

# 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.uaiconsultant.com E-mail: uae@uaiconsultant.com



NSC - TISI - TIS 17025  
TESTING 0207



TESTING  
No. 0063

## 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** : WASTEWATER  
**SAMPLING DATE** : MARCH 16, 2023  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : MARCH 16, 2023  
**ANALYTICAL DATE** : MARCH 16-23, 2023  
**REPORT NO.** : 2023-U022121  
**WORK NO.** : 2023-001325  
**ANALYSIS NO.** : T23AE712-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AE712-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM. PART 4500-H <sup>+</sup> B)	6.9 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM. PART 5210 B AND PART 4500-O C)	3.9	≤ 30	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM. PART 2540 D)	ND	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE TP WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM. PART 2540 C	449	500*	25
SETTLABLE SOLIDS <sup>d</sup>	mL/L	IMHOFF CONE (SM. PART 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>e</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM. PART 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>b</sup>	mg/L	IODOMETRIC METHOD (SM. PART 4500-S <sup>2-</sup> F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>a</sup>	mg/L	IN-HOUSE METHOD: UAE TP WAS.001 (KJELDAHL METHOD); SM. PART 4500-Norg C	ND	≤ 35	15
FAT, OIL AND GREASE <sup>e</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM. PART 5520 B)	ND	≤ 20	3

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

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 \* THIS ANALYSIS REPORT APPROVES ONLY FOR SUBMITTED SAMPLES.

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PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT EFFLUENT T23AE712-0001	REGULATORY STANDARD	DETECTION LIMIT
<b>MICROBIOLOGY</b>					
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM PART 9221B)	490	-	18
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID					
SEDIMENT					

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> 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<sup>c</sup> : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 29, 2023

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**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : KANTARY HOTEL AYUTTHAYA  
**SAMPLE TYPE** : WATER SUPPLY  
**SAMPLING DATE** : MARCH 16, 2023  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : MARCH 16, 2023  
**ANALYTICAL DATE** : MARCH 16-22, 2023  
**REPORT NO.** : 2023-U022122  
**WORK NO.** : 2023-001325  
**ANALYSIS NO.** : T23AE712-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T23AE712-0002		
TOTAL DISSOLVED SOLIDS <sup>a</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM PART 2540 C)	178	≤ 600	25
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOUR: P55/CLEAR		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

REGULATORY STANDARD : WATER SUPPLY STANDARDS, NOTIFICATION OF THE PROVINCIAL WATERWORKS AUTHORITY FOLLOW AS WORLD HEALTH ORGANIZATION (WHO) GUIDELINE VALUE, B.E. 2554 (2011).

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 29, 2023



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**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF KANTARY HOTEL AYUTTHAYA  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : JUNE 1, 2023  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : JUNE 1, 2023  
**ANALYTICAL DATE** : JUNE 1-8, 2023  
**REPORT NO.** : 2023-U045970  
**WORK NO.** : 2023-004152  
**ANALYSIS NO.** : T23AK114-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AK114-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: PART 4500-H <sup>+</sup> B)	6.5 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	6.0	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	21.3	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE TP WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	583	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>a</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: PART 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>b</sup>	mg/L	IODOMETRIC METHOD (SM: PART 4500-S <sup>2-</sup> F)	< 0.50	≤ 10	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE TP WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	5.3	≤ 35	1.5
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3





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**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : JUNE 1, 2023  
**ANALYTICAL DATE** : JUNE 1-8, 2023  
**REPORT NO.** : 2023-U045970  
**WORK NO.** : 2023-004152  
**ANALYSIS NO.** : T23AK114-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T23AK114-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: PART 4500-H <sup>+</sup> B)	6.5 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	6.0	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	21.3	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	583	500*	25
SETTLABLE SOLIDS <sup>c</sup>	ml/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: PART 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>b</sup>	mg/L	IODOMETRIC METHOD (SM: PART 4500-S <sup>2-</sup> F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	5.3	≤ 35	1.5
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



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**SAMPLE TYPE** : WATER SUPPLY  
**SAMPLING DATE** : -  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : JUNE 1, 2023  
**ANALYTICAL DATE** : JUNE 1-7, 2023  
**REPORT NO.** : 2023-U045971  
**WORK NO.** : 2023-004152  
**ANALYSIS NO.** : T23AK114-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T23AK114-0002		
TOTAL DISSOLVED SOLIDS <sup>a</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	183	≤ 1,000	25
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> 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

JUNE 12, 2023

