

ภาคผนวก จ

ใบรายงานผลการวิเคราะห์ (Analysis Report)

ภาคผนวก จ-1
คุณภาพน้ำทิ้ง

ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : JANUARY 18, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : JANUARY 18, 2024
ANALYTICAL DATE : JANUARY 18-23, 2024
REPORT NO. : 2024-U006906
WORK NO. : 2023-002338
ANALYSIS NO. : T24AB035-0001 - T24AB035-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 13:20 HOUR 1/ T24AB035-0001	2 13:05 HOUR 1/ T24AB035-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.1 (30°C)	6.6 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	96.2	3.3	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	45.4	27.0	≤ 40	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	381	716	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.2	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	1.6	< 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	61.8	8.4	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 13:20 HOUR 1/ T24AB035-0001	2 13:05 HOUR 1/ T24AB035-0002		
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	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 STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

RESULT 1 : น้ำเสียก่อนเข้าระบบบำบัดน้ำเสีย

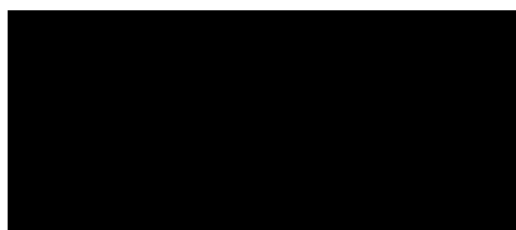
RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

BIOCHEMICAL OXYGEN DEMAND (T24AB035-0002) : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : JANUARY 18, 2024
SAMPLING TIME : 13:40 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : JANUARY 18, 2024
ANALYTICAL DATE : JANUARY 18-19, 2024
REPORT NO. : 2024-U006909
WORK NO. : 2023-002338
ANALYSIS NO. : T24AB035-0005

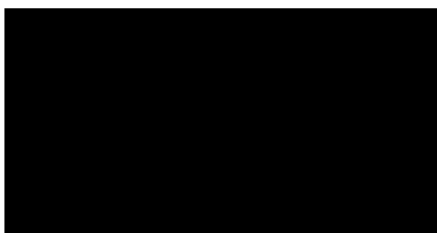
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AB035-0005	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	313	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : FEBRUARY 22, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : FEBRUARY 22, 2024
ANALYTICAL DATE : FEBRUARY 22 - MARCH 1, 2024
ISSUE DATE : MARCH 1, 2024
REPORT NO. : 2024-U017714
WORK NO. : 2023-002338
ANALYSIS NO. : T24AD683-0001 - T24AD683-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 11:10 HOUR 1/ T24AD683-0001	2 10:55 HOUR 1/ T24AD683-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (30°C)	7.0 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.4	16.2	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	43.7	14.0	≤ 40	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	332	558	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	1.5	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	3.0	< 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	45.2	15.4	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 11:10 HOUR 1/ T24AD683-0001	2 10:55 HOUR 1/ T24AD683-0002		
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	7	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	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 STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

RESULT 1 : น้ำเสียก่อนเข้าระบบบำบัดน้ำเสีย

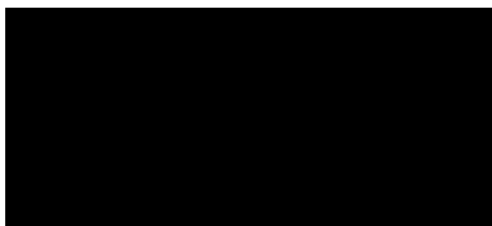
RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

BIOCHEMICAL OXYGEN DEMAND (T24AD683-0002) : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : FEBRUARY 22, 2024
SAMPLING TIME : 10:35 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : FEBRUARY 22, 2024
ANALYTICAL DATE : FEBRUARY 22-28, 2024
ISSUE DATE : MARCH 1, 2024
REPORT NO. : 2024-U017717
WORK NO. : 2023-002338
ANALYSIS NO. : T24AD683-0005

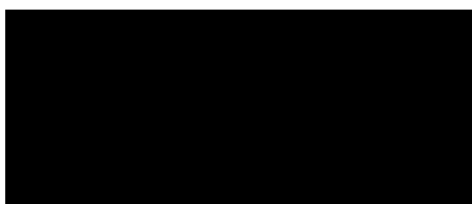
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AD683-0005	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	269	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : MARCH 20, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : MARCH 20, 2024
ANALYTICAL DATE : MARCH 20-27, 2024
ISSUE DATE : MARCH 28, 2024
REPORT NO. : 2024-U026120
WORK NO. : 2023-002338
ANALYSIS NO. : T24AF834-0001 - T24AF834-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:17 HOUR 1/ T24AF834-0001	2 10:14 HOUR 1/ T24AF834-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.1 (30°C)	7.3 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	81.6	6.2	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	29.0	26.9	≤ 40	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	349	811	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.8	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	2.9	< 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	47.1	16.9	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:17 HOUR 1/ T24AF834-0001	2 10:14 HOUR 1/ T24AF834-0002		
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	9	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	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 STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

RESULT 1 : น้ำเสียก่อนเข้ระบบบำบัดน้ำเสีย

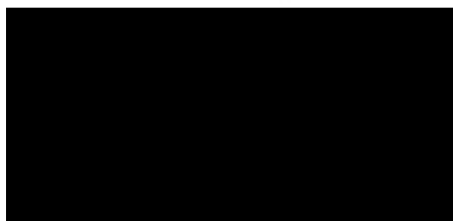
RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

BIOCHEMICAL OXYGEN DEMAND (T24AF834-0002) : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : MARCH 20, 2024
SAMPLING TIME : 10:26 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : 
ANALYZED BY : 

RECEIVED DATE : MARCH 20, 2024
ANALYTICAL DATE : MARCH 20-27, 2024
ISSUE DATE : MARCH 28, 2024
REPORT NO. : 2024-U026121
WORK NO. : 2023-002338
ANALYSIS NO. : T24AF834-0003

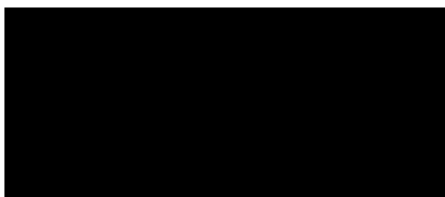
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AF834-0003	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	223	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : APRIL 25, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : APRIL 25, 2024
ANALYTICAL DATE : APRIL 25 - MAY 3, 2024
ISSUE DATE : MAY 3, 2024
REPORT NO. : 2024-U037319
WORK NO. : 2024-003779
ANALYSIS NO. : T24AI627-0001 - T24AI627-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 11:30 HOUR 1/ T24AI627-0001	2 11:40 HOUR 1/ T24AI627-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.9 (30°C)	7.4 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	192	36.7	≤ 30	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	219	14.6	≤ 40	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	330	630	500*	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	9.5	< 0.1	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	3.1	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	55.4	23.5	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 11:30 HOUR 1/ T24AI627-0001	2 11:40 HOUR 1/ T24AI627-0002		
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	22	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	YELLOW/TURBID BROWN		

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

RESULT 1 : น้ำเสียก่อนเข้าระบบบำบัดน้ำเสีย

RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

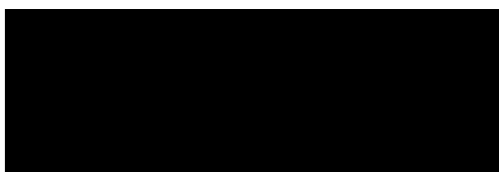


ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY **RECEIVED DATE** : APRIL 25, 2024
SAMPLING DATE : APRIL 25, 2024 **ANALYTICAL DATE** : APRIL 25 - MAY 3, 2024
SAMPLING TIME : 11:50 HOUR **ISSUE DATE** : MAY 3, 2024
SAMPLING METHOD : GRAB **REPORT NO.** : 2024-U037320
SAMPLING BY : [REDACTED] **WORK NO.** : 2024-003779
ANALYZED BY : [REDACTED] **ANALYSIS NO.** : T24AI627-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AI627-0003	
TOTAL DISSOLVED SOLIDS	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	203	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
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CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-30, 2024
ISSUE DATE : MAY 30, 2024
REPORT NO. : 2024-U047243
WORK NO. : 2024-003779
ANALYSIS NO. : T24AK967-0001 - T24AK967-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T24AK967-0001	2 14:00 HOUR 1/ T24AK967-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (30°C)	7.0 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	89.4	3.1	≤ 30	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	42.1	8.6	≤ 40	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	433	553	500*	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.4	< 0.1	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	3.0	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	52.0	12.5	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T24AK967-0001	2 14:00 HOUR 1/ T24AK967-0002		
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	8	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	YELLOW/TURBID BROWN		

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

RESULT 1 : น้ำเสียก่อนเข้าระบบบำบัดน้ำเสีย

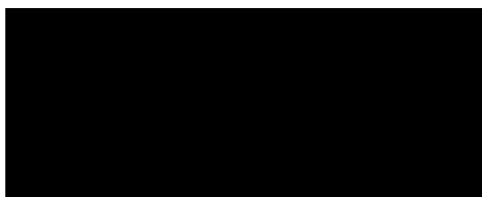
RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

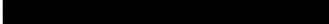
500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

BIOCHEMICAL OXYGEN DEMAND (T24AK967-0002) : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

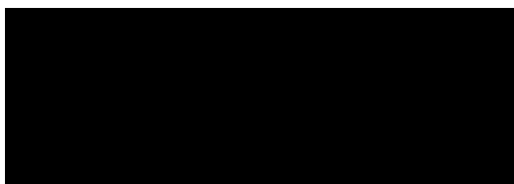


ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 14:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : 
ANALYZED BY : 
RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-30, 2024
ISSUE DATE : MAY 30, 2024
REPORT NO. : 2024-U047244
WORK NO. : 2024-003779
ANALYSIS NO. : T24AK967-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AK967-0003	
TOTAL DISSOLVED SOLIDS	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	386	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : JUNE 20, 2024
SAMPLING TIME : 1/
SAMPLING METHOD : GRAB
SAMPLING BY :
ANALYZED BY :
RECEIVED DATE : JUNE 20, 2024
ANALYTICAL DATE : JUNE 20-27, 2024
ISSUE DATE : JUNE 28, 2024
REPORT NO. : 2024-U058723
WORK NO. : 2024-003779
ANALYSIS NO. : T24AN759-0001 - T24AN759-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T24AN759-0001	2 13:55 HOUR 1/ T24AN759-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.1 (32°C)	7.3 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	113	6.0	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	55.8	11.6	≤ 40	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	409	586	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	3.0	< 0.1	≤ 0.5	0.1
SULPHIDE ^c	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	3.3	< 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	82.6	33.0	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T24AN759-0001	2 13:55 HOUR 1/ T24AN759-0002		
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	22	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	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 STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

RESULT 1 : น้ำเสียก่อนเข้าระบบบำบัดน้ำเสีย

RESULT 2 : น้ำเสียหลังการบำบัดด้วยระบบบำบัดน้ำเสีย ก่อนระบายลงท่อระบายน้ำบนถนนเย็นอากาศ

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 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

BIOCHEMICAL OXYGEN DEMAND (T24AN759-0002) : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B.5(e).

ND : NOT DETECTED.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : JUNE 20, 2024
SAMPLING TIME : 13:48 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : JUNE 20, 2024
ANALYTICAL DATE : JUNE 20-26, 2024
ISSUE DATE : JUNE 28, 2024
REPORT NO. : 2024-U058724
WORK NO. : 2024-003779
ANALYSIS NO. : T24AN759-0003

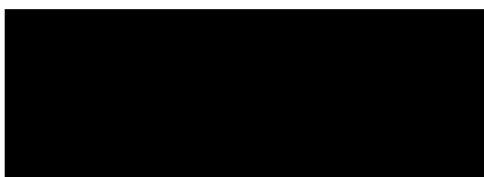
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AN759-0003	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	278	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

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

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


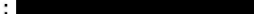
^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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



ภาคผนวก จ-2
คุณภาพน้ำสระว่ายนํ้า

ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : JANUARY 18, 2024
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ^c : STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : JANUARY 18, 2024
ANALYTICAL DATE : JANUARY 18-22, 2024
REPORT NO. : 2024-U006907
WORK NO. : 2023-002338
ANALYSIS NO. : T24AB035-0003

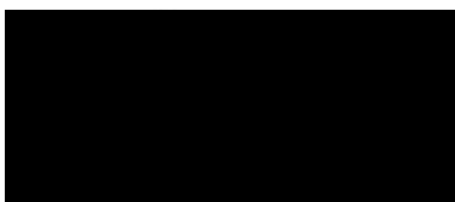
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AB035-0003	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : JANUARY 18, 2024
SAMPLING TIME : 13:35 HOUR
SAMPLING METHOD ^c : STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 

RECEIVED DATE : JANUARY 18, 2024
ANALYTICAL DATE : JANUARY 18-23, 2024
REPORT NO. : 2024-U006908
WORK NO. : 2023-002338
ANALYSIS NO. : T24AB035-0004

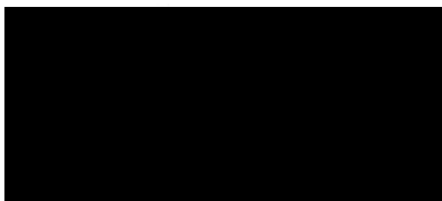
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AB035-0004	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : FEBRUARY 22, 2024
SAMPLING TIME : 10:20 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : FEBRUARY 22, 2024
ANALYTICAL DATE : FEBRUARY 22-29, 2024
ISSUE DATE : MARCH 1, 2024
REPORT NO. : 2024-U017716
WORK NO. : 2023-002338
ANALYSIS NO. : T24AD683-0004

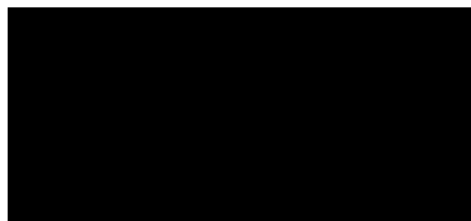
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AD683-0004	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : FEBRUARY 22, 2024
SAMPLING TIME : 10:25 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : FEBRUARY 22, 2024
ANALYTICAL DATE : FEBRUARY 22-29, 2024
ISSUE DATE : MARCH 1, 2024
REPORT NO. : 2024-U017715
WORK NO. : 2023-002338
ANALYSIS NO. : T24AD683-0003

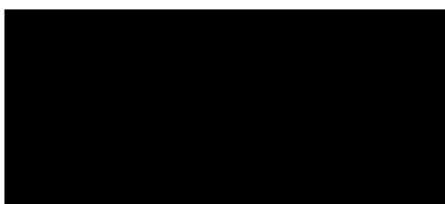
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AD683-0003	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	
			-	

^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 STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : MARCH 20, 2024
SAMPLING TIME : 10:25 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 

RECEIVED DATE : MARCH 20, 2024
ANALYTICAL DATE : MARCH 20-26, 2024
ISSUE DATE : MARCH 29, 2024
REPORT NO. : 2024-U026123
WORK NO. : 2023-002338
ANALYSIS NO. : T24AF834-0005

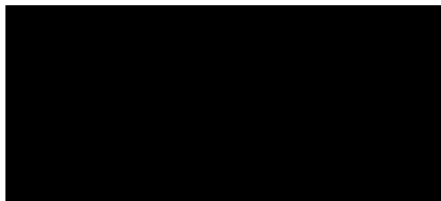
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AF834-0005	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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


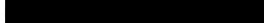
^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : MARCH 20, 2024
SAMPLING TIME : 10:24 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 

RECEIVED DATE : MARCH 20, 2024
ANALYTICAL DATE : MARCH 20-26, 2024
ISSUE DATE : MARCH 29, 2024
REPORT NO. : 2024-U026122
WORK NO. : 2023-002338
ANALYSIS NO. : T24AF834-0004

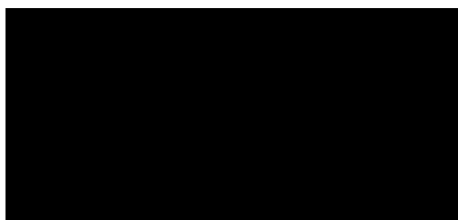
PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AF834-0004	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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


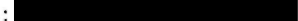
^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

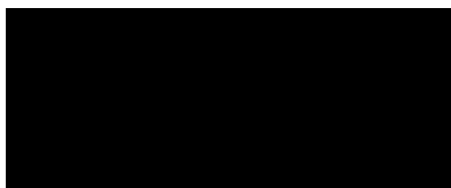


ANALYSIS REPORT


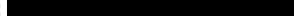
CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : APRIL 25, 2024
SAMPLING TIME : 11:10 HOUR
SAMPLING METHOD : GRAB AND STERILE TECHNIQUE
SAMPLING BY : 
ANALYZED BY : 
RECEIVED DATE : APRIL 25, 2024
ANALYTICAL DATE : APRIL 25 - MAY 1, 2024
ISSUE DATE : MAY 3, 2024
REPORT NO. : 2024-U037322
WORK NO. : 2024-003779
ANALYSIS NO. : T24AI627-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AI627-0005	
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT


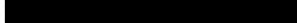
CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : APRIL 25, 2024
SAMPLING TIME : 11:15 HOUR
SAMPLING METHOD : GRAB AND STERILE TECHNIQUE
SAMPLING BY : 
ANALYZED BY : 
RECEIVED DATE : APRIL 25, 2024
ANALYTICAL DATE : APRIL 25 - MAY 1, 2024
ISSUE DATE : MAY 3, 2024
REPORT NO. : 2024-U037321
WORK NO. : 2024-003779
ANALYSIS NO. : T24AI627-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AI627-0004	
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 14:12 HOUR
SAMPLING METHOD : GRAB AND STERILE TECHNIQUE
SAMPLING BY : 
ANALYZED BY : 


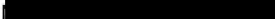
RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-29, 2024
ISSUE DATE : MAY 31, 2024
REPORT NO. : 2024-U047246
WORK NO. : 2024-003779
ANALYSIS NO. : T24AK967-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AK967-0005	
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

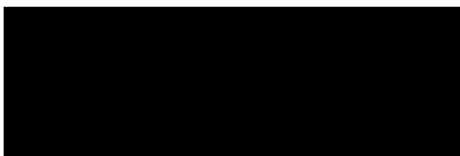


ANALYSIS REPORT


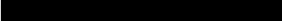
CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 14:15 HOUR
SAMPLING METHOD : GRAB AND STERILE TECHNIQUE
SAMPLING BY : 
ANALYZED BY : 
RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-29, 2024
ISSUE DATE : MAY 31, 2024
REPORT NO. : 2024-U047245
WORK NO. : 2024-003779
ANALYSIS NO. : T24AK967-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AK967-0004	
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	< 1.1	1.1
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.1	1.1
SAMPLE CONDITION			COLOURLESS/CLEAR -	
WATER'S COLOUR/TURBID				
SEDIMENT				

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : JUNE 20, 2024
SAMPLING TIME : 13:45 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : JUNE 20, 2024
ANALYTICAL DATE : JUNE 20-27, 2024
ISSUE DATE : JUNE 28, 2024
REPORT NO. : 2024-U058725
WORK NO. : 2024-003779
ANALYSIS NO. : T24AN759-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (SHALLOW ZONE) T24AN759-0004	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B AND C)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			-	

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


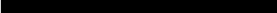
^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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



ANALYSIS REPORT

CUSTOMER NAME : SHAMA YEN-AKAT BANGKOK
ADDRESS : 69 YEN AKAT ROAD CHONG NONSI YAN NAWA BANGKOK 10120
CONTACT INFORMATION : TEL : 0 2160 8752, 08 7989 6355 e-mail : pakorn.s@shama.com
SAMPLING SOURCE : SHAMA YEN-AKAT BANGKOK
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : JUNE 20, 2024
SAMPLING TIME : 13:40 HOUR
SAMPLING METHOD ^c : GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : 
ANALYZED BY : 
RECEIVED DATE : JUNE 20, 2024
ANALYTICAL DATE : JUNE 20-27, 2024
ISSUE DATE : JUNE 28, 2024
REPORT NO. : 2024-U058728
WORK NO. : 2024-003779
ANALYSIS NO. : T24AN759-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SWIMMING POOL (DEEP ZONE) T24AN759-0005	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B AND C)	< 1.1	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	< 1.1	1.1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			-	

^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 STILL NOT ACCREDITED

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

