

เอกสารแนบ 4

เอกสารการตรวจวัดคุณภาพสิ่งแวดล้อม



ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 Baan Klang Krung Biz Town, Soi Srinagarindra 46/1 (Pramote), NONG BON Sub-district, PRAWET District, BANGKOK 10250

Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 29/07/2565 Analytical Date : 01-10/08/2022
Sample Type : Waste water Report Date : 10/08/2022
Customer Code : JP 023-7-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	6.9	6.1	7.0	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	319	36	19	20
Total Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	55	60	22	30
Total Dissolved Solids	mg/L	Dried at 180 °C	<2.5	411	392	460	500*
Settleable Solids	ml/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	0.82	0.30	<0.30	1.0
TKN ²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	62	12	11	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	42	20	15	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	2.0 x 10 ⁶	5.0 x 10 ⁴	7.8 x 10 ⁴	-
Analysis No.				WW 2136	WW 2137	WW 2138	
Sampling Time				14:30	15:00	15:35	
Sample Condition				Black Sediment	Yellow Sediment	Yellow Sediment	

Regulatory Standard: Announcement of the Ministry of Science Technology and Environment Subject: Establishing Control Standards Drainage from certain types and sizes of buildings

: ²⁾ Subcontract: Test Tech

St.1 = Equalization Tank

St.2 = Clear Water Tank

St.3 = Discharged to the public

[Redacted Signature Area]

Analyst

Laboratory Manager



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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 26/08/2022 Analytical Date : 29/08-05/09/2022
Analysis No. : WW 2122 - WW 2124 Report Date : 05/09/2022
Sample Type : Waste water Customer Code : JP 023-8-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	6.9	7.6	7.4	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	456	6.5	23	20
Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	186	36	29	30
Total Dissolved Solids	mg/L	Dried at 180 °C	<2.5	336	504	412	500*
Settleable Solids	ml/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	<0.30	<0.30	<0.30	1.0
TKN ²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	42	16	20	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	13	11	6.3	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	4.6 x 10 ⁵	7.2 x 10 ³	7.2 x 10 ⁵	-
Analysis No.				WW 2122	WW 2123	WW 2124	
Sampling Time				14:30	14:45	14:00	
Sample Condition				Black	Yellow	Yellow	
				Sediment	Sediment	Sediment	

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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/09/2022 Analytical Date : 30/09-10/10/2022
Sample Type : Waste water Report Date : 10/10/2022
Customer Code : JP 023-9-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	7.0	5.9	6.6	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	412	22	16	20
Total Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	46	64	12	30
Total Dissolved Solids	mg/L	Dried at 180 °C	<2.5	312	494	466	500*
Settleable Solids	ml/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	0.66	0.32	<0.30	1.0
TKN ²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	51	7.2	5.5	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	35	22	16	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	2.1 x 10 ⁷	5.2 x 10 ⁴	7.8 x 10 ⁴	-
Analysis No.				WW 2169	WW 2170	WW 2171	
Sampling Time				15:38	15:49	15:55	
Sample Condition				Black	Yellow	Yellow	
				Sediment	Sediment	Sediment	

Regulatory Standard: Announcement of the Ministry of Science Technology and Environment Subject: Establishing Control Standards Drainage from certain types and sizes of buildings

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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 26/10/2022 Analytical Date : 27/10-04/11/2022
Sample Type : Waste water Report Date : 09/11/2022
Customer Code : JP 023-10-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	7.1	5.4	6.4	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	426	22	12	20
Total Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	44	55	18	30
Total Dissolved Solids	mg/L	Dried at 180 °C	<2.5	310	512	500	500*
Settleable Solids	ml/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	0.57	0.30	<0.30	1.0
TKN ²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	45	7.4	5.6	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	40	19	18	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	2.4 x 10 ⁷	5.4 x 10 ⁴	7.9 x 10 ⁴	-
Analysis No.				WW 2169	WW 2170	WW 2171	
Sampling Time				15:29	15:24	15:39	
Sample Condition				Black	Yellow	Yellow	
				Sediment	Sediment	Sediment	

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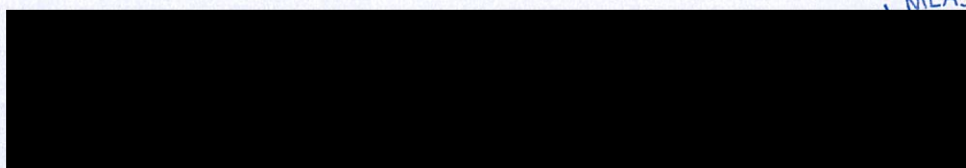
ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 26/10/2022 Analytical Date : 27-31/10/2022
Sample Type : Swimming Pool Report Date : 04/11/2022
Customer Code : JP 023-10-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Swimming Pool	
pH	-	Electrometric Method	-	7.4	7.2-8.4
Free chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	0.47	0.6-1.0
Total Bacteria ²⁾	CFU/100ml	MPN Method	<1	26	-
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	10
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	-
<i>E. coli</i> ²⁾	/100ml	MPN Method, Detection	<1.8	Not detected	Not detected
Analysis No.				WW 2172	
Sampling Time				15:12	
Sample Condition				Clear	

Regulatory Standard : Ministry of Health (Thailand), Swimming pool business control or other similar businesses, 2007

: ²⁾ Subcontract: Test Tech



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10250

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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 26/10/2022 Analytical Date : 27-31/10/2022
Sample Type : Drinking Water (Ice) Report Date : 04/11/2022
Customer Code : JP-023-10-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Machine Room Service FL.2	
Standard plate count ²⁾	CFU/ml	Pour Plate Method	<1.1	1.4×10^2	-
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	Not detected
<i>E. coli</i> ²⁾	/100ml	MPN Method, Detection	<1.1	Not detected	Not detected
Analysis No.				WW 2173	
Sampling Time				14:57	
Sample Condition				Clear	

Regulatory Standard : World Health Organization Recommendation Criteria for Drinking Water Quality, 2013

: ²⁾ Subcontract: Test Tech



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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/11/2022 Analytical Date : 02-16/12/2022
Sample Type : Waste water Report Date : 16/12/2022
Customer Code : JP 023-11-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	6.7	6.4	6.8	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	700	11	8.5	20
Total Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	368	18	9.8	30
Total Dissolved Solids	mg/L	Dried at 103-105 °C	<2.5	374	642	462	500*
Settleable Solids	m/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	0.47	<0.30	<0.30	1.0
TKN ⁽²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	58	4.2	5.4	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	38	<2.0	<2.0	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ⁽²⁾	MPN/100ml	MPN Method	<1.8	3.3 x 10 ⁵	9.2 x 10 ³	2.4 x 10 ³	-
Analysis No.				WW 2490	WW 2491	WW 2492	
Sampling Time				14:08	14:01	14:13	
Sample Condition				Grey Sediment	Yellow Sediment	Yellow Sediment	

Regulatory Standard: Announcement of the Ministry of Science Technology and Environment Subject: Establishing Control Standards Drainage from certain types and sizes of buildings

: ²⁾ Subcontract: Test Tech

: Total Dissolved Solids for Tap water 190 mg/L

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St.3 = Discharged to the public



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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/11/2022 Analytical Date : 02-13/12/2022
Sample Type : Tap Water Report Date : 15/12/2022
Customer Code : JP 023-11-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Shower Water (Room 2616)	
<i>Legionella spp.</i> ²⁾	CFU/L	Membrane Filtration Technique	Not detected	Not detected	Not detected
<i>E. Coli</i> ²⁾	/100ml	MPN Method, Detection	<1.1	Not detected	Not detected
Analysis No.				WW 2496	
Sampling Time				13:28	
Sample Condition				Clear	

Regulatory Standard : Criteria to determine the quality of tap water Metropolitan Waterworks Authority, 2017

: ²⁾ Subcontract: Test Tech



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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/11/2022 Analytical Date : 02-12/12/2022
Sample Type : Drinking Water Report Date : 15/12/2022
Customer Code : JP-023-11-00

Parameter	Unit	Method of Analysis	Detection Limit	Result		Regulatory Standard
				Voila Room service (FL.2)	Canteen (FL.6)	
Colour, Odour	-	Sensory Test	-	Not detected	Not detected	Not detected
Turbidity	NTU	Nephelometric	<0.01	0.25	0.06	5
pH	-	Electrometric	-	6.8	7.5	6.5-9
Total Solids	mg/L	Dried at 103-105 °C	<2.5	12	153	-
Chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric	<0.10	<0.10	<0.10	250
Total Hardness	mg/L as CaCO ₃	EDTA Titrimetric	<1.0	8.0	104	500
Nitrate-Nitrogen ²⁾	mg/L as NO ₃ -N	Cadmium Reduction	<0.05	<0.05	0.57	50
Sulfate ²⁾	mg/L as SO ₄ ²⁻	Turbidimetric	<5.00	<5.00	23	1000
Arsenic (As) ²⁾	mg/L	Hydride Generation, AAS	<0.0020	<0.0020	<0.0020	0.01
Barium (Ba) ²⁾	mg/L	Direct Aspiration, AAS	<0.02	<0.02	0.06	1.7
Cadmium (Cd) ²⁾	mg/L	In-house method:TE-03	<0.002	<0.002	<0.002	0.03
Chromium (Cr) ²⁾	mg/L	Direct Aspiration, AAS	<0.01	<0.01	<0.01	0.05
Copper (Cu) ²⁾	mg/L	Direct Aspiration, AAS	<0.01	<0.01	0.02	1
Iron (Fe) ²⁾	mg/L	Phenanthroline Method	<0.10	<0.10	<0.10	0.3
Lead (Pb) ²⁾	mg/L	Direct Aspiration, AAS	<0.01	<0.01	<0.01	0.01
Manganese (Mn) ²⁾	mg/L	Persulfate	<0.04	<0.04	<0.04	0.1
Mercury (Hg) ²⁾	mg/L	Cold Vapor, AAS	<0.0010	<0.0010	<0.0010	0.001
Selenium (Se) ²⁾	mg/L	Hydride Generation	<0.0005	<0.0005	<0.0005	0.01
Silver (Ag) ²⁾	mg/L	Direct Aspiration, AAS	<0.01	<0.01	<0.01	0.005
Zinc (Zn) ²⁾	mg/L	Direct Aspiration, AAS	<0.01	<0.01	0.03	4
Aluminum (Al) ²⁾	mg/L	Direct Aspiration, AAS	<0.05	0.07	0.10	0.2
Phenol ²⁾	mg/L	Direct Photometric	<0.001	<0.001	<0.001	-
Cyanide ²⁾	mg/L as CN ⁻	Direct Photometric	<0.005	<0.005	<0.005	0.07
Analysis No.				WW 2494	WW 2495	
Sampling Time				13:39		
Sample Condition				Clear	Clear	

Analyst

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Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/11/2022 Analytical Date : 02-12/12/2022
Sample Type : Drinking Water Report Date : 15/12/2022
Customer Code : JP-023-11-00

Parameter	Unit	Method of Analysis	Detection Limit	Result		Regulatory Standard
				Voila Room service (FL.2)	Canteen (FL.6)	
Residual Chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric	<0.10	<0.10	<0.10	0.6-1.1
Alkylbenzene Sulphonate ²⁾	mg/L	Colorimetric Method	<0.10	<0.10	<0.10	-
Fluoride ²⁾	mg/L as F ⁻	Distillation, SPADNS	<0.30	<0.30	0.40	1.5
Total Bacteria ²⁾	CFU/ml	MPN Method	<1.1	Not detected	Not detected	Not detected
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	Not detected	Not detected	Not detected
<i>E. coli</i> ²⁾	MPN/100ml	MPN Method, Detection	<1.1	Not detected	Not detected	Not detected
<i>Staphylococcus aureus</i> ²⁾	/100ml	Membrane Filtration	ND	Not detected	Not detected	Not detected
<i>Salmonella spp.</i> ²⁾	/100ml	Membrane Filtration	ND	Not detected	Not detected	Not detected
<i>Clostridium perfringens</i> ²⁾	/100ml	Membrane Filtration	ND	Not detected	Not detected	Not detected
Analysis No.				WW 2494	WW 2495	
Sampling Time				13:39	13:13	
Sample Condition				Clear	Clear	

Regulatory Standard : World Health Organization Recommendation Criteria for Drinking Water Quality, 2013

: ²⁾ Subcontract: Test Tech

: ND = Not detected

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ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 30/11/2022 Analytical Date : 02-08/12/2022
Sample Type : Swimming Pool Report Date : 14/12/2022
Customer Code : JP 023-11-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Swimming Pool	
pH	-	Electrometric Method	-	8.2	7.2-8.4
Free chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	1.0	0.6-1.0
Total Bacteria ²⁾	CFU/100ml	MPN Method	<1	27	-
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	10
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	-
<i>E. coli</i> ²⁾	/100ml	MPN Method, Detection	<1.8	Not detected	Not detected
Analysis No.				WW 2493	
Sampling Time				13:18	
Sample Condition				Clear	

Regulatory Standard : Ministry of Health (Thailand), Swimming pool business control or other similar businesses, 2007

: ²⁾ Subcontract: Test Tech



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Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 19-28/12/2022
Sample Type : Waste water Report Date : 03/01/2023
Customer Code : JP 023-12-00

Parameter	Unit	Method of Analysis	Detection Limit	Result			Regulatory Standard
				St.1	St.2	St.3	
pH	-	Electrometric Method	-	6.7	6.3	6.6	5-9
BOD	mg/L	5 Day BOD Membrane Electrode	<2.0	390	21	6.2	20
Total Suspended Solids	mg/L	Dried at 103-105 °C	<2.5	335	22	25	30
Total Dissolved Solids	mg/L	Dried at 180 °C	<2.5	316	564	514	500*
Settleable Solids	mL/L	Volumetric Method	<0.1	<0.1	<0.1	<0.1	0.5
Sulfide	mg/L as H ₂ S	Iodometric Method	<0.30	0.39	0.12	<0.30	1.0
TKN ²⁾	mg/L as N	Macro-Kjeldahl Method	<0.01	46	5.2	10	35
Oil & Grease	mg/L	Partition - gravimetric method	<2.0	6.5	5.3	<2.0	20
Residue Chlorine	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	<0.10	<0.10	<0.10	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	3.5 x 10 ⁶	9.2 x 10 ³	1.3 x 10 ²	-
Analysis No.				WW 2648	WW 2649	WW 2650	
Sampling Time				15:13	15:08	13:35	
Sample Condition				Black Sediment	Yellow Sediment	Yellow Sediment	

Regulatory Standard: Announcement of the Ministry of Science Technology and Environment Subject: Establishing Control Standards Drainage from certain types and sizes of buildings

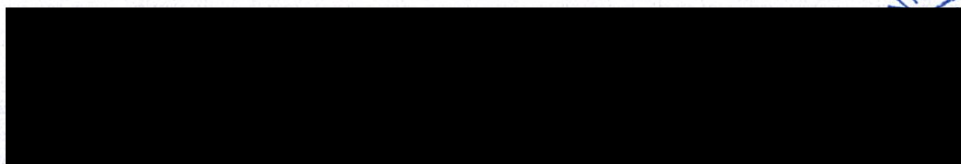
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: Tap water of Total Dissolved Solids 178 mg/L

St.1 = Equalization Tank

St.2 = Clear Water Tank

St.3 = Discharged to the public



Analyst

Laboratory Manager



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10250 Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 17-21/12/2022
Sample Type : Drinking Water Report Date : 22/12/2022
Customer Code : JP-023-12-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Voila Kitchen	
Total Bacteria ²⁾	CFU/ml	MPN Method	<1.1	<1.1	-
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	-
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	Not detected
<i>E. coli</i> ²⁾	MPN/100ml	MPN Method, Detection	<1.1	<1.1	Not detected
<i>Staphylococcus aureus</i> ²⁾	/100ml	Membrane Filtration	ND	Not detected	-
<i>Salmonella spp.</i> ²⁾	/100ml	Membrane Filtration	ND	Not detected	-
Analysis No.				WW 2653	
Sampling Time				14:56	
Sample Condition				Clear	

Regulatory Standard : World Health Organization Recommendation Criteria for Drinking Water Quality, 2013

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Laboratory Manager



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Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 17-27/12/2022
Sample Type : Cooling Water Report Date : 29/12/2022
Customer Code : JP 023-12-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Cooling Water	
<i>E. Coli</i> ²⁾	/100ml	MPN Method, Detection	<1.8	11	-
<i>Legionella spp.</i> ²⁾	/100ml	Membrane Filtration Method	ND	Not detected	Not detected
Analysis No.				WW 2652	
Sampling Time				14:31	
Sample Condition				Clear	

Regulatory Standard : Announcement of the department of health (Thailand), Practice for the control of legionella bacteria in cooling towers, January 2001

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Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 17-27/12/2022
Sample Type : Tap Water Report Date : 29/12/2022
Customer Code : JP-023-12-00

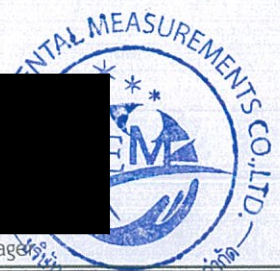
Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				Jacucci Room 3007	
pH	-	Electrometric Method	-	6.9	6.5-8.5
Free chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	2.0	0.2-2.0
Total Bacteria ²⁾	CFU/100ml	MPN Method	<1.1	<1	500
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	Not detected
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.1	<1.1	-
<i>E. coli</i> ²⁾	/100ml	MPN Method, Detection	<1.1	Not detected	Not detected
Analysis No.				WW 2655	
Sampling Time				14:42	
Sample Condition				Clear	

Regulatory Standard : Criteria to determine the quality of tap water Metropolitan Waterworks Authority, 2017
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Analyst

Laboratory Manager



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Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 17-27/12/2022
Sample Type : Tap Water Report Date : 29/12/2022
Customer Code : JP-023-12-00

Parameter	Unit	Method of Analysis	Detection Limit	Result	Regulatory Standard
				KAFFIR LIME	
<i>E. Coli</i> ²⁾	/100ml	MPN Method, Detection	<1.1	Not detected	Not detected
<i>Legionella spp.</i> ²⁾	CFU/L	Membrane Filtration Technique	Not detected	Not detected	Not detected
Analysis No.				WW 2654	
Sampling Time				14:19	
Sample Condition				Clear	

Regulatory Standard : Criteria to determine the quality of tap water Metropolitan Waterworks Authority, 2017

: ²⁾ Subcontract: Test Tech



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Tel: 0-2716-3506-7 Fax: 0-2716-3507

ANALYSIS REPORT

Customer Name : Sofitel Bangkok Sukhumvit
Address : 189 Sukhumvit Road Klong Toei Nuea Watthana Bangkok 10110
Sample Date : 15/12/2022 Analytical Date : 17-19/12/2022
Sample Type : Swimming Pool Report Date : 22/12/2022
Customer Code : JP 023-12-00

Parameter	Unit	Method of Analysis	Detection	Result	Regulatory Standard
			Limit	Swimming Pool	
pH	-	Electrometric Method	-	7.8	7.2-8.4
Free chlorine ²⁾	mg/L as Cl ₂	DPD Colorimetric Method	<0.10	0.78	0.6-1.0
Total Bacteria ²⁾	CFU/100ml	MPN Method	<1	<1	-
Total Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	10
Fecal Coliform Bacteria ²⁾	MPN/100ml	MPN Method	<1.8	<1.8	-
<i>E. coli</i> ²⁾	/100ml	MPN Method, Detection	<1.8	Not detected	Not detected
Analysis No.				WW 2651	
Sampling Time				14:15	
Sample Condition				Clear	

Regulatory Standard : Ministry of Health (Thailand), Swimming pool business control or other similar businesses, 2007

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