

ผลวิเคราะห์คุณภาพน้ำ โครงการ KANTARY HOTEL AYUTTHAYA



United Analyst and Engineering Consultant Co., Ltd.
 3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
 Tel.0 2763 2828 Fax 0 2763 2800 www.uaconsultant.com E-mail: uae@uaconsultant.com



NSC-TISI-TIS 17025
TESTING 0207



TESTING
No. 0063

ANALYSIS REPORT

CUSTOMER NAME	: RANGSIT PROSPER ESTATE COMPANY LIMITED	RECEIVED DATE	: SEPTEMBER 4, 2023
ADDRESS	: 168 MOO 1 ROJANA ROAD THANU UTHAI PHRA NAKHON SI AYUTTHAYA 13000	ANALYTICAL DATE	: SEPTEMBER 4-12, 2023
CONTACT INFORMATION	: TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com	REPORT NO.	: 2023-U076725
SAMPLING SOURCE	: WASTEWATER TREATMENT PLANT OF KANTARY HOTEL AYUTTHAYA	WORK NO.	: 2023-006432
SAMPLE TYPE	: EFFLUENT	ANALYSIS NO.	: T23AR289-0001
SAMPLING DATE	: SEPTEMBER 3, 2023		
SAMPLING TIME	: -		
SAMPLING METHOD	: -		
SAMPLING BY	: CUSTOMER		
ANALYZED BY	: MISS NAPAPORN KHUNNOKKHUM		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AR289-0001		
pH ^a	-	ELECTROMETRIC METHOD (SM: PART 4500-H ⁺ B)	7.2 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	2.7	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	8.7	≤ 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	398	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE ^c	mg/L Cl ₂	DPD FERROUS TITRIMETRIC METHOD (SM: PART 4500-Cl F)	ND	-	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 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	< LOQ	≤ 35	15
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3

ISO 9001:2015 CERTIFIED
 ISO 14001:2015 CERTIFIED
 BY BSI GROUP (THAILAND) CO.,LTD.

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

1/2



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AR289-0001		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	330	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			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.

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.

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

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (TOTAL KJELDAHL NITROGEN ≥ 1.5 AND < 5.0 mg/L).

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

SEPTEMBER 14, 2023

ANALYSIS REPORT

CUSTOMER NAME : RANGSIT PROSPER ESTATE COMPANY LIMITED
ADDRESS : 168 MOO 1 ROJANA ROAD THANU UTHAI PHRA NAKHON SI AYUTTHAYA 13000
CONTACT INFORMATION : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com
SAMPLING SOURCE : KANTARY HOTEL AYUTTHAYA
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : SEPTEMBER 3, 2023
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 4, 2023
ANALYTICAL DATE : SEPTEMBER 4-7, 2023
REPORT NO. : 2023-U076726
WORK NO. : 2023-006432
ANALYSIS NO. : T23AR289-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T23AR289-0002		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	177	≤ 1,000	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.

REGULATORY STANDARD : WATER SUPPLY STANDARDS, NOTIFICATION OF THE PROVINCIAL WATERWORKS AUTHORITY FOLLOW AS WORLD HEALTH ORGANIZATION (WHO) GUIDELINE ISSUE NO.4, A.D.2011; APPENDIX 1, A.D. 2017.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

SEPTEMBER 14, 2023

ISO 9001:2015 CERTIFIED
ISO 14001:2015 CERTIFIED
BY BSI GROUP (THAILAND) CO.,LTD.

• PROHIBITED TO PARTIALLY COPY ANALYSIS REPORT PRIOR TO WRITTEN PERMISSION BY THE LABORATORY.
• THIS ANALYSIS REPORT APPROVES ONLY FOR SUBMITTED SAMPLES.

1/1

- End of Analysis Report -



ANALYSIS REPORT

CUSTOMER NAME : RANGSIT PROSPER ESTATE COMPANY LIMITED
ADDRESS : 168 MOO 1 ROJANA ROAD THANU UTHAI PHRA NAKHON SI AYUTTHAYA 13000
CONTACT INFORMATION : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF KANTARY HOTEL AYUTTHAYA
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : DECEMBER 1, 2023
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS NAPAPORN KHUNNOKKHAM

RECEIVED DATE : DECEMBER 1, 2023
ANALYTICAL DATE : DECEMBER 1-8, 2023
REPORT NO. : 2023-U107865
WORK NO. : 2023-008967
ANALYSIS NO. : T23AY013-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AY013-0001		
pH ^a	-	ELECTROMETRIC METHOD (SM: PART 4500-H ⁺ B)	7.2 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	ND	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	5.4	≤ 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	422	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE ^c	mg/L Cl ₂	DPD FERROUS TITRIMETRIC METHOD (SM: PART 4500-Cl F)	ND	-	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 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	< LOQ	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3





United Analyst and Engineering Consultant Co., Ltd.
3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Tel. 0 2763 2828 Fax 0 2763 2800 www.uaeconsultant.com E-mail: uae@uaeconsultant.com



NSC-TISI-TIS 17025
TESTING 0207



TESTING
No. 0063

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AY013-0001		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	17	-	18
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			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.

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.

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

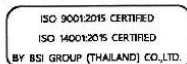
ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (TOTAL KJELDAHL NITROGEN ≥ 1.5 AND < 5.0 mg/L).

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

DECEMBER 15, 2023



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

2/2

2023-U107865

- End of Analysis Report -

ANALYSIS REPORT

CUSTOMER NAME : RANGSIT PROSPER ESTATE COMPANY LIMITED
ADDRESS : 168 MOO 1 ROJANA ROAD THANU UTHAI PHRA NAKHON SI AYUTTHAYA 13000
CONTACT INFORMATION : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com
SAMPLING SOURCE : KANTARY HOTEL AYUTTHAYA
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : DECEMBER 1, 2023
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : DECEMBER 1, 2023
ANALYTICAL DATE : DECEMBER 1-4, 2023
REPORT NO. : 2023-U107866
WORK NO. : 2023-008967
ANALYSIS NO. : T23AY013-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T23AY013-0002		
TOTAL DISSOLVED SOLIDS ^a	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	207	≤ 1,000	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.

REGULATORY STANDARD : WATER SUPPLY STANDARDS, NOTIFICATION OF THE PROVINCIAL WATERWORKS AUTHORITY FOLLOW AS WORLD HEALTH ORGANIZATION (WHO) GUIDELINE ISSUE NO.4, A.D.2011; APPENDIX 1, A.D. 2017.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

DECEMBER 15, 2023

ISO 9001:2015 CERTIFIED
ISO 14001:2015 CERTIFIED
BY BSI GROUP (THAILAND) CO., LTD.

• PROHIBITED TO PARTIALLY COPY ANALYSIS REPORT PRIOR TO WRITTEN PERMISSION BY THE LABORATORY.
• THIS ANALYSIS REPORT APPROVES ONLY FOR SUBMITTED SAMPLES.

1/1

- End of Analysis Report -

