

ภาคผนวก ค

ใบรับรองผลการวิเคราะห์คุณภาพน้ำ



Analysis Report BK2500212



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2500212**
Report Number : BK2500212-AA
Date Received : Jan 08, 2025
Date Reported : Jan 18, 2025
Date Analysis Commenced : Jan 09, 2025
No. of samples received : 4
Temperature : 3.0 °C
Sampled by : Chulladet Warin

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Sithichok Thong-Nguen
Scientist (3)



Analysis Report BK2500212

Report Number : BK2500212-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2500212-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2500212-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอก โครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2500212-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated
BK2500212-004	สระสป้า	----	----	1x 500mL Plastic Bottle, 1x 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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CI (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2500212

Report Number : BK2500212-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

(Matrix: WATER)

Sampling Date

Jan 08, 2025 10:54 AM

Jan 08, 2025 10:53 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2500212-001	BK2500212-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	127	9.9	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	6	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.4	7.2	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	6.4 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	50.8	8.9	----

Microbiological Parameters

MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	11000000	130000	----
--------	---------	-----------------	------	------	-----------	------	------	----------	--------	------

Physical and Aggregate Properties

EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.1 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	244	240	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	55	11	----



Analysis Report BK2500212

Report Number : BK2500212-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER								Client Sample ID		น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)												
								Sampling Date		Jan 08, 2025 10:45 AM	Jan 08, 2025 10:50 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2500212-003	BK2500212-004	-----		
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----		
Chemical Parameters												
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	8.0 *	8.1 *	----		
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.7 *	0.6 *	----		
Microbiological Parameters												
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	<1.1	<1.1	----		
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	Not Detected	Not Detected	Not Detected	----		
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	7	----		

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

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 BK2504999



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2504999**
Report Number : BK2504999-AA
Date Received : Feb 11, 2025
Date Reported : Feb 22, 2025
Date Analysis Commenced : Feb 12, 2025
No. of samples received : 4
Temperature : 3.6 °C
Sampled by : Panupong Homewong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Sithichok Thong-Nguen
Scientist (3)



Analysis Report BK2504999

Report Number : BK2504999-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2504999-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2504999-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอกโครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2504999-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated
BK2504999-004	สระสป้า	----	----	1x 500mL Plastic Bottle, 1x 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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CI (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2504999

Report Number : BK2504999-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

Sampling Date

Feb 11, 2025 10:00 AM

Feb 11, 2025 09:55 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2504999-001	BK2504999-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	99.4	18.6	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	6	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.4	7.4	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	6.0 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	38.7	30.1	----
Microbiological Parameters										
MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	4900000	170000	----
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.1 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	240	256	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	50	15	----



Analysis Report BK2504999

Report Number : BK2504999-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER								Client Sample ID	น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)											
								Sampling Date	Feb 11, 2025 09:40 AM	Feb 11, 2025 09:43 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2504999-003	BK2504999-004	-----	
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----	
Chemical Parameters											
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	7.4 *	7.9 *	----	
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.7 *	0.7 *	----	
Microbiological Parameters											
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	<1.1	<1.1	----	
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	Not Detected	Not Detected	Not Detected	----	
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	<1	----	

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: 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 BK2509135



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2509135**
Report Number : BK2509135-AA
Date Received : Mar 12, 2025
Date Reported : Mar 22, 2025
Date Analysis Commenced : Mar 12, 2025
No. of samples received : 4
Temperature : 3.6 °C
Sampled by : Panupong Homewong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Sithichok Thong-Nguen
Scientist (3)



Analysis Report BK2509135

Report Number : BK2509135-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2509135-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2509135-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอกโครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2509135-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated
BK2509135-004	สระสป่า	----	----	1x 500mL Plastic Bottle, 1x 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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CI (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2509135

Report Number : BK2509135-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

Sampling Date

Mar 12, 2025 08:25 AM

Mar 12, 2025 08:20 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2509135-001	BK2509135-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	77.6	19.9	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	7	5	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.3	7.1	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	8.0 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	30.3	6.7	----

Microbiological Parameters

MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	1700000	49000	----
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Physical and Aggregate Properties

EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.1 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	252	244	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	50	18	----



Analysis Report BK2509135

Report Number : BK2509135-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER								Client Sample ID		น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)								Sampling Date		Mar 12, 2025 08:13 AM	Mar 12, 2025 08:16 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2509135-003	BK2509135-004	-----		
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----		
Chemical Parameters												
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	7.5 *	7.4 *	----		
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.7 *	1.0 *	----		
Microbiological Parameters												
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	<1.1	<1.1	----		
MC6012	Bangkok	<i>Escherichia coli</i>	----	----	in 100mL	----	Not Detected	Not Detected	Not Detected	----		
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	<1	----		

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: 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 BK2512873



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2512873**
Report Number : BK2512873-AA
Date Received : Apr 09, 2025
Date Reported : Apr 23, 2025
Date Analysis Commenced : Apr 09, 2025
No. of samples received : 4
Temperature : 3.5 °C
Sampled by : Panupong Homewong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Kittitee Jamjumroon
Scientist (3)



Analysis Report BK2512873

Report Number : BK2512873-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2512873-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2512873-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอกโครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2512873-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated
BK2512873-004	สระสป้า	----	----	1x 500mL Plastic Bottle, 1x 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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CI (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2512873

Report Number : BK2512873-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

Sampling Date

Apr 09, 2025 08:05 AM

Apr 09, 2025 08:00 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2512873-001	BK2512873-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	83.7	<2.0	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	9	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.0	6.6	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	6.6 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	45.6	2.4	----

Microbiological Parameters

MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	490000	490	----
--------	---------	-----------------	------	------	-----------	------	------	--------	-----	------

Physical and Aggregate Properties

EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	<0.1 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	292	252	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	48	11	----



Analysis Report BK2512873

Report Number : BK2512873-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER								Client Sample ID	น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)											
								Sampling Date	Apr 09, 2025 07:50 AM	Apr 09, 2025 07:45 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2512873-003	BK2512873-004	-----	
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----	
Chemical Parameters											
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	7.6 *	8.2 *	----	
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.8 *	0.9 *	----	
Microbiological Parameters											
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	6.9	<1.1	----	
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	Not Detected	Detected	Not Detected	----	
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	<1	----	

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: 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 BK2515117



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2515117**
Report Number : BK2515117-AA
Date Received : May 07, 2025
Date Reported : May 19, 2025
Date Analysis Commenced : May 08, 2025
No. of samples received : 4
Temperature : 2.0 °C
Sampled by : Pichai Boonyong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Nanthawadee Somboon
Specialist 2



Analysis Report BK2515117

Report Number : BK2515117-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2515117-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease
BK2515117-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอกโครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease
BK2515117-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate
BK2515117-004	สระสปา	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate

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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - Cl (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2515117

Report Number : BK2515117-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

Sampling Date

May 07, 2025 10:45 AM

May 07, 2025 10:40 AM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2515117-001	BK2515117-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	99.2	18.1	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	6	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.3	6.4	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	10.4 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	41.8	3.7	----

Microbiological Parameters

MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	3300000	130000	----
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Physical and Aggregate Properties

EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.1 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	308	392	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	50	34	----



Analysis Report BK2515117

Report Number : BK2515117-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER							Client Sample ID	น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)										
							Sampling Date	May 07, 2025 10:32 AM	May 07, 2025 10:30 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2515117-003	BK2515117-004	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----
Chemical Parameters										
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	7.4 *	8.2 *	----
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.6 *	0.9 *	----
Microbiological Parameters										
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	<1.1	<1.1	----
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	Not Detected	Not Detected	Not Detected	----
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	<1	----

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: 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 BK2519526



TESTING
No.0009

Client : Suwan Estate Co., Ltd.
1511, Sukhumvit Rd., Phra Khanong Nuea, Watthana, Bangkok, Thailand, 10110
P/O : JR2411056
Project : ----
Project Location: Jasmine Resort Hotel : Sukhumvit 67-69 (BTS Phra Khanong)

Work Order : **BK2519526**
Report Number : BK2519526-AA
Date Received : Jun 11, 2025
Date Reported : Jun 21, 2025
Date Analysis Commenced : Jun 12, 2025
No. of samples received : 4
Temperature : 3.1 °C
Sampled by : Pichai Boonyong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Sithichok Thong-Nguen
Scientist (3)



Analysis Report BK2519526

Report Number : BK2519526-AA



TESTING
No.0009

Sample Receipt and Conditions

Sample ID	Sample Name	Sample Description	GPS	Conditions
BK2519526-001	น้ำทิ้งที่ปล่อยน้ำก่อนเข้าระบบบำบัดน้ำเสีย	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2519526-002	น้ำทิ้งที่ผ่านการบำบัดก่อนระบายออกสู่ภายนอกโครงการ	----	----	1x Plastic bottle - Preserved with H ₂ SO ₄ , 2x 1L Plastic Bottle, 1x Plastic Bottle - Preserved with Zinc Acetate and NaOH, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, 1x Oil & Grease, refrigerated
BK2519526-003	น้ำสระใหญ่	----	----	1x 500mL Plastic Bottle, 1x Sterile Bottle - Preserved with Sodium Thiosulfate, refrigerated
BK2519526-004	สระสป่า	----	----	1x 500mL Plastic Bottle, 1x 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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
EN0027	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CI (F)
EN0032	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-Norg (D)
EN0044	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B and part 4500 - O (G)
EN0048	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B
EN0093	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 F
EN0100	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C
EN0102	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D
MC6009	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6010	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 B
MC6012	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023. Part 9221 F
MC6043	Bangkok	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24th ed., 2023. Part 9215 B



Analysis Report BK2519526

Report Number : BK2519526-AA



TESTING
No.0009

Sub-Matrix: WASTEWATER

Client Sample ID

น้ำทิ้งที่บ่อดักน้ำก่อนเข้าระบบ
บำบัดน้ำเสีย

น้ำทิ้งที่ผ่านการบำบัดก่อน
ระบายออกสู่ภายนอกโครงการ

(Matrix: WATER)

Sampling Date

Jun 11, 2025 12:10 PM

Jun 11, 2025 12:05 PM

Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2519526-001	BK2519526-002	-----
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	----	2.0	mg/L	≤20	----	110	19.9	----
EN0048	Bangkok	Oil & Grease	----	3	mg/L	≤20	----	6	<3	----
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	5.5-9	----	7.1	7.1	----
EN0032	Bangkok	Sulfides	----	0.5	mg/L	≤1	----	8.4 *	<0.5 *	----
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	----	60.7	24.6	----

Microbiological Parameters

MC6010	Bangkok	Total Coliforms	----	----	MPN/100mL	----	----	22000000	70000	----
--------	---------	-----------------	------	------	-----------	------	------	----------	-------	------

Physical and Aggregate Properties

EN0093	Bangkok	Settleable Solids	----	0.1	mL/L/hr	----	----	0.3 *	<0.1 *	----
EN0100	Bangkok	Total Dissolved Solids at 180°C	----	5	mg/L	≤1000	----	268	288	----
EN0102	Bangkok	Total Suspended Solids	----	5	mg/L	≤30	----	41	16	----



Analysis Report BK2519526

Report Number : BK2519526-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

Client Sample ID

(Matrix: WATER)

Sub-Matrix: PROCESS WATER								Client Sample ID	น้ำสระใหญ่	สระสเปา	----
(Matrix: WATER)											
								Sampling Date	Jun 11, 2025 12:00 PM	Jun 11, 2025 11:55 AM	----
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		BK2519526-003	BK2519526-004	-----	
						MNRE 2567 Type A	MOPH 1/2550	Result	Result	----	
Chemical Parameters											
EN0021	Bangkok	pH at 25°C	----	1.0	pH Unit	----	7.2-8.4	7.2 *	7.9 *	----	
EN0027	Bangkok	Residual Free Chlorine	----	0.1	mg/L	----	0.6-1	0.7 *	1.0 *	----	
Microbiological Parameters											
MC6009	Bangkok	Total Coliforms	----	----	MPN/100mL	----	<10	<1.1	<1.1	----	
MC6012	Bangkok	Escherichia coli	----	----	in 100mL	----	Not Detected	Not Detected	Not Detected	----	
MC6043	Bangkok	Standard Plate Count	----	----	CFU/mL	----	----	<1	<1	----	

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A

MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: 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 -----