



Microbiology Test Report

Customer Details

Crystalline Cleaning & Environmental Services

P.O.Box: 131463 Warehouse no: 84, M-45. Mussafah, Abu Dhabi, UAE.

Report No. WA-R-L-2009-19682



Request No. : WA-Q-L-2009-02940

Sample No. : WA-S-L-2009-18899

Sampling Date	: 12/09/2020	Report Date.	: 16/10/2020
Analysis Start Date.	: 12/09/2020	Analysis End Date.	: 15/09/2020
Sample Location.	: Zayed University	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1795	Sampling Method	: APHA 9060 A&B
Temperature °C	: 13.5	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water Plant

Sampling Point	: Female Side FF2	Preservation	: 4-8°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Escherichia Coli	APHA 9222 B,H& I 23rd Ed. 2017	CFU/100ml	Not Detected	-
Faecal Coliforms	APHA 9222 D 23rd Ed. 2017	CFU/100ml	Not Detected	-
Heterotrophic plate count	APHA 9215 B 23rd Ed. 2017	CFU/ml	Not Detected	10000CFU/ml
Pseudomonas aeroginosa	CCFRA 2.5.2 5th Ed. 2007	CFU/250ml	Not Detected	-
Total Coliforms	APHA 9222 B 23rd Ed. 2017	CFU/100ml	Not Detected	-

Note : Not Detected=<1CFU

Limit based on DM.Rev2.Dated 6/2010 for guidelines for control of legionella in water system. Public Safety

Department

Remarks :The tested results of the sample are found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; APHA-American Public Health Association; CCFRA-Campden Chorleywood Food Research Association.

Signed for and on behalf of Wimpey Laboratories



Dr. Suresh Murugan Ph.D

Head of Microbiology Department

Test results relate only to the samples tested.This report shall not be reproduced except in full, without the written approval of the Laboratory. This is a LIMS software generated document with E Signature.

Form No: WARF-MB-01 Issue No.:01 Rev No:00 Issued Date:22-01-2020

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Microbiology Test Report

Customer Details

Crystalline Cleaning & Environmental Services

P.O.Box: 131463 Warehouse no: 84, M-45. Mussafah, Abu Dhabi, UAE.

Report No. WA-R-L-2009-19681



Request No. : WA-Q-L-2009-02940

Sample No. : WA-S-L-2009-18898

Sampling Date	: 12/09/2020	Report Date.	: 16/09/2020
Analysis Start Date.	: 12/09/2020	Analysis End Date.	: 15/09/2020
Sample Location.	: Zayed University	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1795	Sampling Method	: APHA 9060 A&B
Temperature °C	: 13	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water Plant Room
Sampling Point	: Male Side M1	Preservation	: 4-8°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Escherichia Coli	APHA 9222 B,H& I 23rd Ed. 2017	CFU/100ml	Not Detected	-
Faecal Coliforms	APHA 9222 D 23rd Ed. 2017	CFU/100ml	Not Detected	-
Heterotrophic plate count	APHA 9215 B 23rd Ed. 2017	CFU/ml	Not Detected	10000CFU/ml
Pseudomonas aeruginosa	CCFRA 2.5.2 5th Ed. 2007	CFU/250ml	Not Detected	-
Total Coliforms	APHA 9222 B 23rd Ed. 2017	CFU/100ml	Not Detected	-

Note : Not Detected=<1CFU

Limit based on DM.Rev2.Dated 6/2010 for guidelines for control of legionella in water system. Public Safety

Department

Remarks :The tested results of the sample are found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; APHA-American Public Health Association; CCFRA-Campden Chorleywood Food Research Association.

Signed for and on behalf of Wimpey Laboratories

Dr. Suresh Murugan Ph.D

Head of Microbiology Department



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Microbiology Test Report

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Crystalline Cleaning & Environmental Services

P.O.Box: 131463 Warehouse no: 84, M-45. Mussafah, Abu Dhabi, UAE.

Report No. WA-R-L-2009-19680



Request No. : WA-Q-L-2009-02940

Sample No. : WA-S-L-2009-18897

Sampling Date	: 12/09/2020	Report Date.	: 16/09/2020
Analysis Start Date.	: 12/09/2020	Analysis End Date.	: 15/09/2020
Sample Location.	: Zayed University	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1795	Sampling Method	: APHA 9060 A&B
Temperature °C	: 14	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water Plant

Sampling Point	: SV2	Preservation	: 4-8°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Escherichia Coli	APHA 9222 B,H& I 23rd Ed. 2017	CFU/100ml	Not Detected	-
Faecal Coliforms	APHA 9222 D 23rd Ed. 2017	CFU/100ml	Not Detected	-
Heterotrophic plate count	APHA 9215 B 23rd Ed. 2017	CFU/ml	Not Detected	10000CFU/ml
Pseudomonas aeroginosa	CCFRA 2.5.2 5th Ed. 2007	CFU/250ml	Not Detected	-
Total Coliforms	APHA 9222 B 23rd Ed. 2017	CFU/100ml	Not Detected	-

Note : Not Detected=<1CFU

Limit based on DM.Rev2.Dated 6/2010 for guidelines for control of legionella in water system. Public Safety Department

Remarks :The tested results of the sample are found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; APHA-American Public Health Association; CCFRA-Campden Chorleywood Food Research Association.

Signed for and on behalf of Wimpey Laboratories



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Head of Microbiology Department

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P.O.Box: 131463 Warehouse no: 84, M-45. Mussafah, Abu Dhabi, UAE.

Report No. WA-R-L-2009-19679



Request No. : WA-Q-L-2009-02940

Sample No. : WA-S-L-2009-18896

Sampling Date	: 12/09/2020	Report Date.	: 16/09/2020
Analysis Start Date.	: 12/09/2020	Analysis End Date.	: 15/09/2020
Sample Location.	: Zayed University	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1795	Sampling Method	: APHA 9060 A&B
Temperature °C	: 13	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water Plant
		Room	
Sampling Point	: SV1	Preservation	: 4-8°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Escherichia Coli	APHA 9222 B,H& I 23rd Ed. 2017	CFU/100ml	Not Detected	-
Faecal Coliforms	APHA 9222 D 23rd Ed. 2017	CFU/100ml	Not Detected	-
Heterotrophic plate count	APHA 9215 B 23rd Ed. 2017	CFU/ml	Not Detected	10000CFU/ml
Pseudomonas aeroginosa	CCFRA 2.5.2 5th Ed. 2007	CFU/250ml	Not Detected	-
Total Coliforms	APHA 9222 B 23rd Ed. 2017	CFU/100ml	Not Detected	-

Note : Not Detected=<1CFU

Limit based on DM.Rev2.Dated 6/2010 for guidelines for control of legionella in water system. Public Safety

Department

Remarks :The tested results of the sample are found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; APHA-American Public Health Association; CCFRA-Campden Chorleywood Food Research Association.

Signed for and on behalf of Wimpey Laboratories



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CRYSTALLINE ENVIRONMENTAL SERVICES

CONSULTING TEST REPORT

CUSTOMER: SERCO,ZAYED UNIVERSITY	DATE: 12-09-2020
SOURCE OF SAMPLE: CHILLED WATER	SAMPLE POINT: SV1 CHW(PLANT ROOM)

CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
Ph	9.0 - 10.5	9.18
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1280
TDS, ppm	--	832
Iron, ppm as Fe	0 - 2.0	0.08
Treatment Residuals		
Nitrite, ppm	> 800	640
Dipslide	<10 ³	ND

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

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.
Corrosion Inhibitor levels are low	Please maintained control limits above 800PPM.

Reported By


Murugaraaj
Service Engineer



CLEANER WATER GREENER TOMORROW



CRYSTALLINE ENVIRONMENTAL SERVICES

CONSULTING TEST REPORT

CUSTOMER: SERCO,ZAYED UNIVERSITY	DATE: 12-09-2020
SOURCE OF SAMPLE: CHILLED WATER	SAMPLE POINT: SV2 CHW(PLANT ROOM)

CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
Ph	9.0 - 10.5	9.74
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	2084
TDS, ppm	--	1354
Iron, ppm as Fe	0 - 2.0	0.06
Treatment Residuals		
Nitrite, ppm	> 800	1620
Dipslide	<10 ³	ND

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

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.
Corrosion Inhibitor levels are satisfactory	No action recommended.

Reported By

Murugaraaj
Service Engineer



CLEANER WATER GREENER TOMORROW



CRYSTALLINE ENVIRONMENTAL SERVICES

CONSULTING TEST REPORT

CUSTOMER: SERCO,ZAYED UNIVERSITY	DATE: 12-09-2020
SOURCE OF SAMPLE: CHILLED WATER	SAMPLE POINT: MALE SIDE M1 CHW

CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
Ph	9.0 - 10.5	9.19
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1248
TDS, ppm	--	811
Iron, ppm as Fe	0 - 2.0	0.46
Treatment Residuals		
Nitrite, ppm	> 800	750
Dipslide	<10 ³	ND

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

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.
Corrosion Inhibitor levels are low	Please maintained control limits above 800PPM.

Reported By


Murugaraaj
Service Engineer



CLEANER WATER GREENER TOMORROW



CRYSTALLINE ENVIRONMENTAL SERVICES

CONSULTING TEST REPORT

CUSTOMER: SERCO,ZAYED UNIVERSITY	DATE: 12-09-2020
SOURCE OF SAMPLE: CHILLED WATER	SAMPLE POINT: FEMALE SIDE FF2 CHW

CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
Ph	9.0 - 10.5	9.16
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1253
TDS, ppm	--	814
Iron, ppm as Fe	0 - 2.0	0.07
Treatment Residuals		
Nitrite, ppm	> 800	780
Dipslide	<10 ³	ND

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

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.
Corrosion Inhibitor levels are low	Please maintained control limits above 800PPM.

Reported By


Murugaraaj
Service Engineer



CLEANER WATER GREENER TOMORROW