

Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12281/66

Parameters	Unit	Method	TW10824 /66	TW10825 /66	TW10826 /66	Standard ^a
			Water in Storage Tank	Soft Water System (Main Point)	Hot Water System (Main Point)	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	7.2	7.1	7.3	6.5-8.5
Turbidity [#]	NTU	SM 2017 (2130 B)	< 0.50	3.03	0.56	5
Conductivity [#]	uS/cm	SM 2017 (2510 B)	325	339	332	-
* Dissolved Solids	mg/L as NaCl	Electrical Conductivity	195	203	199	1000
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	75	81	79	300
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	38	39	38	250
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	0.20	0.15	0.3
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	0.05	< 0.04	0.1
Nitrate [#]	mg/L as NO ₃ ⁻	SM 2017 (4500-NO ₃ ⁻ E)	0.97	0.90	1.08	50
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ B)	37.32	31.00	38.83	250
Sample Condition		Observation	Clear	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. Test marked "# " on this report are Accredited International Standard ISO/IEC 17025 by BLA-DSS.

3. Test marked "@ " on this report are Accredited International Standard ISO/IEC 17025 by BLQS-DMSQ.

4. Test marked " * " on this report are not included in scope of Accreditation

5. a : Specification for Water Supply Quality of Metropolitan Waterworks Authority.



Analyst

30/05/2023

Technical Manager

30/05/2023

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Sample Type : Usage Water

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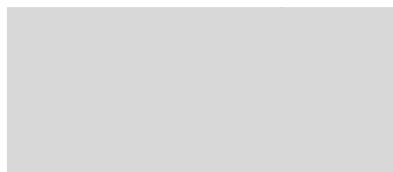
Report No. : R12282/66

Parameters	Unit	Method	TW10824 /66	TW10825 /66	TW10826 /66	Standard ^a
			Water in Storage Tank	Soft Water System (Main Point)	Hot Water System (Main Point)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	< 1.1	not found
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	not found	not found
Sample Condition		Observation	Clear	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Specification for Water Supply Quality of Metropolitan Waterworks Authority.

3. Coliform Bacteria < 1.1 MPN/100 mL is meaning not found



Analyst

30/05/2023

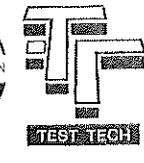
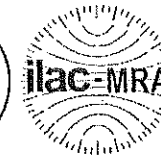


Technical Manager

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12283/66

Parameters	Unit	Method	TW10827 /66	TW10828 /66	Standard ^a
			Guest Room Cold Water (North A 1615)	Guest Room Cold Water (South A 1910)	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	7.6	7.7	6.5-8.5
Turbidity [#]	NTU	SM 2017 (2130 B)	< 0.50	< 0.50	5
Conductivity [#]	uS/cm	SM 2017 (2510 B)	333	335	-
* Dissolved Solids	mg/L as NaCl	Electrical Conductivity	200	201	1000
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	78	74	300
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	38	36	250
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	< 0.10	0.3
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	< 0.04	0.1
Nitrate [#]	mg/L as NO ₃ ⁻	SM 2017 (4500-NO ₃ ⁻ E)	1.02	0.94	50
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ E)	39.13	37.62	250
Sample Condition		Observation	Clear	Clear	

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya
Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand
Sampling Site : Centara Grand (Pattaya) Sample Type : Usage Water
Sampling by : Test Tech Co., Ltd. Sampling Method : Grab
Sampling Date : 16/05/2023 Sampling Time : 11:00 AM
Received Date : 16/05/2023 Analytical Date : 16 - 29/05/2023
Report Date : 30/05/2023 Report No. : R12284/66

Parameters	Unit	Method	TW10827 /66	TW10828 /66	Standard ^a
			Guest Room Cold Water (North A 1615)	Guest Room Cold Water (South A 1910)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	not found
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	not found
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017
2. a : Specification for Water Supply Quality of Metropolitan Waterworks Authority.
3. Coliform Bacteria < 1.1 MPN/100 mL is meaning not found



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30/05/2023



Technical Manager
30/05/2023

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12285/66

Parameters	Unit	Method	TW10829 /66	TW10830 /66	Standard ^a
			Guest Room Hot Water (North A 1615)	Guest Room Hot Water (South A 1910)	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	7.3	7.4	6.5-8.5
Turbidity [#]	NTU	SM 2017 (2130 B)	0.65	0.59	5
Conductivity [#]	uS/cm	SM 2017 (2510 B)	331	332	-
Dissolved Solids [*]	mg/L as NaCl	Electrical Conductivity	199	199	1000
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	76	78	300
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl B)	38	38	250
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	< 0.10	0.3
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	< 0.04	0.1
Nitrate [#]	mg/L as NO ₃ ⁻	SM 2017 (4500-NO ₃ E)	1.05	1.22	50
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ E)	37.62	38.23	250
Sample Condition		Observation	Clear	Clear	

- Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017
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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya
Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand
Sampling Site : Centara Grand (Pattaya) Sample Type : Usage Water
Sampling by : Test Tech Co., Ltd. Sampling Method : Grab
Sampling Date : 16/05/2023 Sampling Time : 11:00 AM
Received Date : 16/05/2023 Analytical Date : 16 - 29/05/2023
Report Date : 30/05/2023 Report No. : R12286/66

Parameters	Unit	Method	TW10829 /66	TW10830 /66	Standard ^a
			Guest Room Hot Water (North A 1615)	Guest Room Hot Water (South A 1910)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	not found
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	not found
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Specification for Water Supply Quality of Metropolitan Waterworks Authority.

3. Coliform Bacteria < 1.1 MPN/100 mL is meaning not found



Analyst

30/05/2023

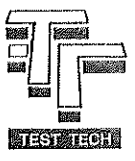


Technical Manager

30/05/2023

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12287/66

Parameters	Unit	Method	TW10831 /66	Standard ^a (Cooling Water)
			Cooling Water	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	8.6	8.5 - 9.5
Conductivity [#]	uS/cm	SM 2017 (2510 B)	1554	< 2500
* Dissolved Solids	mg/L as NaCl	Electrical Conductivity	932	< 2000
* P-Alkalinity	mg/L as CaCO ₃	Titration	20	-
* M-Alkalinity	mg/L as CaCO ₃	Titration	130	-
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	300	< 100
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	242	< 400
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	< 1.0
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	-
* Sulfate	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ E)	208	-
* Silica	mg/L as SiO ₂	SM 2017 (4500-SiO ₂ C)	27.48	-
* Total Phosphorus	mg/L as P	Stannous Chloride	0.07	-
Sample Condition		Observation	Light Yellow, a little bit Particles	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. Test marked "# " on this report are Accredited International Standard ISO/IEC 17025 by BLA-DSS.

3. Test marked "@ " on this report are Accredited International Standard ISO/IEC 17025 by BLQS-DMSO.

4. Test marked " * " on this report are not included in scope of Accreditation

5. a : เกณฑ์ควบคุมคุณภาพน้ำในระบบต่าง ๆ



Analyst

30/05/2023

Technical Manager

30/05/2023

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TESTING
NO.0001

Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12288/66

Parameters	Unit	Method	TW10831 /66
			Cooling Water
<i>Legionella spp.</i>	CFU/L	ISO 11731 : 2017	not detected
Sample Condition		Observation	Light Yellow, a little bit Particles

Analyst

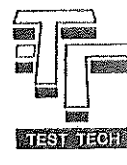
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Analysis/Test Report

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Sampling Site : Centara Grand (Pattaya)

Sample Type : Usage Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

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Analytical Date : 16 - 29/05/2023

Report Date : 30/05/2023

Report No. : R12289/66

Parameters	Unit	Method	TW10832 /66	Standard ^a (Chilled Water)
			Chilled Water	
pH (25°C)	-	Based on SM 2017 (4500-H ⁺ B)	10.1	7.5 - 9.5
Conductivity [#]	uS/cm	SM 2017 (2510 B)	899	-
* Dissolved Solids	mg/L as NaCl	Electrical Conductivity	539	-
* P-Alkalinity	mg/L as CaCO ₃	Titration	125	-
* M-Alkalinity	mg/L as CaCO ₃	Titration	255	-
* Total Hardness	mg/L as CaCO ₃	SM 2017 (2340 C)	6	-
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	42	-
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	0.13	< 1.0
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	-
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ E)	43.64	-
Silica [#]	mg/L as SiO ₂	SM 2017 (4500-SiO ₂ C)	4.22	-
* Nitrite	mg/L as NO ₂ ⁻	SM 2017 (4500-NO ₂ ⁻ B)	37.19	500 - 1000
Sample Condition		Observation	Clear	

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4. Test marked " * " on this report are not included in scope of Accreditation

5. a : เกณฑ์ควบคุมคุณภาพน้ำในระบบต่าง ๆ (Chilled Water)



Analyst

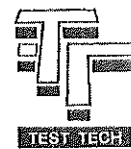
30/05/2023

Technical Manager

30/05/2023

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Accreditation No. 1201/54

TESTING
NO.0001

Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Drinking Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

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Received Date : 16/05/2023

Analytical Date : 16 - 23/05/2023

Report Date : 24/05/2023

Report No. : R11817/66

Parameters	Unit	Method	TW10833 /66	TW10834 /66	TW10835 /66	Standard ^a
			Drinking Water (Canteen)	Drinking Water (Oasis Kitchen)	Drinking Water (Guest Room 1615)	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	7.1	7.4	7.2	6.5-8.5
Turbidity [#]	NTU	SM 2017 (2130 B)	< 0.50	< 0.50	< 0.50	≤ 5.0
Conductivity [#]	uS/cm	SM 2017 (2510 B)	329	330	330	-
Dissolved Solids	mg/L as NaCl	Electrical Conductivity	197	198	198	-
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	72	74	75	≤ 100.0
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	38	38	38	≤ 250.0
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	0.21	< 0.10	≤ 0.3
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	< 0.04	< 0.04	≤ 0.05
Nitrate Nitrogen [#]	mg/L as NO ₃ -N	SM 2017 (4500-NO ₃ ⁻ E)	0.23	0.24	0.18	≤ 4.0
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ E)	37.32	37.62	36.72	≤ 250.0
Sample Condition		Observation	Clear	Clear	Clear	

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5. a : Notification of the Ministry of Public Health, No. 284 , B.E. 2547 (2004) on "Drinking Water in Sealed Container" (No.5)
(Included No. 135 , B.E. 2534 (1991) and No. 61, B.E. 2524 (1981))



Analyst

24/05/2023

Technical Manager

24/05/2023

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Sampling Site : Centara Grand (Pattaya)

Sample Type : Drinking Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 23/05/2023

Report Date : 24/05/2023

Report No. : R11818/66

Parameters	Unit	Method	TW10833 /66	TW10834 /66	TW10835 /66	Standard ^a
			Drinking Water (Canteen)	Drinking Water (Oasis Kitchen)	Drinking Water (Guest Room 1615)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	< 1.1	< 2.2
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	not found	negative
Sample Condition		Observation	Clear	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Notification of the Ministry of Public Health, No. 284 , B.E. 2547 (2004) on "Drinking Water in Sealed Container" (No.5)
(Included No. 135 , B.E. 2534 (1991) and No. 61, B.E. 2524 (1981))

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Sampling Site : Centara Grand (Pattaya)

Sample Type : Drinking Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

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Received Date : 16/05/2023

Analytical Date : 16 - 23/05/2023

Report Date : 24/05/2023

Report No. : R11817/66

Parameters	Unit	Method	TW10833 /66	TW10834 /66	TW10835 /66	Standard ^a
			Drinking Water (Canteen)	Drinking Water (Oasis Kitchen)	Drinking Water (Guest Room 1615)	
pH (25°C) [#]	-	Based on SM 2017 (4500-H ⁺ B)	7.1	7.4	7.2	6.5-8.5
Turbidity [#]	NTU	SM 2017 (2130 B)	< 0.50	< 0.50	< 0.50	≤ 5.0
Conductivity [#]	uS/cm	SM 2017 (2510 B)	329	330	330	-
Dissolved Solids [*]	mg/L as NaCl	Electrical Conductivity	197	198	198	-
Total Hardness [@]	mg/L as CaCO ₃	SM 2017 (2340 C)	72	74	75	≤ 100.0
Chloride [@]	mg/L as Cl ⁻	SM 2017 (4500-Cl ⁻ B)	38	38	38	≤ 250.0
Total Iron [#]	mg/L as Fe	SM 2017 (3500-Fe B)	< 0.10	0.21	< 0.10	≤ 0.3
Manganese [#]	mg/L	SM 2017 (3500-Mn B)	< 0.04	< 0.04	< 0.04	≤ 0.05
Nitrate Nitrogen [#]	mg/L as NO ₃ -N	SM 2017 (4500-NO ₃ -E)	0.23	0.24	0.18	≤ 4.0
Sulfate [#]	mg/L as SO ₄ ²⁻	Based on SM 2017 (4500-SO ₄ ²⁻ -E)	37.32	37.62	36.72	≤ 250.0
Sample Condition		Observation	Clear	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. Test marked "# " on this report are Accredited International Standard ISO/IEC 17025 by BLA-DSS.

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Drinking Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 23/05/2023

Report Date : 24/05/2023

Report No. : R11818/66

Parameters	Unit	Method	TW10833 /66	TW10834 /66	TW10835 /66	Standard ^a
			Drinking Water (Canteen)	Drinking Water (Oasis Kitchen)	Drinking Water (Guest Room 1615)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	< 1.1	< 2.2
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	not found	negative
Sample Condition		Observation	Clear	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Notification of the Ministry of Public Health, No. 284 , B.E. 2547 (2004) on "Drinking Water in Sealed Container" (No.5)

(Included No. 135 , B.E. 2534 (1991) and No. 61, B.E. 2524 (1981))



Analyst

24/05/2023



Technical Manager

24/05/2023

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Ice

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 20/05/2023

Report Date : 22/05/2023

Report No. : R11664/66

Parameters	Unit	Method	TW10840 /66	TW10841 /66	Standard ^a
			Canteen (Cube)	Banquet (Flake)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	< 2.2
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	negative
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Notification of the Ministry of Public Health, No. 284 , B.E. 2547 (2004) on "Drinking Water in Sealed Container" (No.5)

(Included No. 135 , B.E. 2534 (1991) and No. 61, B.E. 2524 (1981))

Analyst

22/05/2023

Technical Manager

22/05/2023

Reported results refer to the sample as received only.

Test report shall not be reproduced except in full, without written approved of the laboratory.

Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sampling by : Test Tech Co., Ltd.

Sampling Date : 16/05/2023

Received Date : 16/05/2023

Report Date : 22/05/2023

Sample Type : Ice

Sampling Method : Grab

Sampling Time : 11:00 AM

Analytical Date : 16 - 20/05/2023

Report No. : RI1665/66

Parameters	Unit	Method	TW10842 /66	TW10843 /66	Standard ^a
			Flames	Oasis Kitchen (Flake)	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.1	< 1.1	< 2.2
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	negative
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 20172. a : Notification of the Ministry of Public Health, No. 284 , B.E. 2547 (2004) on "Drinking Water in Sealed Container" (No.5)
(Included No. 135 , B.E. 2534 (1991) and No. 61, B.E. 2524 (1981))

Analyst

22/05/2023

Technical Manager

22/05/2023

Reported results refer to the sample as received only.

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Waste Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 23/05/2023

Report Date : 24/05/2023

Report No. : R11819/66

Parameters	Unit	Method	TW10844 /66	Standard ^a
			Effluent	
pH	-	SM 2017 (4500-H ⁺ B)	6.9	-
BOD	mg/L	SM 2017 (5210 B, 4500-O G)	244	≤ 1000
Total Suspended Solids	mg/L	SM 2017 (2540 D)	144	-
Oil & Grease	mg/L	SM 2017 (5520 D)	80.7	-
Sample Condition		Observation	Light Yellow, Cloud	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. Test marked " * " on this report are not included in scope of Accreditation

3. a : ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 22 (พ.ศ. 2544) เรื่อง กำหนดอัตราค่าบริการบำบัดน้ำเสียของระบบบำบัดน้ำเสียรวมเมืองพัทยา

Analyst

24/05/2023



Technical Manager

24/05/2023

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Swimming Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 20/05/2023

Report Date : 22/05/2023

Report No. : R11660/66

Parameters	Unit	Method	TW10836 /66	TW10837 /66	Standard ^a
			Main Pool	Lab Pool	
pH (25°C)	-	Based on SM 2017 (4500-H ⁺ B)	7.5	7.6	7.2-8.4
Residual Chlorine	mg/L as Cl ₂	DPD Colorimetric	0.95	0.94	0.6-1.0
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Bangkok Metropolitan Administration published in the Royal Government Gazette, Vol.104 ,Part 205,dated October 14, B.E.2530 (1987)

Analyst

22/05/2023

Technical Manager

22/05/2023

Reported results refer to the sample as received only.

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sampling by : Test Tech Co., Ltd.

Sampling Date : 16/05/2023

Received Date : 16/05/2023

Report Date : 22/05/2023

Sample Type : Swimming Water

Sampling Method : Grab

Sampling Time : 11:00 AM

Analytical Date : 16 - 20/05/2023

Report No. : R11661/66

Parameters	Unit	Method	TW10836 /66	TW10837 /66	Standard ^a
			Main Pool	Lab Pool	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.8	< 1.8	< 10
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	negative
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Bangkok Metropolitan Administration published in the Royal Government Gazette, Vol.104 ,Part 205,dated October 14, B.E.2530 (1987)

Analyst

22/05/2023

Technical Manager

22/05/2023

Reported results refer to the sample as received only.

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sampling by : Test Tech Co., Ltd.

Sampling Date : 16/05/2023

Received Date : 16/05/2023

Report Date : 22/05/2023

Sample Type : Swimming Water

Sampling Method : Grab

Sampling Time : 11:00 AM

Analytical Date : 16 - 20/05/2023

Report No. : R11662/66

Parameters	Unit	Method	TW10838 /66	TW10839 /66	Standard ^a
			Lazy Pool	18 th Flr Pool	
pH (25°C)	-	Based on SM 2017 (4500-H ⁺ B)	7.4	7.5	7.2-8.4
Residual Chlorine	mg/L as Cl ₂	DPD Colorimetric	0.86	0.91	0.6-1.0
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Bangkok Metropolitan Administration published in the Royal Government Gazette, Vol.104 ,Part 205,dated October 14, B.E.2530 (1987)

Analyst

22/05/2023

Technical Manager

22/05/2023

Reported results refer to the sample as received only.

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Analysis/Test Report

Customer Name : Centara Grand Mirage Beach Resort Pattaya

Address : 277 Moo 5, Naklua, Banglamung, Pattaya, Chonburi 20150, Thailand

Sampling Site : Centara Grand (Pattaya)

Sample Type : Swimming Water

Sampling by : Test Tech Co., Ltd.

Sampling Method : Grab

Sampling Date : 16/05/2023

Sampling Time : 11:00 AM

Received Date : 16/05/2023

Analytical Date : 16 - 20/05/2023

Report Date : 22/05/2023

Report No. : R11663/66

Parameters	Unit	Method	TW10838 /66	TW10839 /66	Standard ^a
			Lazy Pool	18 th Flr Pool	
Coliform Bacteria	MPN/100 mL	SM 2017 (9221 B)	< 1.8	< 1.8	< 10
<i>E. coli</i>	/100 mL	SM 2017 (9221 F, Detection)	not found	not found	negative
Sample Condition		Observation	Clear	Clear	

Remark : 1. SM 2017 : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017

2. a : Bangkok Metropolitan Administration published in the Royal Government Gazette, Vol.104 ,Part 205, dated October 14, B.E.2530 (1987)



Analyst

22/05/2023



Technical Manager

22/05/2023

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