

ภาคผนวก ง

ผลการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม



คุณภาพน้ำทิ้งของโครงการ





Analysis Report CH2400050



TESTING
No.0009

Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : 2401-0108
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400050
Report Number : CH2400050-AA
Date Received : Jan 18, 2024
Date Reported : Jan 29, 2024
Date Analysis Commenced : Jan 18, 2024
No. of samples received : 3
Temperature : 4.5 °C
Sampled by : Sitthichok Taseeda

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400050-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, refrigerated
CH2400050-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, refrigerated
CH2400050-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0045	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (C)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

Jan 17, 2024 10:00 AM

Jan 17, 2024 10:05 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400050-001	CH2400050-002	-----
						----	----	Result	Result	----
Chemical Parameters										
EN0045	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	598 *	19 *	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	1416	4	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	5.4	6.4	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	0.8 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	11.2	8.8	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	24000000	7000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.3 *	0.2 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	452	392	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	342	46	----



Analysis Report CH2400074



TESTING
No.0009

Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : 2402-0059
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400074
Report Number : CH2400074-AA
Date Received : Feb 14, 2024
Date Reported : Feb 23, 2024
Date Analysis Commenced : Feb 14, 2024
No. of samples received : 3
Temperature : 3.8 °C
Sampled by : Chaloamkiat Amornsriserm

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Signatories

ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Life Sciences

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand T +662 760 3000



Analysis Report CH2400074

Report Number : CH2400074-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400074-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 3x 500mL Plastic Bottle, refrigerated
CH2400074-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 3x 500mL Plastic Bottle, refrigerated
CH2400074-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400074

Report Number : CH2400074-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

Feb 13, 2024 10:30 AM

Feb 13, 2024 10:40 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400074-001	CH2400074-002	-----
						----	----	Result	Result	----
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	507	33.6	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	194	3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	6.3	7.3	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	<0.5 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	7.7	11.4	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	7900000	170000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.3 *	0.1 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	572	324	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	206	21	----



Analysis Report CH2400105



TESTING
No.0009

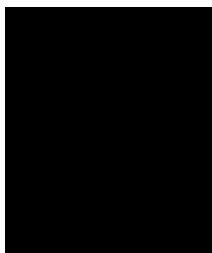
Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : 2403-0087
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400105
Report Number : CH2400105-AA
Date Received : Mar 15, 2024
Date Reported : Mar 25, 2024
Date Analysis Commenced : Mar 15, 2024
No. of samples received : 3
Temperature : 2.9 °C
Sampled by : Tanakron Insuta

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Signatories





Analysis Report CH2400105

Report Number : CH2400105-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400105-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400105-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400105-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S ₂ (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B,F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400105

Report Number : CH2400105-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

Mar 14, 2024 10:00 AM

Mar 14, 2024 10:05 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400105-001	CH2400105-002	_____
						----	----	Result	Result	----
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	600	17.0	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	196	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	6.3	6.1	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	1.2 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	15.0	7.4	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	17000000	110000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	4 *	0.1 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	336	444	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	306	36	----



Analysis Report CH2400127



TESTING
No.0009

Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : ----
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400127
Report Number : CH2400127-AA
Date Received : Apr 12, 2024
Date Reported : Apr 25, 2024
Date Analysis Commenced : Apr 12, 2024
No. of samples received : 3
Temperature : 2.2 °C
Sampled by : Tanakron Insuta

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis Report CH2400127

Report Number : CH2400127-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400127-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400127-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400127-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400127

Report Number : CH2400127-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

Apr 11, 2024 01:30 PM

Apr 11, 2024 01:35 PM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400127-001	CH2400127-002	_____
						----	----	Result	Result	----
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	1750	82.9	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	101	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	4.5	6.6	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	<0.5 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	25.0	19.9	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	160000000	2400	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	9 *	8 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	1080	372	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	820	184	----



Analysis Report CH2400154



TESTING
No.0009

Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : 2405-0012
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400154
Report Number : CH2400154-AA
Date Received : May 09, 2024
Date Reported : May 17, 2024
Date Analysis Commenced : May 09, 2024
No. of samples received : 3
Temperature : 2.6 °C
Sampled by : Nattapong Sopa

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis Report CH2400154

Report Number : CH2400154-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400154-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400154-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 1x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, 1x 500mL Plastic Bottle, refrigerated
CH2400154-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400154

Report Number : CH2400154-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

May 08, 2024 10:00 AM

May 08, 2024 10:05 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400154-001	CH2400154-002	-----
						----	----	Result	Result	----
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	432	9.6	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	69	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	5.2	6.4	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	0.6 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	14.9	2.2	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	1300000	49000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	<0.1 *	<0.1 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	264	336	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	140	10	----



Analysis Report CH2400050



TESTING
No.0009

Client : Tanboon Co., Ltd.
171, Huaykaew Rd., Tambon Suthep, Amphoe Mueang Chiang Mai, Chiang Mai,
Thailand, 50200
P/O : 2401-0108
Project : ----
Project Location: Eastin Tan Hotel Chiang Mai

Work Order : CH2400050
Report Number : CH2400050-AA
Date Received : Jan 18, 2024
Date Reported : Jan 29, 2024
Date Analysis Commenced : Jan 18, 2024
No. of samples received : 3
Temperature : 4.5 °C
Sampled by : Sitthichok Taseeda

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.



Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
CH2400050-001	Influent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, refrigerated
CH2400050-002	Effluent	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x 300mL Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, 1x 1L Oil & Grease, refrigerated
CH2400050-003	สระว่ายน้ำ	----	----	1x 500mL Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated

Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
EN0021	Bangkok	In-house method : STM 04-003 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - S2 (C, F)
EN0035	Bangkok	In-house method : STM 04-100 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (D)
EN0045	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B and part 4500 - O (C)
EN0048	Bangkok	In - house method : STM 04-014 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 F
EN0099	Bangkok	In-house method : STM 04-010 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, F
MC6020	Bangkok	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, Part 9221 B, E
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, Part 9215 B



Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

Influent

Effluent

(Matrix: WATER)

Sampling Date

Jan 17, 2024 10:00 AM

Jan 17, 2024 10:05 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400050-001	CH2400050-002	-----
						----	----	Result	Result	----
Chemical Parameters										
EN0045	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	----	----	598 *	19 *	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	----	----	1416	4	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	----	5.4	6.4	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	----	----	0.8 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	----	----	11.2	8.8	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	24000000	7000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.3 *	0.2 *	----
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	----	5	mg/L	----	----	452	392	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	----	----	342	46	----

คุณภาพน้ำสระว่ายน้ำ





Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sub-Matrix: SURFACE WATER

Client Sample ID

สระบัวน้ำ

(Matrix: WATER)

Sampling Date

Jan 17, 2024 10:10 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400050-003	-----	-----
						---	---	Result	---	---
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	<i>Escherichia coli</i>	----	----	in 100mL	----	----	Not Detected *	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected *	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

Key:

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report CH2400074

Report Number : CH2400074-AA



TESTING
No.0009

Sub-Matrix: SURFACE WATER

Client Sample ID

สระบัวน้ำ

(Matrix: WATER)

Sampling Date

Feb 13, 2024 10:40 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400074-003	-----	-----
						----	----	Result	----	----
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	<i>Escherichia coli</i>	----	----	in 100mL	----	----	Not Detected *	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected *	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

Key:

- ° LOD : Limit of Detection
- ° "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- ° Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report CH2400105

Report Number : CH2400105-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER						Client Sample ID		สระว่ายนํ้า	----	----
(Matrix: WATER)						Sampling Date		Mar 14, 2024 10:10 AM	----	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400105-003	-----	-----
						----	----	Result	----	----
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	----	Not Detected	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report CH2400127

Report Number : CH2400127-AA



TESTING
No.0009

Sub-Matrix: SURFACE WATER						Client Sample ID		สระว่ายน้ำ	---	---
(Matrix: WATER)						Sampling Date		Apr 11, 2024 01:40 PM	---	---
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400127-003	-----	-----
						---	---	Result	---	---
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	----	Not Detected *	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected *	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report CH2400050

Report Number : CH2400050-AA



TESTING
No.0009

Sub-Matrix: SURFACE WATER						Client Sample ID		สระว่ายนํ้า	---	---
(Matrix: WATER)						Sampling Date		Jan 17, 2024 10:10 AM	----	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400050-003	-----	-----
						---	---	Result	---	---
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	----	Not Detected *	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected *	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report CH2400154

Report Number : CH2400154-AA



TESTING
No.0009

Sub-Matrix: SURFACE WATER						Client Sample ID		สระว่ายน้ำ	---	---
(Matrix: WATER)						Sampling Date		May 08, 2024 10:10 AM	---	---
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		CH2400154-003	-----	-----
						---	---	Result	---	---
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	<1.1	----	----
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	----	Not Detected *	----	----
MC6020	Bangkok	Fecal Coliforms	----	----	in 100mL	----	----	Not Detected *	----	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	----	----

Guideline: ----

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----