

## ภาคผนวก ข

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ใบรายงานผลการวิเคราะห์คุณภาพสิ่งแวดล้อม

## ภาคผนวก ข-1

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ใบรายงานผลการวิเคราะห์คุณภาพน้ำผิวดิน

## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : SURFACE WATER  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 11:45 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-11, 2024  
**ISSUE DATE** : APRIL 19, 2024  
**REPORT NO.** : 2024-U032285  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH224-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			คลองสาม T24AH224-0001	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B	8.2 (33°C)	-
TEMPERATURE <sup>c</sup>	°C	THERMOMETER AT SITE (SM: PART 2550 B)	33	-
DISSOLVED OXYGEN <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O C)	3.2	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	3.0	1.0
TOTAL SUSPENDED SOLIDS <sup>a</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	215	5.0
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	

<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.

ND : NON-DETECTABLE.

.....  
[Signature]  
LABORATORY SUPERVISOR

APRIL 22, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : SURFACE WATER  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 11:20 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-11, 2024  
**ISSUE DATE** : APRIL 19, 2024  
**REPORT NO.** : 2024-U032286  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH224-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			ผลของสี T24AH224-0002	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B	8.1 (32°C)	-
TEMPERATURE <sup>c</sup>	°C	THERMOMETER AT SITE (SM: PART 2550 B)	32	-
DISSOLVED OXYGEN <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O C)	3.6	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	6.7	1.0
TOTAL SUSPENDED SOLIDS <sup>a</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	42.1	5.0
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	

<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.

ND : NON-DETECTABLE.

.....  
[REDACTED]  
.....

APRIL 22, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : SURFACE WATER  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 11:30 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-11, 2024  
**ISSUE DATE** : APRIL 19, 2024  
**REPORT NO.** : 2024-U032287  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH224-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			ทดลองค่า T24AH224-0003	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B	8.2 (32°C)	-
TEMPERATURE <sup>c</sup>	°C	THERMOMETER AT SITE (SM: PART 2550 B)	32	-
DISSOLVED OXYGEN <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O C)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	29.9	1.0
TOTAL SUSPENDED SOLIDS <sup>a</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	130	5.0
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID GREEN	

<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.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 22, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : SURFACE WATER  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 11:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-11, 2024  
**ISSUE DATE** : APRIL 19, 2024  
**REPORT NO.** : 2024-U032288  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH224-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			ผลการตรวจพบ T24AH224-0004	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B	8.6 (31°C)	-
TEMPERATURE <sup>c</sup>	°C	THERMOMETER AT SITE (SM: PART 2550 B)	31	-
DISSOLVED OXYGEN <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O C)	3.5	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	3.5	1.0
TOTAL SUSPENDED SOLIDS <sup>a</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	22.2	5.0
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	

<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.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 22, 2024



## ภาคผนวก ข-2

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ใบรายงานผลการวิเคราะห์คุณภาพเสียและน้ำทิ้ง

เดือนมกราคม พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003833  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศาลาประชาม และพิธีกรกษัตริย์ T24AA152-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	4,900	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003834  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจ T24AA152-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	55.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	34.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003835  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้ และวิจัย จุฬาลงกรณ์ ศูนย์การเรียนรู้ T24AA152-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	54.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	33.0	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	9	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 11:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003836  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้ และวิจัย จุดอาคาร พรีคัลนิคและศูนย์วิจัย T24AA152-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	100	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	44.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	7	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003837  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 1 T24AA152-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	83.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	42.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

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[Signature]  
.....  
LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003838  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 2 T24AA152-0006		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	69.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	46.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	8	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

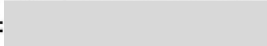

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003839  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 3 T24AA152-0007		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (27°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	73.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	42.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003840  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 4 T24AA152-0008		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (27°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	77.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	45.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.


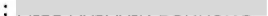
LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003841  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจหาสาร T24AA152-0009		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	45.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	35.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003842  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอดักเจ้าน้ำที่ T24AA152-0010		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	54.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	37.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

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[Signature]  
LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003843  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารวิศวกรรม บริการ T24AA152-0011		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	150	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	48.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

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LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003844  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			โรงจลครก และฟลอมบ้ำจรงกร T24AA152-0012		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	149	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	46.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003845  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้าข่อย T24AA152-0013		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	11.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	15.0	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	54,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

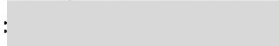

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003846  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการพิกษณะ T24AA152-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	146	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	99.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.



LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-12, 2024  
**REPORT NO.** : 2024-U003847  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารบำบัด น้ำเสียรวม T24AA152-0015		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (29°C)	5-9	-
FLOW RATE <sup>c</sup>	m <sup>3</sup> /hr	CURRENT METER AND CALCULATION	22	-	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			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

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003848  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้าน ทิศตะวันตกใกล้กับ อาคารโรงพยาบาล T24AA152-0016		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	17.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	130	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

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( )  
LABORATORY SUPERVISOR

JANUARY 18, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 10:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003849  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ม่อนน่งน้ำทางด้ำน ท่ศดะวันออกไกล่กั ฉำครนัันหนำการ T24AA152-0017		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	18.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	490	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

.....  
[Signature]  
LABORATORY SUPERVISOR

JANUARY 18, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JANUARY 4, 2024  
**SAMPLING TIME** : 09:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JANUARY 4, 2024  
**ANALYTICAL DATE** : JANUARY 4-10, 2024  
**REPORT NO.** : 2024-U003850  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AA152-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารสุมน้ำ T24AA152-0018		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.7	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	15.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	54,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

JANUARY 18, 2024



เดือนกุมภาพันธ์ พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011079  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ค่ามาตรฐาน และพิพจน์ค่า T24AC036-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	54,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011080  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจ T24AC036-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	35.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	29.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011081  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรือนรัฐ และวิจัย จดอาคาร ศูนย์การเรือนรัฐ T24AC036-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	34.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	31.0	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011082  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุฬาลงกรณ์มหาวิทยาลัยและศูนย์วิจัย T24AC036-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	107	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	60.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011083  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 1 T24AC036-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	81.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	61.7	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	15	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011084  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 2 T24AC036-0006		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	88.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	109	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	13	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.



<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011085  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 3 T24AC036-0007		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	37.7	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011086  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 4 T24AC036-0008		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.1	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	36.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	8	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION



LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011088  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการวิเคราะห์ T24AC036-0009		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	44.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
<b>MICROBIOLOGY</b>					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011089  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักเจ้าหน้าที่ T24AC036-0010		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	33.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	25.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011091  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารวิศวกรรม บริการ T24AC036-0011		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	164	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	53.0	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>a</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011092  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			รับรองตรวจ และข้อมูลปารงกร T24AC036-0012		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	170	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	45.7	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011093  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้าบ่อ T24AC036-0013		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	9.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	7.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011094  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการทดสอบ T24AC036-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	126	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	163	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	89	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

<sup>^</sup> : CUSTOMER INFORMATION

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011099  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารพาณิชย์ น้ำเสียรวม T24AC036-0015		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (30°C)	5-9	-
FLOW RATE <sup>c</sup>	m <sup>3</sup> /hr	CURRENT METER AND CALCULATION	22.49	-	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	4.5	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011101  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้านทิศตะวันตกใกล้กับอาคารโรงพยาบาล T24AC036-0016		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (28°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	13.8	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	33	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 11:37 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011102  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้านทิศตะวันออกใกล้กับอาคารนันทนาการ T24AC036-0017		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	22.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	790	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : FEBRUARY 1, 2024  
**SAMPLING TIME** : 10:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011103  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AC036-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการสุ่มน้ำ T24AC036-0018		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	7.1 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	16.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	3,300	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : -  
**SAMPLE TYPE** : BLANK (EFFLUENT)  
**SAMPLING DATE** : -  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : -  
**ANALYZED BY** :   
**RECEIVED DATE** : FEBRUARY 1, 2024  
**ANALYTICAL DATE** : FEBRUARY 1-7, 2024  
**ISSUE DATE** : FEBRUARY 12, 2024  
**REPORT NO.** : 2024-U011142  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : 2024-FB0083, 2024-TB0083

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		DETECTION LIMIT
			1 2024-FB0083	2 2024-TB0083	
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	ND	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	ND	5.0
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	ND	3
<b>MICROBIOLOGY</b>					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	< 1.8	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	COLOURLESS/CLEAR	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.  
RESULT 1 : FIELD BLANK  
RESULT 2 : TRIP BLANK  
ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

FEBRUARY 13, 2024



เดือนมีนาคม พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025758  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศาลาประชาม และพิธีกรณ T24AE399-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	92,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025759  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจวัด T24AE399-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	30.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	34.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025760  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้ และวิจัย จุฬาลงกรณ์ มหาวิทยาลัย ศูนย์การเรียนรู้ T24AE399-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	60.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	45.5	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	22	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 16:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025761  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุดอาคารพรีคลินิกและศูนย์วิจัย T24AE399-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	100	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	34.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 16:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025763  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 1 T24AE399-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	51.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	39.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 16:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025765  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 2 T24AE399-0006		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	105	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	139	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	16	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : N  
**ANALYZED BY** : N

**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-11, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025766  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 3 T24AE399-0007		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	52.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	34.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup> <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>a</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025768  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษา และบุคลากร 4 T24AE399-0008		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	43.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	24.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

.....  
[Signature]  
LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025769  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจหาการ T24AE399-0009		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	47.7	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	41.0	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025770  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักเจ้าหน้าที่ T24AE399-0010		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	27.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	31.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	1,100	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.



LABORATORY SUPERVISOR

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 14:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025771  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการวิเคราะห์ รายการ T24AE399-0011		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND* <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	34.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	190	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 14:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : M  
**ANALYZED BY** : M  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025772  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			โรงจลตรก และซ่อมปรจรงร T24AE399-0012		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND* <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	37.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	205	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025776  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้าขอนแก่น T24AE399-0016		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	6.5	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	3,300	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025773  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารพักขยะ T24AE399-0013		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	105	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	71.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
<b>MICROBIOLOGY</b>					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 14:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-15, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025774  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารนำมด น้ำเสียมรวม T24AE399-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (31°C)	5-9	-
FLOW RATE <sup>c</sup>	m <sup>3</sup> /hr	CURRENT METER AND CALCULATION	18.9	-	-
BIOCHEMICAL OXYGEN DEMAND* <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025775  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารสุมน้ำ T24AE399-0015		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND* <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	216	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	130	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

.....  
  
LABORATORY SUPERVISOR

APRIL 1, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 15:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : [REDACTED]  
**ANALYZED BY** : [REDACTED]

**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025777  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ม่อน่าน้ำทางด้าน ที่ตดะวันตดใกล้กับ อาคารโรงพยาบาล T24AE399-0017		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.2 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	25.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

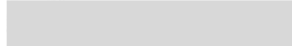

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MARCH 4, 2024  
**SAMPLING TIME** : 16:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MARCH 5, 2024  
**ANALYTICAL DATE** : MARCH 5-12, 2024  
**ISSUE DATE** : MARCH 29, 2024  
**REPORT NO.** : 2024-U025779  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AE399-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้าน ทิศตะวันออกใกล้กับ อาคารนันทนาการ T24AE399-0018		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	8.5 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	6.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	16.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	490	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID GREEN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 1, 2024



เดือนเมษายน พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 14:20 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034109  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศาลาประชาม และพิธีกรณฯ T24AH223-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	54,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

(  
LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:40 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034110  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจ T24AH223-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	54.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	32.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 13:45 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB. GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034112  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุดอาคารศูนย์การเรียนรู้ T24AH223-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.1 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	184	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	54.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup> <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 13:55 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034113  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุดอาคารศูนย์การเรียนรู้ PRECLINIC T24AH223-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	86.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	37.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:20 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034114  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 1 T24AH223-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	94.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	40.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:45 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034116  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 2 T24AH223-0006		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.1 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	122	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	68.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup> <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	7	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.


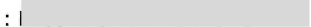
LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:25 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034118  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 3 T24AH223-0007		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	55.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	32.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:30 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034119  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 4 T24AH223-0008		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	18.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	11.5	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:05 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034120  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจหาสาร T24AH223-0009		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	73.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	43.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup> <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>A</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.



LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:55 HOUR  
**SAMPLING METHOD<sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY<sup>c</sup>** :   
**ANALYZED BY** : 

**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034121  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักเจ้าหน้าที่ T24AH223-0010		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	82.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	35.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 14:40 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034124  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารวิศวกรรม บริการ T24AH223-0011		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (36°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	13.7	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	7.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	110	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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, VOL122,  
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 14:45 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034125  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			โรงจวดรกร และชอมม ปารุงกร T24AH223-0012		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	35.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	85.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:38 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034126  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้าลอบ T24AH223-0013		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.8	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	41.5	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:30 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034127  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการพิเคราะห์ T24AH223-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	215	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	426	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	32	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> 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

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>A</sup> : CUSTOMER INFORMATION.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:15 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-17, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034128  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารบำบัด น้ำเสียรวม T24AH223-0015		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (36°C)	5-9	-
FLOW RATE <sup>c</sup>	m <sup>3</sup> hr	CURRENT METER AND CALCULATION	23.25	-	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.1	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	9.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	17	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 17:00 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034129  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้าน ทิศตะวันตกใกล้กับ อาคารโรงพยาบาล T24AH223-0016		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	25.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	1,700	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 16:40 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :  
**ANALYZED BY** :  
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034130  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ป้อนวงน้ำทางด้าน ทิศตะวันออกใกล้กับ อาคารนั้นหนการ T24AH223-0017		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.2 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	4.1	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	18.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	330	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR GREEN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR

APRIL 26, 2024



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 09 2492 8914 e-mail : pakwipa.pai@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : APRIL 4, 2024  
**SAMPLING TIME** : 15:25 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-12, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034131  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AH223-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารสุมน้ำ T24AH223-0018		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (35°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	11.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	48.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	3,300	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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 : 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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.


LABORATORY SUPERVISOR

APRIL 26, 2024





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : -  
**SAMPLE TYPE** : BLANK (EFFLUENT)  
**SAMPLING DATE** : -  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : -  
**ANALYZED BY** :   
**RECEIVED DATE** : APRIL 4, 2024  
**ANALYTICAL DATE** : APRIL 4-17, 2024  
**ISSUE DATE** : APRIL 26, 2024  
**REPORT NO.** : 2024-U034134  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : 2024-FB0337, 2024-TB0326

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		DETECTION LIMIT
			1 2024-FB0337	2 2024-TB0326	
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	< 2.0	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	ND	5.0
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	ND	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	< 1.8	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	COLOURLESS/CLEAR -	

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

RESULT 1 : FIELD BLANK

RESULT 2 : TRIP BLANK

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



APRIL 26, 2024



เดือนพฤษภาคม พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 14:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044683  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศาลาประชาม และพิธีกรณ T24AJ601-0001		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

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 LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044684  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจ T24AJ601-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	10.4	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	9.1	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

(Signature)  
LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 14:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044686  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุฬาลงกรณ์มหาวิทยาลัย การเรียนรู้ T24AJ601-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.1 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	31.9	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	24.1	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044687  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุฬาลงกรณ์มหาวิทยาลัย และศูนย์วิจัย T24AJ601-0004		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.4	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	24.3	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT **RECEIVED DATE** : MAY 8, 2024  
**SAMPLING DATE** : MAY 8, 2024 **ANALYTICAL DATE** : MAY 8-14, 2024  
**SAMPLING TIME** : 16:35 HOUR **ISSUE DATE** : MAY 24, 2024  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE **REPORT NO.** : 2024-U044688  
**SAMPLING BY** :  **WORK NO.** : 2023-003345  
**ANALYZED BY** :  **ANALYSIS NO.** : T24AJ601-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 1 T24AJ601-0005		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	51.6	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	81.3	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	11	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE  
 MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
 PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044689  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและบุคลากร 2 T24AJ601-0006		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	99.3	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	51.2	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044690  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 3 T24AJ601-0007		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	38.6	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	25.4	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	7	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE  
 MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
 PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044691  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 4 T24AJ601-0008		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.1 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	32.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	15.0	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE  
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044692  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารนันทนาการ T24AJ601-0009		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	52.4	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	31.1	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

(MRS PITAPAT SUTTHAMNUTWONG)  
LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044693  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักเจ้าหน้าที่ T24AJ601-0010		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.8 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	22.9	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	22.2	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044694  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารวิศวกรรม บริการ T24AJ601-0011		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	63.9	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	48.6	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044695  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			โรงจวดรกร และพอม ปารุงกร T24AJ601-0012		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	31.6	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	44.0	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE  
 MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
 PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044696  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้าขอม T24AJ601-0013		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	5.2	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	35,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR YELLOW		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044697  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารพิษภัย T24AJ601-0014		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.2 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	136	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	40.2	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	12	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044698  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารบำบัด น้ำเสียรวม T24AJ601-0015		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (35°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
FLOW RATE	m <sup>3</sup> /hr	CURRENT METER AND CALCULATION	20.45	-	-
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR YELLOW		

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 A, NOTIFICATION OF THE  
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 14:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044699  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้าน ทิศตะวันตกใกล้กับ อาคารโรงพยาบาล T24AJ601-0016		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.2 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	19.4	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	4,900	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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 A, NOTIFICATION OF THE  
 MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
 PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.



ND : NON-DETECTABLE.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 16:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044700  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่อน้ำทางด้าน ทิศตะวันออกใกล้กับ อาคารนันทนาการ T24AJ601-0017		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.5 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	14.0	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	4,900	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID GREEN		

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 A, NOTIFICATION OF THE  
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

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LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : MAY 8, 2024  
**SAMPLING TIME** : 15:50 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : MAY 8, 2024  
**ANALYTICAL DATE** : MAY 8-14, 2024  
**ISSUE DATE** : MAY 24, 2024  
**REPORT NO.** : 2024-U044701  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AJ601-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารสุมน้ำ T24AJ601-0018		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (34°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.2	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	210	≤ 30	5.0
FREE CHLORINE	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	2,300	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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 A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NON-DETECTABLE.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : -  
**SAMPLE TYPE** : BLANK (EFFLUENT) **RECEIVED DATE** : MAY 8, 2024  
**SAMPLING DATE** : - **ANALYTICAL DATE** : MAY 8-14, 2024  
**SAMPLING TIME** : - **ISSUE DATE** : MAY 24, 2024  
**SAMPLING METHOD** : - **REPORT NO.** : 2024-U044706  
**SAMPLING BY** : - **WORK NO.** : 2023-003345  
**ANALYZED BY** :  **ANALYSIS NO.** : 2024-FB0446, 2024-TB0435

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		DETECTION LIMIT
			1 2024-FB0446	2 2024-TB0435	
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	< 2.0	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	ND	5.0
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	ND	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	< 1.8	< 1.8	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	COLOURLESS/CLEAR	

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

RESULT 1 : FIELD BLANK

RESULT 2 : TRIP BLANK

ND : NON-DETECTABLE.

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LABORATORY SUPERVISOR







เดือนมิถุนายน พ.ศ. 2567

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## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 14:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057500  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศาลาประชามคม และพิพิธภักณชา T24AM336-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.5	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	92,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 12:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057501  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการตรวจ T24AM336-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	7.6 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	20.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	16.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 10:05 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057502  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุฬาลงกรณ์มหาวิทยาลัย การเรียนรู้ T24AM336-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	44.7	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	17.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>A</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 10:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057503  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ศูนย์การเรียนรู้และวิจัย จุฬาลงกรณ์มหาวิทยาลัย และศูนย์วิจัย T24AM336-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	72.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	26.8	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 11:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057504  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและบุคลากร 1 T24AM336-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	95.2	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	32.3	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	11	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>a</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 11:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057505  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 2 T24AM336-0006		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	99.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	17.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	5	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

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 .....  
 LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 11:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057506  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและ บุคลากร 3 T24AM336-0007		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.6 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	80.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	26.9	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	6	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 11:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057507  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0008

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักนักศึกษาและบุคลากร 4 T24AM336-0008		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	60.4	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	20.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	3	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>a</sup> : CUSTOMER INFORMATION.



ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 12:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** : 

**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057508  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารนันทนาการ T24AM336-0009		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	59.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	15.8	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	8	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>A</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 12:30 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057509  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			หอพักเจ้าหน้าที่ T24AM336-0010		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.5 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	71.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	18.5	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>^</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	7	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 12:40 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057510  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารวิศวกรรม บริการ T24AM336-0011		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.1 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	290	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	196	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>^ a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	55	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.



ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 12:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057511  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			รับรองผล และซ่อมบำรุง T24AM336-0012		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND * <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	16.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	63.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NOT DETECTED.

LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 13:45 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057512  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			สถานีไฟฟ้ายม T24AM336-0013		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.4 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	4.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	7.2	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B, C AND E)	160,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NOT DETECTED.

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 LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 13:25 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057513  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารพักขยะ T24AM336-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.0 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	178	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	67.4	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	11	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>^</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 13:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057515  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			มอบหมายงานทางด้าน ทดสอบวิเคราะห์กับ อาคารโรงพยาบาล T24AM336-0016		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	8.5 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	6.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	46.6	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	14,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NOT DETECTED.

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LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 11:55 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057516  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ป้อนผ่านน้ำทางด้าน ทิศตะวันออกใกล้กับ อาคารนั้นหนการ T24AM336-0017		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.7 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	4.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	15.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	8,400	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID GREEN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

ND : NOT DETECTED.

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LABORATORY SUPERVISOR



## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 6, 2024  
**SAMPLING TIME** : 13:35 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : [REDACTED]  
**ANALYZED BY** : [REDACTED]

**RECEIVED DATE** : JUNE 6, 2024  
**ANALYTICAL DATE** : JUNE 6-12, 2024  
**ISSUE DATE** : JUNE 28, 2024  
**REPORT NO.** : 2024-U057517  
**WORK NO.** : 2023-003345  
**ANALYSIS NO.** : T24AM336-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			อาคารศูนย์น้ำ T24AM336-0018		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	7.3 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND * <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	5.3	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	43.1	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	22,000	-	1.8
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

\* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NOT DETECTED.

LABORATORY SUPERVISOR





## ANALYSIS REPORT

**CUSTOMER NAME** : CHAKRI NARUEBODINDRA MEDICAL INSTITUTE  
**ADDRESS** : 111 MOO 14 BANG PLA BANG PHLI SAMUT PRAKAN 10540  
**CONTACT INFORMATION** : TEL : 0 2839 5131 e-mail : Natchapon.kad@mahidol.edu  
**SAMPLING SOURCE** : RAMADHIBODI CHAKRI NARUEBODINDRA HOSPITAL  
**SAMPLE TYPE** : BUILDING EFFLUENT  
**SAMPLING DATE** : JUNE 29, 2024  
**SAMPLING TIME** : 11:00 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** :  
**ANALYZED BY** :  
**RECEIVED DATE** : JUNE 29, 2024  
**ANALYTICAL DATE** : JUNE 29 - JULY 12, 2024  
**ISSUE DATE** : JULY 12, 2024  
**REPORT NO.** : 2024-U063875  
**WORK NO.** : 2024-006409  
**ANALYSIS NO.** : T24AO600-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ผลการบำบัด น้ำเสียรวม T24AO600-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H <sup>+</sup> B AND 1060 B	6.3 (32°C)	5-9	-
FLOW RATE <sup>c</sup>	m <sup>3</sup> /hr	CURRENT METER AND CALCULATION	36	-	-
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
SUSPENDED SOLIDS <sup>c</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
FREE CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	ND	-	0.1
FAT, OIL AND GREASE <sup>a c</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	49	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

<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, 24<sup>th</sup> EDITION, 2023.

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 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

<sup>a</sup> : CUSTOMER INFORMATION.

ND : NOT DETECTED.

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[Signature]  
LABORATORY SUPERVISOR

