



**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-2009-19474



Request No. : WA-Q-L-2009-02920

Sample No. : WA-S-L-2009-18702

Sampling Date	: 10/09/2020	Report Date.	: 14/09/2020
Analysis Start Date.	: 10/09/2020	Analysis End Date.	: 13/09/2020
Sample Location.	: Galleria Mall	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1790	Sampling Method	: APHA 9060 A & B
Temperature °C	: 17	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water (P2 North Side) PHEX-NE-B3-02
Sampling Point	: ETS Room #01 R 07730	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
SN	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

- End of Text -



**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-2009-19475



Request No. : WA-Q-L-2009-02920

Sample No. : WA-S-L-2009-18703

Sampling Date	: 10/09/2020	Report Date.	: 14/09/2020
Analysis Start Date.	: 10/09/2020	Analysis End Date.	: 13/09/2020
Sample Location.	: Galleria Mall	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1790	Sampling Method	: APHA 9060 A & B
Temperature °C	: 16	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water (P2 North Side) PHEX-NE-B3-04
Sampling Point	: ETS Room #01 R 07730	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
SN	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

- End of Text -



**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-2009-19476



Request No. : WA-Q-L-2009-02920

Sample No. : WA-S-L-2009-18704

Sampling Date	: 10/09/2020	Report Date.	: 14/09/2020
Analysis Start Date.	: 10/09/2020	Analysis End Date.	: 13/09/2020
Sample Location.	: Galleria Mall	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1790	Sampling Method	: APHA 9060 A & B
Temperature °C	: 15	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water (P2 North Side) PHEX-NE-B3-03
Sampling Point	: ETS Room #02 R 07728	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= $\leq$ 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
SN	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

- End of Text -



**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-2009-19477



Request No. : WA-Q-L-2009-02920

Sample No. : WA-S-L-2009-18705

Sampling Date	: 10/09/2020	Report Date.	: 14/09/2020
Analysis Start Date.	: 10/09/2020	Analysis End Date.	: 13/09/2020
Sample Location.	: Galleria Mall	Sampled By	: Amin ullah
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 1790	Sampling Method	: APHA 9060 A & B
Temperature °C	: 17	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Chilled Water (P2 North Side) PHEX-NE-B3-05
Sampling Point	: ETS Room #02 R 07728	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= $\leq$ 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
SN	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

- End of Text -



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

<b>CUSTOMER: SERCO MIDDLE EAST, ABU DHABI</b>	
<b>SITE LOCATION: GALLERIA MALL (GAMI)</b>	<b>SAMPLE POINT: ETS ROOM # 01- R 07730</b>
<b>SOURCE OF SAMPLE: (P2 NORTH SIDE) PHEX-NE-B3-02</b>	<b>DATE: 10-09-2020</b>

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
Ph	9.0 - 10.5	9.72
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1687
TDS, ppm	--	1096
Iron, ppm as Fe	0 - 2.0	0.33
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	830
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.
Corrosion Inhibitor levels are satisfactory $\Rightarrow$	No action recommended.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

<b>CUSTOMER: SERCO MIDDLE EAST, ABU DHABI</b>	
<b>SITE LOCATION: GALLERIA MALL (GAMI)</b>	<b>SAMPLE POINT: ETS ROOM # 01- R 07730</b>
<b>SOURCE OF SAMPLE: (P2 NORTH SIDE) PHEX-NE-B3-04</b>	<b>DATE: 10-09-2020</b>

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	8.09
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1178
TDS, ppm	--	765
Iron, ppm as Fe	0 - 2.0	1.53
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	590
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 <input type="checkbox"/>	No action recommended.
The Conductivity levels are satisfactory <input type="checkbox"/>	No action recommended.
Dissolved iron levels are within the control limits. <input type="checkbox"/>	No action recommended.
Corrosion Inhibitor levels are satisfactory <input type="checkbox"/>	No action recommended.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

<b>CUSTOMER: SERCO MIDDLE EAST, ABU DHABI</b>	
<b>SITE LOCATION: GALLERIA MALL (GAMI)</b>	<b>SAMPLE POINT: ETS ROOM # 02- R 07728</b>
<b>SOURCE OF SAMPLE: (P2 NORTH SIDE) PHEX-NE-B3-03</b>	<b>DATE: 10-09-2020</b>

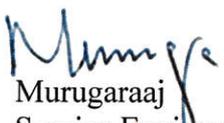
### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	9.72
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1960
TDS, ppm	--	1274
Iron, ppm as Fe	0 - 2.0	0.03
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	870
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.
Corrosion Inhibitor levels are satisfactory $\Rightarrow$	No action recommended.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**



# CRYSTALLINE ENVIRONMENTAL SERVICES

## CONSULTING TEST REPORT

<b>CUSTOMER: SERCO MIDDLE EAST, ABU DHABI</b>	
<b>SITE LOCATION: GALLERIA MALL (GAMI)</b>	<b>SAMPLE POINT: ETS ROOM # 02- R 07728</b>
<b>SOURCE OF SAMPLE: (P2 NORTH SIDE) PHEX-NE-B3-05</b>	<b>DATE: 10-09-2020</b>

### CHILLED WATER ANALYSIS

PARAMETER	CONTROL LIMITS	RESULTS
pH	9.0 - 10.5	9.69
Conductivity, $\mu\text{s}/\text{cm}$	Max 3500	1692
TDS, ppm	--	1099
Iron, ppm as Fe	0 - 2.0	0.30
<b>Treatment Residuals</b>		
Nitrite, ppm	> 800	820
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.
Corrosion Inhibitor levels are satisfactory $\Rightarrow$	No action recommended.

Reported By

  
Murugaraaj  
Service Engineer



**CLEANER WATER GREENER TOMORROW**