

## TEST REPORT

Report No: QMTL/R-148290/2021

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-148290
		Date Received	14 Feb 2021
		Date(s) Tested	14 Feb 2021 - 16 Feb 2021
ATTN : MR. JASMAN PINTO		Date Reported	22 Feb 2021
Sample Description	L4, Cooling Tower -1		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021 / 1:40 PM
Sample Container	1x500ml PB	Sampling Point	Tray
Sample Receipt Temp	4.3°C	Sample Onsite Temp	23°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL PARAMETERS</b>				
Total Bacterial Count*	APHA 9215 B -23rd Edition	CFU/ml	10,000	65x10 <sup>4</sup>
Total Coliforms*	APHA 9222 B -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
E.coli*	APHA 9222 I -23rd Edition	CFU/100 ml	-	Zero

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets DM Water Systems quality (2010) specifications for Cooling Water Systems with respect to the above tests only.
Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
Test method deviation	None
Test performed by Emp#	103 & 14
Report prepared by Emp#	72
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-148291/2021

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-148291
ATTN : MR. JASMAN PINTO		Date Received	14 Feb 2021
		Date(s) Tested	14 Feb 2021 - 16 Feb 2021
		Date Reported	22 Feb 2021
Sample Description	L4, Cooling Tower -2		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021 / 1:20 PM
Sample Container	1x500ml PB	Sampling Point	Tray
Sample Receipt Temp	4.3°C	Sample Onsite Temp	20°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL PARAMETERS</b>				
Total Bacterial Count*	APHA 9215 B -23rd Edition	CFU/ml	10,000	19x10 <sup>2</sup>
Total Coliforms*	APHA 9222 B -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
E.coli*	APHA 9222 I -23rd Edition	CFU/100 ml	-	Zero

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets DM Water Systems quality (2010) specifications for Cooling Water Systems with respect to the above tests only.
Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
Test method deviation	None
Test performed by Emp#	103 & 14
Report prepared by Emp#	72
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## TEST REPORT

Report No: QMTL/R-148292/2021

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-148292
		Date Received	14 Feb 2021
		Date(s) Tested	14 Feb 2021 - 16 Feb 2021
ATTN : MR. JASMAN PINTO		Date Reported	22 Feb 2021
Sample Description	L4, Cooling Tower -3		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021 / 3:00 PM
Sample Container	1x500ml PB	Sampling Point	Tray
Sample Receipt Temp	4.3°C	Sample Onsite Temp	20°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL PARAMETERS</b>				
Total Bacterial Count*	APHA 9215 B -23rd Edition	CFU/ml	10,000	<b>150</b>
Total Coliforms*	APHA 9222 B -23rd Edition	CFU/100 ml	-	<b>Zero</b>
Fecal Coliforms*	APHA 9222 D -23rd Edition	CFU/100 ml	-	<b>Zero</b>
Pseudomonas aeruginosa*	APHA 9213 E -23rd Edition	CFU/100 ml	-	<b>Zero</b>
E.coli*	APHA 9222 I -23rd Edition	CFU/100 ml	-	<b>Zero</b>

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets DM Water Systems quality (2010) specifications for Cooling Water Systems with respect to the above tests only.
Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
Test method deviation	None
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## TEST REPORT

Report No: QMTL/R-148293/2021

<b>CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES</b> Abu Dhabi PO Box : 131463 United Arab Emirates		Sample ID	QMTL/S-148293
		Date Received	14 Feb 2021
		Date(s) Tested	14 Feb 2021 - 16 Feb 2021
<b>ATTN : MR. JASMAN PINTO</b>		Date Reported	22 Feb 2021
Sample Description	L4, Cooling Tower -4		
Sample Type	Water	Sampling Method	QMTL-WI-15
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021 / 4:50 PM
Sample Container	1x500ml PB	Sampling Point	Tray
Sample Receipt Temp	4.3°C	Sample Onsite Temp	23°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

## TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>MICROBIOLOGICAL PARAMETERS</b>				
Total Bacterial Count*	APHA 9215 B -23rd Edition	CFU/ml	10,000	<b>200</b>
Total Coliforms*	APHA 9222 B -23rd Edition	CFU/100 ml	-	<b>Zero</b>
Fecal Coliforms*	APHA 9222 D -23rd Edition	CFU/100 ml	-	<b>Zero</b>
Pseudomonas aeruginosa*	APHA 9213 E -23rd Edition	CFU/100 ml	-	<b>Zero</b>
E.coli*	APHA 9222 I -23rd Edition	CFU/100 ml	-	<b>Zero</b>

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets DM Water Systems quality (2010) specifications for Cooling Water Systems with respect to the above tests only.
Keywords	CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NP: Not Provided, NA: Not Applicable, WI: Work Instruction
Test method deviation	None
Test performed by Emp#	103 & 14
Report prepared by Emp#	72
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## TEST REPORT

Report No: QMTL/R-148288/2021

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates	Sample ID	QMTL/S-148288	
	Date Received	14 Feb 2021	
	Date(s) Tested	14 Feb 2021 - 17 Feb 2021	
	Date Reported	23 Feb 2021	
ATTN : MR. JASMAN PINTO			
Sample Description	Copper - Silver Ionisation – P2 Water Tank # 05		
Sample Type	Water	Sampling Method	QMTL-SOP-128
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021/ 11:00 AM
Sample Container	1x500ml PB	Sampling Point	Tank
Sample Receipt Temp	18°C	Sample Onsite Temp	30°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

### TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>PHYSICAL PARAMETERS</b>				
Conductivity*	APHA 2510 B-23rd Edition	µs/cm	-	273@24.2°C
pH*	APHA 4500 H+B-23rd Edition	-	Min 7.0-Max 9.2	7.22@24.2°C
Total Dissolved Solids*	APHA 2540-C-23rd Edition	mg/L	Min 100-Max 600	177
<b>CHEMICAL PARAMETERS</b>				
Calcium Hardness*	APHA 3500 Ca B-23rd Edition	mg/L	Max 200	37.4
Chloride*	APHA 4500 Cl <sup>-</sup> B-23rd Edition	mg/L	Max 250	54.8
Total Hardness as (CaCO <sub>3</sub> )*	APHA 2340-C-23rd Edition	mg/L	Max 300	56.04
<b>METALS</b>				
Copper*	APHA 3120 B-23rd Edition	mg/L	Max 1.0	<0.05
Iron*	APHA 3120 B-23rd Edition	mg/L	Max 0.20	<0.05
Silver*	APHA 3120 B-23rd Edition	mg/L	-	<0.05

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets Department of Energy Water Quality Regulations (5th Edition/Document No-DoE/PD/R01/003)Jan- 2021 requirements for potable water with respect to the above tests only.
Keywords	pH: Potential Hydrogen, APHA: American Public Health Association, DoE: Department of Energy, SOP: Standard Operating Procedure, NA: Not Applicable, NP: Not Provided.
Test method deviation	None
Test performed by Emp#	13
Report prepared by Emp#	22
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## TEST REPORT

Report No: QMTL/R-148289/2021

CLIENT : CRYSTALLINE ENVIRONMENTAL SERVICES Abu Dhabi PO Box : 131463 United Arab Emirates	Sample ID	QMTL/S-148289	
	Date Received	14 Feb 2021	
	Date(s) Tested	14 Feb 2021 - 17 Feb 2021	
	ATTN : MR. JASMAN PINTO	Date Reported	23 Feb 2021
Sample Description	Copper - Silver Ionisation – P2 Water Tank # 06		
Sample Type	Water	Sampling Method	QMTL-SOP-128
Client Name/Project	NP	Sampled By	QMTL Representative
Location	Healthpoint Hospital, Abu Dhabi	Sampling Date/Time	14.02.2021/ 11:10 AM
Sample Container	1x500ml PB	Sampling Point	Tank
Sample Receipt Temp	18°C	Sample Onsite Temp	18°C
Sample Appearance	Clear	On-site Treatment	NA
Reference	NP		

### TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	GUIDELINES	RESULTS
<b>PHYSICAL PARAMETERS</b>				
Conductivity*	APHA 2510 B-23rd Edition	µs/cm	-	276@24.2°C
pH*	APHA 4500 H+B-23rd Edition	-	Min 7.0-Max 9.2	7.89@24.2°C
Total Dissolved Solids*	APHA 2540-C-23rd Edition	mg/L	Min 100-Max 600	180
<b>CHEMICAL PARAMETERS</b>				
Calcium Hardness*	APHA 3500 Ca B-23rd Edition	mg/L	Max 200	44.9
Chloride*	APHA 4500 Cl <sup>-</sup> B-23rd Edition	mg/L	Max 250	62.9
Total Hardness as (CaCO <sub>3</sub> )*	APHA 2340-C-23rd Edition	mg/L	Max 300	63.5
<b>METALS</b>				
Copper*	APHA 3120 B-23rd Edition	mg/L	Max 1.0	<0.05
Iron*	APHA 3120 B-23rd Edition	mg/L	Max 0.20	<0.05
Silver*	APHA 3120 B-23rd Edition	mg/L	-	<0.05

The Analysis results denoted by (\*) are part of the laboratory ENAS Accreditation to ISO/IEC 17025 : 2017.

Remarks	The sample meets Department of Energy Water Quality Regulations (5th Edition/Document No-DoE/PD/R01/003)Jan- 2021 requirements for potable water with respect to the above tests only.
Keywords	pH: Potential Hydrogen, APHA: American Public Health Association, DoE: Department of Energy, SOP: Standard Operating Procedure, NA: Not Applicable, NP: Not Provided.
Test method deviation	None
Test performed by Emp#	13
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