

บทที่ 3

ผลการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม

นิติบุคคลอาคารชุดแอสปายอุดรธานี

ที่อยู่เจ้าของโครงการ นิติบุคคลอาคารชุดแอสปายอุดรธานี
669 หมู่ 2 ซ.บ้านโพธิ์สว่าง ถ.โพศรี ต.หมากแข้ง อ.เมือง จ.อุดรธานี 41000

วันที่เก็บตัวอย่าง มกราคม 2567 ถึง มิถุนายน 2567 (ความถี่ 1 ครั้ง / เดือน)

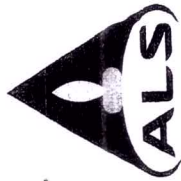
สถานที่เก็บตัวอย่าง

1. จุดระบายน้ำออกจากระบบ
2. บ่อพักน้ำสุดท้ายก่อนระบายออกท่อสาธารณะ

นิติบุคคลแอสปายอุดรธานี

ตำแหน่งที่วัด	พารามิเตอร์ที่วัด						Total dissolved solids
	pH	BOD (mg/L)	Suspended Solids (mg/L)	Oil & Grease (mg/L)	TKN (mg/L)	Sulfide (mg/L)	
1. น้ำเสียหลังจากบำบัด ก.ค 67	7.5	26.1	0.1	3	59.7	0.6	348
2. น้ำเสียหลังจากบำบัด ส.ค 67	7.6	20.2	0.1	3	25.1	0.5	380
3. น้ำเสียหลังจากบำบัด ก. ย 67	7.15	34.9	0.1	3	26.7	0.5	308
4. น้ำเสียหลังจากบำบัด ต.ค 67	7.0	80.0	25	3	28.6	0.5	312
5. น้ำเสียหลังจากบำบัด พ.ย 67	7.4	6.2	17	3	17.3	0.5	232
6. น้ำเสียหลังจากบำบัด ธ.ค 67	7.7	19.7	31	4	12.8	0.5	348
ค่ามาตรฐาน ***	5.5-9	≤ 30	≤ 40	≤ 20	≤ 35	≤ 1.0	≤ 1000

หมายเหตุ : *** ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่อง กำหนดมาตรฐานควบคุม การระบายน้ำทิ้งจากอาคารบางประเภทและบางขนาด ลงวันที่ 7 พฤศจิกายน 2548 ประกาศในราชกิจจานุเบกษา เล่มที่ 122 ตอนที่ 12 ลง วันที่ 29 ธันวาคม 2548



Analysis Report NN2400243



TESTING
7/67 No.0009

Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000

P/O : ----

Project : ----

Project Location: Juristic Person Condo Aspire Udonthani

Work Order : NN2400243

Report Number : NN2400243-AA

Date Received : Jul 02, 2024

Date Reported : Jul 08, 2024

Date Analysis Commenced : Jul 03, 2024

No. of samples received : 1

Temperature : 3.2 °C

Sampled by : Anukun Wilasang

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Signatories

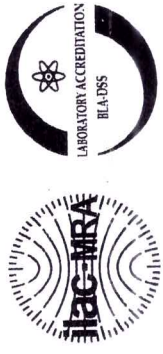
Nat Sant

Nanthawadee Somboon
Specialist 2

ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Life Sciences

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand T +662 760 3000

www.alsglobal.com



Analysis Report NN2400243

Report Number : NN2400243-AA

TESTING
No.0009

Sub-Matrix: WASTEWATER

(Matrix: WATER)

Sub-Matrix: WASTEWATER			Client Sample ID		Sampling Date		Guideline		Result	
Matrix: WATER					Jul 01, 2024 02:50 PM		NN2400243-001			
Method	Testing Lab	Analytes	LOD	LOQ	Unit	MNRE 2548 Type B				
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	≤30			26.1	
EN0048	Bangkok	Oil & Grease	---	3	mg/L	≤20			<3	
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	5-9			7.5	
EN0032	Bangkok	Sulfides	---	0.5	mg/L	≤1			<0.5 *	
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35			59.7	
Physical and Aggregate Properties										
EN0093	Bangkok	Settleable Solids	---	0.1	mL/L/hr	≤0.5			<0.1 *	
EN0099	Bangkok	Total Dissolved Solids at 103-105°C	---	5	mg/L	≤500			348	

Guideline: MNRE 2548 Type B: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type B (Guideline for TDS are in addition to the TDS of the water used not more than 500 mg/L)

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

Key:

- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report NN2400283

Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000

P/O :
Project :
Project Location: Juristic Person Condo Aspire Udonthani

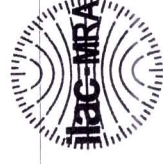
Work Order : NN2400283
Report Number : NN2400283-AA
Date Received : Aug 02, 2024
Date Reported : Aug 09, 2024
Date Analysis Commenced : Aug 02, 2024
No. of samples received : 1
Temperature : 3.2 °C
Sampled by : Anukun Willasang

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

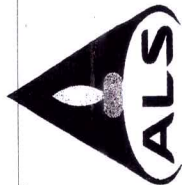
Signatories

Nant Sait

Nanthawadee Somboon
Specialist 2



TESTING 8/67
No.0009

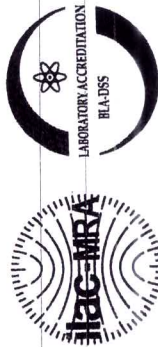


Analysis Report NN2400283

Report Number : NN2400283-AA

Sub-Matrix: WASTEWATER

(Matrix: WATER)



TESTING
No.0009

Sub-Matrix: WASTEWATER										Client Sample ID		Sampling Date		Guideline		Unit		LOQ		LOD		Analytes		Testing Lab		Method		Result		Date			
Sub-Matrix: WASTEWATER																																	
(Matrix: WATER)																																	

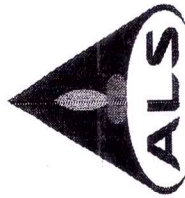
Guideline: MNRE 2548 Type B: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type B (Guideline for TDS are in addition to the TDS of the water used not more than 500 mg/L)

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

END OF REPORT



Analysis Report NN2400314



Client : Juristic Person Condo Aspire Udonthani

669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000

P/O : ---

Project : ---

Project Location: Juristic Person Condo Aspire Udonthani

Work Order : NN2400314
Report Number : NN2400314-AA
Date Received : Sep 03, 2024
Date Reported : Sep 09, 2024
Date Analysis Commenced : Sep 04, 2024
No. of samples received : 1
Temperature : 4.8 °C
Sampled by : Adisak Phomphai

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

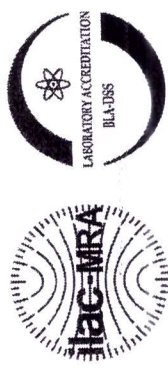
ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Signatories

Siriluk P.

Siriluk Bunnak

Section Head



Analysis Report NN2400314

Report Number : NN2400314-AA

TESTING
No.0009

Sub-Matrix: WASTEWATER				Client Sample ID		Client Sample ID	
(Matrix: WATER)				Sampling Date		Sampling Date	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline	
						MNRE 2567 Type B	Result
Chemical Parameters							
EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	≤30	34.9
EN0048	Bangkok	Oil & Grease	---	3	mg/L	≤20	<3
EN0021	Bangkok	pH at 25°C	---	1	pH Unit	5.5-9	7.15
EN0032	Bangkok	Sulfides	---	0.5	mg/L	≤1	<0.5 *
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	26.7
Physical and Aggregate Properties							
EN0093	Bangkok	Settleable Solids	---	0.1	mL/L/hr	---	<0.1 *
EN0100	Bangkok	Total Dissolved Solids at 180°C	---	5	mg/L	≤1000	308

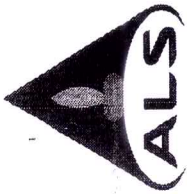
Guideline: MNRE 2567 Type B; Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type B

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

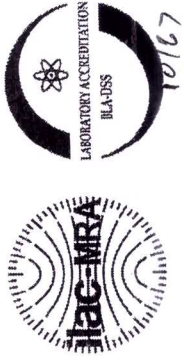
Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report NN2400362



TESTING
No.0009

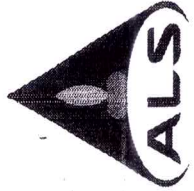
Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000
P/O : ---
Project : ---
Project Location: Juristic Person Condo Aspire Udonthani

Work Order : NN2400362
Report Number : NN2400362-AA
Date Received : Oct 02, 2024
Date Reported : Oct 08, 2024
Date Analysis Commenced : Oct 03, 2024
No. of samples received : 1
Sampled by : Adisak Phomphai

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.
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Signatories

Nanthawadee Somboon
Specialist 2



Analysis Report NN2400362

Report Number : NN2400362-AA

Sub-Matrix: WASTEWATER

(Matrix: WATER)

TESTING
No.0009

Client Sample ID

ปิ่นเกล้า

Sampling Date

Oct 01, 2024 01:50 PM

Method

Testing Lab

Analytes

LOD

LOQ

Unit

Guideline

MNRE 2567
Type B

Result

Chemical Parameters

EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	≤30	---	80.0	---
EN0048	Bangkok	Oil & Grease	---	3	mg/L	≤20	---	3	---
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	5.5-9	---	7.0	---
EN0032	Bangkok	Sulfides	---	0.5	mg/L	≤1	---	<0.5 *	---
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	---	28.6	---

Physical and Aggregate Properties

EN0100	Bangkok	Total Dissolved Solids at 180°C	---	5	mg/L	≤1000	---	312	---
EN0102	Bangkok	Total Suspended Solids	---	5	mg/L	≤40	---	25	---

Guideline: MNRE 2567 Type B: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type B

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

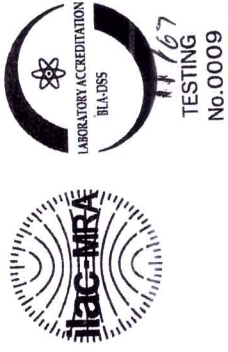
Key:

- LOD : Limit of Detection
- "<": Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report NN2400416



Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000

P/O : ---

Project : ---

Project Location: Juristic Person Condo Aspire Udonthani

Work Order : NN2400416

Report Number : NN2400416-AA

Date Received : Nov 02, 2024

Date Reported : Nov 08, 2024

Date Analysis Commenced : Nov 02, 2024

No. of samples received : 1

Temperature : 4.0 °C

Sampled by : Adisak Phomphai

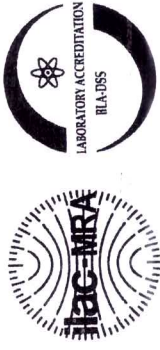
Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Signatories

Siriluk P.

Siriluk Bunnak
Section Head



Analysis Report NN2400416

Report Number : NN2400416-AA

TESTING
No.0009

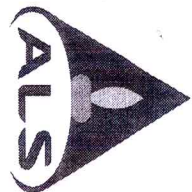
Sub-Matrix: WASTEWATER
(Matrix: WATER)

Sub-Matrix: WASTEWATER					Client Sample ID		Sampling Date	
(Matrix: WATER)							Nov 01, 2024 02:05 PM	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		Result
						MNRE 2567	Type A	
Chemical Parameters								
EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	≤20	---	6.2
EN0048	Bangkok	Oil & Grease	---	3	mg/L	≤20	---	3
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	5.5-9	---	7.4
EN0032	Bangkok	Sulfides	---	0.5	mg/L	≤1	---	<0.5 *
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	---	17.3
Physical and Aggregate Properties								
EN0101	Bangkok	Total Dissolved Solids at 180°C	---	5	mg/L	≤1000	---	232
EN0101	Bangkok	Total Suspended Solids	---	5	mg/L	≤30	---	17

Guideline: MNRE 2567 Type A: Building: Notification of The Ministry of Natural Resources and Environment on Effluent from building Type A
Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.
Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report NN2400458



TESTING
12/167
No.0009

Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000
P/O : ---
Project : ---
Project Location: Juristic Person Condo Aspire Udonthani

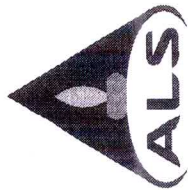
Work Order : NN2400458
Report Number : NN2400458-AA
Date Received : Dec 03, 2024
Date Reported : Dec 13, 2024
Date Analysis Commenced : Dec 03, 2024
No. of samples received : 2
Temperature : 3.5 °C
Sampled by : Adisak Phomphai

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Signatories

Tuanjai T.

Tuanjai Thangklang
Manager



Analysis Report NN2400458

Report Number : NN2400458-AA

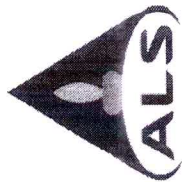


TESTING
No.0009

Sub-Matrix: WASTEWATER

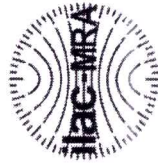
(Matrix: WATER)

Sub-Matrix: WASTEWATER (Matrix: WATER)							Client Sample ID		ปิ่นเกล้า	
							Sampling Date		Dec 02, 2024 02:30 PM	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		Result		
						MNRE 2567 Type B	MOPH 1/2550			
Chemical Parameters										
EN0044	Bangkok	BOD (5 days at 20°C)	---	2.0	mg/L	≤30	---	19.7	---	
EN0048	Bangkok	Oil & Grease	---	3	mg/L	≤20	---	4	---	
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	5.5-9	---	7.7	---	
EN0032	Bangkok	Sulfides	---	0.5	mg/L	≤1	---	<0.5 *	---	
EN0035	Bangkok	Total Kjeldahl Nitrogen as N	0.15	1.0	mg/L	≤35	---	12.8	---	
Physical and Aggregate Properties										
EN0100	Bangkok	Total Dissolved Solids at 180°C	---	5	mg/L	≤1000	---	348	---	
EN0102	Bangkok	Total Suspended Solids	---	5	mg/L	≤40	---	31	---	



Analysis Report NN2400458

Report Number : NN2400458-AA



TESTING
No.0009

Sub-Matrix: PROCESS WATER

(Matrix: WATER)

Sub-Matrix: PROCESS WATER							Client Sample ID	
Sub-Matrix: WATER							สร้อยสำเนา	
							Sampling Date	
							Dec 02, 2024 02:15 PM	
Method	Testing Lab	Analytes	LOD	LOQ	Unit	Guideline		
						MNRE 2567	MOPH	
						Type B	1/2550	
Chemical Parameters								
EN0017	Bangkok	Ammonia Nitrogen	0.02	0.05	mg/L	---	Not Detected *	
EN0002	Bangkok	Chloride as Cl	0.06	0.2	mg/L	---	162 *	
EN0002	Bangkok	Nitrate as N	0.06	0.2	mg/L	---	0.9 *	
EN0021	Bangkok	pH at 25°C	---	1.0	pH Unit	---	7.2 *	
EN0041	Bangkok	Total Hardness as CaCO3	---	1	mg/L	---	54 *	
Microbiological Parameters								
MC6009	Bangkok	Total Coliforms	---	---	MPN/100mL	---	<1.1	
MC6012	Bangkok	Escherichia coli	---	---	in 100mL	---	Not Detected	
MC6021	Bangkok	Fecal Coliforms	---	---	MPN/100mL	---	<1.1	
Physical and Aggregate Properties								
EN0077	Bangkok	Total Alkalinity as CaCO3	---	1	mg/L	---	<1 *	

Guideline: MINRE 2567 Type B: Building, Notification of The Ministry of Natural Resources and Environment on Effluent from building Type B

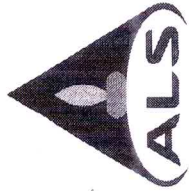
MOPH 1/2550: Recommendations of The Public Health Committee on Swimming Pool Operations

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

- Key:
- LOD : Limit of Detection
 - "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----



Analysis Report NN2400458



Accreditation No.1031/47

Client : Juristic Person Condo Aspire Udonthani
669 Moo 2, Tambon Mak Khaeng, Amphoe Mueang Udon Thani, Udon Thani,
Thailand, 41000
P/O : ---
Project : ---
Project Location: Juristic Person Condo Aspire Udonthani

Work Order : NN2400458
Report Number : NN2400458-AB
Date Received : Dec 03, 2024
Date Reported : Dec 13, 2024
Date Analysis Commenced : Dec 04, 2024
No. of samples received : 1
Temperature : 3.5 °C
Sampled by : Adisak Phomphai

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

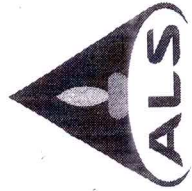
Signatories

Siriluk P.

Siriluk Bunnak
Section Head

ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Life Sciences

104 Phatthanakan 40, Phatthanakan Rd., Kwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand T +662 760 3000



Analysis Report NN2400458

Report Number : NN2400458-AB

Sub-Matrix: PROCESS WATER

(Matrix: WATER)

Accreditation No.1031/47

Client Sample ID

น้ำประปา : ชั้น 8 อาคาร A

Sampling Date

Dec 02, 2024 02:35 PM

Guideline

NN2400458-001

PWA 2565

Result

Method

Testing Lab

Analytes

LOQ

Unit

Guideline

Result

Chemical Parameters

EN0021

Bangkok

pH at 25°C

LOQ

6.5-8.5

Unit

6.2

Physical and Aggregate Properties

EN0081

Bangkok

Color (Apparent)

LOQ

5

Color unit

<5 *

EN0082

Bangkok

Conductivity at 25 °C

LOQ

0.50

µS/cm

389 *

EN0104

Bangkok

Turbidity

LOQ

0.1

NTU

1.0

Guideline: PWA 2565: Provincial Waterworks Authority on water quality standards

Comment: The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

Key:

◦ LOD : Limit of Detection

◦ "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

◦ Result(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

----- END OF REPORT -----