

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



DEPARTMENT OF CIVIL ENGINEERING

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PABX: +8802-55167100 Ext. 7226;

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ENVIRONMENTAL ENGINEERING LABORATORY



BRTC No. : 1103-12736/23-24/CE; Dt: 30/1/2024

Sent by : Md. Rajun Nabi, General Manager

Company : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur, Bangladesh

Address : Maddhapaara Granite Mining Company Limited

Project : MGMC-L-GW

Date of Test : 30/1/2024 - 29/2/2024

Ref. No.: 28.17.0000.400.09.001.23-65; Dt: 28/1/2024

Location: Maddhapaara, Parbatipur, Dinajpur

Source: Groundwater from Mine

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	Bangladesh Standard for Drinking Water (ECR 2023)	WHO Guideline Values, 2022	Method of analysis	Minimum Detection Limit(MDL)
1	pH	---	9.68	6.5-8.5	6.5-8.5	SM 4500-H+ B	0
2	Color	Pl-Co	4	15	15	SM 2120 C	0.1
3	Turbidity	NTU	0.34	5	5	SM 2130 B	0.01
4	Total Hardness (as CaCO ₃)	mg/l	2	500	500	SM 2340 C	0.2
5	Total Solids (TS)	mg/l	360	---	---	SM 2540 B - D	5
6	Total Dissolved Solids (TDS)	mg/l	349	1000	1000	SM 2540 B - D	5
7	Total Suspended Solids (TSS)	mg/l	11	10	---	SM 2540 B - D	5
8	Total Coliform(TC)	CFU/100ml	0	0	0	SM 9221 E	0
9	Fecal Coliform (FC)	CFU/100ml	0	0	0	SM 9222 G	0
10	Dissolved Oxygen (DO)	mg/l	4.85	---	---	USEPA 360.3, 360.2, SM 4500-O B,G	0.1

Comments :

1. Sample was supplied by CLIENT
2. Sample was received in sealed condition.

Important Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that samples are sent in a secure and sealed cover/pack

Countersigned by:

Test Performed by:

Dr. A. B. M. Badruzzaman

Professor, Dept. of Civil Engineering

Prof. Dr. Hasib Mohammed Ahsan
Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka-1000





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Ref. No.: 28.17.0000.400.09.001.23-65; Dt: 28/1/2024

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DEPARTMENT OF CIVIL ENGINEERING

Address: Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur, Bangladesh

BRTC No. : 1103-12736/23-24/CE; Dt: 30/1/2024
Sent by : Md. Rajun Nabi, General Manager
Company : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur, Bangladesh
Address : Maddhapaara Granite Mining Company Limited
Project : Sample Id : MGMCL-GW
Date of Test : 30/1/2024 - 29/2/2024

Location: Maddhapaara, Parbatipur, Dinajpur

Source: Groundwater from Mine

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	Bangladesh Standard for Drinking Water (ECR 2023)	WHO Guideline Values, 2022	Method of analysis	Minimum Detection Limit (MDL)
11	Iron (Fe)	mg/l	<MDL	0.3-1.0	0.3	SM 3111 B	0.02
12	Arsenic (As)	mg/l	0.002	0.05	0.01	SM 3113 B	0.001
13	Nitrate - Nitrogen (NO ₃ - N)	mg/l	0.2	45	50	SM 4500-NO3-N-F	0.1
14	Nitrite - Nitrogen (NO ₂ - N)	mg/l	<MDL	---	3	SM 4500-NO2-N-F	0.008
15	Silica (SiO ₂) Reactive	mg/l	76	---	---	SM 4500-SI02-C	0.3
16	Sulphate (SO ₄)	mg/l	41	250	250	SM 4500-SO4	7
17	Magnesium (Mg)	mg/l	0.14	30-35	---	SM 3111 B	0.001
18	Sodium (Na)	mg/l	127.3	200	200	SM 3111 B	0.01
19	Lead (Pb)	mg/l	<MDL	0.01	0.01	SM 3111 B	0.01
20	Cadmium (Cd)	mg/l	<MDL	0.003	0.003	SM 3113 B	0.001

Comments : 1. Sample was supplied by CLIENT
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Professor, Dept. of Civil Engineering



Prof. Dr. Hasib Mohammed Ahsan
Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka-1000



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BRTC No. : 1103-12736 /23-24/CE; Dt: 30/1/2024

Sent by : Md Rajiun Nabi, General Manager
 Company : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur, Bangladesh
 Address : Maddhapaara Granite Mining Company Limited
 Project : Sample Id : MGMC-L-GW
 Date of Test : 30/1/2024 - 29/2/2024

Location: Maddhapaara, Parbatipur, Dinajpur

Source: Groundwater from Mine

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	Bangladesh Standard for Drinking Water (ECR 2023)	WHO Guideline Values, 2022	Method of analysis	Minimum Detection Limit(MDL)
21	Chromium (Cr)	mg/l	<MDL	0.05	0.05	SM 3111 B	0.001
22	Copper (Cu)	mg/l	<MDL	1.5	2	USEPA 200.9; SM 3111 B	0.014
23	Nickel (Ni)	mg/l	<MDL	0.05	0.02	SM 3111 B	0.02
24	Zinc (Zn)	mg/l	0.13	5	3.5	SM 3111 B	0.02
25	Aluminum (Al)	mg/l	<MDL	0.2	0.2	SM 3111 B	0.1
26	Selenium (Se)	mg/l	0.001	0.01	0.01	SM 3113 B	0.001
27	Boron (B)	mg/l	<MDL	1	0.5	SM 4500-B C	0.4
28	Mercury (Hg)	mg/l	<MDL	0.001	0.001	SM 3112 B	0.001
29	Manganese (Mn)	mg/l	0.005	0.4	0.4	PAN Method	0.005
30	Chloride (Cl ⁻)	mg/l	50	250 (1000 Coastal Area)	250	SM 4500-Cl-	1

Comments :
 a. Health based guideline, b. Guideline based on other considerations
 1. Sample was supplied by CLIENT
 2. Sample was received in sealed condition.

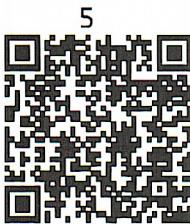
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Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan
 Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka-1000

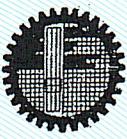
Test Performed by:

Dr. A. B. M. Badruzzaman
 Professor, Dept. of Civil Engineering



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Ref. No.: 28/17.000/400.09.001.234/5; Date: 20/11/2024

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BRTC No. : 1103-12736 /23-24/CE; DT: 30/11/2024
 Sent by : Md Rajiun Nabi, General Manager
 Address: : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
 Project: : Maddhapaara Granite Mining Company Limited
 Sample Id : MGMC-L SW 02
 Date of Test : 30/11/2024 - 29/12/2024

Location : Maddhapaara, Parbatipur, Dinajpur

Source & Use : Surface Water

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water		Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial Irrigation		
1	pH	---	8.34	6 - 9	6.5 - 8.5	6.5 - 8.5	USEPA 150.1; SM 4500-H+ B 0
2	Color	Pt-Co	262	---	---	---	USEPA 110.2; SM 2120 C 0.01
3	Turbidity	NTU	56.7	---	---	---	USEPA 180.1 Rev 2; SM 2130 B 0.01
4	Total Hardness (as CaCO ₃)	mg/l	42	---	---	---	USEPA 130.2; SM 2340 C 0.2
5	Chloride (Cl)	mg/l	54	---	---	---	USEPA 325.6; SM 4500-Cl- 1
6	Total Solids (TS)	mg/l	630	---	---	---	USEPA 160.2; SM 2540 B - D 5
7	Total Dissolved Solids (TDS)	mg/l	514	1000	1000	1000	USEPA 160.2; SM 2540 B - D 5
8	Total Suspended Solids (TSS)	mg/l	116	---	---	---	USEPA 160.2; SM 2540 B - D 5
9	Total Coliform (TC)	CFU/100ml	20000	≤ 5000	≤ 50,000	≤ 50,000	USEPA 9132; SM 9221 E 0
10	Fecal Coliform (FC)	CFU/100ml	12000	---	---	SM 9222 G	0

Comments : 1. Sample was supplied by CLIENT
 2. Sample was received in sealed condition.

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Countersigned by:

Prof. Dr. Hasib Mohammed Alisan
 Test-in-Charge, Dept of Civil Engg., BUET, Dhaka 1000

Test Performed by:

Dr. A. B. M. Badruzzaman
 Professor, Dept. of Civil Engineering





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DEPARTMENT OF CIVIL ENGINEERING

BRTC No. : 1103-12736/23-24/CE; Dt: 30/1/2024

Sent by : Md. Rajiun Nabi, General Manager

Address: Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur

Project: Maddhapaara Granite Mining Company Limited

Sample Id : MGMC SW 02

Date of Test : 30/1/2024 - 29/2/2024

Location : Maddhapaara, Parbatipur, Dinajpur

Source & Use : Surface Water

Ref.:

28.17.0000.400.09.001.23-15; Dt: 28/1/2024

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water		Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial		
11	Dissolved Oxygen (DO)	mg/l	3.21	≥ 5	≥ 1	—	USEPA 360.3, 360.2; SM 4500-O B,G
12	Iron (Fe)	mg/l	3	—	—	—	USEPA 200.9; SM 3111 B
13	Arsenic (As)	mg/l	0.003	—	0.2	0.2	USEPA 206.2; SM 3113 B
14	Nitrate - Nitrogen (NO3 - N)	mg/l	27	7	—	5	USEPA 353.2; SM 4500-NO3-N-F
15	#N/A	mg/l	4.05	—	—	—	SM 4500-NQ2-N-F
16	Silica (SiO2), Reactive	mg/l	73	—	—	—	USEPA 370.1; SM 4500-SI02-C
17	Sulphate (SO4)	mg/l	<MDL	—	—	—	USEPA 375.4; SM 4500-SO4
18	Magnesium (Mg)	mg/l	2.97	—	—	—	USEPA 200.9; SM 3111 B
19	Sodium (Na)	mg/l	253.4	—	—	—	USEPA 200.9; SM 3111 B
20	Lead (Pb)	mg/l	0.015	0.1	0.1	0.1	USEPA 200.9 Rev 2.2; SM 3111 B

Comments : 1. Sample was supplied by CLIENT
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BRTC No. : 1103-12736 /23-24/CE; Dt: 30/11/2024

Ref.: 28.17.0000.400.09.001.23-25; Dt: 28/11/2024

Sent by : Md. Rajiun Nabi, General Manager
 Address : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
 Project : Maddhapaara Granite Mining Company Limited
 Sample Id : MGMC1 SW 02
 Date of Test : 30/11/2024 - 29/12/2024

Source & Use : Surface Water
 Location : Maddhapaara, Parbatipur, Dinajpur

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water			Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial	Irrigation		
21	Cadmium (Cd)	mg/l	<MDL	---	1	2	USEPA 213.2 : SM 3113 B	0.001
22	Chromium (Cr)	mg/l	0.003	0.05	0.1	0.1	USEPA 200.9 Rev 2.2; SM 3111 B	0.001
23	Copper (Cu)	mg/l	0	---	---	---	USEPA 200.9; SM 3111 B	---
24	Nickel (Ni)	mg/l	<MDL	---	---	---	USEPA 200.9; SM 3111 B	0.035
25	Zinc (Zn)	mg/l	0.19	---	---	---	USEPA 200.9 : SM 3111 B	0.02
26	Aluminum (Al)	mg/l	<MDL	---	---	---	USEPA 236.1; SM 3111 B	0.1
27	Selenium (Se)	mg/l	0.001	---	---	---	USEPA 270.2; SM 3113 B	---
28	Boron (B)	mg/l	1.4	---	2	4	USEPA 212.3; SM 4500-B C	0.4
29	Mercury (Hg)	mg/l	<MDL	0.004	0.05	0.002	USEPA 245.1 Rev. 3.0; SM 3112 B	0.0001
30	Manganese (Mn)	mg/l	0.038	---	---	---	PAN Method	0.005

Comments : 1. Sample was supplied by CLIENT
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YmfNFH53J

Test Performed by:

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Ref.: 28.17.0000.400.09.001.23.35; Dt: 20/1/2024

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BRTC No. : 1103-12736 /23-24/CE; Dt: 30/1/2024

Sent by : Md. Rajiun Nabi, General Manager
 Address: Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
 Project: Maddhapaara Granite Mining Company Limited
 Sample Id : MGMCCL PP 03
 Date of Test : 30/1/2024 - 29/2/2024

Location : Maddhapaara, Parbatipur, Dinajpur
 Source & Use : Precipitation Pond

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water			Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial	Irrigation		
1	pH	---	8.31	6 - 9	6.5 - 8.5	6.5 - 8.5	USEPA 150.1; SM 4500-H+ B	0
2	Color	Pt-Co	640	---	---	---	USEPA 110.2; SM 2120 C	0.01
3	Turbidity	NTU	16.25	---	---	---	USEPA 180.1 Rev 2; SM 2130 B	0.01
4	Total Hardness (as CaCO ₃)	mg/l	200	---	---	---	USEPA 130.2; SM 2340 C	0.2
5	Chloride (Cl)	mg/l	90	---	---	---	USEPA 325.6; SM 4500-C	1
6	Total Solids (TS)	mg/l	7372	---	---	---	USEPA 160.2; SM 2540 B - D	5
7	Total Dissolved Solids (TDS)	mg/l	750	1000	1000	1000	USEPA 160.2; SM 2540 B - D	5
8	Total Suspended Solids (TSS)	mg/l	6922	---	---	---	USEPA 160.2; SM 2540 B - D	5
9	Total Coliform(TC)	CFU/100ml	2450	≤ 5000	≤ 50,000	≤ 50,000	USEPA 9132; SM 9221/E	0
10	Fecal Coliform (FC)	CFU/100ml	1200	---	---	---	SM 9222 G	0

Comments : 1. Sample was supplied by CLIENT
 2. Sample was received in sealed condition.

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Test Performed by:



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 Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka 1000



BRTC No. : 1103-12736 /23-24/CE; DT: 30/1/2024

Ref.:

28.17.0000.400.09.001.23-5; Dt: 20/1/2024

Sent by : Md. Rajun Nabi, General Manager
 Address: Maddhapa Granite Mining Company Limited, Maddhapa, Parbatipur, Dinajpur
 Project: Maddhapa Granite Mining Company Limited
 Sample Id : MGMC1 PP 03
 Date of Test : 30/1/2024 - 29/2/2024

Location : Maddhapa, Parbatipur, Dinajpur
 Source & Use : Precipitation Pond

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water			Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial	Irrigation		
11	Dissolved Oxygen (DO)	mg/l	1.66	≥ 5	≥ 1	—	USEPA 360.3, 360.2; SM 4500-O.B.G	0.1
12	Iron (Fe)	mg/l	7	—	—	—	USEPA 200.9; SM 3111 B	0.02
13	Arsenic (As)	mg/l	0.016	—	0.2	0.2	USEPA 206.2; SM 3113 B	0.001
14	Nitrate - Nitrogen (NO3 - N)	mg/l	38	7	—	5	USEPA 353.2; SM 4500-NO3-N-F	0.1
15	#N/A	mg/l	6.65	—	—	—	SM 4500-NO2-N-F	0.001
16	Silica (SiO2), Reactive	mg/l	42	—	—	—	USEPA 370.1; SM 4500-SI02-C	0.3
17	Sulphate (SO4)	mg/l	35	—	—	—	USEPA 375.4; SM 4500-SO4	7
18	Magnesium (Mg)	mg/l	6.82	—	—	—	USEPA 200.9; SM 3111 B	0.008
19	Sodium (Na)	mg/l	389.6	—	—	—	USEPA 200.9; SM 3111 B	—
20	Lead (Pb)	mg/l	0.195	0.1	0.1	0.1	USEPA 200.9 Rev 2.2; SM 3111 B	0.001

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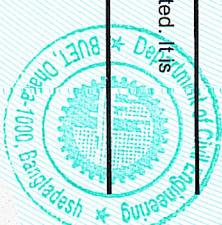
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Test Performed by:

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Prof. Dr. Hasib Mohammed Ahsan
 Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka 1000





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BRTC No. : 1103-12736 /23-24/CE; Dt: 30/1/2024
 Sent by : Md. Rajun Nabi, General Manager
 Address: : Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
 Project: : Maddhapaara Granite Mining Company Limited
 Sample Id : MGMC1_PP_03
 Date of Test: : 30/1/2024 - 29/2/2024

Ref.:

28/17/0000-400/00/001/2355; Dt: 28/1/2024

Source & Use : Precipitation Pond

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water			Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial	Irrigation		
21	Cadmium (Cd)	mg/l	<MDL	---	1	2	USEPA 213.2 ; SM 3113 B	0.001
22	Chromium (Cr)	mg/l	0.283	0.05	0.1	0.1	USEPA 200.9 Rev 2.2; SM 3111 B	0.001
23	Copper (Cu)	mg/l	0.264	---	---	---	USEPA 200.9; SM 3111 B	---
24	Nickel (Ni)	mg/l	0.278	---	---	---	USEPA 200.9 ; SM 3111 B	0.035
25	Zinc (Zn)	mg/l	0.9	---	---	---	USEPA 200.9 ; SM 3111 B	0.02
26	Aluminum (Al)	mg/l	<MDL	---	---	---	USEPA 236.1; SM 3111 B	0.1
27	Selenium (Se)	mg/l	0.001	---	---	---	USEPA 270.2, SM 3113 B	---
28	Boron (B)	mg/l	1.1	---	2	4	USEPA 212.3; SM 4500-B-C	0.4
29	Mercury (Hg)	mg/l	<MDL	0.004	0.05	0.002	USEPA 245.1 Rev. 3.0, SM 3112 B	0.0001
30	Manganese (Mn)	mg/l	0.105	---	---	---	PAN Method	0.005

Comments : 1. Sample was supplied by CLIENT
 2. Sample was received in sealed condition.

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Prof. Dr. Hasib Mohammed Ahsan
 Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka 1000

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Test Performed by:

Dr. A. B. M. Badruzzaman
 Professor, Dept. of Civil Engineering





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www.buet.ac.bd/cel/



BRTC No. : 1103-12736 /23-24/CE; DT: 30/1/2024

Ref.: 28/17.000.400.09.001.234/5; Dt: 20/1/2024

Sent by : Md. Rajiun Nabi, General Manager
 Address: Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
 Project: Maddhapaara Granite Mining Company Limited
 Sample Id : MGMC-L PO 04
 Date of Test : 30/1/2024 - 29/2/2024

Location : Maddhapaara, Parbatipur, Dinajpur
 Source & Use : Pond Outlet

TEST REPORT (PHYSICAL/ CHEMICAL/ BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water			Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial	Irrigation		
1	pH	---	7.26	6 - 9	6.5 - 8.5	6.5 - 8.5	USEPA 150.1; SM 4500-H+ B	0
2	Color	Ph-Co	1984	---	---	---	USEPA 110.2; SM 2120 C	0.01
3	Turbidity	NTU	1720	---	---	---	USEPA 180.1 Rev 2; SM 2130 B	0.01
4	Total Hardness (as CaCO ₃)	mg/l	104	---	---	---	USEPA 130.2; SM 2340 C	0.2
5	Chloride (Cl)	mg/l	49	---	---	---	USEPA 325.6; SM 4500-Cl-	1
6	Total Solids (TS)	mg/l	1352	---	---	---	USEPA 160.2; SM 2540 B - D	5
7	Total Dissolved Solids (TDS)	mg/l	556	1000	1000	1000	USEPA 160.2; SM 2540 B - D	5
8	Total Suspended Solids (TSS)	mg/l	796	---	---	---	USEPA 160.2; SM 2540 B - D	5
9	Total Coliform(TC)	CFU/100ml	750	≤ 5000	≤ 50,000	≤ 50,000	USEPA 9132; SM 9221 E	0
10	Fecal Coliform (FC)	CFU/100ml	450	---	---	---	SM 9222 G	0

Comments : 1. Sample was supplied by CLIENT
 2. Sample was received in sealed condition.

Important Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that samples are sent in a secure and sealed cover/pack

Countersigned by:

12

 Dr. A. B. M. Badruzzaman

Test Performed by:

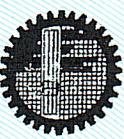
Prof. Dr. Hasib Mohammed Alisan

Test-in-Charge, Dept. of Civil Engg., BUET, Dhaka 1000



X2QEWrhrX





BRTC No. : 1103-12736 /23-24/CE; Dt: 30/11/2024
Sent by : Md. Rajun Nabi, General Manager
Address: Maddhapaara Granite Mining Company Limited, Maddhapaara, Parbatipur, Dinajpur
Project: Maddhapaara Granite Mining Company Limited
Sample Id : MGMCL PO 04
Date of Test : 30/11/2024 - 29/12/2024

Source & Use : Pond Outlet

TEST REPORT (PHYSICAL/ CHEMICAL/BACTERIOLOGICAL ANALYSIS OF SURFACE WATER SAMPLE)

Sl. No.	Water Quality Parameters	Unit	Concentration Present	ECR 2023: Standards for Use of Surface Water		Method of analysis	Minimum Detection Limit (MDL)
				Fish Culture	Different Processes, Cooling & Industrial		
21	Cadmium (Cd)	mg/l	<MDL	---	1	2	USEPA 213.2; SM 3113 B
22	Chromium (Cr)	mg/l	0.05	0.05	0.1	0.1	USEPA 200.9 Rev 2.2; SM 3111 B
23	Copper (Cu)	mg/l	0.026	---	---	---	USEPA 200.9; SM 3111 B
24	Nickel (Ni)	mg/l	0.05	---	---	---	USEPA 200.9; SM 3111 B
25	Zinc (Zn)	mg/l	0.42	---	---	---	USEPA 200.9 ; SM 3111 B
26	Aluminum (Al)	mg/l	<MDL	---	---	---	USEPA 236.1; SM 3111 B
27	Selenium (Se)	mg/l	0	0	---	---	USEPA 270.2, SM 3113 B
28	Boron (B)	mg/l	0.7	---	2	4	USEPA 242.3; SM 4500-B C
29	Mercury (Hg)	mg/l	<MDL	0.004	0.05	0.002	USEPA 245.1 Rev. 3.0; SM 3112 B
30	Manganese (Mn)	mg/l	0.258	---	---	---	PAN Method

Comments : 1. Sample was supplied by CLIENT
2. Sample was received in sealed condition.

Important Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that samples are sent in a secure and sealed cover/pack

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan
Test-in-Charge, Dept. of Civil Engg.; BUET, Dhaka 1000

Test Performed by:

Dr. A. B. M. Badruzzaman
Professor, Dept. of Civil Engineering

