

TEST REPORT

Report No: QMTL/R-92628/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-92628
ATTN : MR. JASMAN PINTO		Date Received	08 Feb 2020
		Date(s) Tested	08 Feb 2020 - 10 Feb 2020
		Date Reported	24 Feb 2020
Sample Description	Northside, Main Water Tank		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	AUH	Sampling Date/Time	08.02.2020/2:59PM
Sample Container	1x500mL PB	Sampling Point	Tank
Sample Receipt Temp	4°C	Sample Onsite Temp	23°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NYUAD		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	Zero	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	Zero	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	10@37°C	8
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	Zero	Zero
Remarks	The sample meets RSB Water Quality Regulations (4th Edition) January 2014 requirements for potable water with respect to the above tests only			

Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA : Not Applicable
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Test method deviation	None
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Test performed by Emp#	74 & 55
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Report prepared by Emp#	22
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The above test results are only applicable to the sample(s) referred above.

Reported By



ANILA GEORGE
LABORATORY MANAGER



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END OF REPORT

TEST REPORT

Report No: QMTL/R-92627/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO	Sample ID	QMTL/S-92627	
	Date Received	08 Feb 2020	
	Date(s) Tested	08 Feb 2020 - 10 Feb 2020	
	Date Reported	24 Feb 2020	
Sample Description	Northside, Janitor Closet		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	AUH	Sampling Date/Time	08.02.2020/2:54PM
Sample Container	1x500mL PB	Sampling Point	Tap
Sample Receipt Temp	4°C	Sample Onsite Temp	26°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NYUAD		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	Zero	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	Zero	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	10@37°C	1
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	Zero	Zero
Remarks	The sample meets RSB Water Quality Regulations (4th Edition) January 2014 requirements for potable water with respect to the above tests only			

Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA : Not Applicable
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Test method deviation	None
Test performed by Emp#	74 & 55
Report prepared by Emp#	22

The above test results are only applicable to the sample(s) referred above.

Reported By



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END OF REPORT

TEST REPORT

Report No: QMTL/R-92626/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-92626
ATTN : MR. JASMAN PINTO		Date Received	08 Feb 2020
		Date(s) Tested	08 Feb 2020 - 10 Feb 2020
		Date Reported	24 Feb 2020
Sample Description	Northside, Drinking Water Fountain (NYUAD: 00202988)		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	AUH	Sampling Date/Time	08.02.2020/2:50PM
Sample Container	1x500mL PB	Sampling Point	Drinking Water Fountain
Sample Receipt Temp	4°C	Sample Onsite Temp	24°C
Sample Appearance	Clear	On-site Treatment	Na
Reference	NYUAD		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	Zero	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	Zero	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	10@37°C	<1
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	Zero	Zero
Remarks	The sample meets RSB Water Quality Regulations (4th Edition) January 2014 requirements for potable water with respect to the above tests only.			

Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA : Not Applicable
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Test method deviation	None
Test performed by Emp#	74 & 55
Report prepared by Emp#	22
The above test results are only applicable to the sample(s) referred above.	

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END OF REPORT

TEST REPORT

Report No: QMTL/R-92629/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO	Sample ID	QMTL/S-92629	
	Date Received	08 Feb 2020	
	Date(s) Tested	08 Feb 2020 - 10 Feb 2020	
	Date Reported	24 Feb 2020	
Sample Description	Northside, Irrigation Tank		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	AUH	Sampling Date/Time	08.02.2020/3:05PM
Sample Container	1x500mL PB	Sampling Point	Tank
Sample Receipt Temp	4°C	Sample Onsite Temp	27°C
Sample Appearance	Clear	On-site Treatment	NP
Reference	NYUAD		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	23	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	23	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	-	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	-	<1
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	-	Zero
Remarks	The sample meets RSB Recycled Water and Biosolids Regulations 2018 requirements for irrigation water with respect to the above tests only			

Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, RSB: Regulation & Supervision Bureau, NA: Not Applicable, NP: Not Provided
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Test method deviation	None
Test performed by Emp#	74 & 55
Report prepared by Emp#	22

The above test results are only applicable to the sample(s) referred above.

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END OF REPORT



CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 08-02-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 04-01-2020

AMBIENT WATER ANALYSIS

PARAMETER	CONTROL LIMITS	North Side Water Tank			
pH at 25°C	7.0 – 9.2	8.12			
Conductivity at 25°C, µs/cm	1600 Max.	306			
Total Dissolved Solids (TDS)	1000 Max.	198			
Total Hardness, ppm as CaCO ₃	300 Max.	58			
Calcium Hardness, ppm as CaCO ₃	200 Max.	53			
Total Alkalinity	--	47			
Chloride, ppm as Cl ⁻	250 Max.	48			
Iron, ppm as Fe	0.2 Max.	<0.05			
Sulphate (SO ₄), mg/l	250 Max.	<10			
Copper (Cu), mg/l	1 Max.	<0.05			
Aluminum (Al), mg/l	0.2 Max.	<0.05			
Zinc (Zn), mg/l	5 Max.	<0.05			
Nitrate (NO ₃ ⁻), mg/l	50 Max.	<1.0			
Nitrite (NO ₂ ⁻), mg/l	30 Max.	<0.05			
Fluorides (F), mg/l	15 Max.	<0.01			
Potassium (K), mg/l	12 Max.	<5.0			

Treatment Residuals					
Odor	Unobjectionable	ND			
Free Residual Chlorine as Cl	0.2 – 0.5	0.37			
Turbidity in NTU	4.0 Max	<1.0			

All test results expressed in parts per million (ppm) as CaCO₃ except pH and conductivity (µmhos).

COMMENTS:	ACTION:
The pH and Conductivity/TDS are found satisfactory. ⇨	No action recommended.
Dissolved iron levels are within control limits. ⇨	No action recommended.
Chlorine levels found satisfactory. ⇨	No action recommended.

The dosing system is calibrated. Dosing pumps, low level sensor, dosing tubes are in good condition. There is no recirculation line/system for the water tank. Please check chlorine levels daily. Kindly inform Crystalline if levels fluctuate.

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Crystal SHC			--	
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		



CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 08-02-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 04-01-2020

AMBIENT WATER ANALYSIS

PARAMETER	CONTROL LIMITS	North Side Janitor Closed			
pH at 25°C	7.0 - 9.2	8.17			
Conductivity at 25°C, µs/cm	1600 Max.	288			
Total Dissolved Solids (TDS)	1000 Max.	187			
Total Hardness, ppm as CaCO ₃	300 Max.	61			
Calcium Hardness, ppm as CaCO ₃	200 Max.	57			
Total Alkalinity	--	45			
Chloride, ppm as Cl ⁻	250 Max.	49			
Iron, ppm as Fe	0.2 Max.	<0.05			
Sulphate (SO ₄), mg/l	250 Max.	<10			
Copper (Cu), mg/l	1 Max.	<0.05			
Aluminum (Al), mg/l	0.2 Max.	<0.05			
Zinc (Zn), mg/l	5 Max.	<0.05			
Nitrate (NO ₃ ⁻), mg/l	50 Max.	<1.0			
Nitrite (NO ₂ ⁻), mg/l	30 Max.	<0.05			
Fluorides (F), mg/l	15 Max.	<0.01			
Potassium (K), mg/l	12 Max.	<5.0			

Treatment Residuals

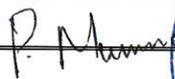
Odor	Unobjectionable	ND			
Free Residual Chlorine as Cl	0.2 - 0.5	0.31			
Turbidity in NTU	4.0 Max	<1.0			

All test results expressed in parts per million (ppm) as CaCO₃ except pH and conductivity (µmhos).

COMMENTS:	ACTION:
The pH and Conductivity/TDS are found satisfactory. ⇨	No action recommended.
Dissolved iron levels are within control limits. ⇨	No action recommended.
Chlorine levels found satisfactory. ⇨	No action recommended.

INVENTORY LEVELS

DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Crystal SHC			--	
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		

