

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : JANUARY 27, 2026
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : JANUARY 28, 2026
ANALYTICAL DATE : JANUARY 28 - FEBRUARY 4, 2026
ISSUE DATE : FEBRUARY 5, 2026
REPORT NO. : 2026-U008757
WORK NO. : 2026-000666
ANALYSIS NO. : T26AB589-0001 - T26AB589-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 15:45 HOUR 1/ T26AB589-0001	2 15:35 HOUR 1/ T26AB589-0002			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.7 (29.9°C)	7.2 (29.8°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	184	71.8	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	68.2	38.5	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	412	309	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.5	< 0.1	-	0.1	-
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	2.7	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	55.3	43.9	≤ 35	1.5	5.0



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 15:45 HOUR 1/ T26AB589-0001	2 15:35 HOUR 1/ T26AB589-0002			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	40	4	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID BLACK	GREY/TURBID GREY			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK **RECEIVED DATE** : JANUARY 28, 2026
SAMPLING DATE : JANUARY 27, 2026 **ANALYTICAL DATE** : JANUARY 28-29, 2026
SAMPLING TIME : 15:55 HOUR **ISSUE DATE** : FEBRUARY 5, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U008758
SAMPLING BY : MR SUKSAN BOONLEANG **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AB589-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION TANK T26AB589-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (29.1°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	6.1	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	443	-	5.0
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			BROWN/TURBID		
SEDIMENT			BROWN		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Sriruk.

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhaw@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : FEBRUARY 10, 2026
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : FEBRUARY 10, 2026
ANALYTICAL DATE : FEBRUARY 10-18, 2026
ISSUE DATE : FEBRUARY 18, 2026
REPORT NO. : 2026-U012816
WORK NO. : 2026-000666
ANALYSIS NO. : T26AC648-0001, T26AC648-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 15:30 HOUR 1/ T26AC648-0001	2 14:45 HOUR 1/ T26AC648-0003			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.7 (31.0°C)	7.0 (30.6°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	411	93.5	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^c	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	6,757	108	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	290	264	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	22.0	2.5	-	0.1	-
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	1.7	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	49.9	48.8	≤ 35	1.5	5.0



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 15:30 HOUR 1/ T26AC648-0001	2 14:45 HOUR 1/ T26AC648-0003			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	27	6	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	BLACK/TURBID BLACK			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK **RECEIVED DATE** : FEBRUARY 10, 2026
SAMPLING DATE : FEBRUARY 10, 2026 **ANALYTICAL DATE** : FEBRUARY 10-17, 2026
SAMPLING TIME : 15:58 HOUR **ISSUE DATE** : FEBRUARY 18, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U012817
SAMPLING BY : MR SUKSAN BOONLEANG **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AC648-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION TANK T26AC648-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.4 (31.3°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	3.7	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	427	-	5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BROWN/TURBID BROWN		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER **RECEIVED DATE** : MARCH 10, 2026
SAMPLING DATE : MARCH 10, 2026 **ANALYTICAL DATE** : MARCH 10-17, 2026
SAMPLING TIME : 1/ **ISSUE DATE** : MARCH 18, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U020305
SAMPLING BY : MR SUKSAN BOONLEANG **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AE828-0001 - T26AE828-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:55 HOUR 1/ T26AE828-0001	2 14:25 HOUR 1/ T26AE828-0002			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (32.4°C)	6.9 (32.4°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	284	172	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	143	134	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	338	272	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	12.0	30.0	-	0.1	-
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	49.4	37.2	≤ 35	1.5	5.0

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:55 HOUR 1/ T26AE828-0001	2 14:25 HOUR 1/ T26AE828-0002			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	4	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	GREY/TURBID GREY			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhaw@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK
SAMPLING DATE : MARCH 10, 2026
SAMPLING TIME : 14:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MARCH 10, 2026
ANALYTICAL DATE : MARCH 10-13, 2026
ISSUE DATE : MARCH 18, 2026
REPORT NO. : 2026-U020306
WORK NO. : 2026-000666
ANALYSIS NO. : T26AE828-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION TANK T26AE828-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.9 (31.3°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	1.7	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	614	-	5.0
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			BLACK/TURBID		
SEDIMENT			GREY		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR



ISO 9001
Quality
Management
Systems
CERTIFIED

ISO 14001
Environmental
Management
CERTIFIED

ISO 45001
Occupational
Health and Safety
Management
CERTIFIED

- PROHIBITED TO PARTIALLY COPY ANALYSIS REPORT PRIOR TO WRITTEN PERMISSION BY THE LABORATORY.
- THIS ANALYSIS REPORT APPROVES ONLY FOR THE SAMPLES AS RECEIVED.



ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhaw@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : APRIL 8, 2026
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : APRIL 8, 2026
ANALYTICAL DATE : APRIL 8-20, 2026
ISSUE DATE : APRIL 21, 2026
REPORT NO. : 2026-U030940
WORK NO. : 2026-000666
ANALYSIS NO. : T26AH610-0001 - T26AH610-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:10 HOUR 1/ T26AH610-0001	2 14:55 HOUR 1/ T26AH610-0002			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.7 (32.6°C)	7.2 (32.1°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	107	79.8	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	62.8	44.3	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	326	271	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	0.1	-	0.1	-
SULPHIDE ^d	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^d	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	47.3	21.2	≤ 35	1.5	5.0



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:10 HOUR 1/ T26AH610-0001	2 14:55 HOUR 1/ T26AH610-0002			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	31	5	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	YELLOW/TURBID BROWN			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Sriruk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK **RECEIVED DATE** : APRIL 8, 2026
SAMPLING DATE : APRIL 8, 2026 **ANALYTICAL DATE** : APRIL 8-20, 2026
SAMPLING TIME : 14:40 HOUR **ISSUE DATE** : APRIL 21, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U030946
SAMPLING BY : MR WEERAYUT MOKKAEW **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AH610-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION TANK T26AH610-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (32.3°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	3.1	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	721	-	5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BROWN/TURBID BROWN		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : MAY 12, 2026
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAWE
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : MAY 12, 2026
ANALYTICAL DATE : MAY 12-19, 2026
ISSUE DATE : MAY 20, 2026
REPORT NO. : 2026-U041308
WORK NO. : 2026-000666
ANALYSIS NO. : T26AK140-0001, T26AK140-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:10 HOUR 1/ T26AK140-0001	2 13:40 HOUR 1/ T26AK140-0003			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.6 (31.2°C)	7.0 (31.0°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	126	66.9	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	84.2	54.4	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	326	296	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.8	< 0.1	-	0.1	-
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	41.1	34.5	≤ 35	1.5	5.0

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 14:10 HOUR 1/ T26AK140-0001	2 13:40 HOUR 1/ T26AK140-0003			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	4	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	YELLOW/TURBID BROWN			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Srisuk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhaw@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK **RECEIVED DATE** : MAY 12, 2026
SAMPLING DATE : MAY 12, 2026 **ANALYTICAL DATE** : MAY 12-18, 2026
SAMPLING TIME : 14:00 HOUR **ISSUE DATE** : MAY 20, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U041309
SAMPLING BY : MR WEERAYUT MOKKAEW **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AK140-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION TANK T26AK140-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (31.1°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	3.6	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	319	-	5.0
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID GREY		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Srisuk.

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES,BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : JUNE 9, 2026
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : JUNE 9, 2026
ANALYTICAL DATE : JUNE 9-17, 2026
ISSUE DATE : JUNE 17, 2026
REPORT NO. : 2026-U052538
WORK NO. : 2026-000666
ANALYSIS NO. : T26AM655-0001, T26AM655-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 11:45 HOUR 1/ T26AM655-0001	2 11:25 HOUR 1/ T26AM655-0003			
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (31.2°C)	7.2 (31.8°C)	5.5-9.0	-	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	186	97.0	≤ 30	-	2.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	161	43.0	≤ 40	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	287	252	≤ 1,000	-	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	6.0	0.3	-	0.1	-
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	2.8	< 0.50	≤ 1.0	-	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	42.8	29.1	≤ 35	1.5	5.0



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			1 11:45 HOUR 1/ T26AM655-0001	2 11:25 HOUR 1/ T26AM655-0003			
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	22	6	≤ 20	-	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	BLACK/TURBID BLACK			

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT NOT IN SCOPE OF ACCREDITATION

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

RESULT 1 : บ่อพักน้ำเสีย (EQUALIZATION TANK)

RESULT 2 : บ่อน้ำใส (EFFLUENT TANK)

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS B, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 141, PART 233 D, DATED AUGUST 27, 2024.

Wilailak Sriruk.

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : THE RITZ-CARLTON RESIDENCES, BANGKOK
ADDRESS : 114 NARADHIWAS RAJANAGARINDRA ROAD SI LOM BANG RAK BANGKOK 10500
CONTACT INFORMATION : TEL : 0 2062 1414 e-mail : Watchara.Chansamakhow@ritzcarlton.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF THE RITZ-CARLTON RESIDENCE, BANGKOK
SAMPLE TYPE : SLURRY IN AERATION TANK **RECEIVED DATE** : JUNE 9, 2026
SAMPLING DATE : JUNE 9, 2026 **ANALYTICAL DATE** : JUNE 9-15, 2026
SAMPLING TIME : 11:35 HOUR **ISSUE DATE** : JUNE 17, 2026
SAMPLING METHOD : GRAB **REPORT NO.** : 2026-U052539
SAMPLING BY : MR SUKSAN BOONLEANG **WORK NO.** : 2026-000666
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T26AM655-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT	LIMIT OF QUANTITATION (LOQ)
			AERATION T26AM655-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (31.5°C)	-	-
DISSOLVED OXYGEN	mg/L	MEMBRANE ELECTRODE METHOD (AT SITE) SM: PART 4500-O G	1.0	0.5	-
MIXED LIQUOR SUSPENDED SOLIDS	mg/L	MIXED LIQUOR SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	31.8	-	5.0
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			GREY/TURBID		
SEDIMENT			GREY		

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

Wilailak Sriruk

(MISS WILAILAK SRISUK)
LABORATORY SUPERVISOR

