540 | | | | | |
| S. N. | Pressure in kg/cm2 | | Depression | Discharge by 'V' Notch | | Sand content in P.P.M. |
| | Starting Pressure | Running Pressure | In In mtr. | Inch | LPM | |
| 1 | 2.40 | 1.70 | 0.70 | 7 1/4 | 1205 | At start 6400 After 5 min 3500 After 10 min 3300 After 15 min 3100 After 20 min 3000 |
| 2 | 1.80 | 1.20 | 0.60 | 6 3/4 | 1008 | At start 5500 After 5 min 3100 After 10 min 2900 After 15 min 2700 After 20 min 2600 |


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


 Company Repr.
 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: | | Compressor unit Capacity | As per DPR: | 400 PSI |
| Block: | Mardah | Compressor unit Hours | As per Site: | 250 PSI |
| Scheme | Govindpur Kirat | Cumm Gravel(cum) | As per DPR: | 40 |
| Block | Mardah | Cumm Gravel(cum) | As per Site: | 49:00 |
| GP | Durkhushi TW2, Zone 2 | As per DPR: | | 45.3 |
| Lowering Depth(mt): | 41.540 | As per Site: | | 39.67 |

| SI No | Date | Start Time | End Time | Total Hours | Remarks |
|--------------|-----------|------------|----------|--------------|---------|
| 1 | 4-Jul-23 | 9:00 AM | 2:10 PM | 5:10 | |
| 2 | 5-Jul-23 | 7:00 AM | 12:50 PM | 5:50 | |
| 3 | 6-Jul-23 | 8:05 AM | 12:00 PM | 3:55 | |
| 4 | 7-Jul-23 | 10:00 AM | 2:39 PM | 4:39 | |
| 5 | 8-Jul-23 | 9:00 AM | 2:13 PM | 5:13 | |
| 6 | 9-Jul-23 | 11:00 AM | 3:18 PM | 4:18 | |
| 7 | 10-Jul-23 | 9:30 AM | 12:18 PM | 2:48 | |
| 8 | 11-Jul-23 | 10:00 AM | 1:12 PM | 3:12 | |
| 9 | 12-Jul-23 | 9:00 AM | 1:10 PM | 4:10 | |
| 10 | 13-Jul-23 | 7:00 AM | 12:50 PM | 5:50 | |
| 11 | 14-Jul-23 | 8:05 AM | 12:00 PM | 3:55 | |
| Total | | | | 49:00 | |

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| 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 - Durkhushi TW2, Zone 2, Block - Mardah, Scheme- Govindpur Kirat Reorganisation
WSS by 1 Cusec O.P. Unit

| | | | | | | | | | | |
|------------------------|-----------|---|------------------------|-------------------------|----------------|------------------------|-------------|--------------|--------------|--------------|
| Size of Ventury | | 4" X 3" | | Column Pipe Lowered: | | 30.00 | | | | |
| Static water level(m): | | 12.00 | | Date: | | 27/7/2023 | | | | |
| S.N. | Discharge | | Static Water Level (m) | 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 | 60.00 | 1223 | 12.00 | 17.00 | 5.00 | 650 | 300 | 250 | 200 | 100 |
| 2 | 50.00 | 1120 | 12.00 | 16.40 | 4.40 | 450 | 200 | 150 | 50 | Tr |
| 3 | 40.00 | 1007 | 12.00 | 16.10 | 4.10 | 50 | 40 | Tr | Tr | CI |
| Remark- | | Recommended discharge 600 L.P.M. at 4.1m depression after running 20 minute bypass. | | | | | | | | |



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




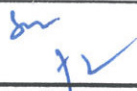
(.....)
TPIA
Medhaj Techno Concept Pvt.
Ltd., Ghazipur

(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 | Govindpur Kirat Reorganisation WSS | Op unit | As per DPR: | 70 | |
| Block | Mardah | Hours | As per Site: | 92:00 | |
| GP | Durkhushi TW2, Zone 2 | | | | |
| Lowering Depth(mt): | 41.540 | | | | |
| SI No | Date | Start Time | End Time | Total Hours | Remarks |
| 1 | 17-07-2023 | 7:20 AM | 4:00 PM | 8:40 | |
| 2 | 18-07-2023 | 8:45 AM | 5:10 PM | 8:25 | |
| 3 | 19-07-2023 | 7:40 AM | 4:00 PM | 8:20 | |
| 4 | 20-07-2023 | 8:50 AM | 5:00 PM | 8:10 | |
| 5 | 21-07-2023 | 7:40 AM | 5:00 PM | 9:20 | |
| 6 | 22-07-2023 | 7:30 AM | 5:05 PM | 9:35 | |
| 7 | 23-07-2023 | 7:40 AM | 3:50 PM | 8:10 | |
| 8 | 24-07-2023 | 7:20 AM | 3:00 PM | 7:40 | |
| 9 | 25-07-2023 | 8:45 AM | 6:10 PM | 9:25 | |
| 10 | 26-07-2023 | 7:40 AM | 2:35 PM | 6:55 | |
| 11 | 27-07-2023 | 8:50 AM | 4:10 PM | 7:20 | |
| | | | Total | 92:00 | |
| | |  |  |  |  |
| 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 | | | |



QA Testing Laboratories Pvt. Ltd.

(Govt. Approved Testing Laboratories)

B-76, Sector-64, Gautam Buddha Nagar, Noida-201301 (Uttar Pradesh)

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Website : www.qatestinglaboratories.com

CIN : U51100UP2018PTC108293 • GSTIN : 09AAACQ5609C1ZN

IAS-ANZ



M54009131N

Quality Assurance



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/230830001561
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-Mardah GP-Durkhushi L-2

| 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 | 0.4 | 1 max. | 5 max. | IS : 3025(P-10) |
| 3 | pH value at 25°C | - | 7.86 | 6.5-8.5 | No Relaxation | IS : 3025 (P-11) |
| 4 | Total Hardness as CaCO ₃ | mg/l | 198 | 200 max | 600 max. | IS : 3025 (P-21) |
| 5 | Calcium (as Ca) | mg/l | 44.8 | 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 | 20.8 | 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 ₄) | mg/l | 7.0 | 200 max. | 400 max. | IS : 3025 (P-24) |
| 11 | Total Alkalinity (as CaCO ₃) | mg/l | 162 | 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 | 462 | 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):

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.



Quality Assurance

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TEST CERTIFICATE

(This Certificate is not Valid without Hologram)



Test Report No : QAL/WT/230830001561

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 ₃) | mg/l | 0.34 | 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 | 0.022 | 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 | 0.024 | 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

Upenra Kumar
Technical manager
Authorized By (Sign & Stamp):

Upenra Kumar
Quality manager
Approved By (Sign & Stamp):

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TEST CERTIFICATE

(This Certificate is not Valid without Hologram)



Test Report No : QAL/WT/230830001561
Sample Name: : Tube well Water
Sample Code : -
Issued To : VSAIPPL-SMC JV
District-Ghaziipur.

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-Mardah GP-Durkhusi L-2

| 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 | 0.4 | 1 max. | 5 max. | IS : 3025(P-10) |
| 3 | pH value at 25°C | - | 7.86 | 6.5-8.5 | No Relaxation | IS : 3025 (P-11) |
| 4 | Total Hardness as CaCO3 | mg/l | 198 | 200 max | 600 max. | IS : 3025 (P-21) |
| 5 | Calcium (as Ca) | mg/l | 44.8 | 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 | 20.8 | 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 | 7.0 | 200 max. | 400 max. | IS : 3025 (P-24) |
| 11 | Total Alkalinity (as CaCO3) | mg/l | 162 | 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 | 462 | 500 max. | 2000 max. | IS : 3025 (P-16) |
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| 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):

Upendra Kumar
Quality Manager
Approved By (Sign & Stamp):

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JAS-ANZ



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TEST CERTIFICATE

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Test Report No : QAL/WT/230830001561

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 | |
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| 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 | 0.024 | 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):

Deep Kumar
Quality Manager

Approved By (Sign & Stamp):

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