

ภาคผนวก ค

ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป (ระยะก่อสร้าง)



Analysis / Test Report



TESTING
No.0009

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO016308

Project Name : EIA Monitoring

Project Location :

Lot ID: 24124064

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3149995-1

Page 1 of 1

Sample Description	Air Quality				
Location	บริเวณหน้าหมู่บ้าน (A1) (GPS 47N 660900, 759227)				
Date Analysis Commenced	Nov 14, 2024				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24124064-1	Nov 04 - Nov 05, 2024	0.038	0.020	756	31
24124064-2	Nov 05 - Nov 06, 2024	0.026	0.016	756	29
24124064-3	Nov 06 - Nov 07, 2024	0.038	0.021	756	31
24124064-4	Nov 07 - Nov 08, 2024	0.048	0.024	756	32
24124064-5	Nov 08 - Nov 09, 2024	0.029	0.017	756	29
24124064-6	Nov 09 - Nov 10, 2024	0.029	0.017	756	25
24124064-7	Nov 10 - Nov 11, 2024	0.043	0.022	756	27
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Narathorn Keawpongsa

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air Ambient\7Days.rpt (10:35AM)

12044-31 / ENAL



Analysis / Test Report



TESTING
No.0009

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO016308

Project Name : EIA Monitoring

Project Location :

Lot ID: 24124064

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171141-1

Page 1 of 1

Sample Description	Air Quality				
Location	บริเวณหน้าหมู่บ้าน (A2) (GPS 47N 662212, 759091)				
Date Analysis Commenced	Nov 14, 2024				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24124064-8	Nov 04 - Nov 05, 2024	0.028	0.018	756	31
24124064-9	Nov 05 - Nov 06, 2024	0.023	0.015	756	29
24124064-10	Nov 06 - Nov 07, 2024	0.025	0.018	756	31
24124064-11	Nov 07 - Nov 08, 2024	0.026	0.018	756	32
24124064-12	Nov 08 - Nov 09, 2024	0.026	0.017	756	29
24124064-13	Nov 09 - Nov 10, 2024	0.032	0.019	756	25
24124064-14	Nov 10 - Nov 11, 2024	0.029	0.019	756	27
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Narathorn Keawpongsa

Remark :

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

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31 / ENAL

S:\Reports_Air Ambient\7Days.rpt (10:35AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO016308
Project Name : EIA Monitoring
Project Location :

Lot ID: 24124070
Date Received :Nov 13, 2024
Date Reported :Nov 20, 2024
Report Number :3149998-1

Sample Number : 24124070-1 to 7
Parameter : Wind Speed / Wind Direction
Location : บึงหนองปรือ (A1) (GPS 47N 0660900, 0759227)
Sampling Date : Nov 04 - Nov 11, 2024
Sampling by : Narathorn Keawpongsa

Time	Nov 04 - Nov 05, 2024		Nov 05 - Nov 06, 2024		Nov 06 - Nov 07, 2024		Nov 07 - Nov 08, 2024		Nov 08 - Nov 09, 2024		Nov 09 - Nov 10, 2024		Nov 10 - Nov 11, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
09:00 AM - 10:00 AM	0.1	-	0.0	-	0.0	-	0.2	-	0.2	-	0.2	-	0.0	-
10:00 AM - 11:00 AM	0.1	-	0.0	-	0.0	-	0.2	-	0.0	-	0.0	-	1.3	58.0 ENE
11:00 AM - 12:00 PM	0.1	-	0.1	-	0.8	281.0 W	0.0	-	0.0	-	0.0	-	1.2	59.0 ENE
12:00 PM - 01:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.3	280.0 W	0.0	-	0.0	-
01:00 PM - 02:00 PM	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.9	48.0 NE	0.2	-
02:00 PM - 03:00 PM	0.0	-	0.0	-	0.0	-	0.5	82.0 E	0.0	-	0.0	-	0.3	188.0 S
03:00 PM - 04:00 PM	0.0	-	0.0	-	1.0	258.0 W	0.0	-	0.0	-	0.0	-	0.1	-
04:00 PM - 05:00 PM	0.2	-	2.0	42.0 NE	0.0	-	0.0	-	0.5	342.0 NNW	0.0	-	0.1	-
05:00 PM - 06:00 PM	0.0	-	0.0	-	0.0	-	0.1	-	0.0	-	0.1	-	0.0	-
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.1	-	0.0	-	0.0	-	0.0	-	0.1	-
07:00 PM - 08:00 PM	0.2	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
08:00 PM - 09:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
09:00 PM - 10:00 PM	0.3	19.0 NNE	2.3	54.0 NE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
10:00 PM - 11:00 PM	0.2	-	2.2	53.0 NE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
11:00 PM - 12:00 AM	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
01:00 AM - 02:00 AM	1.6	10.0 N	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
02:00 AM - 03:00 AM	0.0	-	2.1	55.0 NE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
03:00 AM - 04:00 AM	1.6	10.0 N	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
04:00 AM - 05:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
05:00 AM - 06:00 AM	0.0	-	1.2	294.0 WNW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
06:00 AM - 07:00 AM	0.0	-	1.3	341.0 NNW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
07:00 AM - 08:00 AM	0.2	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	1.2	32.0 NNE
08:00 AM - 09:00 AM	0.0	-	0.0	-	0.3	37.0 NE	0.0	-	0.1	-	0.0	-	1.3	25.0 NNE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate 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.

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

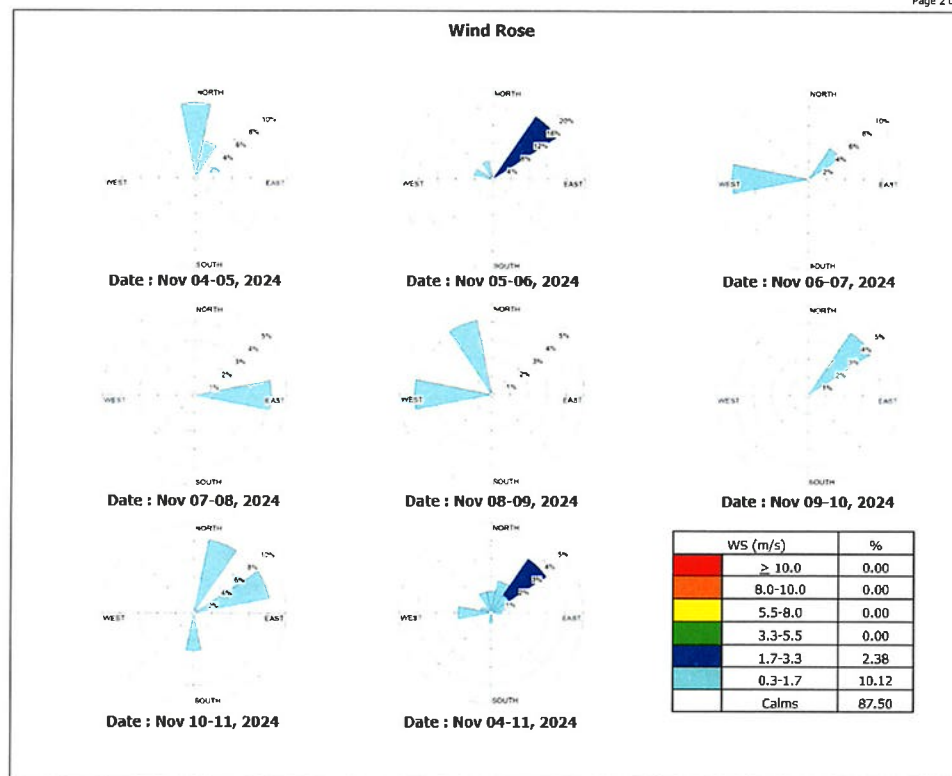


Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO016308
Project Name : EIA Monitoring
Project Location :

Lot ID: 24124070
Date Received :Nov 13, 2024
Date Reported :Nov 20, 2024
Report Number :3149998-1



The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate 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.

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

Lot ID: 24124070
Date Received :Nov 13, 2024
Date Reported :Nov 20, 2024
Report Number :3149998-1

P/O : PO016308
Project Name : EIA Monitoring
Project Location :

Page 1 of 2

Sample Number : 24124070-8 to 14
Parameter : Wind Speed / Wind Direction
Location : บริเวณจุดตรวจบ้านสวนพริกแดง (A2) (GPS 47N 0662212, 0759091)
Sampling Date : Nov 04 - Nov 11, 2024
Sampling by : Narathorn Keawpongsa

Time	Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024			Nov 08 - Nov 09, 2024			Nov 09 - Nov 10, 2024			Nov 10 - Nov 11, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	1.4	128.0	SE	0.6	272.0	W	0.9	357.0	N	1.3	352.0	N	0.0	-	-	0.0	-	-	1.7	323.0	NW
11:00 AM - 12:00 PM	0.4	37.0	NE	2.2	328.0	NNW	1.3	103.0	ESE	2.9	28.0	NNE	1.0	312.0	NW	0.0	-	-	1.0	1.0	N
12:00 PM - 01:00 PM	2.4	351.0	N	1.8	335.0	NNW	1.7	0.0	N	1.4	105.0	ESE	1.5	307.0	NW	0.0	-	-	2.8	354.0	N
01:00 PM - 02:00 PM	1.6	350.0	N	0.0	-	-	0.4	124.0	SE	1.7	331.0	NNW	1.1	302.0	WNW	0.5	340.0	NNW	1.6	16.0	NNE
02:00 PM - 03:00 PM	0.8	308.0	NW	0.7	305.0	NW	0.0	-	-	1.7	323.0	NW	0.0	-	-	0.6	339.0	NNW	1.1	74.0	ENE
03:00 PM - 04:00 PM	0.6	316.0	NW	0.6	94.0	E	1.0	346.0	NNW	1.1	125.0	SE	0.0	-	-	0.8	326.0	NW	2.5	54.0	NE
04:00 PM - 05:00 PM	0.5	230.0	SW	3.6	261.0	W	0.0	-	-	0.4	87.0	E	0.0	-	-	0.5	333.0	NNW	0.7	135.0	SE
05:00 PM - 06:00 PM	0.5	138.0	SE	0.5	113.0	ESE	0.0	-	-	0.9	303.0	WNW	1.2	327.0	NNW	0.5	4.0	N	0.5	356.0	N
06:00 PM - 07:00 PM	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	1.1	307.0	NW	0.1	-	-	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.9	320.0	NW	0.0	-	-	1.0	320.0	NW	0.3	336.0	NNW	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	0.5	288.0	WNW	0.0	-	-
09:00 PM - 10:00 PM	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.6	282.0	WNW	0.0	-	-	1.0	313.0	NW	0.0	-	-
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.5	313.0	NW	0.0	-	-	1.5	334.0	NNW	0.0	-	-
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.8	306.0	NW	0.0	-	-	0.4	315.0	NW	0.4	357.0	N
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	1.0	284.0	WNW	0.0	-	-	0.3	322.0	NW	0.4	313.0	NW
02:00 AM - 03:00 AM	0.1	-	-	0.0	-	-	0.0	-	-	0.6	308.0	NW	0.4	330.0	NNW	0.3	277.0	W	0.0	-	-
03:00 AM - 04:00 AM	1.4	314.0	NW	0.0	-	-	0.0	-	-	0.5	7.0	N	2.0	2.0	N	0.0	-	-	0.4	330.0	NNW
04:00 AM - 05:00 AM	0.3	345.0	NNW	0.0	-	-	0.0	-	-	0.9	309.0	NW	0.6	331.0	NNW	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.4	319.0	NW	1.7	333.0	NNW	0.5	303.0	WNW	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.1	-	-	0.0	-	-	0.0	-	-	0.4	333.0	NNW	0.0	-	-	0.0	-	-	0.0	-	-
07:00 AM - 08:00 AM	0.9	325.0	NW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.8	3.0	N	0.0	-	-
08:00 AM - 09:00 AM	0.8	351.0	N	0.9	342.0	NNW	1.0	320.0	NW	1.1	319.0	NW	0.0	-	-	0.0	-	-	0.0	-	-
09:00 AM - 10:00 AM	1.3	311.0	NW	1.4	7.0	N	2.6	346.0	NNW	1.5	284.0	WNW	0.0	-	-	1.3	18.0	NNE	0.0	-	-

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate 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.

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



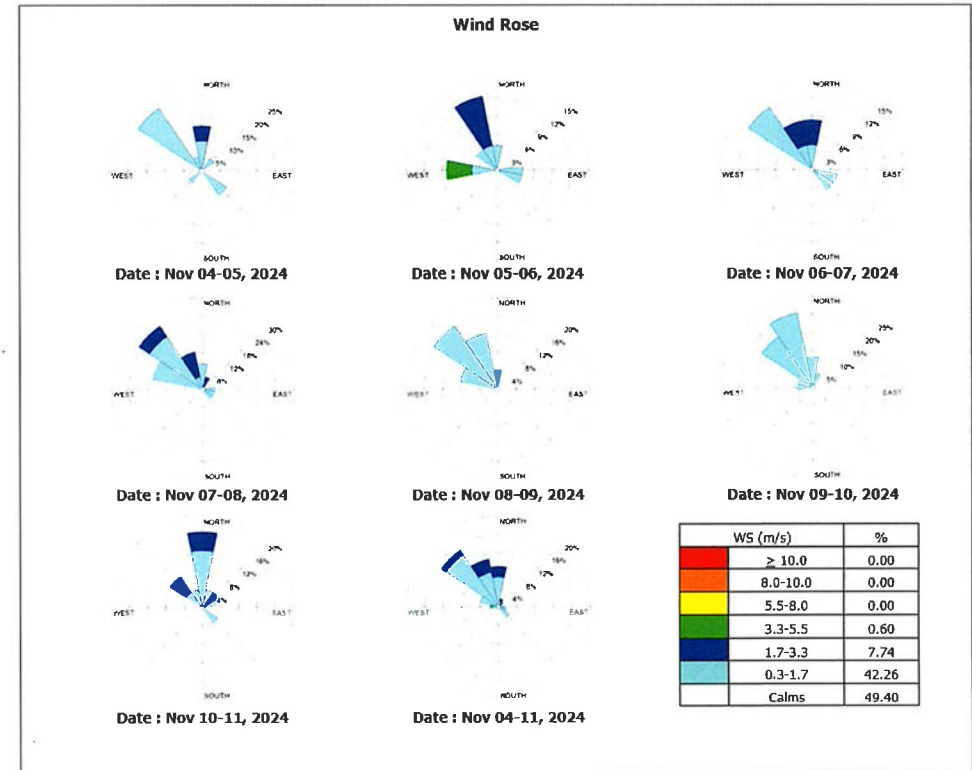
Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO016308
Project Name : EIA Monitoring
Project Location :

Lot ID: 24124070
Date Received :Nov 13, 2024
Date Reported :Nov 20, 2024
Report Number :3149998-1

Page 2 of 2



The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate 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.

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบาย

ANALYSIS REPORT

Analysis No. : Lab-S 168/2567
Job No. : PCL 0664/67
Report Date : June 25, 2024

Customer Name : บริษัท ไอเค หาดใหญ่ จำกัด
Address : เลขที่ 417/115 ถนนกาญจนาภิเษก ตำบลพะตง อำเภอหาดใหญ่ จังหวัดสงขลา 90230
Sampling Source : ปล่องหม้อไอน้ำ
GPS. Coordinate : UTM 47N 0661082 E, 0759730 N
Air Pollution Control System : Steam assisted
Sampling Time : 10:20 a.m. - 10:50 a.m.
Sampling Condition : Good
Sampling Method : US. EPA. Method
Sampling By : Mr. Siripong Thongket License No. 2-272-จ-0003
Analyzed By : Ms. Anothai Suebueang License No. 2-272-ค-0008
Fuel Type : ดีเซล (ระบบปิด)
Sampling Date : June 13, 2024
Received Date : June 14, 2024
Analytical Date : June 17, 2024
Sample ID No. : 485/06/67

Item	Description	Unit	Method of Analysis ^{3/}	Result	Standard	
					1/	2/
1.	Stack Height	m	Measuring Tape	16.00	-	-
2.	Stack Diameter	m	Measuring Tape	0.60	-	-
3.	Temperature in Stack	°C	US. EPA Method 2	147.00	-	-
4.	Pressure Stack	mm.Hg	US. EPA Method 2	755.78	-	-
5.	Air Velocity	m/s	US. EPA Method 2	5.75	-	-
6.	Flow Rate	m ³ /s	US. EPA Method 2	1.62	-	-
7.	Oxygen Rate	%	US. EPA Method 3	7.00	-	-
8.	Carbon dioxide Rate	%	US. EPA Method 3	8.10	-	-
9.	Moisture Rate	%	US. EPA Method 4	5.44	-	-
10.	Percent of Isokinetic Rate	%	US. EPA Method 5	107.36	-	-
11.	Particulate ^{4/}	mg/m ³	Isokinetic Sampling, Gravimetric Method	10.79	≤240	≤25
12.	Emission rate of Particulate	g/s	Calculate	0.0175	-	≤0.027
13.	Sulfur dioxide ^{4/}	ppm	Absorption Sampling, Barium-Thorin Titrimetric Method	<1.3	≤950	≤5
14.	Emission rate of Sulfur dioxide	g/s	Calculate	<0.0055	-	≤0.014
15.	Oxide of Nitrogen as Nitrogen dioxide ^{4/}	ppm	Absorption Sampling, Phenoldisulfonic Acid Method	6.57	≤200	≤60
16.	Emission rate of NO _x as NO ₂	g/s	Calculate	0.0200	-	≤0.121

Remark : 1. ^{1/} ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าปริมาณของสารเจือปนในอากาศที่ระบายออกจากโรงงาน พ.ศ. 2549 (ลงวันที่ 31 ตุลาคม พ.ศ. 2549)
2. ^{2/} มาตรฐานตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม (EIA) ของบริษัท ไอเค หาดใหญ่ จำกัด
3. ^{3/} United States Environmental Protection Agency. Standards of Performance for New Stationary Sources.
4. ^{4/} ค่าเฉลี่ยที่สภาวะความดัน 1 บรรยากาศ อุณหภูมิ 25 องศาเซลเซียส และ O₂ 7%

PACIFIC LABORATORY CO., LTD.
PCL
(Mr. Anus Fakto)

Lab. Supervisor No. 2-272-ค-0001



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-S 304/2567
Job No. : PCL 1218/67
Report Date : October 21, 2024

Customer Name : บริษัท ไอเค หาดใหญ่ จำกัด
Address : เลขที่ 417/115 ถนนกาญจนาภิเษก ตำบลพะตง อำเภอหาดใหญ่ จังหวัดสงขลา 90230
Sampling Source : ปล่อง Scrubber SC 2306
GPS. Coordinate : UTM 47N 0661106 E, 0759736 N
Sampling Time : 09:30 a.m. - 09:50 a.m.
Air Pollution Control System : Wet scrubber
Sampling Condition : Good
Sampling Method : US. EPA. Method
Sampling By : Mr. Siripong Thongket
Analyzed By : Ms. Anothai Suebnueang

Fuel Type : Non
Sampling Date : October 3, 2024
Received Date : October 4, 2024
Analytical Date : October 7, 2024
Sample ID No. : 213/10/67

Item	Description	Unit	Method of Analysis ^{3/}	Result	Standard	
					1/	2/
1.	Stack Height	m	Measuring Tape	16.00	-	-
2.	Stack Diameter	m	Measuring Tape	0.40	-	-
3.	Temperature in Stack	°C	US. EPA Method 2	31.00	-	-
4.	Pressure Stack	mm.Hg	US. EPA Method 2	759.80	-	-
5.	Air Velocity	m/s	US. EPA Method 2	3.85	-	-
6.	Flow Rate	m ³ /s	US. EPA Method 2	0.48	-	-
7.	Oxygen Rate	%	US. EPA Method 3	20.90	-	-
8.	Carbon dioxide Rate	%	US. EPA Method 3	<0.101	-	-
9.	Moisture Rate	%	US. EPA Method 4	2.30	-	-
10.	Formaldehyde ^{4/}	mg/m ³	Absorption Sampling, Visible Absorption Spectrophotometric Method	0.104	-	≤10
11.	Emission Rate of Formaldehyde	g/s	Calculate	0.00005	-	≤0.0038

Remark : 1.^{1/} ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าปริมาณของสารเจือปนในอากาศที่ระบายออกจากโรงงาน พ.ศ. 2549 (ลงวันที่ 31 ตุลาคม พ.ศ. 2549)
2.^{2/} มาตรฐานตามมาตรการการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม (EIA) ของบริษัท ไอเค หาดใหญ่ จำกัด
3.^{3/} United States Environmental Protection Agency. Standards of Performance for New Stationary Sources.
4.^{4/} ค่าความเทียบที่สภาวะความดัน 1 บรรยากาศ และอุณหภูมิ 25 องศาเซลเซียส

(Mr. Rnus Fakto)
Lab. Supervisor

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL
REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-S 304/2567

Job No. : PCL 1218/67

Report Date : October 21, 2024

Customer Name : บริษัท โอเค หาดใหญ่ จำกัด
Address : เลขที่ 417/115 ถนนกาญจนวนิช ตำบลพะตง อำเภอหาดใหญ่ จังหวัดสงขลา 90230
Sampling Source : ปล่อง Scrubber SC 4021
GPS. Coordinate : UTM 47N 0661187 E, 0759723 N
Sampling Time : 10:00 a.m. - 10:20 a.m.
Air Pollution Control System : Wet scrubber
Sampling Condition : Good
Sampling Method : US. EPA. Method
Sampling By : Mr. Siripong Thongket
Analyzed By : Ms. Anothai Suebnueang

Fuel Type : Non
Sampling Date : October 3, 2024
Received Date : October 4, 2024
Analytical Date : October 7, 2024
Sample ID No. : 211/10/67

Item	Description	Unit	Method of Analysis ^{3/}	Result	Standard	
					1/	2/
1.	Stack Height	m	Measuring Tape	13.20	-	-
2.	Stack Diameter	m	Measuring Tape	0.08	-	-
3.	Temperature in Stack	°C	US. EPA Method 2	31.00	-	-
4.	Pressure Stack	mm.Hg	US. EPA Method 2	759.80	-	-
5.	Air Velocity	m/s	US. EPA Method 2	1.10	-	-
6.	Flow Rate	m ³ /s	US. EPA Method 2	0.01	-	-
7.	Oxygen Rate	%	US. EPA Method 3	20.90	-	-
8.	Carbon dioxide Rate	%	US. EPA Method 3	<0.10	-	-
9.	Moisture Rate	%	US. EPA Method 4	2.25	-	-
10.	Formaldehyde ^{4/}	mg/m ³	Absorption Sampling, Visible Absorption Spectrophotometric Method	0.107	-	≤10
11.	Emission Rate of Formaldehyde	g/s	Calculate	0.000001	-	≤0.000031

Remark : 1. ^{1/} ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าปริมาณของสารเจือปนในอากาศที่ระบายออกจากโรงงาน พ.ศ. 2549 (ลงวันที่ 31 ตุลาคม พ.ศ. 2549)
2. ^{2/} มาตรฐานตามมาตรการการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม (EIA) ของบริษัท โอเค หาดใหญ่ จำกัด
3. ^{3/} United-States Environmental Protection Agency, Standards of Performance for New Stationary Sources.
4. ^{4/} คำนวณเทียบที่สถานะความดัน 1 บรรยากาศ และอุณหภูมิ 25 องศาเซลเซียส

(Mr. Rnus Fakto)

Lab. Supervisor

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL
REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

ภาคผนวก ค-3

คุณภาพอากาศในบรรยากาศโดยทั่วไป (ระยะดำเนินการ)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125540

Date Received : Nov 13, 2024

Date Reported : Nov 18, 2024

Report Number: 3153040-1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงเรียนกมลชนก (A1) (GPS 47N 661993, 761327)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 04, 2024 - Nov 11, 2024						
Measurement by	Norraset Komal						
	24125540-1	24125540-2	24125540-3	24125540-4	24125540-5	24125540-6	24125540-7
Time	Nov 04, 2024	Nov 05, 2024	Nov 06, 2024	Nov 07, 2024	Nov 08, 2024	Nov 09, 2024	Nov 10, 2024
11:00 AM - 12:00 PM	0.0007	0.0007	0.0005	0.0004	0.0015	0.0010	0.0006
12:00 PM - 01:00 PM	0.0008	0.0002	0.0006	0.0005	0.0011	0.0007	0.0011
01:00 PM - 02:00 PM	0.0004	0.0001	0.0004	0.0017	0.0010	0.0004	0.0002
02:00 PM - 03:00 PM	0.0004	0.0005	0.0007	0.0007	0.0005	0.0012	0.0001
03:00 PM - 04:00 PM	0.0008	0.0006	0.0008	0.0009	0.0009	0.0018	0.0001
04:00 PM - 05:00 PM	0.0010	0.0011	0.0006	0.0006	0.0002	0.0004	0.0001
05:00 PM - 06:00 PM	0.0018	0.0005	0.0016	0.0005	0.0004	0.0003	0.0003
06:00 PM - 07:00 PM	0.0018	0.0010	0.0016	0.0008	0.0004	0.0007	0.0003
07:00 PM - 08:00 PM	0.0024	0.0009	0.0020	0.0003	0.0005	0.0003	0.0001
08:00 PM - 09:00 PM	0.0010	0.0010	0.0006	0.0007	0.0005	0.0002	0.0002
09:00 PM - 10:00 PM	0.0005	0.0006	0.0005	0.0012	0.0070	0.0002	0.0019
10:00 PM - 11:00 PM	0.0004	0.0010	0.0004	0.0009	0.0037	0.0001	0.0010
11:00 PM - 12:00 AM	0.0005	0.0005	0.0002	<0.0001	0.0028	0.0001	<0.0001
12:00 AM - 01:00 AM	0.0001	0.0003	0.0004	<0.0001	0.0004	0.0002	<0.0001
01:00 AM - 02:00 AM	0.0001	0.0003	0.0006	0.0001	0.0004	0.0002	0.0001
02:00 AM - 03:00 AM	0.0001	0.0006	0.0011	0.0001	0.0001	0.0002	<0.0001
03:00 AM - 04:00 AM	0.0001	0.0004	0.0004	0.0001	0.0003	0.0003	0.0001
04:00 AM - 05:00 AM	0.0002	0.0007	0.0004	<0.0001	0.0004	0.0002	0.0005
05:00 AM - 06:00 AM	0.0004	0.0004	0.0005	0.0001	0.0001	0.0002	0.0046
06:00 AM - 07:00 AM	0.0006	0.0024	0.0010	0.0003	0.0001	0.0001	0.0034
07:00 AM - 08:00 AM	0.0020	0.0058	0.0103	0.0012	0.0001	0.0009	0.0081
08:00 AM - 09:00 AM	0.0028	0.0022	0.0028	0.0013	0.0001	0.0008	0.0062
09:00 AM - 10:00 AM	0.0026	0.0029	0.0016	0.0010	0.0017	0.0006	0.0019
10:00 AM - 11:00 AM	0.0013	0.0011	0.0004	0.0023	0.0033	0.0003	0.0009
Average	0.0010	0.0011	0.0012	0.0007	0.0012	0.0005	0.0013
1hr - Maximum	0.0028	0.0058	0.0103	0.0023	0.0070	0.0018	0.0081
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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.

Approved by

Orawan R.
Orawan Rak Yong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air SOxNOx.rpt (9:38AM)

12044-31/EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125540

Date Received : Nov 13, 2024

Date Reported : Nov 18, 2024

Report Number: 3167386-1

Page 1 of 1

Sample Description	Air Quality						
Location	มหาวิทยาลัยราชภัฏ (A2) (GPS 47N 660900, 759227)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 04, 2024 - Nov 11, 2024						
Measurement by	Norraset Komal						
	24125540-8	24125540-9	24125540-10	24125540-11	24125540-12	24125540-13	24125540-14
Time	Nov 04, 2024	Nov 05, 2024	Nov 06, 2024	Nov 07, 2024	Nov 08, 2024	Nov 09, 2024	Nov 10, 2024
10:00 AM - 11:00 AM	0.0052	0.0045	0.0041	0.0094	0.0046	0.0046	0.0048
11:00 AM - 12:00 PM	0.0073	0.0031	0.0036	0.0057	0.0041	0.0036	0.0056
12:00 PM - 01:00 PM	0.0064	0.0027	0.0037	0.0041	0.0041	0.0037	0.0038
01:00 PM - 02:00 PM	0.0082	0.0056	0.0091	0.0057	0.0038	0.0041	0.0036
02:00 PM - 03:00 PM	0.0035	0.0033	0.0057	0.0093	0.0041	0.0048	0.0064
03:00 PM - 04:00 PM	0.0046	0.0045	0.0042	0.0096	0.0038	0.0043	0.0068
04:00 PM - 05:00 PM	0.0057	0.0037	0.0048	0.0076	0.0038	0.0038	0.0062
05:00 PM - 06:00 PM	0.0107	0.0040	0.0059	0.0077	0.0041	0.0034	0.0063
06:00 PM - 07:00 PM	0.0087	0.0044	0.0050	0.0044	0.0025	0.0039	0.0048
07:00 PM - 08:00 PM	0.0052	0.0034	0.0038	0.0029	0.0032	0.0034	0.0027
08:00 PM - 09:00 PM	0.0045	0.0037	0.0032	0.0026	0.0026	0.0030	0.0026
09:00 PM - 10:00 PM	0.0036	0.0029	0.0027	0.0032	0.0028	0.0028	0.0024
10:00 PM - 11:00 PM	0.0029	0.0027	0.0030	0.0040	0.0032	0.0025	0.0023
11:00 PM - 12:00 AM	0.0033	0.0025	0.0029	0.0026	0.0030	0.0023	0.0026
12:00 AM - 01:00 AM	0.0026	0.0025	0.0028	0.0023	0.0024	0.0036	0.0026
01:00 AM - 02:00 AM	0.0028	0.0021	0.0028	0.0022	0.0024	0.0019	0.0024
02:00 AM - 03:00 AM	0.0026	0.0023	0.0034	0.0018	0.0026	0.0020	0.0023
03:00 AM - 04:00 AM	0.0029	0.0028	0.0047	0.0021	0.0022	0.0022	0.0027
04:00 AM - 05:00 AM	0.0027	0.0026	0.0030	0.0018	0.0024	0.0020	0.0027
05:00 AM - 06:00 AM	0.0027	0.0026	0.0032	0.0021	0.0023	0.0021	0.0031
06:00 AM - 07:00 AM	0.0037	0.0035	0.0033	0.0024	0.0022	0.0023	0.0038
07:00 AM - 08:00 AM	0.0043	0.0052	0.0079	0.0033	0.0025	0.0033	0.0087
08:00 AM - 09:00 AM	0.0040	0.0039	0.0090	0.0036	0.0024	0.0032	0.0064
09:00 AM - 10:00 AM	0.0038	0.0048	0.0057	0.0048	0.0050	0.0032	0.0029
Average	0.0047	0.0035	0.0045	0.0044	0.0032	0.0032	0.0041
1hr - Maximum	0.0107	0.0056	0.0091	0.0096	0.0050	0.0048	0.0087
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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.

Approved by

Orawan R.
Orawan Rak Yong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/EMAIL

S:\Reports_Air SOxNOx.rpt (9:38AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125540

Date Received : Nov 13, 2024

Date Reported : Nov 18, 2024

Report Number: 3167388-1

Page 1 of 1

Sample Description	Air Quality						
Location	หมู่บ้านคลองม่วง (A3) (GPS 47N 662212, 759091)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 04, 2024 - Nov 11, 2024						
Measurement by	Norraset Komal						
Time	24125540-15 Nov 04, 2024	24125540-16 Nov 05, 2024	24125540-17 Nov 06, 2024	24125540-18 Nov 07, 2024	24125540-19 Nov 08, 2024	24125540-20 Nov 09, 2024	24125540-21 Nov 10, 2024
09:00 AM - 10:00 AM	0.0032	0.0043	0.0033	0.0032	0.0047	0.0037	0.0032
10:00 AM - 11:00 AM	0.0029	0.0039	0.0032	0.0030	0.0043	0.0034	0.0027
11:00 AM - 12:00 PM	0.0019	0.0036	0.0027	0.0029	0.0041	0.0044	0.0027
12:00 PM - 01:00 PM	0.0047	0.0034	0.0032	0.0028	0.0034	0.0064	0.0027
01:00 PM - 02:00 PM	0.0037	0.0030	0.0035	0.0030	0.0032	0.0042	0.0028
02:00 PM - 03:00 PM	0.0063	0.0145	0.0032	0.0030	0.0032	0.0037	0.0028
03:00 PM - 04:00 PM	0.0040	0.0030	0.0035	0.0030	0.0031	0.0036	0.0030
04:00 PM - 05:00 PM	0.0180	0.0031	0.0040	0.0033	0.0035	0.0034	0.0032
05:00 PM - 06:00 PM	0.0043	0.0032	0.0046	0.0037	0.0042	0.0037	0.0034
06:00 PM - 07:00 PM	0.0044	0.0032	0.0043	0.0040	0.0106	0.0056	0.0037
07:00 PM - 08:00 PM	0.0034	0.0035	0.0036	0.0044	0.0084	0.0077	0.0060
08:00 PM - 09:00 PM	0.0036	0.0033	0.0045	0.0044	0.0063	0.0101	0.0038
09:00 PM - 10:00 PM	0.0040	0.0033	0.0038	0.0036	0.0068	0.0055	0.0036
10:00 PM - 11:00 PM	0.0033	0.0032	0.0053	0.0036	0.0037	0.0031	0.0044
11:00 PM - 12:00 AM	0.0033	0.0032	0.0040	0.0040	0.0039	0.0032	0.0046
12:00 AM - 01:00 AM	0.0048	0.0033	0.0053	0.0037	0.0035	0.0036	0.0036
01:00 AM - 02:00 AM	0.0039	0.0034	0.0066	0.0040	0.0034	0.0033	0.0051
02:00 AM - 03:00 AM	0.0033	0.0038	0.0045	0.0034	0.0035	0.0030	0.0086
03:00 AM - 04:00 AM	0.0040	0.0036	0.0039	0.0037	0.0032	0.0031	0.0060
04:00 AM - 05:00 AM	0.0035	0.0066	0.0080	0.0039	0.0038	0.0036	0.0078
05:00 AM - 06:00 AM	0.0054	0.0063	0.0083	0.0048	0.0030	0.0038	0.0122
06:00 AM - 07:00 AM	0.0050	0.0058	0.0038	0.0047	0.0030	0.0040	0.0025
07:00 AM - 08:00 AM	0.0056	0.0066	0.0072	0.0056	0.0033	0.0064	0.0023
08:00 AM - 09:00 AM	0.0091	0.0042	0.0040	0.0047	0.0038	0.0042	0.0027
Average	0.0048	0.0044	0.0045	0.0038	0.0043	0.0044	0.0045
1hr - Maximum	0.0180	0.0145	0.0083	0.0056	0.0106	0.0101	0.0122
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).						
Reference Method	: US EPAMethod Part 50 App. F (Chemiluminescence)						

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.

Approved by

Orawan R.
Orawan Rak Yong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air SOxNOx.rpt (9:38AM)

12044-31/EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125540

Date Received : Nov 13, 2024

Date Reported : Nov 18, 2024

Report Number: 3167389-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดคลองม่วง (A4) (GPS 47N 664348, 761591)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Nov 04, 2024 - Nov 11, 2024						
Measurement by	Norraset Komal						
Time	24125540-22 Nov 04, 2024	24125540-23 Nov 05, 2024	24125540-24 Nov 06, 2024	24125540-25 Nov 07, 2024	24125540-26 Nov 08, 2024	24125540-27 Nov 09, 2024	24125540-28 Nov 10, 2024
12:00 PM - 01:00 PM	0.0017	0.0013	0.0003	0.0001	0.0003	0.0012	0.0002
01:00 PM - 02:00 PM	0.0004	0.0004	0.0259	0.0002	0.0005	0.0008	<0.0001
02:00 PM - 03:00 PM	0.0012	0.0005	0.0009	0.0002	0.0009	0.0007	0.0002
03:00 PM - 04:00 PM	0.0006	0.0005	0.0011	0.0013	0.0019	0.0008	0.0007
04:00 PM - 05:00 PM	0.0007	0.0005	0.0011	0.0015	0.0029	0.0024	0.0024
05:00 PM - 06:00 PM	0.0013	0.0007	0.0018	0.0017	0.0023	0.0016	0.0019
06:00 PM - 07:00 PM	0.0009	0.0002	0.0006	0.0008	0.0019	0.0014	0.0025
07:00 PM - 08:00 PM	0.0013	0.0004	0.0004	0.0007	0.0005	0.0007	0.0004
08:00 PM - 09:00 PM	0.0007	0.0005	0.0002	0.0004	0.0006	0.0005	0.0007
09:00 PM - 10:00 PM	0.0018	0.0006	0.0014	0.0004	0.0005	0.0001	0.0007
10:00 PM - 11:00 PM	0.0021	0.0005	0.0013	0.0002	0.0007	0.0001	0.0008
11:00 PM - 12:00 AM	0.0016	0.0006	0.0006	0.0001	0.0006	0.0002	0.0005
12:00 AM - 01:00 AM	0.0011	0.0005	0.0002	<0.0001	0.0001	0.0001	0.0001
01:00 AM - 02:00 AM	0.0005	0.0004	0.0001	0.0001	0.0002	0.0001	0.0002
02:00 AM - 03:00 AM	0.0004	0.0006	0.0001	0.0001	0.0002	0.0002	0.0002
03:00 AM - 04:00 AM	0.0004	0.0009	0.0004	0.0003	0.0003	0.0060	0.0006
04:00 AM - 05:00 AM	0.0006	0.0011	0.0009	0.0003	0.0007	0.0006	0.0016
05:00 AM - 06:00 AM	0.0006	0.0019	0.0019	0.0007	0.0017	0.0005	0.0029
06:00 AM - 07:00 AM	0.0003	0.0007	0.0008	0.0009	0.0005	0.0007	0.0013
07:00 AM - 08:00 AM	0.0005	0.0005	0.0005	0.0004	0.0006	0.0006	0.0005
08:00 AM - 09:00 AM	0.0007	0.0004	0.0003	0.0006	0.0012	0.0006	0.0017
09:00 AM - 10:00 AM	0.0010	0.0004	0.0004	0.0006	0.0026	0.0007	0.0010
10:00 AM - 11:00 AM	0.0011	0.0005	0.0004	0.0040	0.0049	0.0006	0.0034
11:00 AM - 12:00 PM	0.0016	0.0002	0.0005	0.0015	0.0027	0.0003	0.0009
Average	0.0010	0.0006	0.0018	0.0007	0.0012	0.0009	0.0011
1hr - Maximum	0.0021	0.0019	0.0259	0.0040	0.0049	0.0060	0.0034
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).						
Reference Method	: US EPAMethod Part 50 App. F (Chemiluminescence)						

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.

Approved by

Orawan R.
Orawan Rak Yong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air SOxNOx.rpt (9:38AM)

12044-31/EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2474355
Date Received : Jul 05, 2024
Date Reported : Jul 23, 2024
Report Number : 3039019-1

Page 1 of 1

Sample Number 2474355-1
Sampled Date Jul 03, 2024
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47N 661088, 759681)
Date Analysis Commenced Jul 06, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	03/07/24 - 04/07/24	ppm	-	0.002	0.003	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Apiwat Chanta

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.

Saranya Chalerthamrong
Scientist (4)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air_Working_HQL.rpt (6:11PM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487669
Date Received : Aug 08, 2024
Date Reported : Aug 24, 2024
Report Number : 3069647-1

Page 1 of 1

Sample Number 2487669-1
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47N 661088, 759681)
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	06/08/24 - 07/08/24	ppm	-	0.002	0.003	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air_Working_HQL.rpt (9:13AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2497308

Date Received : Sep 05, 2024

Date Reported : Sep 20, 2024

Report Number : 3090604-1

Page 1 of 1

Sample Number 2497308-1
Sampled Date Sep 03, 2024
Sample Description Air Quality
Location ไร่โรงงงาน (GPS 47N 661088, 759681)
Date Analysis Commenced Sep 06, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	03/09/24 - 04/09/24	ppm	*	0.002	0.004	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Narathorn Keawpongso

Remark :

- * LOD : Limit of Detection
- * "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

J2044-33/ EPMAL

S:\Reports\Air_Working_NGL.rpt (11:39PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :

Project Name : EIA Monitoring

Project Location :

Lot ID: 24107696

Date Received : Oct 04, 2024

Date Reported : Oct 17, 2024

Report Number : 3114294-1

Page 1 of 1

Sample Number 24107696-1
Sampled Date Oct 01, 2024
Sample Description Air Quality
Location ไร่โรงงงาน (GPS 47N 661088, 759681)
Date Analysis Commenced Oct 07, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	01/10/24 - 02/10/24	ppm	*	0.002	0.003	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Woravut Deenuk

Remark :

- * LOD : Limit of Detection
- * "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

J2044-33/ EPMAL

S:\Reports\Air_Working_NGL.rpt (5:20PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125577
Date Received : Nov 21, 2024
Date Reported : Dec 09, 2024
Report Number : 3153077-1

Page 1 of 1

Sample Number 24125577-1
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47N 661088, 759681)
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	19/11/24 - 20/11/24	ppm	-	0.002	<0.002	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air_Working_NGL.rpt (4 40PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 24135655
Date Received : Dec 14, 2024
Date Reported : Dec 30, 2024
Report Number : 3179328-1

Page 1 of 1

Sample Number 24135655-1
Sampled Date Dec 11, 2024
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47N 661088, 759681)
Date Analysis Commenced Dec 16, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
Formaldehyde	11/12/24 - 12/12/24	ppm	-	0.002	0.024	United States Environmental Protection Agency, EPA Method TO-11A (HPLC/DAD)	Bangkok

Sampled By : Woravut Deenuk

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air_Working_NGL.rpt (3:45PM)

ภาคผนวก ค-4

ระดับเสียงโดยทั่วไป



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171028-1

Page 1 of 1

Sample Number	24125543-1
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ 1 บ้านย่านยาว (N1) (GPS 47N 660892, 759222)
Measurement Date	Nov 04 - Nov 05, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.7	79.9	47.5
10:00 AM - 11:00 AM	60.8	89.0	48.0
11:00 AM - 12:00 PM	60.7	87.6	47.6
12:00 PM - 01:00 PM	57.9	85.5	49.1
01:00 PM - 02:00 PM	57.5	90.3	47.7
02:00 PM - 03:00 PM	58.2	89.4	47.9
03:00 PM - 04:00 PM	54.0	76.1	47.7
04:00 PM - 05:00 PM	56.7	84.6	50.4
05:00 PM - 06:00 PM	57.4	86.0	50.8
06:00 PM - 07:00 PM	53.7	83.5	49.9
07:00 PM - 08:00 PM	55.5	86.3	50.9
08:00 PM - 09:00 PM	55.4	86.1	52.0
09:00 PM - 10:00 PM	51.4	85.5	48.1
10:00 PM - 11:00 PM	51.6	88.1	47.9
11:00 PM - 12:00 AM	49.9	87.5	47.5
12:00 AM - 01:00 AM	50.3	72.2	47.9
01:00 AM - 02:00 AM	50.9	72.3	48.5
02:00 AM - 03:00 AM	52.7	73.1	48.9
03:00 AM - 04:00 AM	54.3	74.4	50.2
04:00 AM - 05:00 AM	58.2	81.2	50.6
05:00 AM - 06:00 AM	59.8	83.8	50.4
06:00 AM - 07:00 AM	58.4	89.0	49.8
07:00 AM - 08:00 AM	57.9	84.8	48.9
08:00 AM - 09:00 AM	56.0	79.9	47.8

Leq Average 24 hrs. (dB(A))	56.7		
Lmax (dB(A))		90.3	
L90 (dB(A))			48.5
Ldn (dB(A))	62.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\Air Noise.rpt (9:03AM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171029-1

Page 1 of 1

Sample Number	24125543-2
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ 1 บ้านย่านยาว (N1) (GPS 47N 660892, 759222)
Measurement Date	Nov 05 - Nov 06, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.7	80.7	45.6
10:00 AM - 11:00 AM	57.7	80.6	48.3
11:00 AM - 12:00 PM	65.3	93.8	48.3
12:00 PM - 01:00 PM	56.4	76.6	48.7
01:00 PM - 02:00 PM	59.6	89.3	48.2
02:00 PM - 03:00 PM	55.7	76.7	49.3
03:00 PM - 04:00 PM	56.9	80.5	47.6
04:00 PM - 05:00 PM	55.4	86.1	52.0
05:00 PM - 06:00 PM	64.7	92.3	56.5
06:00 PM - 07:00 PM	62.9	95.3	56.5
07:00 PM - 08:00 PM	64.0	95.0	57.3
08:00 PM - 09:00 PM	57.0	90.0	52.0
09:00 PM - 10:00 PM	53.9	84.3	51.7
10:00 PM - 11:00 PM	51.8	75.0	50.1
11:00 PM - 12:00 AM	55.1	90.4	50.2
12:00 AM - 01:00 AM	52.1	87.5	50.0
01:00 AM - 02:00 AM	52.3	73.7	49.6
02:00 AM - 03:00 AM	51.5	85.4	49.0
03:00 AM - 04:00 AM	52.0	73.9	48.1
04:00 AM - 05:00 AM	54.9	74.9	49.2
05:00 AM - 06:00 AM	56.3	78.2	49.4
06:00 AM - 07:00 AM	60.0	95.9	50.4
07:00 AM - 08:00 AM	61.2	83.6	49.6
08:00 AM - 09:00 AM	59.1	86.6	49.0

Leq Average 24 hrs. (dB(A))	59.5		
Lmax (dB(A))		95.9	
L90 (dB(A))			49.4
Ldn (dB(A))	62.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\Air Noise.rpt (9:03AM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171030-1

Page 1 of 1

Sample Number 24125543-3
Parameter Noise (Leq 24 hrs.)
Location บริเวณหมู่ที่ 1 บ้านด่านตง (N1) (GPS 47N 660892, 759222)
Measurement Date Nov 06 - Nov 07, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.8	82.8	48.6
10:00 AM - 11:00 AM	55.2	81.2	48.2
11:00 AM - 12:00 PM	56.2	77.6	48.9
12:00 PM - 01:00 PM	57.6	84.6	50.2
01:00 PM - 02:00 PM	57.7	81.4	50.7
02:00 PM - 03:00 PM	53.4	75.5	47.4
03:00 PM - 04:00 PM	57.2	87.3	47.3
04:00 PM - 05:00 PM	55.9	75.7	49.8
05:00 PM - 06:00 PM	55.7	79.1	49.5
06:00 PM - 07:00 PM	53.4	81.4	49.3
07:00 PM - 08:00 PM	53.9	87.0	48.8
08:00 PM - 09:00 PM	50.8	74.5	48.2
09:00 PM - 10:00 PM	49.6	66.4	48.2
10:00 PM - 11:00 PM	50.7	78.2	48.5
11:00 PM - 12:00 AM	50.2	84.6	48.1
12:00 AM - 01:00 AM	50.7	79.7	48.4
01:00 AM - 02:00 AM	49.2	71.1	46.8
02:00 AM - 03:00 AM	49.6	74.2	46.7
03:00 AM - 04:00 AM	49.7	72.6	47.0
04:00 AM - 05:00 AM	51.4	73.0	47.5
05:00 AM - 06:00 AM	54.6	83.1	47.8
06:00 AM - 07:00 AM	61.7	88.9	48.3
07:00 AM - 08:00 AM	58.4	92.5	50.5
08:00 AM - 09:00 AM	54.8	78.1	49.7

Leq Average 24 hrs. (dB(A))

55.3

Lmax (dB(A))

92.5

L90 (dB(A))

48.3

Ldn (dB(A))

61.1

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9 04AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171031-1

Page 1 of 1

Sample Number 24125543-4
Parameter Noise (Leq 24 hrs.)
Location บริเวณหมู่ที่ 1 บ้านด่านตง (N1) (GPS 47N 660892, 759222)
Measurement Date Nov 07 - Nov 08, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.9	93.6	49.7
10:00 AM - 11:00 AM	59.4	88.8	49.8
11:00 AM - 12:00 PM	58.9	77.9	49.7
12:00 PM - 01:00 PM	57.7	87.4	50.0
01:00 PM - 02:00 PM	54.6	77.9	50.2
02:00 PM - 03:00 PM	59.4	90.8	50.5
03:00 PM - 04:00 PM	55.5	79.6	50.1
04:00 PM - 05:00 PM	56.2	77.0	51.1
05:00 PM - 06:00 PM	56.0	78.1	50.4
06:00 PM - 07:00 PM	57.8	81.4	50.1
07:00 PM - 08:00 PM	56.6	85.0	49.8
08:00 PM - 09:00 PM	56.1	81.8	50.5
09:00 PM - 10:00 PM	55.4	80.6	47.7
10:00 PM - 11:00 PM	52.2	73.7	49.4
11:00 PM - 12:00 AM	54.0	81.0	47.4
12:00 AM - 01:00 AM	50.2	79.0	48.6
01:00 AM - 02:00 AM	54.0	84.0	48.1
02:00 AM - 03:00 AM	58.0	84.0	53.1
03:00 AM - 04:00 AM	53.7	86.3	50.3
04:00 AM - 05:00 AM	53.8	77.9	50.2
05:00 AM - 06:00 AM	56.8	80.3	50.0
06:00 AM - 07:00 AM	58.8	85.2	51.0
07:00 AM - 08:00 AM	59.5	93.1	50.8
08:00 AM - 09:00 AM	60.7	93.3	51.2

Leq Average 24 hrs. (dB(A))

57.1

Lmax (dB(A))

93.6

L90 (dB(A))

50.1

Ldn (dB(A))

62.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9 04AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171032-1

Page 1 of 1

Sample Number	24125543-5
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ 1 บ้านผ่านยาว (N1) (GPS 47N 660892, 759222)
Measurement Date	Nov 08 - Nov 09, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.1	79.3	50.0
10:00 AM - 11:00 AM	59.1	95.7	50.2
11:00 AM - 12:00 PM	57.6	85.4	49.8
12:00 PM - 01:00 PM	56.1	78.3	49.7
01:00 PM - 02:00 PM	54.7	77.4	49.9
02:00 PM - 03:00 PM	56.7	83.5	50.8
03:00 PM - 04:00 PM	56.2	78.9	49.3
04:00 PM - 05:00 PM	57.5	84.1	49.0
05:00 PM - 06:00 PM	56.0	77.5	51.7
06:00 PM - 07:00 PM	57.2	87.3	51.9
07:00 PM - 08:00 PM	54.1	78.6	51.3
08:00 PM - 09:00 PM	54.6	77.1	52.5
09:00 PM - 10:00 PM	54.8	85.6	50.7
10:00 PM - 11:00 PM	51.7	73.6	49.4
11:00 PM - 12:00 AM	58.2	85.1	50.5
12:00 AM - 01:00 AM	50.3	80.4	47.5
01:00 AM - 02:00 AM	51.2	78.2	48.0
02:00 AM - 03:00 AM	49.2	79.1	47.5
03:00 AM - 04:00 AM	51.6	71.3	49.7
04:00 AM - 05:00 AM	53.4	80.7	50.7
05:00 AM - 06:00 AM	56.0	80.1	49.1
06:00 AM - 07:00 AM	63.8	94.1	48.9
07:00 AM - 08:00 AM	55.7	83.1	49.2
08:00 AM - 09:00 AM	57.3	85.1	49.2

Leq Average 24 hrs. (dB(A))	56.6		
Lmax (dB(A))		95.7	
L90 (dB(A))			49.7
Ldn (dB(A))	63.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9:04AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171033-1

Page 1 of 1

Sample Number	24125543-6
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ 1 บ้านผ่านยาว (N1) (GPS 47N 660892, 759222)
Measurement Date	Nov 09 - Nov 10, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.5	79.4	50.2
10:00 AM - 11:00 AM	59.9	88.4	51.5
11:00 AM - 12:00 PM	60.7	91.5	51.3
12:00 PM - 01:00 PM	62.1	89.5	50.5
01:00 PM - 02:00 PM	56.7	77.8	50.1
02:00 PM - 03:00 PM	59.6	89.2	50.8
03:00 PM - 04:00 PM	61.3	89.1	51.3
04:00 PM - 05:00 PM	59.2	84.6	52.0
05:00 PM - 06:00 PM	57.6	80.4	52.5
06:00 PM - 07:00 PM	60.0	80.7	51.8
07:00 PM - 08:00 PM	56.3	83.0	50.6
08:00 PM - 09:00 PM	56.8	79.7	52.6
09:00 PM - 10:00 PM	54.8	76.6	52.1
10:00 PM - 11:00 PM	54.3	77.8	52.3
11:00 PM - 12:00 AM	59.2	85.5	52.9
12:00 AM - 01:00 AM	53.9	74.9	52.5
01:00 AM - 02:00 AM	52.2	71.3	50.5
02:00 AM - 03:00 AM	51.9	73.3	49.2
03:00 AM - 04:00 AM	53.7	83.0	44.8
04:00 AM - 05:00 AM	52.2	72.7	49.8
05:00 AM - 06:00 AM	56.3	81.1	48.6
06:00 AM - 07:00 AM	65.1	101.5	50.7
07:00 AM - 08:00 AM	59.3	88.6	51.3
08:00 AM - 09:00 AM	60.1	84.5	51.0

Leq Average 24 hrs. (dB(A))	58.8		
Lmax (dB(A))		101.5	
L90 (dB(A))			51.0
Ldn (dB(A))	64.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9:04AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171034-1

Page 1 of 1

Sample Number 24125543-7
Parameter Noise (Leq 24 hrs.)
Location บริเวณหมู่ที่ 1 บ้านย่านยาว (N1) (GPS 47N 660892, 759222)
Measurement Date Nov 10 - Nov 11, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120941

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	68.3	89.9	51.7
10:00 AM - 11:00 AM	67.1	86.9	50.2
11:00 AM - 12:00 PM	56.6	79.8	49.4
12:00 PM - 01:00 PM	58.5	91.6	49.6
01:00 PM - 02:00 PM	53.3	83.0	49.1
02:00 PM - 03:00 PM	54.8	83.7	49.7
03:00 PM - 04:00 PM	57.3	76.2	50.9
04:00 PM - 05:00 PM	58.6	80.3	51.2
05:00 PM - 06:00 PM	57.7	80.8	50.7
06:00 PM - 07:00 PM	56.9	81.3	50.3
07:00 PM - 08:00 PM	57.7	84.0	50.1
08:00 PM - 09:00 PM	55.9	80.8	49.8
09:00 PM - 10:00 PM	51.8	75.8	47.9
10:00 PM - 11:00 PM	50.6	67.8	48.1
11:00 PM - 12:00 AM	49.7	69.6	47.6
12:00 AM - 01:00 AM	51.2	75.4	47.9
01:00 AM - 02:00 AM	51.7	66.6	48.0
02:00 AM - 03:00 AM	48.5	62.6	47.5
03:00 AM - 04:00 AM	50.9	83.0	47.5
04:00 AM - 05:00 AM	52.4	72.6	49.7
05:00 AM - 06:00 AM	55.8	85.8	50.8
06:00 AM - 07:00 AM	63.7	93.2	53.2
07:00 AM - 08:00 AM	58.7	91.4	51.5
08:00 AM - 09:00 AM	57.7	86.3	48.2

Leq Average 24 hrs. (dB(A))

59.6

Lmax (dB(A))

93.2

L90 (dB(A))

49.7

Ldn (dB(A))

63.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:04AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171035-1

Page 1 of 1

Sample Number 24125543-8
Parameter Noise (Leq 24 hrs.)
Location บริเวณชุมชนบ้านย่านยาวออก (N2) (GPS 47N 662200, 759079)
Measurement Date Nov 04 - Nov 05, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.7	80.2	43.0
10:00 AM - 11:00 AM	45.2	60.1	42.1
11:00 AM - 12:00 PM	45.3	59.3	40.2
12:00 PM - 01:00 PM	68.6	80.5	44.2
01:00 PM - 02:00 PM	56.0	82.0	46.1
02:00 PM - 03:00 PM	57.6	75.9	48.0
03:00 PM - 04:00 PM	50.7	83.5	45.3
04:00 PM - 05:00 PM	51.8	71.2	45.1
05:00 PM - 06:00 PM	57.4	73.0	53.6
06:00 PM - 07:00 PM	58.8	70.9	55.2
07:00 PM - 08:00 PM	56.4	68.7	54.0
08:00 PM - 09:00 PM	57.0	69.0	54.8
09:00 PM - 10:00 PM	58.2	70.2	54.7
10:00 PM - 11:00 PM	53.1	66.3	49.6
11:00 PM - 12:00 AM	57.7	64.3	50.8
12:00 AM - 01:00 AM	59.9	67.1	52.5
01:00 AM - 02:00 AM	60.0	63.6	53.8
02:00 AM - 03:00 AM	55.8	67.1	50.3
03:00 AM - 04:00 AM	53.8	67.0	51.9
04:00 AM - 05:00 AM	55.1	62.3	53.3
05:00 AM - 06:00 AM	59.4	74.7	55.2
06:00 AM - 07:00 AM	58.2	74.2	52.6
07:00 AM - 08:00 AM	53.3	63.5	49.7
08:00 AM - 09:00 AM	49.3	64.9	45.9

Leq Average 24 hrs. (dB(A))

58.7

Lmax (dB(A))

83.5

L90 (dB(A))

50.3

Ldn (dB(A))

64.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:05AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171036-1

Page 1 of 1

Sample Number	24125543-9
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนบ้านผ่านยาวออก (N2) (GPS 47N 662200, 759079)
Measurement Date	Nov 05 - Nov 06, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	47.0	63.7	43.3
10:00 AM - 11:00 AM	49.3	70.5	43.9
11:00 AM - 12:00 PM	51.2	79.7	43.8
12:00 PM - 01:00 PM	48.8	65.9	43.8
01:00 PM - 02:00 PM	53.4	72.2	43.9
02:00 PM - 03:00 PM	50.2	66.7	45.0
03:00 PM - 04:00 PM	49.2	70.7	45.1
04:00 PM - 05:00 PM	54.1	64.1	51.6
05:00 PM - 06:00 PM	66.8	94.6	62.2
06:00 PM - 07:00 PM	62.9	71.4	61.1
07:00 PM - 08:00 PM	65.1	71.1	63.3
08:00 PM - 09:00 PM	59.8	69.9	55.5
09:00 PM - 10:00 PM	56.9	70.4	54.2
10:00 PM - 11:00 PM	55.4	68.4	52.8
11:00 PM - 12:00 AM	55.3	68.1	53.3
12:00 AM - 01:00 AM	54.9	68.5	53.0
01:00 AM - 02:00 AM	54.6	66.6	53.0
02:00 AM - 03:00 AM	55.5	67.0	53.4
03:00 AM - 04:00 AM	57.3	66.8	53.8
04:00 AM - 05:00 AM	55.3	67.6	54.0
05:00 AM - 06:00 AM	58.1	66.1	56.1
06:00 AM - 07:00 AM	59.6	70.6	56.8
07:00 AM - 08:00 AM	57.2	73.9	52.1
08:00 AM - 09:00 AM	52.9	64.9	46.7

Leq Average 24 hrs. (dB(A))	58.6		
Lmax (dB(A))		94.6	
L90 (dB(A))			53.0
Ldn (dB(A))	63.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rak Yong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise rpt (9:05AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171037-1

Page 1 of 1

Sample Number	24125543-10
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนบ้านผ่านยาวออก (N2) (GPS 47N 662200, 759079)
Measurement Date	Nov 05 - Nov 07, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	49.0	68.6	44.7
10:00 AM - 11:00 AM	48.9	62.9	44.3
11:00 AM - 12:00 PM	51.3	71.4	43.9
12:00 PM - 01:00 PM	49.5	71.2	44.1
01:00 PM - 02:00 PM	51.6	72.3	45.3
02:00 PM - 03:00 PM	47.9	65.5	43.9
03:00 PM - 04:00 PM	48.7	61.7	44.0
04:00 PM - 05:00 PM	51.4	64.2	45.5
05:00 PM - 06:00 PM	55.1	71.3	49.3
06:00 PM - 07:00 PM	54.1	64.1	51.6
07:00 PM - 08:00 PM	54.7	65.5	52.2
08:00 PM - 09:00 PM	58.1	64.3	52.3
09:00 PM - 10:00 PM	53.2	61.9	51.6
10:00 PM - 11:00 PM	53.9	64.3	52.1
11:00 PM - 12:00 AM	53.9	59.3	52.2
12:00 AM - 01:00 AM	53.8	60.3	52.0
01:00 AM - 02:00 AM	52.8	58.8	51.8
02:00 AM - 03:00 AM	53.6	73.1	51.9
03:00 AM - 04:00 AM	52.9	61.4	51.5
04:00 AM - 05:00 AM	54.1	72.8	52.2
05:00 AM - 06:00 AM	58.0	74.5	54.7
06:00 AM - 07:00 AM	55.9	73.0	52.8
07:00 AM - 08:00 AM	50.7	68.9	48.4
08:00 AM - 09:00 AM	50.7	79.8	45.8

Leq Average 24 hrs. (dB(A))	53.5		
Lmax (dB(A))		79.8	
L90 (dB(A))			51.5
Ldn (dB(A))	60.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rak Yong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise rpt (9:05AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171038-1

Page 1 of 1

Sample Number 24125543-11
Parameter Noise (Leq 24 hrs.)
Location บริเวณชุมชนบ้านย่านยาวโลก (N2) (GPS 47N 662200, 759079)
Measurement Date Nov 07 - Nov 08, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.8	82.8	45.8
10:00 AM - 11:00 AM	56.9	75.2	44.4
11:00 AM - 12:00 PM	48.8	70.8	44.2
12:00 PM - 01:00 PM	53.4	70.5	44.5
01:00 PM - 02:00 PM	50.3	75.5	44.4
02:00 PM - 03:00 PM	53.2	74.2	46.1
03:00 PM - 04:00 PM	51.9	71.4	48.2
04:00 PM - 05:00 PM	51.9	69.5	47.3
05:00 PM - 06:00 PM	53.4	64.0	48.0
06:00 PM - 07:00 PM	58.3	65.1	51.3
07:00 PM - 08:00 PM	60.7	65.4	56.9
08:00 PM - 09:00 PM	60.4	65.1	55.0
09:00 PM - 10:00 PM	59.7	76.0	53.4
10:00 PM - 11:00 PM	58.2	69.2	50.8
11:00 PM - 12:00 AM	56.6	65.1	49.5
12:00 AM - 01:00 AM	51.1	59.4	49.2
01:00 AM - 02:00 AM	58.9	68.8	50.4
02:00 AM - 03:00 AM	57.8	68.1	52.9
03:00 AM - 04:00 AM	53.0	68.2	51.5
04:00 AM - 05:00 AM	53.1	64.0	51.6
05:00 AM - 06:00 AM	57.2	66.6	54.8
06:00 AM - 07:00 AM	57.0	68.5	54.9
07:00 AM - 08:00 AM	55.0	61.5	52.6
08:00 AM - 09:00 AM	51.6	67.5	48.4

Leq Average 24 hrs. (dB(A)) 56.5
Lmax (dB(A)) 82.8
L90 (dB(A)) 49.5
Ldn (dB(A)) 62.9
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.
Orawan Rakyong
Scientist (3)

Approved by

Supot S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9:06AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171039-1

Page 1 of 1

Sample Number 24125543-12
Parameter Noise (Leq 24 hrs.)
Location บริเวณชุมชนบ้านย่านยาวโลก (N2) (GPS 47N 662200, 759079)
Measurement Date Nov 08 - Nov 09, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.5	78.2	46.6
10:00 AM - 11:00 AM	48.5	73.7	45.5
11:00 AM - 12:00 PM	46.7	58.9	44.6
12:00 PM - 01:00 PM	45.9	58.0	44.0
01:00 PM - 02:00 PM	47.1	59.9	44.3
02:00 PM - 03:00 PM	46.7	65.4	43.6
03:00 PM - 04:00 PM	46.1	59.0	43.6
04:00 PM - 05:00 PM	50.5	66.3	44.8
05:00 PM - 06:00 PM	52.5	75.0	48.4
06:00 PM - 07:00 PM	54.5	62.2	51.1
07:00 PM - 08:00 PM	52.1	61.1	49.5
08:00 PM - 09:00 PM	51.5	58.8	49.7
09:00 PM - 10:00 PM	50.1	65.8	48.3
10:00 PM - 11:00 PM	50.1	62.6	48.3
11:00 PM - 12:00 AM	60.2	71.8	48.6
12:00 AM - 01:00 AM	51.2	67.3	49.2
01:00 AM - 02:00 AM	51.2	68.2	49.1
02:00 AM - 03:00 AM	51.6	65.3	49.7
03:00 AM - 04:00 AM	53.2	63.8	51.8
04:00 AM - 05:00 AM	53.8	64.2	52.8
05:00 AM - 06:00 AM	58.1	66.0	54.8
06:00 AM - 07:00 AM	59.6	65.2	57.0
07:00 AM - 08:00 AM	57.3	68.0	51.6
08:00 AM - 09:00 AM	51.7	67.5	49.4

Leq Average 24 hrs. (dB(A)) 54.4
Lmax (dB(A)) 78.2
L90 (dB(A)) 48.6
Ldn (dB(A)) 62.1
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.
Orawan Rakyong
Scientist (3)

Approved by

Supot S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9:06AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171040-1

Page 1 of 1

Sample Number	24125543-13
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณชุมชนบ้านย่านยาวโลก (N2) (GPS 47N 662200, 759079)
Measurement Date	Nov 09 - Nov 10, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	53.0	66.9	49.5
10:00 AM - 11:00 AM	53.0	65.4	49.4
11:00 AM - 12:00 PM	53.2	75.9	50.4
12:00 PM - 01:00 PM	49.0	65.2	45.5
01:00 PM - 02:00 PM	46.5	59.5	44.6
02:00 PM - 03:00 PM	47.3	60.6	45.0
03:00 PM - 04:00 PM	48.8	64.0	46.7
04:00 PM - 05:00 PM	49.4	65.4	47.5
05:00 PM - 06:00 PM	51.9	74.0	47.6
06:00 PM - 07:00 PM	56.2	71.3	50.0
07:00 PM - 08:00 PM	54.4	62.6	51.4
08:00 PM - 09:00 PM	52.2	59.4	50.3
09:00 PM - 10:00 PM	51.6	63.5	50.3
10:00 PM - 11:00 PM	51.3	60.7	50.0
11:00 PM - 12:00 AM	51.9	65.9	49.1
12:00 AM - 01:00 AM	52.6	66.0	49.9
01:00 AM - 02:00 AM	50.6	64.4	49.6
02:00 AM - 03:00 AM	50.7	59.8	49.6
03:00 AM - 04:00 AM	51.7	58.9	50.7
04:00 AM - 05:00 AM	52.6	57.9	52.0
05:00 AM - 06:00 AM	53.3	71.9	52.3
06:00 AM - 07:00 AM	58.2	72.6	54.7
07:00 AM - 08:00 AM	56.2	72.5	53.5
08:00 AM - 09:00 AM	53.2	75.5	51.3

Leq Average 24 hrs. (dB(A))	52.9		
Lmax (dB(A))		75.9	
L90 (dB(A))			49.9
Ldn (dB(A))	59.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:07AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171041-1

Page 1 of 1

Sample Number	24125543-14
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณชุมชนบ้านย่านยาวโลก (N2) (GPS 47N 662200, 759079)
Measurement Date	Nov 10 - Nov 11, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 1120940

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	51.6	65.9	49.1
10:00 AM - 11:00 AM	48.2	65.5	45.6
11:00 AM - 12:00 PM	46.2	62.7	43.5
12:00 PM - 01:00 PM	46.3	62.2	43.5
01:00 PM - 02:00 PM	46.5	67.2	43.8
02:00 PM - 03:00 PM	47.4	68.9	43.8
03:00 PM - 04:00 PM	48.2	65.2	44.9
04:00 PM - 05:00 PM	48.9	67.2	46.1
05:00 PM - 06:00 PM	48.2	61.3	46.0
06:00 PM - 07:00 PM	53.2	83.3	48.6
07:00 PM - 08:00 PM	54.9	61.0	52.1
08:00 PM - 09:00 PM	52.2	60.6	50.8
09:00 PM - 10:00 PM	52.4	60.2	51.1
10:00 PM - 11:00 PM	50.9	58.1	49.2
11:00 PM - 12:00 AM	52.0	56.7	50.7
12:00 AM - 01:00 AM	51.4	57.3	50.4
01:00 AM - 02:00 AM	51.7	55.4	50.7
02:00 AM - 03:00 AM	51.5	56.8	50.5
03:00 AM - 04:00 AM	52.0	71.8	50.5
04:00 AM - 05:00 AM	52.4	59.7	51.0
05:00 AM - 06:00 AM	52.9	59.9	51.8
06:00 AM - 07:00 AM	57.4	74.2	53.8
07:00 AM - 08:00 AM	54.3	63.9	52.4
08:00 AM - 09:00 AM	51.5	61.1	49.3

Leq Average 24 hrs. (dB(A))	51.8		
Lmax (dB(A))		83.3	
L90 (dB(A))			49.3
Ldn (dB(A))	59.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:07AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171042-1

Page 1 of 1

Sample Number	24125543-15
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)
Measurement Date	Nov 04 - Nov 05, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 331096

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.3	77.9	50.9
10:00 AM - 11:00 AM	60.5	76.0	54.9
11:00 AM - 12:00 PM	62.6	75.4	59.9
12:00 PM - 01:00 PM	62.6	78.2	59.6
01:00 PM - 02:00 PM	66.9	77.8	60.1
02:00 PM - 03:00 PM	61.8	80.7	59.0
03:00 PM - 04:00 PM	55.5	66.9	52.3
04:00 PM - 05:00 PM	55.5	63.6	53.0
05:00 PM - 06:00 PM	55.6	70.8	53.4
06:00 PM - 07:00 PM	60.1	76.3	57.5
07:00 PM - 08:00 PM	59.3	77.0	55.1
08:00 PM - 09:00 PM	58.0	75.5	54.4
09:00 PM - 10:00 PM	59.4	77.1	55.6
10:00 PM - 11:00 PM	59.1	72.2	56.6
11:00 PM - 12:00 AM	61.9	83.8	57.0
12:00 AM - 01:00 AM	65.4	70.0	65.1
01:00 AM - 02:00 AM	69.2	89.1	63.7
02:00 AM - 03:00 AM	67.9	82.1	62.6
03:00 AM - 04:00 AM	66.7	78.3	61.6
04:00 AM - 05:00 AM	62.6	79.3	59.7
05:00 AM - 06:00 AM	63.0	78.9	61.8
06:00 AM - 07:00 AM	63.5	79.9	60.2
07:00 AM - 08:00 AM	62.6	79.9	60.7
08:00 AM - 09:00 AM	60.3	79.5	58.1

Leq Average 24 hrs. (dB(A))	63.2		
Lmax (dB(A))		89.1	
L90 (dB(A))			58.1
Ldn (dB(A))	71.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.
Orawan Rak Yong
Scientist (3)

Approved by

Supt S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:07AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171043-1

Page 1 of 1

Sample Number	24125543-16
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)
Measurement Date	Nov 05 - Nov 06, 2024
Measurement by	Narathorn Keawpongsa
Sound Level meter	Serial No. 331096

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.9	79.6	58.4
10:00 AM - 11:00 AM	60.1	80.2	58.3
11:00 AM - 12:00 PM	57.7	78.1	55.7
12:00 PM - 01:00 PM	59.9	77.7	55.3
01:00 PM - 02:00 PM	57.3	69.8	55.3
02:00 PM - 03:00 PM	56.3	63.9	54.6
03:00 PM - 04:00 PM	58.5	64.8	56.4
04:00 PM - 05:00 PM	56.1	67.0	55.3
05:00 PM - 06:00 PM	58.7	77.6	53.9
06:00 PM - 07:00 PM	57.5	64.9	54.7
07:00 PM - 08:00 PM	60.1	78.7	57.7
08:00 PM - 09:00 PM	57.7	67.0	56.0
09:00 PM - 10:00 PM	57.9	63.2	54.4
10:00 PM - 11:00 PM	56.5	79.0	53.4
11:00 PM - 12:00 AM	55.8	60.4	54.0
12:00 AM - 01:00 AM	57.5	65.5	55.4
01:00 AM - 02:00 AM	57.0	61.7	55.4
02:00 AM - 03:00 AM	58.5	65.8	56.3
03:00 AM - 04:00 AM	58.7	76.1	56.2
04:00 AM - 05:00 AM	56.9	71.5	54.4
05:00 AM - 06:00 AM	56.8	74.8	53.4
06:00 AM - 07:00 AM	54.6	72.3	53.0
07:00 AM - 08:00 AM	54.7	63.6	52.7
08:00 AM - 09:00 AM	54.1	76.4	52.2

Leq Average 24 hrs. (dB(A))	57.8		
Lmax (dB(A))		80.2	
L90 (dB(A))			55.3
Ldn (dB(A))	63.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

Orawan R.
Orawan Rak Yong
Scientist (3)

Approved by

Supt S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:07AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171044-1

Page 1 of 1

Sample Number	24125543-17
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)
Measurement Date	Nov 06 - Nov 07, 2024
Measurement by	Narathom Keawpongsa
Sound Level meter	Serial No. 331096

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.3	87.0	52.8
10:00 AM - 11:00 AM	57.6	73.4	50.1
11:00 AM - 12:00 PM	62.9	74.1	61.9
12:00 PM - 01:00 PM	55.7	73.0	50.1
01:00 PM - 02:00 PM	61.1	73.2	54.3
02:00 PM - 03:00 PM	60.5	69.3	50.7
03:00 PM - 04:00 PM	54.8	75.5	49.0
04:00 PM - 05:00 PM	65.3	79.6	53.5
05:00 PM - 06:00 PM	60.4	76.6	54.4
06:00 PM - 07:00 PM	58.1	73.9	55.6
07:00 PM - 08:00 PM	60.0	79.6	57.1
08:00 PM - 09:00 PM	65.4	74.6	60.2
09:00 PM - 10:00 PM	63.5	81.5	59.1
10:00 PM - 11:00 PM	58.7	75.2	56.3
11:00 PM - 12:00 AM	58.5	74.7	56.1
12:00 AM - 01:00 AM	59.5	79.0	56.3
01:00 AM - 02:00 AM	59.2	70.9	57.2
02:00 AM - 03:00 AM	59.9	78.4	56.8
03:00 AM - 04:00 AM	59.5	76.9	55.7
04:00 AM - 05:00 AM	62.5	82.4	57.2
05:00 AM - 06:00 AM	58.0	76.0	55.6
06:00 AM - 07:00 AM	57.4	74.0	54.4
07:00 AM - 08:00 AM	57.9	72.5	55.9
08:00 AM - 09:00 AM	57.7	89.8	54.6

Leq Average 24 hrs. (dB(A))	60.5		
Lmax (dB(A))		89.8	
L90 (dB(A))			55.6
Ldn (dB(A))	66.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:07AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171045-1

Page 1 of 1

Sample Number	24125543-18
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)
Measurement Date	Nov 07 - Nov 08, 2024
Measurement by	Narathom Keawpongsa
Sound Level meter	Serial No. 331096

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.5	77.9	55.8
10:00 AM - 11:00 AM	56.3	87.0	52.8
11:00 AM - 12:00 PM	57.6	73.4	50.1
12:00 PM - 01:00 PM	62.9	74.1	61.9
01:00 PM - 02:00 PM	55.7	73.0	50.1
02:00 PM - 03:00 PM	61.1	73.2	54.3
03:00 PM - 04:00 PM	60.5	69.3	50.7
04:00 PM - 05:00 PM	54.8	75.5	49.0
05:00 PM - 06:00 PM	65.3	79.6	53.5
06:00 PM - 07:00 PM	60.4	76.6	54.4
07:00 PM - 08:00 PM	58.1	73.9	55.6
08:00 PM - 09:00 PM	60.0	79.6	57.1
09:00 PM - 10:00 PM	65.4	74.6	60.2
10:00 PM - 11:00 PM	63.5	81.5	59.1
11:00 PM - 12:00 AM	58.7	75.2	56.3
12:00 AM - 01:00 AM	58.5	74.7	56.1
01:00 AM - 02:00 AM	59.5	79.0	56.3
02:00 AM - 03:00 AM	59.2	70.9	57.2
03:00 AM - 04:00 AM	59.9	78.4	56.8
04:00 AM - 05:00 AM	59.5	76.9	55.7
05:00 AM - 06:00 AM	62.5	82.4	57.2
06:00 AM - 07:00 AM	58.0	76.0	55.6
07:00 AM - 08:00 AM	57.4	74.0	54.4
08:00 AM - 09:00 AM	57.9	72.5	55.9

Leq Average 24 hrs. (dB(A))	60.5		
Lmax (dB(A))		87.0	
L90 (dB(A))			55.7
Ldn (dB(A))	66.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:08AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171046-1

Page 1 of 1

Sample Number	24125543-19		
Parameter	Noise (Leq 24 hrs.)		
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)		
Measurement Date	Nov 08 - Nov 09, 2024		
Measurement by	Narathorn Keawpongsa		
Sound Level meter	Serial No. 331096		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.7	89.8	54.6
10:00 AM - 11:00 AM	58.5	77.9	55.8
11:00 AM - 12:00 PM	57.8	77.2	55.3
12:00 PM - 01:00 PM	62.5	80.5	57.0
01:00 PM - 02:00 PM	65.9	77.6	60.8
02:00 PM - 03:00 PM	59.8	78.9	57.6
03:00 PM - 04:00 PM	59.5	74.6	57.1
04:00 PM - 05:00 PM	66.8	81.4	61.0
05:00 PM - 06:00 PM	59.6	80.8	57.5
06:00 PM - 07:00 PM	58.6	74.0	55.9
07:00 PM - 08:00 PM	58.8	77.1	55.1
08:00 PM - 09:00 PM	58.9	76.4	55.1
09:00 PM - 10:00 PM	62.8	84.5	57.1
10:00 PM - 11:00 PM	60.0	81.6	55.0
11:00 PM - 12:00 AM	59.6	79.8	55.7
12:00 AM - 01:00 AM	61.9	72.5	58.5
01:00 AM - 02:00 AM	62.5	79.7	54.0
02:00 AM - 03:00 AM	63.5	79.3	59.1
03:00 AM - 04:00 AM	62.6	82.1	59.0
04:00 AM - 05:00 AM	60.9	79.3	58.9
05:00 AM - 06:00 AM	59.1	77.7	54.8
06:00 AM - 07:00 AM	58.3	79.7	54.3
07:00 AM - 08:00 AM	58.4	68.4	56.0
08:00 AM - 09:00 AM	59.4	80.6	53.9
Leq Average 24 hrs. (dB(A))	61.4		
Lmax (dB(A))		89.8	
L90 (dB(A))			55.9
Ldn (dB(A))	67.7		
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป 2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548			

Technical Management

Orawan R.
Orawan Rakyong
Scientist (3)

Approved by

Supt S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:08AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125543
Date Received : Nov 13, 2024
Date Reported : Nov 20, 2024
Report Number: 3171047-1

Page 1 of 1

Sample Number	24125543-20		
Parameter	Noise (Leq 24 hrs.)		
Location	บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)		
Measurement Date	Nov 09 - Nov 10, 2024		
Measurement by	Narathorn Keawpongsa		
Sound Level meter	Serial No. 331096		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.7	73.6	53.8
10:00 AM - 11:00 AM	59.6	79.6	54.3
11:00 AM - 12:00 PM	62.3	76.3	61.0
12:00 PM - 01:00 PM	63.7	86.7	61.2
01:00 PM - 02:00 PM	63.3	85.4	59.0
02:00 PM - 03:00 PM	62.3	75.7	58.3
03:00 PM - 04:00 PM	65.9	84.4	63.1
04:00 PM - 05:00 PM	67.3	82.7	64.3
05:00 PM - 06:00 PM	66.4	86.6	65.5
06:00 PM - 07:00 PM	66.0	83.4	65.2
07:00 PM - 08:00 PM	65.7	72.1	65.3
08:00 PM - 09:00 PM	65.7	72.2	65.3
09:00 PM - 10:00 PM	66.6	84.5	65.3
10:00 PM - 11:00 PM	67.4	72.4	65.8
11:00 PM - 12:00 AM	65.8	80.2	64.7
12:00 AM - 01:00 AM	65.8	81.2	65.0
01:00 AM - 02:00 AM	65.9	82.7	65.2
02:00 AM - 03:00 AM	65.8	76.9	65.3
03:00 AM - 04:00 AM	66.1	80.0	65.3
04:00 AM - 05:00 AM	65.9	79.3	65.4
05:00 AM - 06:00 AM	66.1	70.9	65.7
06:00 AM - 07:00 AM	66.6	78.6	65.9
07:00 AM - 08:00 AM	66.3	78.7	65.7
08:00 AM - 09:00 AM	66.1	79.3	65.4
Leq Average 24 hrs. (dB(A))	65.5		
Lmax (dB(A))		86.7	
L90 (dB(A))			65.2
Ldn (dB(A))	72.4		
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป 2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548			

Technical Management

Orawan R.
Orawan Rakyong
Scientist (3)

Approved by

Supt S.
Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (9:08AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125543

Date Received : Nov 13, 2024

Date Reported : Nov 20, 2024

Report Number: 3171048-1

Page 1 of 1

Sample Number 24125543-21
Parameter Noise (Leq 24 hrs.)
Location บริเวณริมรั้วด้านทิศตะวันตกเฉียงใต้ (N3) (GPS 47N 716827, 738366)
Measurement Date Nov 10 - Nov 11, 2024
Measurement by Narathorn Keawpongsa
Sound Level meter Serial No. 331096

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.6	76.9	65.2
10:00 AM - 11:00 AM	65.7	80.7	65.3
11:00 AM - 12:00 PM	65.9	85.1	65.2
12:00 PM - 01:00 PM	65.7	87.3	64.9
01:00 PM - 02:00 PM	64.0	81.8	60.6
02:00 PM - 03:00 PM	64.9	79.5	62.8
03:00 PM - 04:00 PM	65.7	88.0	65.0
04:00 PM - 05:00 PM	65.4	72.2	64.9
05:00 PM - 06:00 PM	65.5	77.1	65.0
06:00 PM - 07:00 PM	66.0	77.4	65.5
07:00 PM - 08:00 PM	65.5	73.0	64.9
08:00 PM - 09:00 PM	66.2	71.4	64.8
09:00 PM - 10:00 PM	65.2	68.3	64.5
10:00 PM - 11:00 PM	65.3	70.1	64.5
11:00 PM - 12:00 AM	65.7	69.4	65.2
12:00 AM - 01:00 AM	65.8	80.9	65.3
01:00 AM - 02:00 AM	66.1	78.6	65.5
02:00 AM - 03:00 AM	66.0	69.8	65.6
03:00 AM - 04:00 AM	65.7	81.9	64.8
04:00 AM - 05:00 AM	66.1	87.2	65.2
05:00 AM - 06:00 AM	65.5	68.3	65.1
06:00 AM - 07:00 AM	65.5	71.0	65.2
07:00 AM - 08:00 AM	65.7	75.9	65.3
08:00 AM - 09:00 AM	65.7	74.2	65.2

Leq Average 24 hrs. (dB(A)) 65.6
Lmax (dB(A)) 88.0
L90 (dB(A)) 65.1
Ldn (dB(A)) 72.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

Technical Management

Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air Noise.rpt (9:08AM)

ภาคผนวก ค-5

คุณภาพน้ำทิ้ง



Analysis / Test Report



TESTING
No.0166

Lot ID: 2468793

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3027121-1

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Sample Number	2468793-2
Sampled Date	Jul 12, 2024 10:00 AM
Sample Description	Wastewater
Location	ถังพักน้ำทิ้งขนาด 10 ลบ.ม.
Date Analysis Commenced	Jul 12, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Songkhla
pH at 25 degree C *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	248	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Woravut Deenuk ทะเบียนเลขที่ 7-204-จ-0115 , Thanawat Pinthong ทะเบียนเลขที่ 7-267-จ-0022

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-จ-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-จ-0001

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.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\AL_GL.rpt (3:26PM)

12044 31/ EMAIL



Analysis / Test Report



TESTING
No.0166

Lot ID: 2480957

Date Received : Aug 06, 2024

Date Reported : Aug 14, 2024

Report Number : 3055631-1

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Sample Number	2480957-2
Sampled Date	Aug 06, 2024 8:29 AM
Sample Description	Wastewater
Location	ถังพักน้ำทิ้งขนาด 10 ลบ.ม.
Date Analysis Commenced	Aug 06, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	3.1	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Songkhla
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	246	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ 7-267-จ-0011 , Tana Supapan ทะเบียนเลขที่ 7-204-จ-0192

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-จ-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-จ-0001

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.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044 31/ EMAIL

S:\Reports\AL_GL.rpt (3:26PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : P0015739

Project Name : EIA Monitoring

Project Location :

Sample Number	2493860-2						
Sampled Date	Sep 03, 2024 8:35 AM						
Sample Description	Wastewater						
Location	ต่งฟักน้ำทั้งขนาด 10 ลม.ม.						
Date Analysis Commenced	Sep 03, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Songkhla
pH at 25 degree C *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	216	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ 7-267-ก-0011 , Narathorn Keawpongsa ทะเบียนเลขที่ 7-204-ก-0193

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



TESTING

No.0166

Lot ID: 2493860

Date Received : Sep 03, 2024

Date Reported : Sep 10, 2024

Report Number : 3083117-1

Page 2 of 2



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : P0015739

Project Name : EIA Monitoring

Project Location :

Sample Number	24108015-2						
Sampled Date	Oct 01, 2024 9:45 AM						
Sample Description	Wastewater						
Location	ต่งฟักน้ำทั้งขนาด 10 ลม.ม.						
Date Analysis Commenced	Oct 01, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	230	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Sirichai Keangkard ทะเบียนเลขที่ 7-267-ก-0010

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



TESTING

No.0166

Lot ID: 24108015

Date Received : Oct 01, 2024

Date Reported : Oct 08, 2024

Report Number : 3115162-1

Page 1 of 1



Analysis / Test Report

TESTING
No.0166

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24118399
Date Received : Nov 05, 2024
Date Reported : Nov 12, 2024
Report Number : 3138437-1

Page 2 of 2

Sample Number	24118399-2						
Sampled Date	Nov 05, 2024 8:35 AM						
Sample Description	Wastewater						
Location	ถังพักน้ำทิ้งขนาด 10 ลบ.ม.						
Date Analysis Commenced	Nov 05, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	220	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : WutthichaiTayucharoen ทะเบียนเลขที่ 7-267-ก-0007

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\WinRef_All_GL\pt (6:53PM)

12044-31/ EMAIL



Analysis / Test Report

TESTING
No.0166

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24118415
Date Received : Dec 10, 2024
Date Reported : Dec 17, 2024
Report Number : 3138486-1

Page 2 of 2

Sample Number	24118415-2						
Sampled Date	Dec 10, 2024 9:00 AM						
Sample Description	Wastewater						
Location	ถังพักน้ำทิ้งขนาด 10 ลบ.ม.						
Date Analysis Commenced	Dec 10, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	194	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	9	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ 7-267-ก-0011

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\WinRef_All_GL\pt (6:53PM)



Analysis / Test Report



TESTING
No.0166

Lot ID: 2480957

Date Received : Aug 06, 2024

Date Reported : Aug 14, 2024

Report Number : 3055631-1

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Sample Number	2480957-1
Sampled Date	Aug 06, 2024 8:37 AM
Sample Description	Wastewater
Location	บ่อกำจัดน้ำ
Date Analysis Commenced	Aug 06, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	5.4	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	44	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	0.3	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Songkhla
pH at 25 degree C *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	190	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ ๖-267-๖-0011 , Tana Supapan ทะเบียนเลขที่ ๖-204-๖-0192

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ ๖-267-๖-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ ๖-267-๖-0001

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.

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report



TESTING
No.0166

Lot ID: 2493860

Date Received : Sep 03, 2024

Date Reported : Sep 10, 2024

Report Number : 3083117-1

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Sample Number	2493860-1
Sampled Date	Sep 03, 2024 8:45 AM
Sample Description	Wastewater
Location	บ่อกำจัดน้ำ
Date Analysis Commenced	Sep 03, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Songkhla
pH at 25 degree C *		-	-	8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	184	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ ๖-267-๖-0011 , Narathorn Keawpongsa ทะเบียนเลขที่ ๖-204-๖-0193

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ ๖-267-๖-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ ๖-267-๖-0001

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.

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24116360
Date Received : Oct 09, 2024
Date Reported : Oct 17, 2024
Report Number : 3133237-1

Sample Number	24116360-1
Sampled Date	Oct 09, 2024 9:40 AM
Sample Description	Wastewater
Location	บ่อบำบัดน้ำ
Date Analysis Commenced	Oct 09, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	0.6	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C	-	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	52	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ 7-267-ก-0011

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)
ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head
ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\UtlRef_All_GL.rpt (2:17PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24118399
Date Received : Nov 05, 2024
Date Reported : Nov 12, 2024
Report Number : 3138437-1

Sample Number	24118399-1
Sampled Date	Nov 05, 2024 8:40 AM
Sample Description	Wastewater
Location	บ่อบำบัดน้ำ
Date Analysis Commenced	Nov 05, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	<0.1	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	194	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Wuttichai Taucharnen ทะเบียนเลขที่ 7-267-ก-0007

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)
ทะเบียนเลขที่ 7-267-ก-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head
ทะเบียนเลขที่ 7-267-ก-0001

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.

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\UtlRef_All_GL.rpt (6:33PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

TESTING
No.0166
Lot ID: 24118415
Date Received : Dec 10, 2024
Date Reported : Dec 17, 2024
Report Number : 3138486-1

Page 1 of 2

Sample Number	24118415-1
Sampled Date	Dec 10, 2024 9:15 AM
Sample Description	Wastewater
Location	บ่อกำจัดน้ำ
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 degree C)	mg/L	-	2.0	3.2	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
COD	mg/L	-	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Songkhla
Formaldehyde *	mg/L	-	0.1	0.6	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Songkhla
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Songkhla
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	72	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Suspended Solids	mg/L	-	5	13	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Songkhla

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampling By : Somsak Junkong ทะเบียนเลขที่ ๖-267-๖-0011

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Ananta B.

Ananta Boonphet
Scientist (2)

ทะเบียนเลขที่ ๖-267-๖-0004

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

ทะเบียนเลขที่ ๖-267-๖-0001

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.

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ E/MAIL

S:\Reports\HaRef_Ali_GL.rpt (5:52PM)

ภาคผนวก ค-6

คุณภาพน้ำผิวดิน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162276-1

Page 1 of 2

Sample Number	24118404-1							
Sampled Date	Nov 04, 2024 2:00 PM							
Sample Description	Surface Water							
Location	คลองคูตะกานด้านหน้าเขื่อนฝายกั้นฟุ้งโคลนโครงการ 200 เมตร (SW1)							
Date Analysis Commenced	Nov 04, 2024							
Condition of Sample	Contained in two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	4900.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B, E	Songkhla
Total Coliform	MPN/100mL	-	-	17000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Songkhla
Water Testing								
Ammonia Nitrogen *	mg/L	-	0.06	0.16	≤0.5	≤0.5	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (B, F)	Bangkok
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
Chloride as Cl *	mg/L	0.06	0.2	13.7	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Conductivity *	micromhos/cm	-	0.5	138	No Standard	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Songkhla
Dissolved Oxygen *	mg/L	-	0.1	4.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Songkhla
pH at 25 degree C	-	-	-	6.9	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	95	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla

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.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\Mike\ref_AIL_2GL.rpt (4:27PM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162276-1

Page 2 of 2

Guideline : (1) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : WuthichaiTayucharoen , Narathorn Keawpongsa

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Mike\ref_AIL_2GL.rpt (4:27PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Sample Number	24118404-2						
Sampled Date	Nov 04, 2024 2:30 PM						
Sample Description	Surface Water						
Location	คลองวัดเกาะก้านหยายน้ำเมื่อเทียบกับที่ ตั้งโครงการ 200 เมตร (SW2)						
Date Analysis Commenced	Nov 04, 2024						
Condition of Sample	Contained in two BOD bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	49000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 9221 B, E	Songkhla
Total Coliform	MPN/100mL	-	-	330000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Songkhla
Water Testing								
Ammonia Nitrogen *	mg/L	-	0.06	0.31	≤0.5	≤0.5	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH ₃ (B, F)	Bangkok
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Songkhla
Chloride as Cl *	mg/L	0.06	0.2	15.3	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Conductivity *	micromhos/cm	-	0.5	140	No Standard	No Standard	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Songkhla
Dissolved Oxygen *	mg/L	-	0.1	4.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Songkhla
pH at 25 degree C		-	-	6.8	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	92	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla

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.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\SubRef_All_2GL.rpt (4/27PM)

12044 31/ EMAIL



TESTING
No.0166

Lot ID: 24118404

Date Received : Nov 04, 2024

Date Reported : Nov 11, 2024

Report Number : 3162277-1

Page 1 of 2



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Guideline : (1) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Wutthichai Taucharoen , Narathorn Keawpongsa

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044 31/ EMAIL



TESTING
No.0166

Lot ID: 24118404

Date Received : Nov 04, 2024

Date Reported : Nov 11, 2024

Report Number : 3162277-1

Page 2 of 2

ภาคผนวก ค-7

คุณภาพน้ำใต้ดิน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162278-1

Page 1 of 3

Sample Number	24118404-3
Sampled Date	Nov 04, 2024 1:20 PM
Sample Description	Ground Water
Location	ปลอมาดาลบริเวณชุมชนบ้านสวนมะพร้าว (GW1)
Date Analysis Commenced	Nov 05, 2024
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.001	0.005	<0.005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Cadmium	mg/L	0.001	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Chromium	mg/L	0.001	0.005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Copper	mg/L	0.001	0.005	<0.005	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Iron	mg/L	0.001	0.005	0.03	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Lead	mg/L	0.001	0.005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Mercury	mg/L	0.0003	0.0005	Not Detected	≤0.001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla

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.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\WinRef_All_GL.rpt (4:28PM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162278-1

Page 2 of 3

Sample Number	24118404-3
Sampled Date	Nov 04, 2024 1:20 PM
Sample Description	Ground Water
Location	ปลอมาดาลบริเวณชุมชนบ้านสวนมะพร้าว (GW1)
Date Analysis Commenced	Nov 05, 2024
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.001	0.005	<0.005	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Microbiological Testing							
Fecal Coliform	MPN/100mL	-	-	4.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B, E	Songkhla
Total Coliform	MPN/100mL	-	-	240.0	<2.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Songkhla
Water Testing							
Chloride as Cl *	mg/L	0.06	0.2	19.9	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Sulfate *	mg/L	0.15	0.5	1.3	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	362	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	300	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C	Songkhla

Guideline : Groundwater Quality Standards for Drinking Purposes set by Notification of Ministry of Natural Resources and Environment B.E. 2551, Maximum allowable., (1) Suitable Allowance

Sampling By : WutthichaiTaucharoen , Narathorn Keawpongsa

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanavanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\WinRef_All_GL.rpt (4:28PM)

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166

Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162278-1

Page 3 of 3

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166

Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162279-1

Page 1 of 3

Sample Number 24118404-4
Sampled Date Nov 04, 2024 1:35 PM
Sample Description Ground Water
Location บ่อน้ำบาดาลบริเวณชุมชนบ้านย่านยาว (ตำบลทุ่งลาน) (GW2)
Date Analysis Commenced Nov 05, 2024
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.001	0.005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Cadmium	mg/L	0.001	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Chromium	mg/L	0.001	0.005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Copper	mg/L	0.001	0.005	0.02	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Iron	mg/L	0.001	0.005	0.09	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Lead	mg/L	0.001	0.005	<0.005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Mercury	mg/L	0.0003	0.0005	Not Detected	≤0.001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla

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.

Approved by

Ananta B.
Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\WinRef_AIL_GL.rpt (4:28PM)

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.

Approved by

Ananta B.
Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\WinRef_AIL_GL.rpt (4:28PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162279-1

Page 2 of 3

Sample Number 24118404-4
Sampled Date Nov 04, 2024 1:35 PM
Sample Description Ground Water
Location ฝัฒน้ำบาดาลบริเวณชุมชนบ้านด่านยาว (ตำบลทุ่งลาน) (GW2)
Date Analysis Commenced Nov 05, 2024
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.001	0.005	0.04	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
Fecal Coliform	MPN/100mL	-	-	<1.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B, E	Songkhla
Total Coliform	MPN/100mL	-	-	<1.8	<2.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Songkhla
Water Testing							
Chloride as Cl *	mg/L	0.06	0.2	6.7	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Sulfate *	mg/L	0.15	0.5	<0.5	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	42	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	21	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C	Songkhla

Guideline : Groundwater Quality Standards for Drinking Purposes set by Notification of Ministry of Natural Resources and Environment B.E. 2551, Maximum allowable., (1) Suitable Allowance
Sampling By : Wuttichai Taucharoen , Narathorn Keawpongsa

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\NlaRef_AIL_QI.rpt (4:28PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :



TESTING
No.0166
Lot ID: 24118404
Date Received : Nov 04, 2024
Date Reported : Nov 11, 2024
Report Number : 3162279-1

Page 3 of 3

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\NlaRef_AIL_QI.rpt (4:28PM)



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160, Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลท้ายเกาะ อำเภอสสามโคก จังหวัดปทุมธานี 12160, โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawanit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 1 (MW01)
GPS. Coordinate : UTM (WGS84) 47N 0661221 E, 0759728 N
Sampling Date : October 24, 2024
Sampling Time : 09:52
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseelthong Analyst No. 7-262-ก-0029
Appearance : Turbid, Light Yellow, Slightly Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit Analyst No. 7-262-ก-0019

Sample Code : BR73MW/67
Request No. : 1539/67
Report Date : November 7, 2024
Report No. : FMW269/2024

Item	Parameter	Method of Analysis ¹⁾	Result	Standard ²⁾	Unit	Conclusion
1	pH	Electrometric Method (at 25°C)	6.9	6.5-9.2	-	Pass

Remark : ¹⁾ APHA, AWWA, WEF, Standard Method for the Examination of Water and Wastewater 23rd ed, Washington, DC: APHA, 2017

²⁾ Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

(Ms.Thunnaree Suksawat)
Analyst No. 7-262-ก-0011
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Analyst No. 7-262-ก-0001
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160, Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลท้ายเกาะ อำเภอสสามโคก จังหวัดปทุมธานี 12160, โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawanit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 1 (MW01)
GPS. Coordinate : UTM (WGS84) 47N 0661221 E, 0759728 N
Sampling Date : October 24, 2024
Sampling Time : 09:52
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseelthong
Appearance : Turbid, Light Yellow, Slightly Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit

Sample Code : BR73MW/67
Request No. : 1539/67
Report Date : November 7, 2024
Report No. : FMW269/2024

Item	Parameter	Method of Analysis ¹⁾	Result	Standard ²⁾	Unit	Conclusion
1	Formaldehyde	Distillation, Colorimetric Method	0.123	-	mg/l	-
2	Total Dissolved Solids	Dried at 180°C	372	-	mg/l	-

Remark : ¹⁾ APHA, AWWA, WEF, Standard Method for the Examination of Water and Wastewater 23rd ed, Washington, DC: APHA, 2017

²⁾ Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

ND = Not Detectable

(Ms.Thunnaree Suksawat)
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160. Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลท้ายเกาะ อำเภอสามโคก จังหวัดปทุมธานี 12160. โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawanit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 2 (MW02)
GPS. Coordinate : UTM (WGS84) 47N 0661142 E, 0759792 N
Sampling Date : October 24, 2024
Sampling Time : 10:12
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseethong Analyst No.จ-262-จ-0029
Appearance : Turbid, Yellow, Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit Analyst No.จ-262-จ-0019

Sample Code : BR74MW/67
Request No. : 1539/67
Report Date : November 8, 2024
Report No. : FMW270/2024

Item	Parameter	Method of Analysis ^{1/}	Result	Standard ^{2/}	Unit	Conclusion
1	pH	Electrometric Method (at 25°C)	6.7	6.5-9.2	-	Pass

Remark : ^{1/} APHA, AWWA, WEF. Standard Method for the Examination of Water and Wastewater 23rd ed. Washington, DC: APHA, 2017

^{2/} Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

(Ms.Thunnaree Suksawat)
Analyst No.จ-262-จ-0011
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Analyst No.จ-262-จ-0001
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

EC-RP-F28-Rev.00_01/07/62



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160. Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลท้ายเกาะ อำเภอสามโคก จังหวัดปทุมธานี 12160. โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawanit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 2 (MW02)
GPS. Coordinate : UTM (WGS84) 47N 0661142 E, 0759792 N
Sampling Date : October 24, 2024
Sampling Time : 10:12
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseethong
Appearance : Turbid, Yellow, Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit

Sample Code : BR74MW/67
Request No. : 1539/67
Report Date : November 8, 2024
Report No. : FMW270/2024

Item	Parameter	Method of Analysis ^{1/}	Result	Standard ^{2/}	Unit	Conclusion
1	Formaldehyde	Distillation, Colorimetric Method	0.112	-	mg/l	-
2	Total Dissolved Solids	Dried at 180°C	648	-	mg/l	-

Remark : ^{1/} APHA, AWWA, WEF. Standard Method for the Examination of Water and Wastewater 23rd ed. Washington, DC: APHA, 2017

^{2/} Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

ND = Not Detectable

(Ms.Thunnaree Suksawat)
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160, Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลห้วยเกาะ อำเภอสสามโคก จังหวัดปทุมธานี 12160, โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawarit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 3 (MW03)
GPS. Coordinate : UTM (WGS84) 47N 0661075 E, 0759795 N
Sampling Date : October 24, 2024
Sampling Time : 10:22
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseethong Analyst No.ว-262-จ-0029
Appearance : Turbid, Yellow, Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit Analyst No.ว-262-จ-0019

Sample Code : BR75MW/67
Request No. : 1539/67
Report Date : November 8, 2024
Report No. : FMW271/2024

Item	Parameter	Method of Analysis ¹⁾	Result	Standard ²⁾	Unit	Conclusion
1	pH	Electrometric Method (at 25°C)	8.6	6.5-9.2	-	Pass

Remark : ¹⁾ APHA, AWWA, WEF, Standard Method for the Examination of Water and Wastewater 23rd ed. Washing ton, DC: APHA, 2017

²⁾ Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

(Ms.Thunnaree Suksawat)
Analyst No.ว-262-จ-0011
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Analyst No.ว-262-จ-0001
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



ECO CONSULTANT COMPANY LIMITED.

32/3-4, Moo.4, Thai Ko, Sam Khok, Pathumthani, 12160, Tel. 02-001-384-5

32/3-4 หมู่ที่ 4 ตำบลห้วยเกาะ อำเภอสสามโคก จังหวัดปทุมธานี 12160, โทร 02-001-384-5

www.ecoconsult-lab.com Tax Identification Number : 0135559001081

ANALYSIS REPORT

Customer Name : Aica Hatyai Co., Ltd.
Customer Address : 417/115 Kanchanawarit, Phatong, Hat Yai, Songkhla 90230
Sample Type : Ground Water
Sample Name : Monitoring Well 3 (MW03)
GPS. Coordinate : UTM (WGS84) 47N 0661075 E, 0759795 N
Sampling Date : October 24, 2024
Sampling Time : 10:22
Received Date : October 29, 2024
Analysis Date : October 29 – November 7, 2024
Sampling By : Mr.Pathawee Raseethong
Appearance : Turbid, Yellow, Sediment, Scentless
Analyzed By : Ms.Nunchaya Junmit

Sample Code : BR75MW/67
Request No. : 1539/67
Report Date : November 8, 2024
Report No. : FMW271/2024

Item	Parameter	Method of Analysis ¹⁾	Result	Standard ²⁾	Unit	Conclusion
1	Formaldehyde	Distillation, Colorimetric Method	0.104	-	mg/l	-
2	Total Dissolved Solids	Dried at 180°C	414	-	mg/l	-

Remark : ¹⁾ APHA, AWWA, WEF, Standard Method for the Examination of Water and Wastewater 23rd ed. Washing ton, DC: APHA, 2017

²⁾ Announcement the Ministry of Industry of Monitoring Contaminants in Soil and Underground Water Quality, Control Measures and Measures to Reduce Contamination Report in The Royal Government Gazette No 133 Special Part 275D dated November 29, B.E. 2559 (2016)

ND = Not Detectable

(Ms.Thunnaree Suksawat)
Environmental Scientist Senior

(Mr.Koofa Premkijpompattana)
Laboratory & Quality Manager

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

ภาคผนวก ค-8

นิเวศวิทยาทางน้ำ



สถานีวิทยุประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : AICA Hatyai Co., Ltd.

Address : 417/115 Kamchanavanich Rd., Patong, Hatyai, Songkhla , Thailand, 90230

Project name : EIA Monitoring

รายงานผลการวิเคราะห์แหล่งกักต่อน้ำ

ตาราง ผลการวิเคราะห์แหล่งกักต่อน้ำ (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)

ชนิดแหล่งกักต่อน้ำ	ปริมาณแหล่งกักต่อน้ำ (หน่วยต่อลูกบาศก์เมตร)	
	24118406-1	24118406-2
Division Cyanophyta		
Class Cyanophyceae		
Order Nostocales		
Family Oscillatoriaceae		
1. <i>Oscillatoria</i> sp.	52,000	26,000
2. <i>Oscillatoria tenuis</i>	-	52,000
Family Nostocaceae		
3. <i>Anabaenopsis</i> sp.	-	52,000
Division Chlorophyta		
Class Chlorophyceae		
Order Chlorococcales		
Family Oocystaceae		
4. <i>Dictyosphaerium pulchellum</i>	-	26,000

ตาราง ผลการวิเคราะห์แหล่งกักต่อน้ำ (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)
(ต่อ)

ชนิดแหล่งกักต่อน้ำ	ปริมาณแหล่งกักต่อน้ำ (หน่วยต่อลูกบาศก์เมตร)	
	24118406-1	24118406-2
Family Scenedesmaceae		
5. <i>Scenedesmus quadricauda</i>	181,000	335,000
6. <i>Scenedesmus opoliensis</i>	130,000	103,000
7. <i>Scenedesmus</i> sp.	52,000	52,000
Division Chromophyta		
Class Bacillariophyceae		
Order Biddulphiales		
Suborder Coscinodiscineae		
Family Thalassiosiraceae		
8. <i>Cyclotella meneghiniana</i>	1,580,000	464,000
9. <i>Cyclotella stelligera</i>	1,787,000	1,393,000
Order Bacillariales		
Suborder Fragilariineae		
Family Fragilariaceae		
10. <i>Fragilaria capucina</i>	78,000	77,000
11. <i>Synedra ulna</i>	52,000	-
Suborder Bacillariineae		
Family Achnantheaceae		
12. <i>Acchnanthes brevipes</i>	130,000	-
Family Naviculaceae		
13. <i>Navicula</i> sp.	-	26,000
14. <i>Pinnularia grunowii</i>	26,000	-
Family Bacillariaceae		
15. <i>Nitzschia</i> sp.	52,000	-


ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)


(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	24118406-1	24118406-2
Class Dinophyceae		
Order Peridiniales		
Family Peridiniaceae		
16. <i>Peridinium gatunense</i>	-	26,000
ชนิดแพลงก์ตอนพืช	11	12
ปริมาณแพลงก์ตอนพืช	4,120,000	2,632,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	1.4131	1.5503
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.5893	0.6239

Sample Location : 1. สถานี 24118406-1 : คลองอุตะหาดด้านต้นน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW1)
2. สถานี 24118406-2 : คลองอุตะหาดด้านท้ายน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW2)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)


(นางสาวกนกวรรณ ขาวดอน)
ผู้วิเคราะห์


(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : AICA Hatyai Co., Ltd.

Address : 417/115 Kamchanavanich Rd., Patong, Hatyai, Songkhla , Thailand, 90230

Project name : EIA Monitoring

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	24118406-1	24118406-2
Phylum Protozoa		
Subphylum Plasmodroma		
Class Sarcodina		
Subclass Rhizopoda		
Order Testacida		
Family Arcellidae		
1. <i>Arcella vulgaris</i>	1,684,000	77,000
Family Euglyphidae		
2. <i>Euglypha acanthophora</i>	130,000	-
3. <i>Euglypha rotunda</i>	52,000	-
Phylum Rotifera		
Class Monogononta		
Order Ploima		
Family Brachionidae		
4. <i>Anuraeopsis</i> sp.	-	26,000

ตาราง ผลการวิเคราะห์แมลงก้นดัก (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)

(ต่อ)

ชนิดแมลงก้นดัก	ปริมาณแมลงก้นดัก (หน่วยต่อลูกบาศก์เมตร)	
	24118406-1	24118406-2
5. <i>Colurella obtusa</i>	-	26,000
Family Lecanidae		
6. <i>Lecane</i> sp.	-	52,000
Family Notommatidae		
7. <i>Cephalodella gibba</i>	-	52,000
Family Tricercidae		
8. <i>Trichocerca pusilla</i>	-	26,000
ชนิดแมลงก้นดัก	3	6
ปริมาณแมลงก้นดัก	1,866,000	259,000
ดัชนีความหลากหลายแมลงก้นดัก	0.3780	1.6976
ดัชนีความสม่ำเสมอแมลงก้นดัก	0.3441	0.9474

Sample Location : 1. สถานี 24118406-1 : คลองอุ้มเกาะด้านต้นน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW1)
2. สถานี 24118406-2 : คลองอุ้มเกาะด้านท้ายน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW2)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)



(นางสาวกวนวรรณ ขาวค่อน)
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : AICA Hatyai Co., Ltd.

Address : 417/115 Kamchanavanich Rd., Patong, Hatyai, Songkhla, Thailand, 90230

Project name : EIA Monitoring

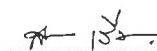
รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 4 พฤศจิกายน 2567)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัว/ตารางเมตร)	
	24118407-1	24118407-2
Phylum Arthropoda		
Class Insecta		
Order Diptera		
Family Chironomidae		
<i>Chironomus</i> sp. (หนอนแดง)	30	-
รวมจำนวนสกุลที่พบทั้งหมด	1	-
รวมปริมาณที่พบทั้งหมด	30	-
ค่าดัชนีความหลากหลาย	0.0000	-

Sample Location : 1. สถานี 24118407-1 : คลองอุ้มเกาะด้านต้นน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW1)
2. สถานี 24118407-2 : คลองอุ้มเกาะด้านท้ายน้ำเมื่อเทียบกับที่ตั้งโครงการ 200 เมตร (SW2)

Condition of Sample : contained in one plastic zip bag



(นายสาโรจน์ เรียมศิริ)
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

ภาคผนวก ค-9

คุณภาพอากาศในสถานประกอบการ



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487665
Date Received : Aug 07, 2024
Date Reported : Aug 15, 2024
Report Number : 3069639-1

Page 1 of 7

Sample Number 2487665-1
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location จุดตรวจค่ามลพิษในอากาศ
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	09:56 AM - 11:56 AM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487665
Date Received : Aug 07, 2024
Date Reported : Aug 15, 2024
Report Number : 3069639-1

Page 2 of 7

Sample Number 2487665-2
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location ส่วนการทดสอบการแพร่กระจายมลพิษในอากาศ
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	10:14 AM - 12:14 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2487665

Date Received : Aug 07, 2024

Date Reported : Aug 15, 2024

Report Number : 3069639-1

Page 3 of 7

Sample Number	2487665-3
Sampled Date	Aug 06, 2024
Sample Description	Air Quality
Location	ฝั่งเขื่อนหัตถ์
Date Analysis Commenced	Aug 09, 2024
Condition of Sample	Drawn into one sorbent tube, refrigerated
Barometric Pressure	757 mmHg
Atmospheric Temperature	31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Methanol	10:01 AM - 12:01 PM	ppm	-	0.10	2.86	200	NIOSH (1994), 2000	ACGIH	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2487665

Date Received : Aug 07, 2024

Date Reported : Aug 15, 2024

Report Number : 3069639-1

Page 4 of 7

Sample Number	2487665-4
Sampled Date	Aug 06, 2024
Sample Description	Air Quality
Location	พื้นที่อาคารเก็บขยะ
Date Analysis Commenced	Aug 09, 2024
Condition of Sample	Drawn into one 10-L air sampling bag and one filter paper placed in plastic cassette
Barometric Pressure	757 mmHg
Atmospheric Temperature	31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:05 AM - 12:05 PM	mg/m3	-	0.15	0.25	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	10:06 AM - 12:06 PM	ppm	-	1.0	5.3	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487665
Date Received : Aug 07, 2024
Date Reported : Aug 15, 2024
Report Number : 3069639-1

Page 5 of 7

Sample Number 2487665-5
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location บริเวณด้านทิศเหนือของพื้นที่โรงงาน
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one 10-L air sampling bag and one filter paper placed in plastic cassette
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:09 AM - 12:09 PM	mg/m3	-	0.15	0.25	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	10:10 AM - 12:10 PM	ppm	-	1.0	3.0	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Tana Supapan

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.
Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487665
Date Received : Aug 07, 2024
Date Reported : Aug 15, 2024
Report Number : 3069639-1

Page 6 of 7

Sample Number 2487665-6
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location ส่วนการผลิตฟอรัลดีไฮด์
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	01:34 PM - 03:34 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok
Methanol	01:33 PM - 03:33 PM	ppm	-	0.10	<0.10	200	NIOSH (1994), 2000	ACGIH	Bangkok

Guideline :
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)
Sampled By : Tana Supapan

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.
Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2487665

Date Received : Aug 07, 2024

Date Reported : Aug 15, 2024

Report Number : 3069639-1

Page 7 of 7

Sample Number	2487665-7
Sampled Date	Aug 06, 2024
Sample Description	Air Quality
Location	บริเวณด้านทิศใต้ของพื้นที่โรงงาน
Date Analysis Commenced	Aug 09, 2024
Condition of Sample	Drawn into one 10-L air sampling bag, one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure	757 mmHg
Atmospheric Temperature	31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Methanol	01:30 PM - 03:30 PM	ppm	-	0.10	<0.10	200	NIOSH (1994), 2000	ACGIH	Bangkok
Total Dust	01:31 PM - 03:31 PM	mg/m3	-	0.15	0.17	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	01:32 PM - 03:32 PM	ppm	-	1.0	72.9	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).

OSHA : Occupational Safety and Health Administration

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Kanitta H.

Kanitta Hemprasatporn
Section Head

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125569

Date Received : Nov 20, 2024

Date Reported : Nov 27, 2024

Report Number : 3153064-1

Page 1 of 5

Sample Number	24125569-3
Sampled Date	Nov 19, 2024
Sample Description	Air Quality
Location	ดงเคี่ยมเขาพล
Date Analysis Commenced	Nov 22, 2024
Condition of Sample	Drawn into one sorbent tube, refrigerated
Barometric Pressure	755 mmHg
Atmospheric Temperature	31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Methanol	10:29 AM - 12:29 PM	ppm	-	0.10	3.90	200	NIOSH (1994), 2000	ACGIH	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125569
Date Received : Nov 20, 2024
Date Reported : Nov 27, 2024
Report Number : 3153064-1

Page 2 of 5

Sample Number 24125569-4
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location พื้นที่อาคารเก็บขยะ
Date Analysis Commenced Nov 21, 2024
Condition of Sample Drawn into one 10-L air sampling bag and one filter paper placed in plastic cassette
Barometric Pressure 755 mmHg
Atmospheric Temperature 31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:39 AM - 12:39 PM	mg/m3	-	0.15	0.25	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	10:39 AM - 12:39 PM	ppm	-	1.0	2.1	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Thanawut Pinthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044 31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125569
Date Received : Nov 20, 2024
Date Reported : Nov 27, 2024
Report Number : 3153064-1

Page 3 of 5

Sample Number 24125569-5
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location บริเวณด้านทิศเหนือของพื้นที่โรงงาน
Date Analysis Commenced Nov 21, 2024
Condition of Sample Drawn into one 10-L air sampling bag and one filter paper placed in plastic cassette
Barometric Pressure 755 mmHg
Atmospheric Temperature 31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:42 AM - 12:42 PM	mg/m3	-	0.15	0.17	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	10:42 AM - 12:42 PM	ppm	-	1.0	3.3	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Thanawut Pinthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044 31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125569

Date Received : Nov 20, 2024

Date Reported : Nov 27, 2024

Report Number : 3153064-1

Page 4 of 5

Sample Number	24125569-6
Sampled Date	Nov 19, 2024
Sample Description	Air Quality
Location	ส่วนการผลิตฟลอร์บอร์ดไม้สังเคราะห์
Date Analysis Commenced	Nov 22, 2024
Condition of Sample	Drawn into two sorbent tubes, refrigerated
Barometric Pressure	755 mmHg
Atmospheric Temperature	31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Methanol	01:10 PM - 03:10 PM	ppm	-	0.10	<0.10	200	NIOSH (1994), 2000	ACGIH	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125569

Date Received : Nov 20, 2024

Date Reported : Nov 27, 2024

Report Number : 3153064-1

Page 5 of 5

Sample Number	24125569-7
Sampled Date	Nov 19, 2024
Sample Description	Air Quality
Location	บริเวณด้านทิศใต้ของพื้นที่โรงงาน
Date Analysis Commenced	Nov 21, 2024
Condition of Sample	Drawn into one 10-L air sampling bag, one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure	755 mmHg
Atmospheric Temperature	31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Methanol	10:50 AM - 12:50 PM	ppm	-	0.10	<0.10	200	NIOSH (1994), 2000	ACGIH	Bangkok
Total Dust	10:50 AM - 12:50 PM	mg/m3	-	0.15	0.17	15	NIOSH (1994), 0500	OSHA	Songkhla
Total Hydrocarbon	10:50 AM - 12:50 PM	ppm	-	1.0	6.1	No Standard	Total Hydrocarbon Analyzer	-	Bangkok

Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).

OSHA : Occupational Safety and Health Administration

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rak Yong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125569
Date Received : Nov 20, 2024
Date Reported : Nov 27, 2024
Report Number : 3153064-2

Page 1 of 3

Sample Number 24125569-1
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location จุดตรวจด้านฟลอร์อัลติเมต
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 755 mmHg
Atmospheric Temperature 31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Formaldehyde	10:50 AM - 12:50 PM	ppm	-	0.10	0.11	0.75	0.30	NIOSH (1994), 2541	Bangkok

Guideline : (1) Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

(2) Environmental Impact Assessment Report of AICA Hatyai Co.,Ltd

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.
Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air_Working_2GL.rpt (10:02AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125569
Date Received : Nov 20, 2024
Date Reported : Nov 27, 2024
Report Number : 3153064-2

Page 2 of 3

Sample Number 24125569-2
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location ส่วนการผลิตกาวยูนิแมฟลอร์อัลติเมต
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 755 mmHg
Atmospheric Temperature 31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Formaldehyde	01:00 PM - 03:00 PM	ppm	-	0.10	<0.10	0.75	0.30	NIOSH (1994), 2541	Bangkok

Guideline : (1) Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

(2) Environmental Impact Assessment Report of AICA Hatyai Co.,Ltd

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.
Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air_Working_2GL.rpt (10:02AM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125569
Date Received : Nov 20, 2024
Date Reported : Nov 27, 2024
Report Number : 3153064-2

Page 3 of 3

Sample Number 24125569-6
Sampled Date Nov 19, 2024
Sample Description Air Quality
Location ส่วนการผลัดฟอสฟอรัส
Date Analysis Commenced Nov 22, 2024
Condition of Sample Drawn into two sorbent tubes, refrigerated
Barometric Pressure 755 mmHg
Atmospheric Temperature 31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Formaldehyde	01:10 PM - 03:10 PM	ppm	-	0.10	<0.10	0.75	0.30	NIOSH (1994), 2541	Bangkok

Guideline : (1) Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

(2) Environmental Impact Assessment Report of AICA Hatyai Co.,Ltd
Sampled By : Thanawut Pinthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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.

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports\Air_Working_2GL.rpt (10:02AM)

ภาคผนวก ค-10

ระดับเสียงในสถานที่ทำงาน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125545

Date Received : Nov 21, 2024

Date Reported : Nov 25, 2024

Report Number: 3175452-1

Page 1 of 1

Sample Number 24125545-1
Parameter Noise (Leq 8 hrs.)
Location อาคารเครื่องอัดอากาศ (Blower)
Measurement Date Nov 19, 2024
Measurement by Thanawut Pinthong

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:34 AM - 09:34 AM	71.3	82.9	70.8
09:34 AM - 10:34 AM	71.7	85.2	70.8
10:34 AM - 11:34 AM	71.2	89.0	70.6
11:34 AM - 12:34 PM	70.5	86.5	69.8
12:34 PM - 01:34 PM	71.4	87.7	70.3
01:34 PM - 02:34 PM	72.4	97.5	70.9
02:34 PM - 03:34 PM	72.2	87.6	71.5
03:34 PM - 04:34 PM	72.1	88.8	71.4

Leq Average 8 hrs. (dB(A))

71.6

Lmax (dB(A))

97.5

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL

S:\Reports_Air Noise.rpt (1:42PM)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125545

Date Received : Nov 21, 2024

Date Reported : Nov 25, 2024

Report Number: 3175453-1

Page 1 of 1

Sample Number 24125545-2
Parameter Noise (Leq 8 hrs.)
Location เครื่องกวน (Agitator) ของถังปฏิกิริยาในส่วนของการผลิตกาวยูเรียฟอร์มัลดีไฮด์เรซิน
Measurement Date Nov 19, 2024
Measurement by Thanawut Pinthong

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:37 AM - 09:37 AM	78.7	88.3	77.9
09:37 AM - 10:37 AM	79.4	102.4	78.0
10:37 AM - 11:37 AM	79.1	93.8	76.8
11:37 AM - 12:37 PM	77.1	92.0	75.7
12:37 PM - 01:37 PM	77.4	91.0	75.5
01:37 PM - 02:37 PM	78.7	93.9	77.4
02:37 PM - 03:37 PM	83.0	103.4	76.9
03:37 PM - 04:37 PM	78.0	84.5	77.3

Leq Average 8 hrs. (dB(A))

79.3

Lmax (dB(A))

103.4

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

Supot S.

Supot Salamteh
Section Head

ภาคผนวก ค-11

ระดับเสียงที่ลูกจ้างได้รับเฉลี่ยตลอดระยะเวลาการทำงาน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125573

Date Received : Nov 21, 2024
Date Reported : Nov 22, 2024
Report Number : 3153066-1

Page 1 of 2

Sample Number 24125573-1
Sampled Date Nov 19, 2024
Sample Description Noise Dose
Location แผนก Production (ผลิตฟอร์มอลีน)
Personal Sampling คุณวินซ์ แก้วเรือนฤทธิ์
Date Analysis Commenced Nov 22, 2024

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:51 AM - 04:51 PM	%	-	1	3.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:51 AM - 04:51 PM	dB(A)	-	-	70.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125573

Date Received : Nov 21, 2024
Date Reported : Nov 22, 2024
Report Number : 3153066-1

Page 2 of 2

Sample Number 24125573-2
Sampled Date Nov 19, 2024
Sample Description Noise Dose
Location แผนก Production (ผลิตกาวยูเรีย)
Personal Sampling คุณธนศร วิสัยพงษ์
Date Analysis Commenced Nov 22, 2024

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:51 AM - 04:51 PM	%	-	1	55.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:51 AM - 04:51 PM	dB(A)	-	-	82.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ภาคผนวก ค-12

ระดับความร้อน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487660
Date Received : Aug 08, 2024
Date Reported : Aug 09, 2024
Report Number: 3069625-1

Page 1 of 2

Sample Number 2487660-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 07, 2024
Measurement by Tana Supapan
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หม้อไอน้ำ	120	27.5	25.4	32.3	31.8
Average (WBGT)		27.5			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot S.
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O : PO015739
Project Name : EIA Monitoring
Project Location :

Lot ID: 2487660
Date Received : Aug 08, 2024
Date Reported : Aug 09, 2024
Report Number: 3069625-1

Page 2 of 2

Sample Number 2487660-2
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 07, 2024
Measurement by Tana Supapan
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
ห้องเครื่องปั่นไอน้ำถึงห้องหล่อชิ้น	120	26.9	25.2	31.0	31.0
Average (WBGT)		26.9			
Guideline WBGT (°C)		32.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

- Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot S.
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125547

Date Received : Nov 21, 2024

Date Reported : Nov 22, 2024

Report Number: 3153051-1

Page 1 of 2

Sample Number	24125547-1				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Nov 19, 2024				
Measurement by	Thanawut Pinthong				
Location	ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พม่าไถ่	120	28.3	26.3	33.1	33.1
Average (WBGT)		28.3			
Guideline WBGT (°C)		32.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management


Supot Salamteh
Section Head

Approved by


Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S VReportAir Heat rpt (6 40PM)

12044-31 / EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125547

Date Received : Nov 21, 2024

Date Reported : Nov 22, 2024

Report Number: 3153051-1

Page 2 of 2

Sample Number	24125547-2				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Nov 19, 2024				
Measurement by	Thanawut Pinthong				
Location	ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
ห้องเรียนไปยังห้องเรียน	120	27.8	26.0	32.1	31.8
Average (WBGT)		27.8			
Guideline WBGT (°C)		32.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management


Supot Salamteh
Section Head

Approved by


Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31 / EMAIL

S VReportAir Heat rpt (6 40PM)

ภาคผนวก ค-13

ความเข้มของแสงสว่างบริเวณพื้นที่การทำงาน



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :

Project Name : EIA Monitoring

Project Location:

Lot ID: 2487662 (1)

Date Received : Aug 08, 2024

Date Reported : Aug 16, 2024

Report Number: 2487662 (1)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : อาคารส่วนการผลิต : 2nd Floor : ห้อง QC : โต๊ะประชุม	2487662 (1)-1	6-Aug-24	Day time	1	308	379	150	300	Pass
		2487662 (1)-2	6-Aug-24	Day time	2	450				
2	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง QC : โต๊ะที่ 1	2487662 (1)-3	6-Aug-24	Day time	1	401	-	400-500	-	Pass
3	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง R&D : โต๊ะที่ 1	2487662 (1)-4	6-Aug-24	Day time	1	417	-	400-500	-	Pass
5	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 2 (คุณนงนิจา นิลกาน)	2487662 (1)-5	6-Aug-24	Day time	1	405	-	400-500	-	Pass
6	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 3 (คุณนงนิจา นิลกาน)	2487662 (1)-6	6-Aug-24	Day time	1	431	-	400-500	-	Pass
9	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 6 (คุณสุกัญญา นอนนารักษ์)	2487662 (1)-7	6-Aug-24	Day time	1	495	-	400-500	-	Pass
10	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 5 (คุณดวงพร ทองจินดา)	2487662 (1)-8	7-Aug-24	Day time	1	420	-	400-500	-	Pass
11	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 4 (คุณวราภรณ์ แก้วประทุม)	2487662 (1)-9	6-Aug-24	Day time	1	403	-	400-500	-	Pass
13	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 1 (คุณธานี นกผล)	2487662 (1)-10	6-Aug-24	Day time	1	458	-	400-500	-	Pass

Measurement by : Tana Supapan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S.

Supot Salamteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phthalaneken 40, Phthalaneken Rd., Khwaeng Phthalaneken, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :

Project Name : EIA Monitoring

Project Location:

Lot ID: 2487662 (2)

Date Received : Aug 08, 2024

Date Reported : Aug 16, 2024

Report Number: 2487662 (2)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 1 (คุณพรอดล ชิวพิชานนท์)	2487662 (2)-1	6-Aug-24	Day time	1	413	-	400-500	-	Pass
2	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 2 (คุณฉัตรชัย จำเริญศรี)	2487662 (2)-2	6-Aug-24	Day time	1	402	-	400-500	-	Pass
3	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 3 (คุณพิศิษฐ์ คงแป้น)	2487662 (2)-3	7-Aug-24	Day time	1	403	-	400-500	-	Pass
4	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 4 (คุณวิฑูรย์ โประเทพ)	2487662 (2)-4	6-Aug-24	Day time	1	404	-	400-500	-	Pass
5	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 5 (คุณธีระพงษ์ อินทอง)	2487662 (2)-5	7-Aug-24	Day time	1	419	-	400-500	-	Pass
7	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 3 (คุณจุฑามาศ สันทรฤกษ์)	2487662 (2)-6	6-Aug-24	Day time	1	410	-	400-500	-	Pass
9	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 5 (คุณศิริโชค ฝั)	2487662 (2)-7	6-Aug-24	Day time	1	420	-	400-500	-	Pass
10	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 4 (คุณปณิธาน สันทรฤกษ์)	2487662 (2)-8	6-Aug-24	Day time	1	787	-	400-500	-	Pass
11	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Meeting Room : โต๊ะที่ 1	2487662 (2)-9	6-Aug-24	Day time	1	426	-	400-500	-	Pass
12	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office : โต๊ะที่ 1 (คุณฐิติมา นนธิโชค)	2487662 (2)-10	6-Aug-24	Day time	1	672	-	400-500	-	Pass
13	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะคุณกฤษณ์พล ของเสนา	2487662 (2)-11	6-Aug-24	Day time	1	693	-	400-500	-	Pass

Measurement by : Tana Supapan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S.

Supot Salamteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phthalaneken 40, Phthalaneken Rd., Khwaeng Phthalaneken, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 2487662 (3)
Date Received : Aug 08, 2024
Date Reported : Aug 16, 2024
Report Number: 2487662 (3)-1

Page 1 of 2

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 1 (คุณหญิง ศรีโคคา)	2487662 (3)-1	6-Aug-24	Day time	1	470	-	400-500	-	Pass
2	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 2 (คุณปัสยาชล สุรโยธ)	2487662 (3)-2	6-Aug-24	Day time	1	455	-	400-500	-	Pass
3	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 3 (คุณสมฤดี สาโนส)	2487662 (3)-3	6-Aug-24	Day time	1	425	-	400-500	-	Pass
4	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 4 (โถงว่าง)	2487662 (3)-4	6-Aug-24	Day time	1	441	-	400-500	-	Pass
5	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 5 (คุณพณิกาญญา หุทธกุล)	2487662 (3)-5	6-Aug-24	Day time	1	506	-	400-500	-	Pass
6	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 6 (คุณสุชาดา ขุสรีส)	2487662 (3)-6	6-Aug-24	Day time	1	415	-	400-500	-	Pass
7	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 7 (คุณสายสุดา เรืองมณี)	2487662 (3)-7	6-Aug-24	Day time	1	422	-	400-500	-	Pass
8	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 8 (คุณปวีวรรณ ขาญชัยวรรณ)	2487662 (3)-8	6-Aug-24	Day time	1	609	-	400-500	-	Pass
9	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 9 (โถงสำรอง)	2487662 (3)-9	6-Aug-24	Day time	1	464	-	400-500	-	Pass
10	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 13 (คุณสุจิต คำวง)	2487662 (3)-10	6-Aug-24	Day time	1	402	-	400-500	-	Pass
11	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 16 (คุณอนุวัฒน์ สุวรรณพรหม)	2487662 (3)-11	6-Aug-24	Day time	1	478	-	400-500	-	Pass
12	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 11 (คุณมีนพณา วันกลิ่น)	2487662 (3)-12	6-Aug-24	Day time	1	422	-	400-500	-	Pass
13	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 14 (คุณปองพล หนะยานทร)	2487662 (3)-13	6-Aug-24	Day time	1	403	-	400-500	-	Pass
14	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 17 (คุณศุภาพงษ์ เตียรุณ)	2487662 (3)-14	6-Aug-24	Day time	1	464	-	400-500	-	Pass
15	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 10 (คุณศิริดา ขันพรอุดม)	2487662 (3)-15	6-Aug-24	Day time	1	404	-	400-500	-	Pass
16	Spot : อาคารสำนักงาน : 1st Floor : ห้อง Chief Accountant : โถงที่ 15 (คุณอัสสระกุล นนทะส)	2487662 (3)-16	6-Aug-24	Day time	1	446	-	400-500	-	Pass

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Ch
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 2487662 (3)
Date Received : Aug 08, 2024
Date Reported : Aug 16, 2024
Report Number: 2487662 (3)-1

Page 2 of 2

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
19	Spot : อาคารสำนักงาน : 1st Floor : ห้อง Purchase : โถงที่ 18 (คุณกนกวรรณ ชูโชติ)	2487662 (3)-17	6-Aug-24	Day time	1	518	-	400-500	-	Pass
22	Spot : อาคารสำนักงาน : 1st Floor : ห้อง General Manager : โถงที่ 1 (คุณบุญโชค ชั่งสิริพร)	2487662 (3)-18	6-Aug-24	Day time	1	509	-	400-500	-	Pass
23	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 16 (คุณมานิตา ไบส์สาเก)	2487662 (3)-19	6-Aug-24	Day time	1	406	-	400-500	-	Pass
25	Spot : อาคารสำนักงาน : 1st Floor : HRD & IT : โถงที่ 21 (คุณธีรภูมิ สุวรรณโชติ)	2487662 (3)-20	7-Aug-24	Day time	1	406	-	400-500	-	Pass
27	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 12 (คุณจตุรวิทย์ ไชยพิพัฒน์กิจ)	2487662 (3)-21	7-Aug-24	Day time	1	486	-	400-500	-	Pass
28	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 21 (คุณพิชชากรณ อูโรวงศ์)	2487662 (3)-22	6-Aug-24	Day time	1	446	-	400-500	-	Pass
29	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 19 (คุณณัฏฐา คงเทพ)	2487662 (3)-23	6-Aug-24	Day time	1	408	-	400-500	-	Pass

Measurement by : Tana Supapan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Ch
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :
Project Name : EIA Monitoring

Project Location:

Lot ID: 2487662 (4)

Date Received : Aug 08, 2024
Date Reported : Aug 16, 2024
Report Number: 2487662 (4)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Store : โต๊ะที่ 1 (คุณเนมวิมล ดันดีศยานนท์)	2487662 (4)-1	6-Aug-24	Day time	1	458	-	400-500	-	Pass
2	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Store : โต๊ะที่ 2 (คุณภาวิศา แก้วคง)	2487662 (4)-2	6-Aug-24	Day time	1	432	-	400-500	-	Pass
3	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Warehouse : โต๊ะที่ 1	2487662 (4)-3	6-Aug-24	Day time	1	435	-	400-500	-	Pass

Measurement by : Tana Supapan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Ch
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :
Project Name : EIA Monitoring

Project Location:

Lot ID: 2487662 (5)

Date Received : Aug 08, 2024
Date Reported : Aug 16, 2024
Report Number: 2487662 (5)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office : โต๊ะที่ 1 (คุณอรุณรัตน์ สุขมาด)	2487662 (5)-1	6-Aug-24	Day time	1	598	-	400-500	-	Pass
2	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office : โต๊ะที่ 2 (คุณพิเชษฐ์ นุญโนน้ำ)	2487662 (5)-2	6-Aug-24	Day time	1	514	-	400-500	-	Pass
4	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office UT : โต๊ะที่ 1 (โต๊ะหัวหน้าฝ่าย) : (คุณเสกสรรค์ บัวแก้ว)	2487662 (5)-3	6-Aug-24	Day time	1	452	-	400-500	-	Pass
6	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office UT : โต๊ะทำงาน UT	2487662 (5)-4	6-Aug-24	Day time	1	504	-	400-500	-	Pass

Measurement by : Tana Supapan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Ch
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125549 (1)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (1)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : อาคารส่วนการผลิต : 2nd Floor : ห้อง QC : โต๊ะประชุม	24125549 (1)-1	5-Nov-24	Day time	1	497	529	150	300	Pass
		24125549 (1)-2	5-Nov-24	Day time	2	561				
2	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง QC : โต๊ะที่ 1	24125549 (1)-3	5-Nov-24	Day time	1	428	-	400-500	-	Pass
3	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง R&D : โต๊ะที่ 1	24125549 (1)-4	5-Nov-24	Day time	1	644	-	400-500	-	Pass
5	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 2 โต๊ะนักศึกษาศึกษา	24125549 (1)-5	5-Nov-24	Day time	1	453	-	400-500	-	Pass
6	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 3 (คุณนงนิกา โพธิ์รัมย์)	24125549 (1)-6	5-Nov-24	Day time	1	513	-	400-500	-	Pass
9	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 6 (คุณสุภัฏญา ปอสนารักษ์)	24125549 (1)-7	5-Nov-24	Day time	1	651	-	400-500	-	Pass
10	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 5 (คุณดวงพร ทองจินดา)	24125549 (1)-8	5-Nov-24	Day time	1	486	-	400-500	-	Pass
11	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 4 (คุณวราวิทย์ แก้วประทุม)	24125549 (1)-9	5-Nov-24	Day time	1	471	-	400-500	-	Pass
13	Spot : อาคารส่วนการผลิต : 2nd Floor : ห้อง HSE&QC : โต๊ะที่ 1 (คุณธานี นาคผล)	24125549 (1)-10	5-Nov-24	Day time	1	637	-	400-500	-	Pass

Measurement by : Thanawut Pinthong

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supt S
Supt Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125549 (2)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (2)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 1 (คุณพรพล ชีวพิศานนท์)	24125549 (2)-1	5-Nov-24	Day time	1	496	-	400-500	-	Pass
2	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 2 (คุณจักรพันธ์ จำเริญกิจ)	24125549 (2)-2	5-Nov-24	Day time	1	630	-	400-500	-	Pass
3	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 3 (คุณพิสิษฐ์ คงเมี้ยน)	24125549 (2)-3	5-Nov-24	Day time	1	416	-	400-500	-	Pass
4	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 4 (คุณวิฑูรย์ ประเทพ)	24125549 (2)-4	5-Nov-24	Day time	1	554	-	400-500	-	Pass
5	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Control Room : โต๊ะที่ 5 (คุณธีรพงษ์ อินทวงศ์)	24125549 (2)-5	5-Nov-24	Day time	1	440	-	400-500	-	Pass
7	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 3 (คุณจุฑามาศ อินทรกุล)	24125549 (2)-6	5-Nov-24	Day time	1	412	-	400-500	-	Pass
9	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 5 (คุณศิริโชค ไร่ไ)	24125549 (2)-7	5-Nov-24	Day time	1	405	-	400-500	-	Pass
10	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะที่ 4 (คุณปณิธาน อินทฤทธิ์)	24125549 (2)-8	5-Nov-24	Day time	1	714	-	400-500	-	Pass
11	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Meeting Room : โต๊ะที่ 1	24125549 (2)-9	5-Nov-24	Day time	1	575	-	400-500	-	Pass
12	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office : โต๊ะที่ 1 (คุณฐิติมา นาคโสด)	24125549 (2)-10	5-Nov-24	Day time	1	660	-	400-500	-	Pass
13	Spot : อาคารส่วนการผลิต : 3rd Floor : ห้อง Office Production : โต๊ะคุณวิวัฒน์ ทองเสนา	24125549 (2)-11	5-Nov-24	Day time	1	695	-	400-500	-	Pass

Measurement by : Thanawut Pinthong

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supt S
Supt Salameh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 24125549 (3)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (3)-1

Page 1 of 2

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 1 (คุณอรุณี ศรีโสภา)	24125549 (3)-1	5-Nov-24	Day time	1	638	-	400-500	-	Pass
2	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 2 (คุณนิสาชล อรุณโชติ)	24125549 (3)-2	5-Nov-24	Day time	1	591	-	400-500	-	Pass
3	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 3 (คุณสมศักดิ์ สาโมล)	24125549 (3)-3	5-Nov-24	Day time	1	416	-	400-500	-	Pass
4	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 4 (โถงว่าง)	24125549 (3)-4	5-Nov-24	Day time	1	538	-	400-500	-	Pass
5	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 5 (คุณพณภูมิภาณุรณ์ พุทธกุล)	24125549 (3)-5	5-Nov-24	Day time	1	561	-	400-500	-	Pass
6	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 6 (คุณสุภาวดี บุตรศรี)	24125549 (3)-6	5-Nov-24	Day time	1	402	-	400-500	-	Pass
7	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 7 (คุณสายสุตา เรืองมณี)	24125549 (3)-7	5-Nov-24	Day time	1	571	-	400-500	-	Pass
8	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 8 (คุณปิยวรรณ ข่ายชัยวิทย์พรหม)	24125549 (3)-8	5-Nov-24	Day time	1	622	-	400-500	-	Pass
9	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 9 (โถงสำรอง)	24125549 (3)-9	5-Nov-24	Day time	1	407	-	400-500	-	Pass
10	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 13 (คุณสุจิตต์ คำงาม)	24125549 (3)-10	5-Nov-24	Day time	1	596	-	400-500	-	Pass
11	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 16 (คุณอนุวัฒน์ สุวรรณพรหม)	24125549 (3)-11	5-Nov-24	Day time	1	690	-	400-500	-	Pass
12	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 11 (คุณณัฏฐา วันกลิ่น)	24125549 (3)-12	5-Nov-24	Day time	1	517	-	400-500	-	Pass
13	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 14 (คุณปองพล หะยานินทร)	24125549 (3)-13	5-Nov-24	Day time	1	447	-	400-500	-	Pass
14	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 17 (คุณสุภาวดี ศรีสุกลิ่น)	24125549 (3)-14	5-Nov-24	Day time	1	513	-	400-500	-	Pass
15	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 10 (คุณศิริดา จันทร์จุลคม)	24125549 (3)-15	5-Nov-24	Day time	1	408	-	400-500	-	Pass
16	Spot : อาคารสำนักงาน : 1st Floor : ห้อง Chief Accountant : โถงที่ 15 (คุณเอื้อสรวงกุล นนทะสร)	24125549 (3)-16	5-Nov-24	Day time	1	610	-	400-500	-	Pass

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khel Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O :
Project Name : EIA Monitoring
Project Location:

Lot ID: 24125549 (3)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (3)-1

Page 2 of 2

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
19	Spot : อาคารสำนักงาน : 1st Floor : ห้อง Purchase : โถงที่ 18 (คุณกนกวรรณ ชูโชติ)	24125549 (3)-17	5-Nov-24	Day time	1	544	-	400-500	-	Pass
22	Spot : อาคารสำนักงาน : 1st Floor : ห้อง General Manager : โถงที่ 1 (คุณบุญโชค ชั่งสิริพร)	24125549 (3)-18	5-Nov-24	Day time	1	640	-	400-500	-	Pass
23	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 16 (คุณมาลีดา โยธสากัง)	24125549 (3)-19	5-Nov-24	Day time	1	596	-	400-500	-	Pass
25	Spot : อาคารสำนักงาน : 1st Floor : HRD & IT : โถงที่ 21 (คุณธีติภูมิ สุวรรณโณทัย)	24125549 (3)-20	5-Nov-24	Day time	1	404	-	400-500	-	Pass
27	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 12 (คุณจตุรวิทย์ ไชยพิพัฒน์กิจ)	24125549 (3)-21	5-Nov-24	Day time	1	494	-	400-500	-	Pass
28	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 21 (คุณพีชกรภรณ์ อุไรวงศ์)	24125549 (3)-22	5-Nov-24	Day time	1	488	-	400-500	-	Pass
29	Spot : อาคารสำนักงาน : 1st Floor : โถงที่ 19 (คุณณัชชา คงเทพ)	24125549 (3)-23	5-Nov-24	Day time	1	642	-	400-500	-	Pass

Measurement by : Thanawut Pinthong

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khel Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125549 (4)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (4)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Store : โซนที่ 1 (คุณเขมรรัตน์ คันทะยานนท์)	24125549 (4)-1	5-Nov-24	Day time	1	518	-	400-500	-	Pass
2	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Store : โซนที่ 2 (คุณสุธิดา แก้วนพรัตน์)	24125549 (4)-2	5-Nov-24	Day time	1	534	-	400-500	-	Pass
3	Spot : อาคารเก็บขยะ : 1st Floor : ห้อง Warehouse : โซนที่ 1	24125549 (4)-3	5-Nov-24	Day time	1	421	-	400-500	-	Pass

Measurement by : Thanawut Pinthong

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.
417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230
P/O :
Project Name : EIA Monitoring
Project Location :

Lot ID: 24125549 (5)

Date Received : Nov 06, 2024
Date Reported : Nov 07, 2024
Report Number: 24125549 (5)-1

Page 1 of 1

AICA Hatyai Co., Ltd.

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office : โซนที่ 1 (คุณอรุณรัตน์ สุขวาท)	24125549 (5)-1	5-Nov-24	Day time	1	643	-	400-500	-	Pass
2	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office : โซนที่ 2 (คุณพิเชษฐ์ นพโพธิ์)	24125549 (5)-2	5-Nov-24	Day time	1	704	-	400-500	-	Pass
4	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office UT : โซนที่ 1 (โต๊ะทำงานฝ่าย) : (คุณเสกสรรค์ ปัทมแก้ว)	24125549 (5)-3	5-Nov-24	Day time	1	701	-	400-500	-	Pass
6	Spot : อาคาร Maintenance : 1st Floor : ห้อง Office UT : โต๊ะทำงาน UT	24125549 (5)-4	5-Nov-24	Day time	1	758	-	400-500	-	Pass

Measurement by : Thanawut Pinthong

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Technical Management

Supot S
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ภาคผนวก ค-14

ปริมาณการรับสัมผัสสารฟอร์มัลดีไฮด์ที่พนักงานได้รับ



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2487667

Date Received : Aug 08, 2024

Date Reported : Aug 16, 2024

Report Number : 3069641-1

Page 1 of 2

Sample Number 2487667-1
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location พนักงานในส่วนการผลิตฟอสฟอรัส
Personal Sampling คุณวณิช แก้วเรืองฤทธิ์
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	10:19 AM - 12:19 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-33/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 2487667

Date Received : Aug 08, 2024

Date Reported : Aug 16, 2024

Report Number : 3069641-1

Page 2 of 2

Sample Number 2487667-2
Sampled Date Aug 06, 2024
Sample Description Air Quality
Location พนักงานในส่วนการผลิตฟอสฟอรัส
Personal Sampling คุณวณิช รัดนัยฤฎา
Date Analysis Commenced Aug 09, 2024
Condition of Sample Drawn into one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	10:17 AM - 12:17 PM	ppm	-	0.1	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Tana Supapan

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-33/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125574

Date Received : Nov 21, 2024

Date Reported : Nov 26, 2024

Report Number : 3153071-1

Page 1 of 2

Sample Number	24125574-1
Sampled Date	Nov 19, 2024
Sample Description	Air Quality
Location	พนักงานในส่วนการผลิตพลาสติก
Personal Sampling	คุณณัฐ นกวีเรืองฤทธิ์
Date Analysis Commenced	Nov 22, 2024
Condition of Sample	Drawn into one sorbent tube, refrigerated
Barometric Pressure	755 mmHg
Atmospheric Temperature	31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	01:20 PM - 03:20 PM	ppm	-	0.10	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL



Analysis / Test Report

Client : AICA Hatyai Co., Ltd.

417/115, Kamchanavanich Rd., Patong, Hatyai, Songkhla Thailand 90230

P/O : PO015739

Project Name : EIA Monitoring

Project Location :

Lot ID: 24125574

Date Received : Nov 21, 2024

Date Reported : Nov 26, 2024

Report Number : 3153071-1

Page 2 of 2

Sample Number	24125574-2
Sampled Date	Nov 19, 2024
Sample Description	Air Quality
Location	พนักงานในส่วนการผลิตทากูยเขียว
Personal Sampling	คุณณัฐ นกวีเรืองฤทธิ์
Date Analysis Commenced	Nov 22, 2024
Condition of Sample	Drawn into one sorbent tube, refrigerated
Barometric Pressure	755 mmHg
Atmospheric Temperature	31.7 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Formaldehyde	01:20 PM - 03:20 PM	ppm	-	0.10	<0.10	0.75	NIOSH (1994), 2541	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Thanawut Pinthong

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12044-31/ EMAIL