

# เอกสารแนบ 4

เอกสารผลการตรวจวัดคุณภาพ  
สิ่งแวดล้อม

## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@aloft-hotels.com  
**SAMPLING SOURCE** : CANTEEN  
**SAMPLE TYPE** : DRINKING WATER  
**SAMPLING DATE** : JANUARY 13, 2022  
**SAMPLING TIME** : 14:05 HOUR  
**SAMPLING METHOD <sup>a</sup>** : STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : JANUARY 13, 2022  
**ANALYTICAL DATE** : JANUARY 13-18, 2022  
**REPORT NO.** : 2022-U006118  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AA683-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			DRINKING WATER T22AA683-0002		
MICROBIOLOGY					
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221B)	< 1.1	< 2.2	1.1
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221E)	< 1.1	-	1.1
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221D AND F)	ABSENCE	ABSENCE	-
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	9.3x10 <sup>3</sup>	-	1
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR		
SEDIMENT					

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

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

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

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

REGULATORY STANDARD : BOTTLED DRINKING WATER QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.61, B.E. 2524 (1981) ISSUED UNDER THE FOOD ACT, B.E. 2522 (1979), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 98, PART 157 (SPECIAL ISSUED), DATED SEPTEMBER 24, B.E. 2524 (1981).

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

LABORATORY SUPERVISOR

JANUARY 26, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@aloft-hotels.com  
**SAMPLING SOURCE** : ICE MACHINE MAIN KITCHEN  
**SAMPLE TYPE** : ICE  
**SAMPLING DATE** : JANUARY 13, 2022  
**SAMPLING TIME** : 14:00 HOUR  
**SAMPLING METHOD<sup>c</sup>** : STERILE TECHNIQUE  
**SAMPLING BY<sup>c</sup>** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : JANUARY 13, 2022  
**ANALYTICAL DATE** : JANUARY 13-18, 2022  
**REPORT NO.** : 2022-U006117  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AA683-0001

PARAMETER		UNIT	METHOD OF ANALYSIS	RESULT ICE T22AA683-0001	REGULATORY STANDARD	DETECTION LIMIT
MICROBIOLOGY						
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221B)	< 1.1	< 2.2	1.1	
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221E)	< 1.1	-	1.1	
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221D AND F)	ABSENCE	ABSENCE	-	
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	6.6x10 <sup>4</sup>	-	1	
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-	
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR			

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

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

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

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

REGULATORY STANDARD : ICE QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.78, B.E. 2527.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : PARAMETER ANALYSED OF ICE SAMPLE ARE COMPLIED WITH REGULATORY STANDARD .

LABORATORY SUPERVISOR

JANUARY 26, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : ALOFT HOTEL SUKHUMVIT 11 TEL : 0 2207 7098 e-mail : engineering.aloftbkk@alofthotels.com  
**SAMPLING SOURCE** : ICE MACHINE MAIN KITCHEN  
**SAMPLE TYPE** : ICE  
**SAMPLING DATE** : FEBRUARY 10, 2022  
**SAMPLING TIME** : 15:25 HOUR  
**SAMPLING METHOD <sup>a</sup>** : GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : FEBRUARY 10, 2022  
**ANALYTICAL DATE** : FEBRUARY 10-17, 2022  
**REPORT NO.** : 2022-U012520  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AC443-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ICE T22AC443-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.1	-	1.1
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	< 1.1	< 2.2	1.1
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221 D AND F)	ABSENCE	ABSENCE	-
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	6.1x10 <sup>4</sup>	-	1
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR		

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

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


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

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

REGULATORY STANDARD : ICE QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.78, B.E. 2527.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

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(MISS CHAWEEWAN BOONLA)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTANA BANGKOK 10110  
**CONTACT INFORMATION** : ALOFT HOTEL SUKHUMVIT 11 TEL : 0 2207 7098 e-mail : engineering.aloftbkk@alofthotels.com  
**SAMPLING SOURCE** : ICE MACHINE MAIN KITCHEN  
**SAMPLE TYPE** : ICE  
**SAMPLING DATE** : MARCH 10, 2022  
**SAMPLING TIME** : 13:50 HOUR  
**SAMPLING METHOD** : GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : MARCH 10, 2022  
**ANALYTICAL DATE** : MARCH 10-16, 2022  
**REPORT NO.** : 2022-U022320  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AE615-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ICE T22AE615-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.1	-	1.1
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	< 1.1	< 2.2	1.1
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221 D AND F)	ABSENCE	ABSENCE	-
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	8.9x10 <sup>3</sup>	-	1
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR		

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

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

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

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

REGULATORY STANDARD : ICE QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.78, B.E. 2527.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

(MISS CHAWEEWAN BOONDA)  
LABORATORY SUPERVISOR

MARCH 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@alofthotels.com  
**SAMPLING SOURCE** : ICE MACHINE MAIN KITCHEN  
**SAMPLE TYPE** : ICE  
**SAMPLING DATE** : APRIL 18, 2022  
**SAMPLING TIME** : 13:20 HOUR  
**SAMPLING METHOD <sup>c</sup>** : GRAB AND STERILE TECHNIQUE  
**SAMPLING BY <sup>c</sup>** : MR WEERAYUT MOKKAWEW  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB  
**RECEIVED DATE** : APRIL 18, 2022  
**ANALYTICAL DATE** : APRIL 18-21, 2022  
**REPORT NO.** : 2022-U031913  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AH209-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ICE T22AH209-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.1	-	1.1
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	< 1.1	< 2.2	1.1
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221 D AND F)	ABSENCE	ABSENCE	-
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	2.9x10 <sup>5</sup>	-	1
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR		

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

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

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

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

REGULATORY STANDARD : ICE QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.78, B.E. 2527.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

LABORATORY SUPERVISOR

MAY 3, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchai@alofthotels.com  
**SAMPLING SOURCE** : ICE MACHINE MAIN KITCHEN  
**SAMPLE TYPE** : ICE  
**RECEIVED DATE** : JUNE 9, 2022  
**SAMPLING DATE** : JUNE 9, 2022  
**ANALYTICAL DATE** : JUNE 9-15, 2022  
**SAMPLING TIME** : 14:20 HOUR  
**REPORT NO.** : 2022-U047956  
**SAMPLING METHOD °** : GRAB AND STERILE TECHNIQUE  
**WORK NO.** : 2021-007854  
**SAMPLING BY °** : MR WEERAYUT MOKKAEW  
**ANALYSIS NO.** : T22AL124-0001  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

ANALYZED BY : MISS TISAKITA PORN BOATID

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ICE T22AL124-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.1	-	1.1
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	< 1.1	< 2.2	1.1
<i>E. coli</i> <sup>b</sup>	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221 D AND F)	ABSENCE	ABSENCE	-
<i>Clostridium perfringens</i> <sup>c</sup>	/100 mL	ENVIRONMENT AGENCY, THE MICROBIOLOGY OF DRINKING WATER, 2010 PART 6	NOT DETECTED	1/	-
HETERO PLATE COUNT <sup>b</sup>	CFU/mL	STANDARD PLATE COUNT (SM: 9215 B)	62	-	1
SAMPLE CONDITION			COLOURLESS/CLEAR		
WATER'S COLOUR/TURBID					
SEDIMENT					

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

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

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

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

REGULATORY STANDARD : ICE QUALITY STANDARDS, NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH, NO.78, B.E. 2527.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

(MISS CHAWEEWAN BOONDA)  
LABORATORY SUPERVISOR

JUNE 23, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: ALOFT BANGKOK SUKHUMVIT 11	<b>RECEIVED DATE</b>	: JANUARY 13, 2022
<b>ADDRESS</b>	: 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110	<b>ANALYTICAL DATE</b>	: JANUARY 13-22, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 2207 7098 e-mail : noppadol.pinchan@aloft-hotels.com	<b>REPORT NO.</b>	: 2022-U006130
<b>SAMPLING SOURCE</b>	: WASTEWATER TREATMENT PLANT	<b>WORK NO.</b>	: 2021-007854
<b>SAMPLE TYPE</b>	: WASTEWATER	<b>ANALYSIS NO.</b>	: T22AA683-0013 - T22AA683-0014
<b>SAMPLING DATE</b>	: JANUARY 13, 2022		
<b>SAMPLING TIME</b>	: 1/		
<b>SAMPLING METHOD</b>	: GRAB		
<b>SAMPLING BY</b>	: MR WEERAYUT MOKKAEW		
<b>ANALYZED BY</b>	: MISS AMONRAT PUTTALEE		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:25 HOUR 1/ T22AA683-0013	2 14:20 HOUR 1/ T22AA683-0014		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	6.7 (30°C)	7.0 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	208	146	≤ 20	2.0
SETTLEABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	0.2	0.1	≤ 0.5	0.1
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	49.4	27.8	≤ 30	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	633	586	500*	25
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	61.2	60.7	≤ 35	1.5
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	9.49	6.70	≤ 1.0	0.50



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:25 HOUR 1/ T22AA683-0013	2 14:20 HOUR 1/ T22AA683-0014		
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	10	ND	≤ 20	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID GREY	GREY/TURBID GREY		

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

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

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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

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

RESULT 1 : INFLUENT

RESULT 2 : EFFLUENT

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005.

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

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD EXCEPT BIOCHEMICAL OXYGEN DEMAND, TOTAL KJELDAHL NITROGEN AND SULPHIDE.

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

JANUARY 26, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@aloft-hotels.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : FEBRUARY 3, 2022  
**SAMPLING TIME** : 12:30 HOUR  
**SAMPLING METHOD<sup>c</sup>** : GRAB  
**SAMPLING BY<sup>c</sup>** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS KALLAYA SOMPHONG

**RECEIVED DATE** : FEBRUARY 4, 2022  
**ANALYTICAL DATE** : FEBRUARY 4-13, 2022  
**REPORT NO.** : 2022-U010741  
**WORK NO.** : 2022-001145  
**ANALYSIS NO.** : T22AC020-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T22AC020-0001		
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	2.5	≤ 20	2.0
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	30.9	≤ 35	1.5
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2</sup> - F)	ND	≤ 1.0	0.50
<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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005.

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS ARE COMPLIED WITH REGULATORY STANDARD.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

FEBRUARY 15, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@aloft hotels.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : MARCH 10, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS AMONRAT PUTTALEE  
**RECEIVED DATE** : MARCH 10, 2022  
**ANALYTICAL DATE** : MARCH 10-21, 2022  
**REPORT NO.** : 2022-U022321  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AE615-0002 - T22AE615-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T22AE615-0002	2 14:00 HOUR 1/ T22AE615-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	6.9 (31°C)	7.4 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	84.3	10.9	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	24.4	5.3	≤ 30	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	481	430	500*	25
SETTLEABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	2.86	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	60.0	47.4	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:05 HOUR 1/ T22AE615-0002	2 14:00 HOUR 1/ T22AE615-0003		
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	ND	≤ 20	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID GREY	YELLOW/TURBID YELLOW		

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

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

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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

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

RESULT 1 : INFLUENT

RESULT 2 : EFFLUENT

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005.

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

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@alofthotels.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : APRIL 18, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS AMONRAT PUTTALEE  
**RECEIVED DATE** : APRIL 18, 2022  
**ANALYTICAL DATE** : APRIL 18-25, 2022  
**REPORT NO.** : 2022-U031916  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AH209-0004 - T22AH209-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 13:35 HOUR I/ T22AH209-0004	2 13:30 HOUR I/ T22AH209-0005		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	6.8 (30°C)	7.5 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	95.1	25.6	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	47.6	11.7	≤ 30	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	462	412	500*	25
SETTLEABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	0.5	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	4.13	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	60.4	19.8	≤ 35	1.5



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 13:35 HOUR 1/ T22AH209-0004	2 13:30 HOUR 1/ T22AH209-0005		
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	3	ND	≤ 20	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID GREY	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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

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

RESULT 1 : INFLUENT

RESULT 2 : EFFLUENT

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005.

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

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD EXCEPT BIOCHEMICAL OXYGEN DEMAND.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 3, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : ALOFT HOTEL SUKHUMVIT 11 TEL : 0 2207 7098 e-mail : engineering.aloftbkk@alofthotels.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MAY 25, 2022  
**SAMPLING TIME** : 13:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS AKSARIN BUNKONG

**RECEIVED DATE** : MAY 27, 2022  
**ANALYTICAL DATE** : MAY 27 - JUNE 2, 2022  
**REPORT NO.** : 2022-U042100  
**WORK NO.** : 2022-004237  
**ANALYSIS NO.** : T22AK138-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT T22AK138-0001		
BIOCHEMICAL OXYGEN DEMAND	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	12.4	≤ 20	2.0
<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.

COMMENT : PARAMETER ANALYSED IS COMPLIED WITH REGULATORY STANDARD.

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : ALOFT BANGKOK SUKHUMVIT 11  
**ADDRESS** : 35 SUKHUMVIT SOI 11 (CHAIYOT), SUKHUMVIT ROAD, KHLONG TOEI NUEA WATTHANA BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 0 2207 7098 e-mail : noppadol.pinchan@alofthotels.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT  
**SAMPLE TYPE** : WASTEWATER  
**SAMPLING DATE** : JUNE 9, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : MR WEERAYUT MOKKAEW  
**ANALYZED BY** : MISS AMONRAT PUTTALEE

**RECEIVED DATE** : JUNE 9, 2022  
**ANALYTICAL DATE** : JUNE 9-22, 2022  
**REPORT NO.** : 2022-U047958  
**WORK NO.** : 2021-007854  
**ANALYSIS NO.** : T22AL124-0003 - T22AL124-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:35 HOUR I/ T22AL124-0003	2 14:30 HOUR I/ T22AL124-0004		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H* B)	6.8 (30°C)	8.1 (30°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	158	37.7	≤ 20	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	97.0	12.4	≤ 30	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	427	426	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	2.0	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2</sup> - F)	6.8	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	66.4	34.5	≤ 35	1.5





PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 14:35 HOUR I/ T22AL124-0003	2 14:30 HOUR I/ T22AL124-0004		
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	13	ND	≤ 20	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID GREY	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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

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

RESULT 1 : INFLUENT

RESULT 2 : EFFLUENT

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005.

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

ND : NON-DETECTABLE.

COMMENT : ALL TESTED PARAMETERS OF THE EFFLUENT ARE COMPLIED WITH REGULATORY STANDARD EXCEPT BIOCHEMICAL OXYGEN DEMAND.

LABORATORY SUPERVISOR

JUNE 23, 2022