

## TEST REPORT

Report No: QMTL/R-127508/2020

<b>CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES</b> Abu Dhabi PO Box : 131463 United Arab Emirates  <b>ATTN : MR. JASMAN PINTO</b>	Sample ID	QMTL/S-127508	
	Date Received	08 Oct 2020	
	Date(s) Tested	08 Oct 2020 - 10 Oct 2020	
	Date Reported	14 Oct 2020	
Sample Description	<b>Horizone Tower E1, Low Zone</b>		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 01:15 PM
Sample Container	1x500ml PB	Sampling Point	Valve
Sample Receipt Temp	4°C	Sample Onsite Temp	19.9°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL ANALYSIS</b>				
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	5
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, WI: Work Instruction
----------	--

Test method deviation	None
-----------------------	------

Test performed by Emp#	14 & 74
------------------------	---------

Report prepared by Emp#	72
-------------------------	----

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

Reported By



**ANILA GEORGE**  
**LABORATORY MANAGER**



The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

**END OF REPORT**

## TEST REPORT

Report No: QMTL/R-127509/2020

<b>CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES</b> Abu Dhabi PO Box : 131463 United Arab Emirates  <b>ATTN : MR. JASMAN PINTO</b>	Sample ID	QMTL/S-127509	
	Date Received	08 Oct 2020	
	Date(s) Tested	08 Oct 2020 - 10 Oct 2020	
	Date Reported	14 Oct 2020	
Sample Description	<b>Horizone Tower - E1, High Zone</b>		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 01:40 PM
Sample Container	1x500ml PB	Sampling Point	Valve
Sample Receipt Temp	4°C	Sample Onsite Temp	16.9°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL ANALYSIS</b>				
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	2
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, WI: Work Instruction
----------	--

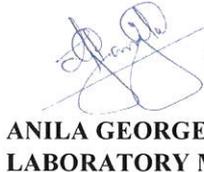
Test method deviation	None
-----------------------	------

Test performed by Emp#	14 & 74
------------------------	---------

Report prepared by Emp#	72
-------------------------	----

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

Reported By




**ANILA GEORGE**  
**LABORATORY MANAGER**

The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

**END OF REPORT**

## TEST REPORT

Report No: QMTL/R-127510/2020

<b>CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES</b> Abu Dhabi PO Box : 131463 United Arab Emirates  <b>ATTN : MR. JASMAN PINTO</b>	Sample ID	QMTL/S-127510	
	Date Received	08 Oct 2020	
	Date(s) Tested	08 Oct 2020 - 10 Oct 2020	
	Date Reported	14 Oct 2020	
Sample Description	<b>Horizone Tower - E2</b>		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 02:00 PM
Sample Container	1x500ml PB	Sampling Point	Valve
Sample Receipt Temp	4°C	Sample Onsite Temp	16.8°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL ANALYSIS</b>				
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, WI: Work Instruction
----------	--

Test method deviation	None
-----------------------	------

Test performed by Emp#	14 & 74
------------------------	---------

Report prepared by Emp#	72
-------------------------	----

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

Reported By



**ANILA GEORGE**  
LABORATORY MANAGER



The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

**END OF REPORT**

## TEST REPORT

Report No: QMTL/R-127525/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-127525
ATTN : MR. JASMAN PINTO		Date Received	08 Oct 2020
		Date(s) Tested	08 Oct 2020 - 18 Oct 2020
		Date Reported	21 Oct 2020
Sample Description	Horizone Tower E1, Low Zone		
Sample Type	Water	Sampling Method	QMTL-WI-16
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 01:10 PM
Sample Container	1x1L PB	Sampling Point	Valve
Sample Receipt Temp	21°C	Sample Onsite Temp	19.9°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>LEGIONELLA ANALYSIS</b>				
Legionella	ISO 11731:2017 E (Matrix A-Procedure-5)	CFU/litre	<1	<1
Legionella Species	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 1	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 2-15	ISO 11731:2017 E	-	-	Absent

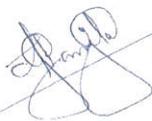
Remarks	The sample meets RSB Water Quality Regulations (4th Edition) January 2014 requirements for potable water with respect to the above tests only.
---------	--

Keywords	CFU: Colony Forming Unit, ISO: International Organization for Standardization, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA: Not Applicable, WI: Work Instruction, BCYE: Buffered Charcoal Yeast Extract, Culture Media :- BCYE Agar
----------	--

Test method deviation	None
Test performed by Emp#	14 & 74
Report prepared by Emp#	72

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

Reported By




**ANILA GEORGE**  
**LABORATORY MANAGER**

The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

**END OF REPORT**

## TEST REPORT

Report No: QMTL/R-127526/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-127526
ATTN : MR. JASMAN PINTO		Date Received	08 Oct 2020
		Date(s) Tested	08 Oct 2020 - 18 Oct 2020
		Date Reported	21 Oct 2020
Sample Description	Horizone Tower - E1, High Zone		
Sample Type	Water	Sampling Method	QMTL-WI-16
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 01:32 PM
Sample Container	1x1L PB	Sampling Point	Valve
Sample Receipt Temp	21°C	Sample Onsite Temp	16.9°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>LEGIONELLA ANALYSIS</b>				
Legionella	ISO 11731:2017 E (Matrix A-Procedure-5)	CFU/litre	<1	<1
Legionella Species	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 1	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 2-15	ISO 11731:2017 E	-	-	Absent

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, ISO: International Organization for Standardization, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA: Not Applicable, WI: Work Instruction, BCYE: Buffered Charcoal Yeast Extract, Culture Media :- BCYE Agar
----------	--

Test method deviation	None
-----------------------	------

Test performed by Emp#	14 & 74
------------------------	---------

Report prepared by Emp#	72
-------------------------	----

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

Reported By

  
ANILA GEORGE  
LABORATORY MANAGER

The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

END OF REPORT

## TEST REPORT

Report No: QMTL/R-127527/2020

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-127527
ATTN : MR. JASMAN PINTO		Date Received	08 Oct 2020
		Date(s) Tested	08 Oct 2020 - 18 Oct 2020
		Date Reported	21 Oct 2020
Sample Description	Horizone Tower - E2		
Sample Type	Water	Sampling Method	QMTL-WI-16
Client Name/Project	NP	Sampled By	QMTL Representative
Location	City Of Light, Al Reem Island	Sampling Date/Time	08.10.2020 / 01:54 PM
Sample Container	1x1L PB	Sampling Point	Valve
Sample Receipt Temp	21°C	Sample Onsite Temp	16.8°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>LEGIONELLA ANALYSIS</b>				
Legionella	ISO 11731:2017 E (Matrix A-Procedure-5)	CFU/litre	<1	<1
Legionella Species	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 1	ISO 11731:2017 E	-	-	Absent
Legionella pneumophila sero group 2-15	ISO 11731:2017 E	-	-	Absent

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, ISO: International Organization for Standardization, RSB: Regulation & Supervision Bureau, NP: Not Provided, NA: Not Applicable, WI: Work Instruction, BCYE: Buffered Charcoal Yeast Extract, Culture Media :- BCYE Agar
----------	--

Test method deviation	None
-----------------------	------

Test performed by Emp#	14 & 74
------------------------	---------

Report prepared by Emp#	72
-------------------------	----

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

Reported By




**ANILA GEORGE**  
**LABORATORY MANAGER**

The test report shall not be reproduced(except in full) without the written approval of QMTL. When analysis is witnessed by us or carried out by sub contract labs, our responsibility is solely to ensure that the analysis is conducted to standard test methods in accordance with Industry accepted practice.

**END OF REPORT**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

CUSTOMER: TAFAWUQ FACILITY MANAGEMENT	
Site Location: Horizon Tower	Date: 08-10-2020
Sample Point: Low Zone, E1 Tower,	Sampled By: Crystalline Rep

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	10.18
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1090
TDS, ppm	--	708
Iron, ppm as Fe	0 - 2.0	0.18
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	510
Dipslide	<10 <sup>3</sup>	ND

\*\*\*All test results expressed in parts per million (ppm) as CaCO<sub>3</sub> except pH and conductivity ( $\mu\text{mhos}$ ).

COMMENTS:	ACTION:
The pH level is satisfactory $\Rightarrow$	No action recommended.
The Conductivity levels are satisfactory $\Rightarrow$	No action recommended.
Dissolved iron levels are within the control limits. $\Rightarrow$	No action recommended.
Nitrite levels are low. $\Rightarrow$	Please maintained control limits above 800PPM.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

CUSTOMER: TAFAWUQ FACILITY MANAGEMENT	
Site Location: Horizon Tower	Date: 08-10-2020
Sample Point: High Zone, E1 Tower,	Sampled By: Crystalline Rep

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	10.70
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1978
TDS, ppm	--	1285
Iron, ppm as Fe	0 - 2.0	0.05
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	1150
Dipslide	<10 <sup>3</sup>	ND

\*\*\*All test results expressed in parts per million (ppm) as CaCO<sub>3</sub> except pH and conductivity ( $\mu\text{mhos}$ ).

COMMENTS:	ACTION:
The Ph Level Is high. $\Rightarrow$	Please Maintained Control Limits.
The Conductivity Levels Are Satisfactory $\Rightarrow$	No Action Recommended.
Dissolved Iron Levels Are Within the Control Limits. $\Rightarrow$	No Action Recommended.
Corrosion Inhibitor Levels Are Satisfactory $\Rightarrow$	No Action Recommended.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

CUSTOMER: TAFAWUQ FACILITY MANAGEMENT	
Site Location: Horizon Tower	Date: 08-10-2020
Sample Point: E2 Tower,	Sampled By: Crystalline Rep

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	10.23
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1115
TDS, ppm	--	724
Iron, ppm as Fe	0 - 2.0	0.17
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	620
Dipslide	<10 <sup>3</sup>	ND

\*\*\*All test results expressed in parts per million (ppm) as CaCO<sub>3</sub> except pH and conductivity ( $\mu\text{mhos}$ ).

COMMENTS:	ACTION:
The pH level is satisfactory $\Rightarrow$	No action recommended.
The Conductivity levels are satisfactory $\Rightarrow$	No action recommended.
Dissolved iron levels are within the control limits. $\Rightarrow$	No action recommended.
Nitrite levels are low. $\Rightarrow$	Please maintained control limits above 800PPM.

Reported By

  
Murugaraaj  
Service Engineer



CLEANER WATER GREENER TOMORROW