

ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้งของระบบ Fixed Film Aeration



United Analyst and Engineering Consultant Co., Ltd.

3 Soi Udomsuk 41, Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260

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NSC - TISI - TIS 17025
TESTING 0207

TESTING
No. 0063

ANALYSIS REPORT

CUSTOMER NAME : KASEMKI CO., LTD.
ADDRESS : 17/2, 17/3 JIRM JOMPOL ROAD SI RACHA SI RACHA CHON BURI 20110
CONTACT INFORMATION : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemki.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF KANTARY BAY, SRIRACHA
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 2, 2022
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS AMONRAT PUTTALEE

RECEIVED DATE : NOVEMBER 3, 2022
ANALYTICAL DATE : NOVEMBER 3-10, 2022
REPORT NO. : 2022-U089475
WORK NO. : 2022-008288
ANALYSIS NO. : T22AV851-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			FIXED FILM AERATION (EFFLUENT) T22AV851-0001		
pH ^a	-	ELECTROMETRIC METHOD (SM: 4500-H ⁺ B)	7.4 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	9.9	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	25.8	≤ 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: 2540 C	320	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: 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: 4500-Norg C	25.7	≤ 35	15
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR 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.

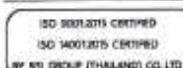
500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

NOVEMBER 15, 2022



• DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL.
• REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

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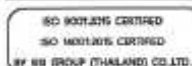
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No. 0063

ANALYSIS REPORT

CUSTOMER NAME : KASEMKIJ CO., LTD.
ADDRESS : 17/2, 17/3 JIRIN JOMPOL ROAD SI RACHA SI RACHA CHON BURI 20110
CONTACT INFORMATION : TEL : 0 2233 8969-98 e-mail : kj-qc@kasemkij.com
SAMPLING SOURCE : WASTEWATER TREATMENT PLANT OF KANTARY BAY, SRIRACHA
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 2, 2022
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS AMONRAT PUTTALEE

RECEIVED DATE : NOVEMBER 3, 2022
ANALYTICAL DATE : NOVEMBER 3-10, 2022
REPORT NO. : 2022-UD96071
WORK NO. : 2022-008288
ANALYSIS NO. : T22AV851-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			MA 1126 (EFFLUENT) T22AV851-0002		
pH ^a	-	ELECTROMETRIC METHOD (SM: 4500-H ⁺ B)	6.9 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O ₂ C AND 5210 B)	8.0	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	≤ 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 2540 C	350	500*	25
SETTLABLE SOLIDS ^c	ml/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: 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 4500-Norg C	19.8	≤ 35	15



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1/2



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			MA 1126 (EFFLUENT) T22AY851-0002		
FAT, OIL AND GREASE *	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM 5520 B)	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

* : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

† : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

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

ND : NON-DETECTABLE.

^ : SAMPLING ON NOVEMBER 23, 2022, ANALYSIS NO. T22AX482-0001 (ANALYTICAL DATE : NOVEMBER 24-29, 2022).

THE REASON FOR ISSUING THE NEW REPORT IS SUBSTITUTE RESULT.

SUBSTITUTED REPORT FOR REPORT NO. 2022-U089476 DATED NOVEMBER 15, 2022.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

DECEMBER 8, 2022

ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้งของระบบถัง SATS รุ่น AT-100



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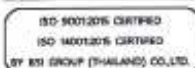


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ANALYSIS REPORT

CUSTOMER NAME	: KASEMKIJ CO., LTD.	RECEIVED DATE	: NOVEMBER 3, 2022
ADDRESS	: 17/2, 17/3 JIRAM JOMPOL ROAD SI RACHA SI RACHA CHON BURI 20110	ANALYTICAL DATE	: NOVEMBER 3-10, 2022
CONTACT INFORMATION	: TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com	REPORT NO.	: 2022-L096072
SAMPLING SOURCE	: WASTEWATER TREATMENT PLANT OF KANTARY BAY, SRIRACHA	WORK NO.	: 2022-008288
SAMPLE TYPE	: EFFLUENT	ANALYSIS NO.	: T22AV851-0003
SAMPLING DATE	: NOVEMBER 2, 2022		
SAMPLING TIME	: -		
SAMPLING METHOD	: -		
SAMPLING BY	: CUSTOMER		
ANALYZED BY	: MISS AMONRAT PUTTALEE		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			AT 100 (EFFLUENT) T22AV851-0003		
pH ^a	-	ELECTROMETRIC METHOD (SM: 4500-H ⁺ B)	7.6 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	13.2	≤ 30	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	11.6	≤ 40	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: 2540 C	258	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^d	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	< LOQ	≤ 35	1.5



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PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			AT 100 (EFFLUENT) T22AV851-0003		
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

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PART 125 D, DATED DECEMBER 29, 2005.

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

^e : SAMPLING ON NOVEMBER 23, 2022, ANALYSIS NO. T22AX482-0002 (ANALYTICAL DATE : NOVEMBER 24 - DECEMBER 2, 2022).

THE REASON FOR ISSUING THE NEW REPORT IS SUBSTITUTE RESULT.

SUBSTITUTED REPORT FOR REPORT NO. 2022-U089477 DATED NOVEMBER 15, 2022.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

DECEMBER 8, 2022