

TEST REPORT

Report No: QMTL/R-100500/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-100500
ATTN : MR. JASMAN PINTO		Date Received	12 Apr 2020
		Date(s) Tested	12 Apr 2020 - 14 Apr 2020
		Date Reported	18 Apr 2020
Sample Description	Irrigation Water Tank		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	NYUAD	Sampling Date/Time	12.04.2020/ 3:20 PM
Sample Container	1x500ml PB	Sampling Point	Tank
Sample Receipt Temp	4.5°C	Sample Onsite Temp	31°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

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	-	280
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.
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Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
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Test method deviation	None
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Test performed by Emp#	14 & 55
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Report prepared by Emp#	72
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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-100495/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO		Sample ID	QMTL/S-100495
		Date Received	12 Apr 2020
		Date(s) Tested	12 Apr 2020 - 14 Apr 2020
		Date Reported	18 Apr 2020
Sample Description	Center Fountain		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	NYUAD	Sampling Date/Time	12.04.2020/ 3:00 PM
Sample Container	1x500ml PB	Sampling Point	Water Fountain
Sample Receipt Temp	4.5°C	Sample Onsite Temp	26°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	-	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	-	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	-	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	500	220
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	-	Zero

Remarks	The sample meets DM Water Systems quality (2010) specifications for Fountain Water with respect to the above tests only.
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Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
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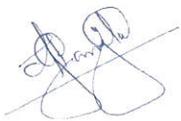
Test method deviation	None
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Test performed by Emp#	14 & 55
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Report prepared by Emp#	72
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Reported By



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END OF REPORT

TEST REPORT

Report No: QMTL/R-100494/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-100494
		Date Received	12 Apr 2020
		Date(s) Tested	12 Apr 2020 - 14 Apr 2020
ATTN : MR. JASMAN PINTO		Date Reported	18 Apr 2020
Sample Description	West Water Feature		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	NYUAD	Sampling Date/Time	12.04.2020/ 2:50 PM
Sample Container	1x500ml PB	Sampling Point	Water Feature
Sample Receipt Temp	4.5°C	Sample Onsite Temp	24.5°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	-	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	-	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	-	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	500	180
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	-	Zero

Remarks	The sample meets DM Water Systems quality (2010) specifications for water feature with respect to the above tests only.
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Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
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Test method deviation	None
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Test performed by Emp#	14 & 55
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Report prepared by Emp#	72
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END OF REPORT

TEST REPORT

Report No: QMTL/R-100493/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-100493
		Date Received	12 Apr 2020
		Date(s) Tested	12 Apr 2020 - 14 Apr 2020
ATTN : MR. JASMAN PINTO		Date Reported	18 Apr 2020
Sample Description	East Water Feature		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	NYUAD	Sampling Date/Time	12.04.2020/ 2:40 PM
Sample Container	1x500ml PB	Sampling Point	Water Feature
Sample Receipt Temp	4.5°C	Sample Onsite Temp	25°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
MICROBIOLOGICAL ANALYSIS				
E.coli	APHA 9222 H & I (23rd Edition)	CFU/100 ml	-	Zero
Fecal Coliforms	APHA 9222 D (23rd Edition)	CFU/100 ml	-	Zero
Pseudomonas aeruginosa	APHA 9213 E (23rd Edition)	CFU/100 ml	-	Zero
Total Bacterial Count	APHA 9215 B (23rd Edition)	CFU/ml	500	260
Total Coliforms	APHA 9222 B (23rd Edition)	CFU/100 ml	-	Zero

Remarks	The sample meets DM Water Systems quality (2010) specifications for water feature with respect to the above tests only.
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Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
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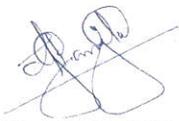
Test method deviation	None
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Test performed by Emp#	14 & 55
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Report prepared by Emp#	72
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The above test results are only applicable to the sample(s) referred above.

Reported By



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LABORATORY MANAGER



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END OF REPORT

CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 12-04-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-03-2020

KIDS SPLASH PAD WATER ANALYSIS

PARAMETER	CONTROL LIMITS	CENTER FOUNTAIN			
pH	7.2 - 7.6	7.46			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	287			
TDS, ppm	Max 1000	186			
'P' Alkalinity, ppm as CaCO_3	80 - 120	--			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	--			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					

Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Salinity in mg/l	--				
Free Residual Chlorine as Cl	1.0 - 2.0	1.30			
Cynauric Acid	20 - 60	--			

*** All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH levels found are satisfactory ⇒	No action recommended
Chlorine levels are found satisfactory ⇒	No action recommended

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Salt Granules			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Calcium Chloride				
Soda Ash				
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: 12-04-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-03-2020

KIDS SPLASH PAD WATER ANALYSIS

PARAMETER	CONTROL LIMITS	EAST FOUNTAIN			
pH	7.2 - 7.6	7.59			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	431			
TDS, ppm	Max 1000	280			
'P' Alkalinity, ppm as CaCO_3	80 - 120	--			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	--			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					

Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Salinity in mg/l	--				
Free Residual Chlorine as Cl	1.0 - 2.0	1.23			
Cynaunic Acid	20 - 60	--			

*** All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:

ACTION:

The pH levels found are satisfactory	⇨	No action recommended
Chlorine levels are found satisfactory	⇨	No action recommended

INVENTORY LEVELS

DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Salt Granules			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Calcium Chloride				
Soda Ash				

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: 12-04-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-03-2020

KIDS SPLASH PAD WATER ANALYSIS

PARAMETER	CONTROL LIMITS	WEST FOUNTAIN			
pH	7.2 – 7.6	7.54			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	269			
TDS, ppm	Max 1000	174			
'P' Alkalinity, ppm as CaCO_3	80 - 120	--			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	--			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					
Treatment Residuals					
Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Salinity in mg/l	--				
Free Residual Chlorine as Cl	1.0 – 2.0	1.13			
Cynauric Acid	20 - 60	--			

*** All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH levels found are satisfactory ⇨	No action recommended
Chlorine levels are found satisfactory ⇨	No action recommended

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Salt Granules			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Calcium Chloride				
Soda Ash				
Service Engineer:	Murugaraaj		Client:	Mr. Ratheesh Muttath
Signature:			Signature:	

