

## ภาคผนวก ก ผลการตรวจวิเคราะห์คุณภาพน้ำ



ผลการติดตามตรวจสอบคุณภาพน้ำเสีย และน้ำทิ้ง  
ระหว่างเดือนมกราคม ถึงมิถุนายน พ.ศ. 2565



กลุ่มอาคาร ออลซีซั่น พรีเมียม

(M-Thai, CRC, Capital)



## ANALYSIS REPORT

**CUSTOMER NAME** : ALL SEASON PROPERTY COMPANY LIMITED  
**ADDRESS** : 19TH FLOOR, M THAI TOWER ALL SEASON PLACE, 87 LUMPHINI PATHUM WAN BANGKOK 10330  
**CONTACT INFORMATION** : TEL : 0 2625 1841 e-mail : Kiatisakp@asp.th.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF M-THAI BUILDING  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : MARCH 19, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD °** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY °** : MR THANADET WANSANOR  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

**RECEIVED DATE** : MARCH 19, 2022  
**ANALYTICAL DATE** : MARCH 19-26, 2022  
**REPORT NO.** : 2022-U023841  
**WORK NO.** : 2022-000786  
**ANALYSIS NO.** : T22AF349-0001 - T22AF349-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 09:50 HOUR 1/ T22AF349-0001	2 09:40 HOUR 1/ T22AF349-0002		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H° B)	7.2 (31°C)	7.1 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	15.5	2.5	≤ 30	2.0
CHEMICAL OXYGEN DEMAND ° a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	61.1	ND	-	25.0
SUSPENDED SOLIDS °	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	23.1	ND	≤ 40	5.0
TOTAL DISSOLVED SOLIDS °	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	374	344	500*	25
SETTLEABLE SOLIDS °	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	< 0.1	≤ 0.5	0.1
AMMONIA-NITROGEN °	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM: 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	20.8	7.0	-	1.5
PHOSPHATE °	mg/L PO <sub>4</sub> <sup>3-</sup>	ASCORBIC ACID METHOD (SM: 4500-P E)	9.03	3.46	-	0.03
SULPHIDE °	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ° b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	26.9	8.7	≤ 35	1.5
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 09:50 HOUR 1/ T22AF349-0001	2 09:40 HOUR 1/ T22AF349-0002		
MICROBIOLOGY						
FAECAL COLIFORM BACTERIA b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	54,000	460	-	1.8
SAMPLE CONDITION						
WATER'S COLOUR/TURBID			YELLOW/TURBID	YELLOW/CLEAR		
SEDIMENT			GREY	YELLOW		

<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.

RESULT 1 : EQUALIZATION TANK

RESULT 2 : EFFLUENT

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  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD. FOR FAECAL COLIFORM BACTERIA, IT SHOULD BE DISINFECTED BEFORE DISCHARGING INTO THE PUBLIC WATERWAY ALTHOUGH REGULATORY STANDARD IS NOT NOTIFIED.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 31, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : ALL SEASON PROPERTY COMPANY LIMITED  
**ADDRESS** : 19TH FLOOR, M THAI TOWER ALL SEASON PLACE, 87 LUMPHINI PATHUM WAN BANGKOK 10330  
**CONTACT INFORMATION** : TEL : 0 2625 1841 e-mail : Kiatisakp@asp.th.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPITAL TOWER  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : MARCH 19, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD °** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY °** : MR THANADET WANSANOR  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

**RECEIVED DATE** : MARCH 19, 2022  
**ANALYTICAL DATE** : MARCH 19-26, 2022  
**REPORT NO.** : 2022-U023842  
**WORK NO.** : 2022-000786  
**ANALYSIS NO.** : T22AF349-0003 - T22AF349-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:10 HOUR 1/ T22AF349-0003	2 09:58 HOUR 1/ T22AF349-0004		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H° B)	7.2 (30°C)	7.2 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	56.4	2.0	≤ 30	2.0
CHEMICAL OXYGEN DEMAND ° a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	113	ND	-	25.0
SUSPENDED SOLIDS °	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	20.3	ND	≤ 40	5.0
TOTAL DISSOLVED SOLIDS °	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	366	290	500*	25
SETTLEABLE SOLIDS °	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	< 0.1	≤ 0.5	0.1
AMMONIA-NITROGEN °	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM: 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	32.9	3.0	-	1.5
PHOSPHATE °	mg/L PO <sub>4</sub> <sup>3-</sup>	ASCORBIC ACID METHOD (SM: 4500-P E)	9.00	2.51	-	0.03
SULPHIDE °	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	1.39	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ° b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	41.7	5.9	≤ 35	1.5
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	ND	≤ 20	3





PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:10 HOUR 1/ T22AF349-0003	2 09:58 HOUR 1/ T22AF349-0004		
MICROBIOLOGY						
FAECAL COLIFORM BACTERIA b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	>160,000	490	-	1.8
SAMPLE CONDITION						
WATER'S COLOUR/TURBID			YELLOW/TURBID	YELLOW/CLEAR		
SEDIMENT			YELLOW	YELLOW		

<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.

RESULT 1 : EQUALIZATION TANK

RESULT 2 : EFFLUENT

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  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD. FOR FAECAL COLIFORM BACTERIA, IT SHOULD BE DISINFECTED BEFORE DISCHARGING INTO THE PUBLIC WATERWAY ALTHOUGH REGULATORY STANDARD IS NOT NOTIFIED.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 31, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : ALL SEASON PROPERTY COMPANY LIMITED  
**ADDRESS** : 19TH FLOOR, M THAI TOWER ALL SEASON PLACE, 87 LUMPHINI PATHUM WAN BANGKOK 10330  
**CONTACT INFORMATION** : TEL : 0 2625 1841 e-mail : Kiatisakp@asp.th.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CRC TOWER  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : MARCH 19, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD °** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY °** : MR THANADET WANSANOR  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

**RECEIVED DATE** : MARCH 19, 2022  
**ANALYTICAL DATE** : MARCH 19-26, 2022  
**REPORT NO.** : 2022-U023843  
**WORK NO.** : 2022-000786  
**ANALYSIS NO.** : T22AF349-0005 - T22AF349-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:25 HOUR 1/ T22AF349-0005	2 10:15 HOUR 1/ T22AF349-0006		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H° B)	6.6 (30°C)	7.2 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	262	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ° a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	650	ND	-	25.0
SUSPENDED SOLIDS °	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	113	ND	≤ 30	5.0
TOTAL DISSOLVED SOLIDS °	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	522	300	500*	25
SETTLABLE SOLIDS °	mL/L	IMHOFF CONE (SM: 2540 F)	2.0	< 0.1	≤ 0.5	0.1
AMMONIA-NITROGEN °	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM: 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	41.3	2.9	-	1.5
PHOSPHATE °	mg/L PO <sub>4</sub> <sup>3-</sup>	ASCORBIC ACID METHOD (SM: 4500-P E)	13.4	2.60	-	0.03
SULPHIDE °	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	6.81	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ° b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	64.5	< LOQ	≤ 35	1.5
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	16	ND	≤ 20	3





PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 10:25 HOUR 1/ T22AF349-0005	2 10:15 HOUR 1/ T22AF349-0006		
MICROBIOLOGY						
FAECAL COLIFORM BACTERIA b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	>160,000	790	-	1.8
SAMPLE CONDITION						
WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK	YELLOW/CLEAR YELLOW		

<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.

RESULT 1 : EQUALIZATION TANK

RESULT 2 : EFFLUENT

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, 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  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

< LOQ : < LEVEL OF QUANTITATION (TOTAL KJELDAHL NITROGEN  $\geq 1.5$  AND  $< 5.0$  mg/L).

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD. FOR FAECAL COLIFORM BACTERIA, IT SHOULD BE DISINFECTED BEFORE DISCHARGING INTO THE PUBLIC WATERWAY ALTHOUGH REGULATORY STANDARD IS NOT NOTIFIED.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 31, 2022



## อาคาร ออลซีซั่น แมนชั่น





# บริษัท ศูนย์วิเคราะห์น้ำ จำกัด

WATER ANALYSIS CENTER COMPANY LIMITED

1/94 หมู่ 5 ต. คานหาม อ. อุทัย จ. พระนครศรีอยุธยา 13210  
1/94 Moo 5, T.Kanhom, A.U-Thai, Ayutthaya 13210, Thailand  
Tel : 035-226-383 , 035-800-593 Fax : 035-800-594



TESTING  
No.0029

## ANALYSIS REPORT

Page 1 of 1

Customer Name : นิติบุคคลอาคารชุด ALL SEASONS MANSION

Address : 87/210 ถนนวิฑู แขวงลุมพินี เขตปทุมวัน กรุงเทพมหานคร 10330

Contact : K. Monton Phone : 02-654-1078, 084-439-9337

E.mail : Monton.Phattano@ap.jil.com

Sample Type : Waste water Sample Site# : โครงการ ALL SEASONS MANSION

Sampling Method# : Grab

Sampling Date# : 29/04/2022 Sampling By# : Rungsasikom (1-190-6-4630)

Receive Date : 30/04/2022

Analysis Date : 30/04/2022-11/05/2022 Report Date : 11/05/2022

Report No. : R 02835/65

Parameter	Unit	Method	WC 03731/65 น้ำดิบก่อน EQ	WC 03732/65 น้ำดิบหลัง Effluent	Standard *
pH	-	In-house method: TM 001	8.1 (25°C)	7.6 (25°C)	5.0-9.0
BOD	mg/L	Azide Modification	26 #	6 #	≤ 30
Total Suspended Solid	mg/L	In-house method: TM 016	55	19	≤ 40
Total Dissolved Solid	mg/L	Dried at 103-105 °C	360 #	374 #	≤ 500
Settleable Solids	mL/L	Volumetric	0.2 #	< 0.1 #	≤ 0.5
Oil & Grease	mg/L	In-house Method : TM 020	6	< 2	≤ 20
Total Kjeldahl Nitrogen	mg/L as N	In-house method : TM 023	33	6	≤ 35
Total Phosphorus	mg/L as P	Ascorbic acid	1.9 #	2.4 #	-
Ammonia Nitrogen	mg/L as NH <sub>3</sub> -N	Titrimetric	29 #	0.36 #	-
Sulfide	mg/L as S <sup>2-</sup>	Iodometric	3.5 #	< 0.10 #	≤ 1.0
Fecal Coliform Bacteria	MPN/100 mL	Thermotolerant (Fecal) Coliform Procedure	3.5 x 10 <sup>3</sup> #	6.8 x 10 <sup>3</sup> #	-

Sample Characterization	Observation	ค่าก่อนบำบัด	ก่อนบำบัด
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**Remark :** In-house method : TM 020 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23<sup>rd</sup> ed., 2017, part 5520 D  
In-house method : TM 023 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23<sup>rd</sup> ed., 2017, part 4500-NH<sub>3</sub> B, 4500-NH<sub>3</sub> C  
In-house method : TM 001 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23<sup>rd</sup> ed., 2017, part 4500-H<sub>2</sub>O B  
In-house method : TM 016 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23<sup>rd</sup> ed., 2017, part 2540 D  
Limit of Quantitation : LOQ (SS=10 mg/L, Oil & Grease=2 mg/L, TKN=5 mg/L as N.).  
\* It is outside the scope of ISO/IEC 17025

\* อ้างอิงประกาศกระทรวงมหาดไทยว่าด้วยการควบคุมการระบายน้ำทิ้งจากอาคารบางประเภทและบางชนิด (อาคารประเภท ข)

:- End Of Report :-

Laboratory Staff

(Miss. Waraporn Wanviset)

Chemist

1-190-6-8762

Approved By

(Mrs. Neeramol Phadungsong)

General Manager

1-190-6-4128

The results relate only to the items tested. Test report shall not be reproduced except in full, without written approval of the laboratory

FO:LAB 7.8.1/1 รายงานผลการทดสอบ

แก้ไขครั้งที่ 0, วันที่แก้ไข : 1 ม.ค. 2562 หน้า 1/1

## โรงแรมคอนราด





บริษัท วิศวกรรมเคมี จำกัด

THAI CHEMICAL & ENGINEERING CO., LTD.

1048/2 ซ.สุขุมวิท 66/1 อ.สุขุมวิท แขวงพระโขนงใต้ เขตพระโขนง กรุงเทพฯ 10260 โทร. 0-2744-9911 แฟกซ์ 0-2393-0165

1048/2 Soi Sukhumvit 66/1, Sukhumvit Rd., Prakanong Tai, Prakanong, Bangkok 10260 TEL. 0-2744-9911 FAX 0-2393-0165

No. 0707/65

### WASTE WATER ANALYSIS REPORT

Date : 14/3/65  
Customer : บริษัท ออล ซีซั่นส์ พร็อพเพอร์ตี้ส์ จำกัด (โรงแรมคอนราด (สาขาที่ 00001)  
Address : 87/3 ถนนวิฑู แขวงจตุรพิณี เขตปทุมวัน กรุงเทพฯ 10330  
Tel : 02-690-9591

Analysis Date : 4/3/65-11/3/65  
Sampling Date : 3/3/65  
Sampling Time : -  
Received Date : 4/3/65

Reference Number	WP/NM 1200/65			Method of Analysis
Parameter	Unit	Influent		
Appearance		ดำขุ่นมีตะกอน		
pH		@ 23.9 °C = 6.9		Electrometric (SM 2017:4500-H <sup>+</sup> B.)
Biochemical Oxygen Demand	(mg/l)	222		5-Day BOD Test, Azide Modification (SM 2017:5210 B.)
Total Suspended Solids	(mg/l)	92		Dried at 103-105°C (SM 2017:2540 D.)
Oil & Grease	(mg/l)	11.60		Soxhlet Extraction (SM 2017:5520 D.)
Faecal Coliform	(MPN/100ml)	> 16000		Multiple Tube Technique

SM : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23 rd Edition, 2017.

- ❖ The results relate only to the samples tested and apply to customer's self-drawn samples only.
- ❖ This analysis report may not be reproduced other than in full, except with the prior written approval of the technical manager.

Approved by

( ธีรญารัตน์ พลอยกระจำจาง )





บริษัท วิศวกรรมเคมี จำกัด

THAI CHEMICAL & ENGINEERING CO., LTD.

1048/2 ซ.สุขุมวิท 66/1 อ.สุขุมวิท แขวงพระโขนงใต้ เขตพระโขนง กรุงเทพฯ 10260 โทร. 0-2744-9911 แฟกซ์ 0-2393-0165

1048/2 Soi Sukhumvit 66/1, Sukhumvit Rd., Prakanong Tai, Prakanong, Bangkok 10260 TEL. 0-2744-9911 FAX 0-2393-0165

No. 0708/65

### WASTE WATER ANALYSIS REPORT

Date : 14/3/65  
Customer : บริษัท ออล ซีซั่นส์ พร็อพเพอร์ตี้ส์ จำกัด (โรงแรมคอนราด (สาขาที่ 00001)  
Address : 87/3 ถนนวิฑู แขวงจตุรมพิน เขตปทุมวัน กรุงเทพฯ 10330  
Tel : 02-690-9591

Analysis Date : 4/3/65-11/3/65  
Sampling Date : 3/3/65  
Sampling Time : -  
Received Date : 4/3/65

Reference Number	WP/NM 1201/65			Method of Analysis
Parameter	Unit	Effluent	Standard	
Appearance		ใสมีตะกอน		
pH		@ 23.8 °C = 7.2	5-9	Electrometric (SM 2017:4500-H <sup>+</sup> B.)
Biochemical Oxygen Demand	(mg/l)	9	< 20	5-Day BOD Test, Azide Modification (SM 2017:5210 B.)
Total Suspended Solids	(mg/l)	23	< 30	Dried at 103-105°C (SM 2017:2540 D.)
Total Dissolved Solids		381	< 500	Dried at 180°C (SM 2017:2540 C.)
Oil & Grease	(mg/l)	< 5.00	< 20	Soxhlet Extraction (SM 2017:5520 D.)
Total Kjeldahl Nitrogen	(mg/l)	11.61	< 35	Macro-Kjeldahl, Titrimetric (SM 2017:4500-N(org) B.)
Sulfide	(mg/l)	Not detected	< 1.0	ZnS Precipitation, Iodometric (SM 2017:4500-S <sup>2-</sup> F.)
Settleable Solids	(ml/l)	< 0.5	< 0.5	Imhoff Cone, Volumetric (SM 2017:2540 F.)
Faecal Coliform	(MPN/100 ml)	9200	-	Multiple Tube Technique

SM : Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23 rd Edition, 2017.

- ❖ The results relate only to the samples tested and apply to customer's self-drawn samples only.
- ❖ This analysis report may not be reproduced other than in full, except with the prior written approval of the technical manager.

Approved by

สัญญารัตน์ พลอยกระจำจ )

คุณภาพน้ำทิ้ง

ที่ระบายออกนอกพื้นที่โครงการ (Manhole)



## ANALYSIS REPORT

**CUSTOMER NAME** : ALL SEASON PROPERTY COMPANY LIMITED  
**ADDRESS** : 19TH FLOOR, M THAI TOWER ALL SEASON PLACE, 87 LUMPHINI PATHUM WAN BANGKOK 10330  
**CONTACT INFORMATION** : TEL : 0 2625 1841 e-mail : Kiatisakp@asp.th.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF M-THAI BUILDING  
**SAMPLE TYPE** : EFFLUENT **RECEIVED DATE** : MARCH 19, 2022  
**SAMPLING DATE** : MARCH 19, 2022 **ANALYTICAL DATE** : MARCH 19-26, 2022  
**SAMPLING TIME** : 10:40 HOUR **REPORT NO.** : 2022-U024112  
**SAMPLING METHOD °** : GRAB, GRAB AND STERILE TECHNIQUE **WORK NO.** : 2022-000787  
**SAMPLING BY °** : MR THANADET WANSANOR **ANALYSIS NO.** : T22AF350-0001  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EXIT GATE T22AF350-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H° B)	7.5 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	57.4	≤ 30	2.0
SUSPENDED SOLIDS °	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	56.0	≤ 40	5.0
TOTAL DISSOLVED SOLIDS °	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	354	500*	25
SETTLABLE SOLIDS °	mL/L	IMHOFF CONE (SM: 2540 F)	0.5	≤ 0.5	0.1
AMMONIA-NITROGEN °	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM: 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	12.3	-	1.5
PHOSPHATE °	mg/L PO <sub>4</sub> <sup>3-</sup>	ASCORBIC ACID METHOD (SM: 4500-P E)	4.99	-	0.03
SULPHIDE °	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	2.05	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN °	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	21.7	≤ 35	1.5
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	3	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EXIT GATE T22AF350-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	>160,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			BLACK/TURBID BLACK		

<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\* : 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).

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

APRIL 1, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALL SEASON PROPERTY COMPANY LIMITED  
**ADDRESS** : 19TH FLOOR, M THAI TOWER ALL SEASON PLACE, 87 LUMPHINI PATHUM WAN BANGKOK 10330  
**CONTACT INFORMATION** : TEL : 0 2625 1841 e-mail : Kiatisakp@asp.th.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPITAL TOWER  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MARCH 19, 2022  
**SAMPLING TIME** : 10:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : MR THANADET WANSANOR  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

**RECEIVED DATE** : MARCH 19, 2022  
**ANALYTICAL DATE** : MARCH 19-29, 2022  
**REPORT NO.** : 2022-U024113  
**WORK NO.** : 2022-000787  
**ANALYSIS NO.** : T22AF350-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ENTRANCE GATE T22AF350-0002		
pH <sup>c</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	6.7 (22°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	14.0	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	17.4	≤ 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 2540 C	364	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
AMMONIA-NITROGEN <sup>c</sup>	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM: 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	2.2	-	1.5
PHOSPHATE <sup>c</sup>	mg/L PO <sub>4</sub> <sup>3-</sup>	ASCORBIC ACID METHOD (SM: 4500-P E)	4.90	-	0.03
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	< LOQ	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3





PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ENTRANCE GATE T22AF350-0002		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	700	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			YELLOW		

<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\* : 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.

< LOQ : < LEVEL OF QUANTITATION (TOTAL KJELDAHL NITROGEN  $\geq 1.5$  AND < 5.0 mg/L).

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

APRIL 1, 2022