



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-2101-31938



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31395

Sampling Date	: 07/01/2021	Report Date.	: 11/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 10/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: APHA 9060 A&B
Temperature °C	: 9.1	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Basement 2 ETS Room
Sampling Point	: Low Zone	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

Limits based on RSB Water Quality Regulation 2014. Schedule 1. Table F For Microbiological Parameters.

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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Legionella 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-2101-31941



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31398

Sampling Date	: 07/01/2021	Report Date.	: 17/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 17/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: BS 7592
Temperature °C	: 9.1	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Basement 2 ETS Room
Sampling Point	: Low Zone	Preservation	: 10°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Legionella	ISO 11731: 2017	CFU/L	Not Detected	100CFU/L

Note : Limit of Detection=<20CFU/L

Procedure: WSOP-MB-0051. Filtration, Washing, Heat Treatment, Acid Treatment followed by Plating on GVPC/BCYE Agar.

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

Remarks :The tested result of the sample is found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; BS-British Standard; ISO-International Organization for Standardization.

Signed for and on behalf of Wimpey Laboratories



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Head of Microbiology Department

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Microbiology Test Report

Customer Details

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

Report No. WA-R-L-2101-31939



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31396

Sampling Date	: 07/01/2021	Report Date.	: 11/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 10/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: APHA 9060 A&B
Temperature °C	: 9.6	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Basement 2 ETS Room
Sampling Point	: High Zone	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

Limits based on RSB Water Quality Regulation 2014. Schedule 1. Table F For Microbiological Parameters.

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.

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Legionella 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-2101-31942



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31399

Sampling Date	: 07/01/2021	Report Date.	: 17/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 17/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: BS 7592
Temperature °C	: 9.6	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: Basement 2 ETS Room
Sampling Point	: High Zone	Preservation	: 10°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Legionella	ISO 11731: 2017	CFU/L	Not Detected	100CFU/L

Note : Limit of Detection=<20CFU/L

Procedure: WSOP-MB-0051. Filtration, Washing, Heat Treatment, Acid Treatment followed by Plating on GVPC/BCYE Agar.

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

Remarks :The tested result of the sample is found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; BS-British Standard; ISO-International Organization for Standardization.

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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-2101-31940



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31397

Sampling Date	: 07/01/2021	Report Date.	: 11/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 10/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: APHA 9060 A&B
Temperature °C	: 11.1	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: 27th Floor ETS Room
Sampling Point	: Not Given	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

Limits based on RSB Water Quality Regulation 2014. Schedule 1. Table F For Microbiological Parameters.

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.

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Legionella 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-2101-31943



Request No. : WA-Q-L-2101-04503

Sample No. : WA-S-L-2101-31400

Sampling Date	: 07/01/2021	Report Date.	: 17/01/2021
Analysis Start Date.	: 07/01/2021	Analysis End Date.	: 17/01/2021
Sample Location.	: City of Lights Horizon Tower	Sampled By	: Shoukth
Sample Identification	: Not Given	Sample Submitted as	: Water
Sample Certificate No	: 3289	Sampling Method	: BS 7592
Temperature °C	: 11.1	Site Observation	: Clear
Sampling Container	: Sterile Plastic Bottle	Source of Sample	: 27th Floor ETS Room
Sampling Point	: Not Given	Preservation	: 10°C
Sample Description	: Chilled Water		

Parameters	Test Methods	Units	Results	Specification
Legionella	ISO 11731: 2017	CFU/L	Not Detected	100CFU/L

Note : Limit of Detection= \leq 20CFU/L

Procedure: WSOP-MB-0051. Filtration, Washing, Heat Treatment, Acid Treatment followed by Plating on GVPC/BCYE Agar.

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

Remarks :The tested result of the sample is found to be satisfactory within the specified limits.

Analyst	Reviewed By	Method Variation
HS	SM	None

Key Words :CFU-Colony Forming Unit; BS-British Standard; ISO-International Organization for Standardization.

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CLIENT: TAFAWUQ FACILITY MANAGEMENT
 SITE: HORIZON TOWER
 AL REEM ISLAND
 ABU DHABI

VISIT DATE: 26 Jan 2021

CHILLED WATER ANALYSIS

Test	E1 HZ	E1 LZ	E2 HZ			
pH	9.72	9.89	9.62			
	8.5 - 10.0	8.5 - 10.0	8.5 - 10.0			
Conductivity, $\mu\text{s}/\text{cm}$	1892	2034	1790			
	< 2250	< 2250	< 2250			
Total Dissolved Solid, ppm	1229	2033	1163			
	< 1500	< 1500	< 1500			
Iron, ppm as Fe	<0.10	<0.10	0.16			
	0 - 1	0 - 1	0 - 1			
Total Hardness, ppm	87	64	54			
	< 100	< 100	< 100			
Total Alkalinity, ppm	76	69	63			
	< 250	< 250	< 250			
Chlorides as Cl ⁻ , ppm	54	57	61			
	< 150	< 150	< 150			
Nitrite, ppm	830	880	820			
	800 - 1000	800 - 1000	800 - 1000			

BUILDING	COMMENTS	ACTION
E1 HZ	All Parameters are in within control limit	No action recommended
E1 LZ	All Parameters are in within control limit	No action recommended
E2 HZ	All Parameters are in within control limit	No action recommended

Reported By:

Murugaraaj
 Murugaraaj

Service Engineer

