

TEST REPORT

Report No: QMTL/R-100501/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO	Sample ID	QMTL/S-100501	
	Date Received	12 Apr 2020	
	Date(s) Tested	12 Apr 2020 - 14 Apr 2020	
	Date Reported	18 Apr 2020	
Sample Description	North Side 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/ 3:25 PM
Sample Container	1x500ml PB	Sampling Point	Tank
Sample Receipt Temp	4.5°C	Sample Onsite Temp	29°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	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	9
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.
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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-100504/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO	Sample ID	QMTL/S-100504	
	Date Received	12 Apr 2020	
	Date(s) Tested	12 Apr 2020 - 14 Apr 2020	
	Date Reported	18 Apr 2020	
Sample Description	North Side Janitor Closed		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	NYUAD	Sampling Date/Time	12.04.2020/ 3:30 PM
Sample Container	1x500ml PB	Sampling Point	Tap
Sample Receipt Temp	4.5°C	Sample Onsite Temp	27°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	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.
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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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TEST REPORT

Report No: QMTL/R-100503/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates ATTN : MR. JASMAN PINTO	Sample ID	QMTL/S-100503		
	Date Received	12 Apr 2020		
	Date(s) Tested	12 Apr 2020 - 14 Apr 2020		
	Date Reported	18 Apr 2020		
Sample Description	North Side Drinking Water Fountain(NYUAD 00202988)			
Sample Type	Water	Sampling Method	QMTL-WI-15	
Client Name/Project	NP	Sampled By	QMTL Representative	
Location	NYUAD	Sampling Date/Time	12.04.2020/ 3:29 PM	
Sample Container	1x500ml PB	Sampling Point	Water Fountain	
Sample Receipt Temp	4.5°C	Sample Onsite Temp	20°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	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	9
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.
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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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TEST REPORT

Report No: QMTL/R-100502/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-100502
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	North Side 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	33°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	-	120
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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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

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

AMBIENT WATER ANALYSIS

PARAMETER	CONTROL LIMITS	North Side Water Tank			
pH at 25°C	7.0 - 9.2	7.84			
Conductivity at 25°C, µs/cm	1600 Max.	274			
Total Dissolved Solids (TDS)	1000 Max.	178			
Total Hardness, ppm as CaCO ₃	300 Max.	61			
Calcium Hardness, ppm as CaCO ₃	200 Max.	54			
Total Alkalinity	--	47			
Chloride, ppm as Cl ⁻	250 Max.	53			
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	0.36			
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:

- The pH and Conductivity/TDS are found satisfactory. ⇨
- Dissolved iron levels are within control limits. ⇨
- Chlorine levels found satisfactory. ⇨

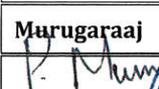
ACTION:

- No action recommended.
- No action recommended.
- 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: 12-04-2020
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-03-2020

AMBIENT WATER ANALYSIS

PARAMETER	CONTROL LIMITS	North Side Janitor Closed			
pH at 25°C	7.0 - 9.2	7.64			
Conductivity at 25°C, µs/cm	1600 Max.	283			
Total Dissolved Solids (TDS)	1000 Max.	183			
Total Hardness, ppm as CaCO ₃	300 Max.	57			
Calcium Hardness, ppm as CaCO ₃	200 Max.	54			
Total Alkalinity	--	45			
Chloride, ppm as Cl ⁻	250 Max.	50			
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:

- The pH and Conductivity/TDS are found satisfactory. ⇨
- Dissolved iron levels are within control limits. ⇨
- Chlorine levels found satisfactory. ⇨

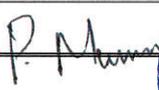
ACTION:

- No action recommended.
- No action recommended.
- No action recommended.

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INVENTORY LEVELS

DOSAGE SCHEDULE

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

