

ภาคผนวก ค

ใบรับรองผลการวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศจากปล่องระบาย



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292580
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387861-1

Page 1 of 1

Sample Number	2292580-1						
Sampled Date	Aug 01, 2022						
Sample Description	Emission from Stationary Source						
Location	Melting and Holding Furnace_1						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.50	m	Oxygen	12.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	4.5 %
Type of Process	Combustion		Stack Temperature	161	°C	Gas Velocity	13.1 m/s
Type of Fuel	Natural Gas		Moisture	4.27	%	Flow Rate (Actual O2)	54679 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Oxides of Nitrogen *	10:10 AM - 10:20 AM	ppm	-	1.06	24.5	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:10 AM - 10:58 AM	mg/m3	-	0.5	2.1	240	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarn

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

Thanitak

Thanita Kulsuriwong
Scientist (4)
โทรศัพท์มือถือ ๖-323-๙-9447

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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S:\Reports\Air_Stack_GL_rpt (1:35PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292632
Date Received : Aug 01, 2022
Date Reported : Aug 20, 2022
Report Number: 2400741-1

Page 1 of 1

Sample Number	2292632-1						
Sampled Date	Aug 01, 2022						
Sample Description	Emission from Stationary Source						
Location	Melting & Holding Furnace no.2						
Date Analysis Commenced	Aug 02, 2022						
Condition of Sample	Extracted into one trap dioxin, two 2-L collection flasks and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.30	m	Oxygen	10.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	6.2 %
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	6.6 m/s
Type of Fuel	Natural Gas		Moisture	41.27	%	Flow Rate (Actual O2)	39961 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide	10:43 AM - 10:53 AM	ppm	-	1.0	59.2	690	US EPA, Method 10	Rayong
Oxides of Nitrogen	10:42 AM - 10:52 AM	ppm	-	1.06	40.1	200	US EPA, Method 7	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart, Saksit Phaisanphisut

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Technical Management

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292632
Date Received : Aug 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2400741-2

Page 1 of 3

Sample Number	2292632-1						
Sample Description	Emission from Stationary Source						
Location	Melting & Holding Furnace no.2						
Condition of Sample	Extracted into one trap dioxin, two 2-L collection flasks and one 10-L air sampling bag						
Sampled Date	Aug 01, 2022						
Date Analysis Commenced	Aug 02, 2022						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.30	m	Oxygen	10.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	6.2 %
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	6.3 m/s
Type of Fuel	Natural Gas		Moisture	18.94	%	Flow Rate (Actual O2)	52515 Nm3/hr
						Flow Rate (7% O2)	40840 Nm3/hr

Analyte	Unit	LOD	Result		I-TEF	Result I-TEQ		Standard (I-TEQ)
			Actual O2	7% O2		Actual O2	7% O2	
2,3,7,8-TCDD	ng/Nm3	0.0020	0.0064	0.0083	1.0	0.0064	0.0083	-
1,2,3,7,8-PeCDD	ng/Nm3	0.0029	0.015	0.019	0.5	0.0073	0.0093	-
1,2,3,4,7,8-HxCDD	ng/Nm3	0.0037	0.019	0.024	0.1	0.0019	0.0024	-
1,2,3,6,7,8-HxCDD	ng/Nm3	0.0037	0.027	0.034	0.1	0.0027	0.0034	-
1,2,3,7,8,9-HxCDD	ng/Nm3	0.0037	0.014	0.018	0.1	0.0014	0.0018	-
1,2,3,4,6,7,8-HpCDD	ng/Nm3	0.0047	0.13	0.17	0.01	0.0013	0.0017	-
OCDD	ng/Nm3	0.0051	0.081	0.10	0.001	0.000081	0.00010	-

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)
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Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292632
Date Received : Aug 01, 2022
Date Reported : Sep 06, 2022
Report Number: 2400741-2

Page 2 of 3

Sample Number	2292632-1						
Sample Description	Emission from Stationary Source						
Location	Melting & Holding Furnace no.2						
Condition of Sample	Extracted into one trap dioxin, two 2-L collection flasks and one 10-L air sampling bag						
Sampled Date	Aug 01, 2022						
Date Analysis Commenced	Aug 02, 2022						

Analyte	Unit	LOD	Result		I-TEF	Result I-TEQ		Standard (I-TEQ)
			Actual O2	7% O2		Actual O2	7% O2	
2,3,7,8-TCDF	ng/Nm3	0.0028	0.078	0.100	0.1	0.0078	0.0100	-
1,2,3,7,8-PeCDF	ng/Nm3	0.0031	0.084	0.11	0.05	0.0042	0.0054	-
2,3,4,7,8-PeCDF	ng/Nm3	0.0031	0.12	0.15	0.5	0.059	0.076	-
1,2,3,4,7,8-HxCDF	ng/Nm3	0.0044	0.20	0.26	0.1	0.020	0.026	-
1,2,3,6,7,8-HxCDF	ng/Nm3	0.0044	0.14	0.18	0.1	0.014	0.018	-
1,2,3,7,8,9-HxCDF	ng/Nm3	0.0044	0.026	0.033	0.1	0.0026	0.0033	-
2,3,4,6,7,8-HxCDF	ng/Nm3	0.0044	0.078	0.100	0.1	0.0078	0.0100	-
1,2,3,4,6,7,8-HpCDF	ng/Nm3	0.0061	0.71	0.91	0.01	0.0071	0.0091	-
1,2,3,4,7,8,9-HpCDF	ng/Nm3	0.0061	0.18	0.23	0.01	0.0018	0.0023	-
OCDF	ng/Nm3	0.0047	0.68	0.87	0.001	0.00068	0.00087	-
Dioxin and Furan	ng/Nm3	-	2.6	3.3	-	0.15	0.19	0.5

Technical Management

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng,
Rayong Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292632
Date Received : Aug 01, 2022
Date Reported : Sep 06, 2022
Report Number : 2400741-2

Page 3 of 3

Sample Number	2292632-1
Sample Description	Emission from Stationary Source
Location	Melting & Holding Furnace no.2
Condition of Sample	Extracted into one trap dioxin, two 2-L collection flasks and one 10-L air sampling bag
Sampled Date	Aug 01, 2022
Date Analysis Commenced	Aug 02, 2022

Analyte	Unit	LOD	Result		I-TEF	Result I-TEQ		Standard (I-TEQ)
			Actual O2	7% O2		Actual O2	7% O2	
Hepta-Dioxins	ng/Nm3	-	0.22	0.28	-	-	-	-
Hexa-Dioxins	ng/Nm3	-	0.47	0.61	-	-	-	-
Hexa-Furans	ng/Nm3	-	1.2	1.6	-	-	-	-
Hepta-Furans	ng/Nm3	-	1.4	1.8	-	-	-	-

Guideline: Notification of Ministry of Natural Resources and Environment B.E. 2553, subjected "The emission standards for municipal waste incinerators".

Remark :

- Reference Method: US EPA Method 23, Analysis by ALS Czech Republic
- TEF according to NATO.
- LOD : Limit of Detection
- Results marked "ND." are lower than the Limit of Detection.
- The concentration of emission air is based on the reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, dry basis

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

Technical Management

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Saranya Chalerthamrong
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Kanokkorn Anek

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

TESTING
No.0042

Lot ID: 2292632
Date Received : Aug 01, 2022
Date Reported : Aug 20, 2022
Report Number: 2400742-1

Page 1 of 1

Sample Number	2292632-2
Sampled Date	Aug 01, 2022
Sample Description	Emission from Stationary Source
Location	Melting & Holding Furnace no.2
Date Analysis Commenced	Aug 03, 2022
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.30	m	Oxygen	10.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	6.2 %
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	6.6 m/s
Type of Fuel	Natural Gas		Moisture	41.27	%	Flow Rate (Actual O2)	39961 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Total Suspended Particulate	01:15 PM - 02:03 PM	mg/m3	-	0.5	<0.5	240	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

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Technical Management

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292598
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387925-1

Page 1 of 1

Sample Number	2292598-1
Sampled Date	Aug 01, 2022
Sample Description	Emission from Stationary Source
Location	Bag Filter_1
Date Analysis Commenced	Aug 03, 2022
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.50	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	49.0	°C	Gas Velocity	4.2 m/s
Type of Fuel	-		Moisture	2.40	%	Flow Rate (Actual O2)	67476 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	02:10 PM - 02:20 PM	ppm	-	1.0	10.9	870	US EPA, Method 10	Rayong
Oxides of Nitrogen *	02:00 PM - 02:10 PM	ppm	-	1.06	2.82	-	US EPA, Method 7	Rayong
Total Suspended Particulate	02:00 PM - 02:48 PM	mg/m3	-	0.5	<0.5	300	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

TESTING
No.0042

Lot ID: 2292599
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387930-1

Page 1 of 1

Sample Number	2292599-1
Sampled Date	Aug 01, 2022
Sample Description	Emission from Stationary Source
Location	Bag Filter_2
Date Analysis Commenced	Aug 03, 2022
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	20.0 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Combustion (Open System)		Stack Temperature	80.0	°C	Gas Velocity	8.6 m/s
Type of Fuel	Natural Gas		Moisture	3.95	%	Flow Rate (Actual O2)	63579 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	11:30 AM - 11:40 AM	ppm	-	1.0	6.5	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:20 AM - 11:30 AM	ppm	-	1.06	3.68	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:20 AM - 12:08 PM	mg/m3	-	0.5	1.4	240	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Technical Management

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Approved by

Dej Changchon

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Senior Manager
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9044-21/ EMAILCASH

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O : 4500021429
Project Name : Monitoring
Project Location :

Lot ID: 2292600
Date Received : Aug 04, 2022
Date Reported : Jan 12, 2023
Report Number: 2541643-1

Page 1 of 1

Sample Number	2292600-1						
Sampled Date	Aug 04, 2022						
Sample Description	Emission from Stationary Source						
Location	Bag Filter_3						
Date Analysis Commenced	Aug 04, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.50	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Combustion (Open System)		Stack Temperature	53.0	°C	Gas Velocity	4.9 m/s
Type of Fuel	Natural Gas		Moisture	3.76	%	Flow Rate (Actual O2)	27064 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	01:50 PM - 02:00 PM	ppm	-	1.0	1.5	690	United States Environmental Protection Agency, EPA Method 10	Rayong
Oxides of Nitrogen *	01:50 PM - 02:00 PM	ppm	-	1.06	<1.06	200	United States Environmental Protection Agency, EPA Method 7	Rayong
Total Suspended Particulate	01:47 PM - 02:29 PM	mg/m3	-	0.5	<0.5	320	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Note : This Analysis test report is reissued to supersede report No.2387934-1, Date Reported : Aug 11, 2022 due to revise analytical information.

Sampled By : Tinnakorn Kulchart

Remark :

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Chongchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292601
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387935-1

Page 1 of 1

Sample Number	2292601-1						
Sampled Date	Aug 05, 2022						
Sample Description	Emission from Stationary Source						
Location	25WF (Bag Filter no.4)						
Date Analysis Commenced	Aug 06, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.50	m	Oxygen	20.8 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Combustion (Open System)		Stack Temperature	70.0	°C	Gas Velocity	9.8 m/s
Type of Fuel	Natural Gas		Moisture	2.90	%	Flow Rate (Actual O2)	52404 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	11:20 AM - 11:30 AM	ppm	-	1.0	11.3	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:20 AM - 11:30 AM	ppm	-	1.06	<1.06	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:10 PM - 11:52 PM	mg/m3	-	0.5	0.7	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Chongchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292602
Date Received : Aug 08, 2022
Date Reported : Aug 17, 2022
Report Number: 2387943-1

Page 1 of 1

Sample Number	2292602-1						
Sampled Date	Aug 08, 2022						
Sample Description	Emission from Stationary Source						
Location	35WF (Bag Filter no.5)						
Date Analysis Commenced	Aug 09, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	20.8 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Combustion (Open System)		Stack Temperature	66.0	°C	Gas Velocity	9.8 m/s
Type of Fuel	Natural Gas		Moisture	2.72	%	Flow Rate (Actual O2)	76020 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:10 AM - 10:20 AM	ppm	-	1.0	2.8	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	10:00 AM - 10:10 AM	ppm	-	1.06	2.73	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:00 AM - 10:42 AM	mg/m3	-	0.5	0.7	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakraw

Remark :

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Chongchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292582
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387864-1

Page 1 of 1

Sample Number	2292582-1						
Sampled Date	Aug 04, 2022						
Sample Description	Emission from Stationary Source						
Location	Boiler_1						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.00	m	Oxygen	5.8 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	8.6 %
Type of Process	Combustion		Stack Temperature	68.8	°C	Gas Velocity	3.7 m/s
Type of Fuel	Natural Gas		Moisture	12.47	%	Flow Rate (Actual O2)	8000 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	02:10 PM - 02:20 PM	ppm	-	1.0	2.4	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	02:00 PM - 02:10 PM	ppm	-	1.06	6.80	200	US EPA, Method 7	Rayong
Total Suspended Particulate	02:00 PM - 02:42 PM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakraw

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Chongchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292583
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387869-1

Page 1 of 1

Sample Number	2292583-1						
Sampled Date	Aug 02, 2022						
Sample Description	Emission from Stationary Source						
Location	Boiler_2						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	5.5 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	8.8 %
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	8.8 m/s
Type of Fuel	Natural Gas		Moisture	7.75	%	Flow Rate (Actual O2)	6264 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	01:50 PM - 02:00 PM	ppm	-	1.0	68.5	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	01:40 PM - 01:50 PM	ppm	-	1.06	13.8	200	US EPA, Method 7	Rayong
Total Suspended Particulate	01:40 PM - 02:40 PM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Sathaporn Thakarn

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)
โทร: 033-9-9447

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 033-9-9442

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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292584
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387870-1

Page 1 of 1

Sample Number	2292584-1						
Sampled Date	Aug 02, 2022						
Sample Description	Emission from Stationary Source						
Location	Boiler_3						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	4.7 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	9.2 %
Type of Process	Combustion		Stack Temperature	81.0	°C	Gas Velocity	1.7 m/s
Type of Fuel	Natural Gas		Moisture	10.95	%	Flow Rate (Actual O2)	1283 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:25 AM - 10:35 AM	ppm	-	1.0	4.5	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	10:25 AM - 10:35 AM	ppm	-	1.06	15.8	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:24 AM - 11:06 AM	mg/m3	-	0.5	0.8	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnaorn Kulchart

Remark :

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Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292585
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387874-1

Page 1 of 1

Sample Number	2292585-1						
Sampled Date	Aug 02, 2022						
Sample Description	Emission from Stationary Source						
Location	Boiler no.4 (2CPL)						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.06	m	Oxygen	4.0 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	9.3 %
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	3.0 m/s
Type of Fuel	Natural Gas		Moisture	9.47	%	Flow Rate (Actual O2)	6941 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:00 AM - 10:10 AM	ppm	-	1.0	213	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	09:50 AM - 10:00 AM	ppm	-	1.06	17.4	200	US EPA, Method 7	Rayong
Total Suspended Particulate	09:50 AM - 10:50 AM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Sathaporn Thakarn

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)
โทร: 033-9-9447

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 033-9-9442

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Analysis / Test Report



TESTING
No.0042

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292642
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387964-2

Page 1 of 1

Sample Number	2292642-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	SCLP No.1						
Date Analysis Commenced	Aug 04, 2022						
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	60.0	°C	Gas Velocity	16.8 m/s
Type of Fuel	-		Moisture	3.43	%	Flow Rate (Actual O2)	162865 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing							
Aluminum	11:03 AM - 11:45 AM	mg/m3	-	1.00	<1.00	US EPA, Method 29	Bangkok

Sampled By : Tinnaorn Kulchart, Saksit Phaisanphit

Remark :

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Approved by

Sawitree N.

Sawitree Nongsiam
Manager

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangorn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292642
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387964-1

Page 1 of 1

Sample Number	2292642-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	SCLP No.1						
Date Analysis Commenced	Aug 04, 2022						
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	60.0	°C	Gas Velocity	16.8 m/s
Type of Fuel	-		Moisture	3.43	%	Flow Rate (Actual O2)	162865 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Total Suspended Particulate	11:03 AM - 11:45 AM	mg/m3	-	0.5	<0.5	400	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
โทรศัพท์ 323-9-9447

Approved by

D. Chongchon

Dej Changchon
Senior Manager
โทรศัพท์ 323-9-9442

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Analysis / Test Report



TESTING
No.0042

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangorn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292643
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387967-1

Page 1 of 1

Sample Number	2292643-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	SCLP No.2						
Date Analysis Commenced	Aug 04, 2022						
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	51.0	°C	Gas Velocity	8.8 m/s
Type of Fuel	-		Moisture	3.49	%	Flow Rate (Actual O2)	88222 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Total Suspended Particulate	10:07 AM - 10:49 AM	mg/m3	-	0.5	<0.5	400	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

Remark :

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
โทรศัพท์ 323-9-9447

Approved by

D. Chongchon

Dej Changchon
Senior Manager
โทรศัพท์ 323-9-9442

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangorn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292643
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387967-2

Page 1 of 1

Sample Number	2292643-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	SCLP No.2						
Date Analysis Commenced	Aug 04, 2022						
Condition of Sample	Extracted into one filter paper placed in plastic petri dish and one plastic bottle						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	51.0	°C	Gas Velocity	8.8 m/s
Type of Fuel	-		Moisture	3.49	%	Flow Rate (Actual O2)	88222 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing							
Aluminum	10:07 AM - 10:49 AM	mg/m3	-	1.00	<1.00	US EPA, Method 29	Bangkok

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

Remark :

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

Approved by

Sawatree N.

Sawatree Naisangiam
Manager

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangorn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292586
Date Received : Aug 03, 2022
Date Reported : Aug 10, 2022
Report Number: 2387881-1

Page 1 of 1

Sample Number	2292586-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	Pusher Furnace 1 (1-1PF)						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.20	m	Oxygen	18.6 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.3 %
Type of Process	Combustion (Open System)		Stack Temperature	99.8	°C	Gas Velocity	14.2 m/s
Type of Fuel	Natural Gas		Moisture	8.26	%	Flow Rate (Actual O2)	42064 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:20 AM - 10:30 AM	ppm	-	1.0	54.1	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	10:10 AM - 10:20 AM	ppm	-	1.06	6.01	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:10 AM - 10:58 AM	mg/m3	-	0.5	0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Sathaporn Thakarnw

Remark :

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Technical Management

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Thanita Kulsuriwong
Scientist (4)
โทรศัพท์ 323-9-9447

Approved by

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Dej Changchon
Senior Manager
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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292587
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387883-1

Page 1 of 1

Sample Number	2292587-1						
Sampled Date	Aug 05, 2022						
Sample Description	Emission from Stationary Source						
Location	Pusher Furnace 1 (1-2PF)						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	3.20 x 0.80	m	Oxygen	20.2 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	0.0 %
Type of Process	Combustion (Open System)		Stack Temperature	145	°C	Gas Velocity	3.5 m/s
Type of Fuel	Natural Gas		Moisture	50.19	%	Flow Rate (Actual O2)	11403 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	01:00 PM - 01:10 PM	ppm	-	1.0	3.7	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	12:50 PM - 01:00 PM	ppm	-	1.06	1.41	200	US EPA, Method 7	Rayong
Total Suspended Particulate	12:50 PM - 01:30 PM	mg/m3	-	0.5	0.6	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Technical Management

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Scientist (4)
โทรศัพท์ ๖-323-๙-9447

Approved by

D. Hannon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292588
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387885-1

Page 1 of 1

Sample Number	2292588-1						
Sampled Date	Aug 05, 2022						
Sample Description	Emission from Stationary Source						
Location	Pusher Furnace 2						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	3.20 x 0.80	m	Oxygen	15.5 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	3.2 %
Type of Process	Combustion (Open System)		Stack Temperature	268	°C	Gas Velocity	4.2 m/s
Type of Fuel	Natural Gas		Moisture	7.97	%	Flow Rate (Actual O2)	19459 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	12:10 PM - 12:20 PM	ppm	-	1.0	378	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	12:00 PM - 12:10 PM	ppm	-	1.06	3.64	200	US EPA, Method 7	Rayong
Total Suspended Particulate	12:00 PM - 12:40 PM	mg/m3	-	0.5	1.3	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Technical Management

Thanitak.

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Scientist (4)
โทรศัพท์ ๖-323-๙-9447

Approved by

D. Hannon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292589
Date Received : Aug 03, 2022
Date Reported : Aug 10, 2022
Report Number: 2387888-1

Page 1 of 1

Sample Number	2292589-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	Pusher Furnace 3 (3-1PF)						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.10	m	Oxygen	19.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.1 %
Type of Process	Combustion (Open System)		Stack Temperature	202	°C	Gas Velocity	7.4 m/s
Type of Fuel	Natural Gas		Moisture	8.64	%	Flow Rate (Actual O2)	14391 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	11:20 AM - 11:30 AM	ppm	-	1.0	4.9	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:10 AM - 11:20 AM	ppm	-	1.06	6.86	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:10 AM - 12:10 PM	mg/m3	-	0.5	0.8	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Technical Management

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Scientist (4)
โทรศัพท์ ๖-323-๙-9447

Approved by

D. Hannon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292590
Date Received : Aug 03, 2022
Date Reported : Aug 10, 2022
Report Number: 2387894-1

Page 1 of 1

Sample Number	2292590-1						
Sampled Date	Aug 03, 2022						
Sample Description	Emission from Stationary Source						
Location	Pusher Furnace 3 (3-2PF)						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	3.20 x 1.80	m	Oxygen	15.9 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	2.6 %
Type of Process	Combustion (Open System)		Stack Temperature	231	°C	Gas Velocity	6.1 m/s
Type of Fuel	Natural Gas		Moisture	8.20	%	Flow Rate (Actual O2)	67990 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	12:30 PM - 12:40 PM	ppm	-	1.0	74.8	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	12:20 PM - 12:30 PM	ppm	-	1.06	24.0	200	US EPA, Method 7	Rayong
Total Suspended Particulate	12:20 PM - 01:08 PM	mg/m3	-	0.5	5.0	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakarnw

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Technical Management

Thanitak.

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Scientist (4)
โทรศัพท์ ๖-323-๙-9447

Approved by

D. Hannon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report



TESTING
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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292591
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387895-1

Page 1 of 1

Sample Number	2292591-1						
Sampled Date	Aug 04, 2022						
Sample Description	Emission from Stationary Source						
Location	Homogenizing Furnace_1						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.40	m	Oxygen	19.7 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.7 %
Type of Process	Combustion (Open System)		Stack Temperature	96.8	°C	Gas Velocity	5.5 m/s
Type of Fuel	Natural Gas		Moisture	4.95	%	Flow Rate (Actual O2)	1884 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:30 AM - 10:40 AM	ppm	-	1.0	1.1	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	10:20 AM - 10:30 AM	ppm	-	1.06	5.44	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:20 AM - 11:00 AM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakurw

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
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Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
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Client : UACJ (Thailand) Co., Ltd.
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Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292592
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387897-1

Page 1 of 1

Sample Number	2292592-1						
Sampled Date	Aug 04, 2022						
Sample Description	Emission from Stationary Source						
Location	Homogenizing Furnace_2						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.40	m	Oxygen	19.5 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.8 %
Type of Process	Combustion (Open System)		Stack Temperature	90.5	°C	Gas Velocity	12.2 m/s
Type of Fuel	Natural Gas		Moisture	5.26	%	Flow Rate (Actual O2)	4278 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	11:20 AM - 11:30 AM	ppm	-	1.0	<1.0	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:10 AM - 11:20 AM	ppm	-	1.06	4.86	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:10 AM - 12:06 PM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Sathaporn Thakurw

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Technical Management

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Approved by

D. Chongchon

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Scientist (4)
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Dej Changchon
Senior Manager
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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
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Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292593
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387898-1

Page 1 of 1

Sample Number	2292593-1						
Sampled Date	Aug 05, 2022						
Sample Description	Emission from Stationary Source						
Location	Coil Annealing Furnace_1						
Date Analysis Commenced	Aug 06, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	7.6 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	7.6 %
Type of Process	Combustion		Stack Temperature	215	°C	Gas Velocity	2.0 m/s
Type of Fuel	Natural Gas		Moisture	6.82	%	Flow Rate (Actual O2)	1136 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	02:49 PM - 02:59 PM	ppm	-	1.0	130	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	02:49 PM - 02:59 PM	ppm	-	1.06	36.8	200	US EPA, Method 7	Rayong
Total Suspended Particulate	02:48 PM - 03:36 PM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart

Remark :
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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292594
Date Received : Aug 05, 2022
Date Reported : Aug 11, 2022
Report Number: 2387904-1

Page 1 of 1

Sample Number	2292594-1						
Sampled Date	Aug 05, 2022						
Sample Description	Emission from Stationary Source						
Location	Coil Annealing Furnace_2						
Date Analysis Commenced	Aug 06, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	10.6 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.9 %
Type of Process	Combustion		Stack Temperature	197	°C	Gas Velocity	2.0 m/s
Type of Fuel	Natural Gas		Moisture	8.58	%	Flow Rate (Actual O2)	1143 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	01:43 PM - 01:53 PM	ppm	-	1.0	62.5	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	01:45 PM - 01:55 PM	ppm	-	1.06	<1.06	200	US EPA, Method 7	Rayong
Total Suspended Particulate	01:42 PM - 02:30 PM	mg/m3	-	0.5	0.8	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart

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Technical Management

Thanitak.

Approved by

D. Chongchon

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9447

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292595
Date Received : Aug 08, 2022
Date Reported : Aug 17, 2022
Report Number: 2387907-1

Page 1 of 1

Sample Number	2292595-1						
Sampled Date	Aug 08, 2022						
Sample Description	Emission from Stationary Source						
Location	Coil Annealing Furnace_3						
Date Analysis Commenced	Aug 09, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	5.5 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	8.8 %
Type of Process	Combustion		Stack Temperature	282	°C	Gas Velocity	8.1 m/s
Type of Fuel	Natural Gas		Moisture	7.77	%	Flow Rate (Actual O2)	4086 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	11:53 AM - 12:03 PM	ppm	-	1.0	2.4	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:53 AM - 12:03 PM	ppm	-	1.06	35.9	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:52 AM - 12:34 PM	mg/m3	-	0.5	0.8	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart

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Technical Management

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Approved by

D. Huanon

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292596
Date Received : Aug 08, 2022
Date Reported : Aug 17, 2022
Report Number: 2387910-1

Page 1 of 1

Sample Number	2292596-1						
Sampled Date	Aug 08, 2022						
Sample Description	Emission from Stationary Source						
Location	Coil Annealing Furnace_4						
Date Analysis Commenced	Aug 09, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	6.6 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	8.1 %
Type of Process	Combustion		Stack Temperature	202	°C	Gas Velocity	4.4 m/s
Type of Fuel	Natural Gas		Moisture	8.43	%	Flow Rate (Actual O2)	2537 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	03:12 PM - 03:22 PM	ppm	-	1.0	39.9	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	03:10 PM - 03:20 PM	ppm	-	1.06	34.2	200	US EPA, Method 7	Rayong
Total Suspended Particulate	03:12 PM - 04:00 PM	mg/m3	-	0.5	1.0	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart

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Technical Management

Thanitak.

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Approved by

D. Huanon

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292597
Date Received : Aug 02, 2022
Date Reported : Aug 10, 2022
Report Number: 2387924-1

Page 1 of 1

Sample Number	2292597-1						
Sampled Date	Aug 02, 2022						
Sample Description	Emission from Stationary Source						
Location	Coil Annealing Furnace_5						
Date Analysis Commenced	Aug 03, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle and one 10-L air sampling bag, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.60	m	Oxygen	11.0 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.5 %
Type of Process	Combustion		Stack Temperature	226	°C	Gas Velocity	3.5 m/s
Type of Fuel	Natural Gas		Moisture	9.01	%	Flow Rate (Actual O2)	1915 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	01:30 PM - 01:40 PM	ppm	-	1.0	47.7	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	01:30 PM - 01:40 PM	ppm	-	1.06	12.8	200	US EPA, Method 7	Rayong
Total Suspended Particulate	01:20 PM - 02:02 PM	mg/m3	-	0.5	1.6	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 3-323-9-9447

Approved by

D. Huanon

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report



TESTING
No.0042

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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292649
Date Received : Aug 04, 2022
Date Reported : Aug 17, 2022
Report Number: 2387977-1

Page 1 of 1

Sample Number	2292649-1						
Sampled Date	Aug 04, 2022						
Sample Description	Emission from Stationary Source						
Location	Solvent Recycle_1TL						
Date Analysis Commenced	Aug 05, 2022						
Condition of Sample	Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.40 x 0.35	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	39.0	°C	Gas Velocity	9.4 m/s
Type of Fuel	-		Moisture	2.61	%	Flow Rate (Actual O2)	4364 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Total Suspended Particulate	11:58 AM - 12:40 PM	mg/m3	-	0.5	<0.5	400	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart , Saksit Phaisanphit

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Technical Management

Thanitak.

Thanita Kulsuriwong
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Approved by

D. Huanon

Dej Changchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292649
Date Received : Aug 04, 2022
Date Reported : Aug 17, 2022
Report Number: 2387977-2

Page 1 of 1

Sample Number 2292649-1
Sampled Date Aug 04, 2022
Sample Description Emission from Stationary Source
Location Solvent Recycle_1TL
Date Analysis Commenced Aug 05, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.40 x 0.35	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	39.0	°C	Gas Velocity	9.4 m/s
Type of Fuel	-		Moisture	2.61	%	Flow Rate (Actual O2)	4364 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
---------	--------------	------	-----	-----------	--------	--------	------------------

Air Testing
n-Decane 12:00 PM - 12:15 PM ppm - 0.2 <0.20 US EPA, Method 18 Bangkok

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

Remark :

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Approved by

Sarant Mongkonjirawut
Supervisor

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Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292653
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387981-2

Page 1 of 1

Sample Number 2292653-1
Sampled Date Aug 03, 2022
Sample Description Emission from Stationary Source
Location Solvent Recycle_CPL1
Date Analysis Commenced Aug 05, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.35 x 0.40	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	39.0	°C	Gas Velocity	12.7 m/s
Type of Fuel	-		Moisture	2.75	%	Flow Rate (Actual O2)	5951 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
---------	--------------	------	-----	-----------	--------	--------	------------------

Air Testing
n-Decane 01:35 PM - 01:50 PM ppm - 0.2 2.48 US EPA, Method 18 Bangkok

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

Remark :

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Approved by

Sarant Mongkonjirawut
Supervisor

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Analysis / Test Report

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Thailand 21140

P/O :
Project Name : Monitoring
Project Location :



TESTING
No.0042

Lot ID: 2292653
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387981-1

Page 1 of 1

Sample Number 2292653-1
Sampled Date Aug 03, 2022
Sample Description Emission from Stationary Source
Location Solvent Recycle_CPL1
Date Analysis Commenced Aug 04, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.35 x 0.40	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Rectangular		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	39.0	°C	Gas Velocity	12.7 m/s
Type of Fuel	-		Moisture	2.75	%	Flow Rate (Actual O2)	5951 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
---------	--------------	------	-----	-----------	--------	-----------------	--------	------------------

Air Testing
Total Suspended Particulate 01:35 PM - 02:23 PM mg/m3 - 0.5 <0.5 400 US EPA, Method 5 Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

Remark :

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Technical Management

Thanita Kulsuriwong
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Approved by

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Senior Manager
โทรศัพท์ ๐-๓๒๓-๙๙๔๒

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :



TESTING
No.0042

Lot ID: 2292656
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387983-1

Page 1 of 1

Sample Number 2292656-1
Sampled Date Aug 03, 2022
Sample Description Emission from Stationary Source
Location Solvent Recycle_TRL
Date Analysis Commenced Aug 04, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.50	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	34.5	°C	Gas Velocity	11.6 m/s
Type of Fuel	-		Moisture	3.01	%	Flow Rate (Actual O2)	7706 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
---------	--------------	------	-----	-----------	--------	-----------------	--------	------------------

Air Testing
Total Suspended Particulate 02:35 PM - 03:23 PM mg/m3 - 0.5 <0.5 400 US EPA, Method 5 Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisit

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

Thanita Kulsuriwong
Scientist (4)
โทรศัพท์ ๐-๓๒๓-๙๙๔๗

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙๙๔๒

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9044-21/ EMAILCASH

S:\Reports\Air_Stack_GL.rpt (1:02PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292656
Date Received : Aug 03, 2022
Date Reported : Aug 16, 2022
Report Number: 2387983-2

Page 1 of 1

Sample Number 2292656-1
Sampled Date Aug 03, 2022
Sample Description Emission from Stationary Source
Location Solvent Recycle_TRL
Date Analysis Commenced Aug 05, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one amber plastic bottle, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	0.50	m	Oxygen	20.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0 %
Type of Process	Process		Stack Temperature	34.5	°C	Gas Velocity	11.6 m/s
Type of Fuel	-		Moisture	3.01	%	Flow Rate (Actual O2)	7706 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Decane	02:40 PM - 02:55 PM	ppm	-	0.2	0.91	US EPA, Method 18	Bangkok

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

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

Approved by

Sarat Mongkonjirawut
Supervisor

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292660
Date Received : Aug 04, 2022
Date Reported : Aug 17, 2022
Report Number: 2388000-2

Page 1 of 1

Sample Number 2292660-1
Sampled Date Aug 04, 2022
Sample Description Emission from Stationary Source
Location Fume Incinerator_FCL
Date Analysis Commenced Aug 05, 2022
Condition of Sample Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one sorbent tube, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.00	m	Oxygen	19.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.0 %
Type of Process	Combustion (Open System)		Stack Temperature	183	°C	Gas Velocity	11.4 m/s
Type of Fuel	Natural Gas		Moisture	5.85	%	Flow Rate (Actual O2)	19658 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Decane	10:55 AM - 11:10 AM	ppm	-	0.2	<0.20	US EPA, Method 18	Bangkok

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

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

Approved by

Sarat Mongkonjirawut
Supervisor

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Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292660
Date Received : Aug 04, 2022
Date Reported : Aug 17, 2022
Report Number: 2388000-1

Page 1 of 1

Sample Number 2292660-1
Sampled Date Aug 04, 2022
Sample Description Emission from Stationary Source
Location Fume Incinerator_FCL
Date Analysis Commenced Aug 04, 2022
Condition of Sample Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one sorbent tube, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.00	m	Oxygen	19.1 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.0 %
Type of Process	Combustion (Open System)		Stack Temperature	183	°C	Gas Velocity	11.4 m/s
Type of Fuel	Natural Gas		Moisture	5.85	%	Flow Rate (Actual O2)	19658 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	10:55 AM - 11:05 AM	ppm	-	1.0	2.6	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	10:55 AM - 11:05 AM	ppm	-	1.06	4.35	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:52 AM - 11:40 AM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart , Saksit Phaisanphisut

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

Technical Management

Thanita Kulsuriwong
Scientist (4)
เบอร์โทรศัพท์ 3-323-9-9447

Approved by

Dej Changchon
Senior Manager
เบอร์โทรศัพท์ 3-323-9-9442

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : 4500016239
Project Name :
Project Location :

Lot ID: 2290006
Date Received : Jul 29, 2022
Date Reported : Aug 10, 2022
Report Number: 2400733-1

Page 1 of 1

Sample Number 2290006-1
Sampled Date Jul 29, 2022
Sample Description Emission from Stationary Source
Location Fume Incinerator (CCL)
Date Analysis Commenced Jul 30, 2022
Condition of Sample Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one sorbent tube, refrigerated

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	18.1 %
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	1.6 %
Type of Process	Combustion (Open System)		Stack Temperature	346	°C	Gas Velocity	9.8 m/s
Type of Fuel	Natural Gas		Moisture	8.16	%	Flow Rate (Actual O2)	48680 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Oxides of Nitrogen *	10:15 AM - 10:30 AM	ppm	-	1.06	9.8	200	US EPA, Method 7	Rayong
Total Suspended Particulate	10:15 AM - 11:03 AM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Suddamrong Chokpitinan , Norranon Tathongkham

Remark :
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Technical Management

Thanita Kulsuriwong
Scientist (4)
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Approved by

Dej Changchon
Senior Manager
เบอร์โทรศัพท์ 3-323-9-9442

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Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O : 4500016239
Project Name :
Project Location :

Lot ID: 2290006
Date Received : Jul 29, 2022
Date Reported : Aug 10, 2022
Report Number: 2400733-3

Page 1 of 1

Sample Number	2290006-1						
Sampled Date	Jul 29, 2022						
Sample Description	Emission from Stationary Source						
Location	Fume Incinerator (CCL)						
Date Analysis Commenced	Jul 29, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one sorbent tube, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	18.1 %
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	1.6 %
Type of Process	Combustion (Open System)		Stack Temperature	346	°C	Gas Velocity	9.8 m/s
Type of Fuel	Natural Gas		Moisture	8.16	%	Flow Rate (Actual O2)	48680 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Decane	10:45 AM - 11:00 AM	ppm	-	0.2	<0.20	US EPA, Method 18	Bangkok

Sampled By : Sutdamrong Chokpitinan, Norranon Tathongkham
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.
Saranya Chalermthamrong
Scientist (4)

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Thailand 21140
P/O : 4500016239
Project Name :
Project Location :

Lot ID: 2289999
Date Received : Jul 29, 2022
Date Reported : Aug 10, 2022
Report Number: 2381949-1

Page 1 of 1

Sample Number	2289999-1						
Sampled Date	Jul 29, 2022						
Sample Description	Emission from Stationary Source						
Location	Fume Incinerator (2CPL)						
Date Analysis Commenced	Jul 30, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one sorbent tube, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	18.0 %
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	1.7 %
Type of Process	Combustion (Open System)		Stack Temperature	360	°C	Gas Velocity	10.2 m/s
Type of Fuel	Natural Gas		Moisture	8.66	%	Flow Rate (Actual O2)	49151 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Testing Location
Air Testing								
Carbon Monoxide *	12:10 PM - 12:20 PM	ppm	-	1.0	29.3	690	US EPA, Method 10	Rayong
Oxides of Nitrogen *	11:50 AM - 12:00 PM	ppm	-	1.06	17.4	200	US EPA, Method 7	Rayong
Total Suspended Particulate	11:50 AM - 12:38 PM	mg/m3	-	0.5	<0.5	320	US EPA, Method 5	Rayong

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)
Sampled By : Sutdamrong Chokpitinan, Norranon Tathongkham

Remark :
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Technical Management

Thanita K.
Thanita Kulsuriwong
Scientist (4)
เบอร์โทรแจ้ง 7-323-9-9447

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
เบอร์โทรแจ้ง 7-323-9-9442

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140
P/O : 4500016239
Project Name :
Project Location :

Lot ID: 2289999
Date Received : Jul 29, 2022
Date Reported : Aug 10, 2022
Report Number: 2381949-2

Page 1 of 1

Sample Number	2289999-1						
Sampled Date	Jul 29, 2022						
Sample Description	Emission from Stationary Source						
Location	Fume Incinerator (2CPL)						
Date Analysis Commenced	Jul 29, 2022						
Condition of Sample	Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one sorbent tube, refrigerated						

Stack Description							
Ambient Pressure	756	mmHg	Diameter	2.00	m	Oxygen	18.0 %
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	1.7 %
Type of Process	Combustion (Open System)		Stack Temperature	360	°C	Gas Velocity	10.2 m/s
Type of Fuel	Natural Gas		Moisture	8.66	%	Flow Rate (Actual O2)	49151 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Air Testing							
n-Decane	12:10 PM - 12:25 PM	ppm	-	0.2	<0.20	US EPA, Method 18	Bangkok

Sampled By : Sutdamrong Chokpitinan, Norranon Tathongkham
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Saranya C.
Saranya Chalermthamrong
Scientist (4)

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ภาคผนวก ค-2

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangpuri, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292499

Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2387483-1

Page 1 of 1

Sample Description	Air Quality						
Location	บ้านบางนา (Ban Map Yang Pom) (GPS 47P 0731355, 1436975)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 01, 2022 - Aug 08, 2022						
Measurement by	Nontachai Uppathamp						
Time	2292499-22 Aug 01, 2022	2292499-23 Aug 02, 2022	2292499-24 Aug 03, 2022	2292499-25 Aug 04, 2022	2292499-26 Aug 05, 2022	2292499-27 Aug 06, 2022	2292499-28 Aug 07, 2022
09:00 AM - 10:00 AM	0.002	0.003	0.029	0.003	0.054	0.004	0.003
10:00 AM - 11:00 AM	0.003	0.003	0.025	0.004	0.060	0.004	0.003
11:00 AM - 12:00 PM	0.003	0.004	0.022	0.031	0.055	0.007	0.003
12:00 PM - 01:00 PM	0.003	0.009	0.022	0.004	0.055	0.014	0.010
01:00 PM - 02:00 PM	0.004	0.015	0.021	0.007	0.015	0.019	0.007
02:00 PM - 03:00 PM	0.004	0.019	0.017	0.010	0.046	0.022	0.022
03:00 PM - 04:00 PM	0.009	0.009	0.016	0.013	0.022	0.011	0.026
04:00 PM - 05:00 PM	0.017	0.009	0.018	0.007	0.054	0.012	0.011
05:00 PM - 06:00 PM	0.018	0.013	0.028	0.004	0.010	0.006	0.006
06:00 PM - 07:00 PM	0.017	0.023	0.052	0.004	0.006	0.007	0.007
07:00 PM - 08:00 PM	0.015	0.013	0.022	0.008	0.004	0.004	0.005
08:00 PM - 09:00 PM	0.018	0.019	0.003	0.006	0.006	0.004	0.004
09:00 PM - 10:00 PM	0.013	0.005	0.004	0.003	0.004	0.005	0.005
10:00 PM - 11:00 PM	0.009	0.003	0.003	0.003	0.004	0.005	0.004
11:00 PM - 12:00 AM	0.015	0.004	0.004	0.007	0.004	0.007	0.004
12:00 AM - 01:00 AM	0.015	0.017	0.006	0.007	0.004	0.004	0.003
01:00 AM - 02:00 AM	0.017	0.043	0.006	0.008	0.004	0.003	0.003
02:00 AM - 03:00 AM	0.011	0.019	0.005	0.008	0.004	0.003	0.003
03:00 AM - 04:00 AM	0.007	0.008	0.007	0.005	0.004	0.003	0.005
04:00 AM - 05:00 AM	0.004	0.003	0.003	0.013	0.004	0.003	0.010
05:00 AM - 06:00 AM	0.004	0.003	0.006	0.003	0.004	0.003	0.006
06:00 AM - 07:00 AM	0.003	0.012	0.004	0.004	0.004	0.003	0.005
07:00 AM - 08:00 AM	0.003	0.012	0.007	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.003	0.018	0.006	0.003	0.016	0.003	0.004
Average	0.009	0.012	0.014	0.007	0.019	0.007	0.007
1hr - Maximum	0.018	0.043	0.052	0.031	0.060	0.022	0.026
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)

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangpuri, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292499

Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405115-1

Page 1 of 1

Sample Description	Air Quality							
Location	บ้านบางนา (Ban Phusa) (GPS 47P 0725767, 1434359)							
Parameter	Nitrogen dioxide (ppm)							
Measurement Date	Aug 01, 2022 - Aug 08, 2022							
Measurement by	Nontachai Uppathamp							
Time	2292499-1 Aug 01, 2022	2292499-2 Aug 02, 2022	2292499-3 Aug 03, 2022	2292499-4 Aug 04, 2022	2292499-5 Aug 05, 2022	2292499-6 Aug 06, 2022	2292499-7 Aug 07, 2022	
10:00 AM - 11:00 AM	<0.001	<0.001	0.004	0.007	0.005	0.006	0.004	
11:00 AM - 12:00 PM	0.010	0.020	0.003	0.005	0.010	0.010	0.003	
12:00 PM - 01:00 PM	0.008	0.015	0.004	0.003	0.005	0.006	0.005	
01:00 PM - 02:00 PM	0.001	0.003	0.005	0.002	0.005	0.006	<0.001	
02:00 PM - 03:00 PM	<0.001	0.007	0.003	0.005	<0.001	0.003	0.002	
03:00 PM - 04:00 PM	0.003	0.007	0.007	0.006	0.006	0.007	0.004	
04:00 PM - 05:00 PM	0.001	0.002	0.006	0.006	0.007	0.006	0.006	
05:00 PM - 06:00 PM	0.009	0.002	0.005	0.006	0.006	0.004	0.003	
06:00 PM - 07:00 PM	0.007	<0.001	0.005	0.006	0.006	0.006	0.002	
07:00 PM - 08:00 PM	0.006	0.007	0.007	0.005	0.008	0.004	0.005	
08:00 PM - 09:00 PM	0.005	<0.001	0.005	0.003	0.002	0.005	0.006	
09:00 PM - 10:00 PM	0.009	0.008	0.005	0.002	0.003	0.006	<0.001	
10:00 PM - 11:00 PM	0.007	0.006	0.002	0.002	0.009	0.008	0.003	
11:00 PM - 12:00 AM	0.008	<0.001	0.003	0.001	0.007	0.004	0.010	
12:00 AM - 01:00 AM	0.010	0.007	0.002	0.004	<0.001	0.002	0.004	
01:00 AM - 02:00 AM	0.010	0.008	0.003	<0.001	<0.001	0.003	0.003	
02:00 AM - 03:00 AM	0.004	0.001	0.004	0.006	0.001	0.002	0.007	
03:00 AM - 04:00 AM	<0.001	0.003	0.002	0.005	0.007	<0.001	0.005	
04:00 AM - 05:00 AM	0.002	0.004	0.005	0.005	0.002	0.005	0.003	
05:00 AM - 06:00 AM	0.001	0.006	0.005	0.005	0.001	0.005	0.002	
06:00 AM - 07:00 AM	0.002	<0.001	0.005	0.006	0.002	0.001	0.005	
07:00 AM - 08:00 AM	0.003	0.008	0.003	0.005	0.001	0.003	0.005	
08:00 AM - 09:00 AM	0.010	0.006	0.005	0.005	0.002	<0.001	0.007	
09:00 AM - 10:00 AM	0.006	0.009	0.004	0.005	0.004	0.003	0.006	
Average	0.005	0.006	0.004	0.004	0.004	0.004	0.004	
1hr - Maximum	0.010	0.020	0.007	0.007	0.010	0.010	0.010	
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)

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Approved by

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangpuri, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292499

Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405116-1

Page 1 of 1

Sample Description	Air Quality						
Location	บ้านบางนา (Ban Huay Kai Nhow) (GPS 47P 0723848, 1430920)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 01, 2022 - Aug 08, 2022						
Measurement by	Nontachai Uppathamp						
Time	2292499-8 Aug 01, 2022	2292499-9 Aug 02, 2022	2292499-10 Aug 03, 2022	2292499-11 Aug 04, 2022	2292499-12 Aug 05, 2022	2292499-13 Aug 06, 2022	2292499-14 Aug 07, 2022
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
07:00 PM - 08:00 PM	0.004	0.006	0.003	0.002	0.003	0.002	0.004
08:00 PM - 09:00 PM	0.006	0.007	0.003	0.002	0.003	0.002	0.003
09:00 PM - 10:00 PM	0.004	0.007	0.003	0.002	0.003	0.002	0.003
10:00 PM - 11:00 PM	0.003	0.003	0.002	0.003	0.004	0.002	0.003
11:00 PM - 12:00 AM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.003	0.003	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.003	0.003	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.006	0.007	0.003	0.003	0.004	0.002	0.003
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)

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangpuri, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292499

Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405117-1

Page 1 of 1

Sample Description	Air Quality
Location	บ้านบางนา (Ban Wang Tan Mhon) (GPS 47P 0734200, 1432165)
Parameter	Nitrogen dioxide (ppm)
Measurement Date	Aug 01, 2022 - Aug 08, 2022
Measurement by	N



Lot ID: 2292505
Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2387505-1

Page 1 of 1

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547)
Reference Method : US EPA Method Part 53 and 58

Approved by

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Lot ID: 2292505
Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405120-1

Page 1 of 1

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547)
Reference Method : US EPA Method Part 53 and 58

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Lot ID: 2292505
Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405118-1

Page 1 of 1

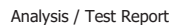
Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547)
Reference Method : US EPA Method Part 53 and 58

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Lot ID: 2292505
Date Received : Aug 08, 2022
Date Reported : Aug 15, 2022
Report Number: 2405121-1

Page 1 of 1

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547)
Reference Method : US EPA Method Part 53 and 58

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng,
Rayong Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292506
Date Received : Aug 08, 2022
Date Reported : Aug 11, 2022
Report Number: 2387520-1

Page 1 of 1

Sample Description		Air Quality			
Location		บ้านวังไทร (Ban Phusai) (GPS 47P 0725767, 1434359)			
Date Analysis Commenced		Aug 09, 2022			
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)
2292506-1	Aug 01 - Aug 02, 2022	0.083	0.018	755	29
2292506-2	Aug 02 - Aug 03, 2022	0.281	0.045	755	29
2292506-3	Aug 03 - Aug 04, 2022	0.042	0.025	755	30
2292506-4	Aug 04 - Aug 05, 2022	0.194	0.037	755	30
2292506-5	Aug 05 - Aug 06, 2022	0.257	0.043	755	30
2292506-6	Aug 06 - Aug 07, 2022	0.154	0.028	755	30
2292506-7	Aug 07 - Aug 08, 2022	0.217	0.033	755	30
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 : Nontachai Uppathamp

Remark :

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

Approved by

Thanitak.

Thanita Kulsurivong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng,
Rayong Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292506
Date Received : Aug 08, 2022
Date Reported : Aug 11, 2022
Report Number: 2387520-2

Page 1 of 1

Sample Description		Air Quality			
Location		บ้านกล้วยไทร (Ban Guay Sai Nho9) (wPx 47P 0723848, 1430q20)			
Date Analysis Commenced		Aug 0q, 2022			
Condition of Sample		Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one Hualt® filter paper (8x10 inch) placed in plastic bag			
xample Number	xampled Date	Total xuspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Gg)	Atmospheric Temperature (°C)
22q2506-8	Aug 01 - Aug 02, 2022	0.05q	0.016	755	2q
22q2506-q	Aug 02 - Aug 03, 2022	0.018	0.012	755	2q
22q2506-10	Aug 03 - Aug 04, 2022	0.015	0.013	755	30
22q2506-11	Aug 04 - Aug 05, 2022	0.017	0.013	755	30
22q2506-12	Aug 05 - Aug 06, 2022	0.020	0.016	755	30
22q2506-13	Aug 06 - Aug 07, 2022	0.023	0.016	755	30
22q2506-14	Aug 07 - Aug 08, 2022	0.01q	0.012	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total suspended Particulate : Ux EPA 40 COR Part 50 Appendix B
Particulate Matter (PM-10) : Ux EPA 40 COR Part 50 Appendix J

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

Sampled By : Nontachai Uppathamp

Remark :

- The laboratory has been accepted as an accredited laboratory complying 9 ith the IxK/IEC 17025.

Approved by

Thanitak.

Thanita Sulsur9 ong
xcientist (4)

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qM4-21 OqG / ENGL

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Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Maabangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : Monitoring

Project Name : Monitoring

Project Location : Nontachal Upthamp

2292528-1 to 7

Parameter Wind Speed / Wind Direction

Location จ.ราชบุรี (Ban Phusai) (GPS 47p 0725767, 1434359)

Sampling Date Aug 01 - Aug 08, 2022

Sampling by Nontachal Upthamp

Analysis / Test Report

Lot ID : 2292528

Date Received : Aug 08, 2022

Date Reported : Aug 17, 2022

Report Number : 2387560-1

Page 1 of 2

Time	Aug 01 - Aug 02, 2022		Aug 02 - Aug 03, 2022		Aug 03 - Aug 04, 2022		Aug 04 - Aug 05, 2022		Aug 05 - Aug 06, 2022		Aug 06 - Aug 07, 2022		Aug 07 - Aug 08, 2022		
	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	2.0	249.0 WSW	1.6	157.0 SSE	1.9	176.0 S	1.4	243.0 WSW	1.1	289.0 WNW	2.1	255.0 WSW	0.9	228.0 SW	
11:00 AM - 12:00 PM	1.5	251.0 WSW	1.2	154.0 SSE	1.8	216.0 SW	1.4	243.0 WSW	1.6	206.0 SSW	3.6	216.0 SW	3.4	224.0 SW	
12:00 PM - 01:00 PM	0.7	262.0 W	1.4	190.0 S	2.8	215.0 SW	1.1	286.0 WNW	2.0	230.0 SW	1.8	302.0 WNW	2.1	300.0 WNW	
01:00 PM - 02:00 PM	1.7	10.0 N	0.9	202.0 SSW	5.7	201.0 SSW	1.5	245.0 WSW	3.9	204.0 SSW	2.2	313.0 NW	4.2	208.0 SSW	
02:00 PM - 03:00 PM	0.9	45.0 NE	1.0	219.0 SW	3.5	198.0 SSW	2.9	228.0 SW	1.3	254.0 WSW	3.5	203.0 SSW	1.6	245.0 WSW	
03:00 PM - 04:00 PM	0.5	53.0 NE	3.0	186.0 S	2.8	202.0 SSW	2.4	244.0 WSW	1.4	204.0 SSW	1.1	125.0 SE	0.9	271.0 W	
04:00 PM - 05:00 PM	0.0	-	-	2.9 178.0 S	3.6	199.0 SSW	0.6	300.0 WNW	0.7	203.0 SSW	1.8	264.0 W	3.0	220.0 SW	
05:00 PM - 06:00 PM	1.9	161.0 SSE	2.1	169.0 S	1.8	201.0 SSW	0.7	305.0 NW	0.4	255.0 WSW	1.1	185.0 S	2.0	169.0 S	
06:00 PM - 07:00 PM	1.0	183.0 S	1.3	191.0 S	1.4	229.0 SW	0.6	212.0 SSW	0.3	290.0 WNW	1.6	249.0 WSW	2.4	217.0 SW	
07:00 PM - 08:00 PM	1.4	161.0 SSE	0.8	196.0 SSW	0.2	-	2.3 179.0 S	0.9	307.0 NW	1.0	220.0 SW	0.7	238.0 WSW		
08:00 PM - 09:00 PM	1.8	159.0 SSE	1.7	205.0 SSW	0.3	206.0 SSW	0.8	221.0 SW	0.2	-	1.0	226.0 SW	0.7	238.0 WSW	
09:00 PM - 10:00 PM	1.9	216.0 SW	1.4	217.0 SW	0.0	-	0.0	-	1.9 209.0 SSW	0.7	213.0 SSW	0.1	-	-	
10:00 PM - 11:00 PM	0.0	-	0.3	43.0 NE	0.0	-	0.5 210.0 SSW	0.3	214.0 SW	0.5	220.0 SW	0.3	228.0 SW	0.0	WSW
11:00 PM - 12:00 AM	0.2	-	0.0	-	0.1	-	0.1	-	0.3 215.0 SW	0.0	-	0.3	247.0 WSW	0.1	-
12:00 AM - 01:00 AM	0.3	36.0 NE	0.0	-	0.0	-	0.2	-	0.0	-	0.3	203.0 SSW	0.1	-	
01:00 AM - 02:00 AM	0.2	-	0.0	-	0.2	-	0.8 281.0 W	0.4	214.0 SW	1.0	222.0 SW	0.0	-	-	
02:00 AM - 03:00 AM	0.2	-	0.0	-	0.0	-	0.2	-	0.4 220.0 SW	1.3	160.0 SSE	0.0	-	-	
03:00 AM - 04:00 AM	0.4	10.0 N	0.2	-	0.1	-	0.1	-	0.1	-	0.3 239.0 WSW	0.0	-	-	
04:00 AM - 05:00 AM	0.4	296.0 WNW	0.3	216.0 SW	0.0	-	0.3 199.0 SSW	0.0	-	2.0 196.0 SSW	0.0	-	-	-	
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	1.9 204.0 SSW	0.3	226.0 SW	0.0	-	0.2	-	-	
06:00 AM - 07:00 AM	0.0	-	0.1	-	0.4	330.0 NNW	0.5 161.0 SSE	0.1	-	0.1	-	0.5 208.0 SSW	0.1	-	
07:00 AM - 08:00 AM	1.9	159.0 SSE	0.7	173.0 S	0.3	208.0 SSW	0.4 202.0 SSW	1.0	230.0 SW	2.3	207.0 SSW	0.1	-	-	
08:00 AM - 09:00 AM	2.1	154.0 SSE	2.4	181.0 S	0.5	235.0 SW	2.1 222.0 SW	2.9	223.0 SW	2.6	214.0 SW	0.6	317.0 NW	-	
09:00 AM - 10:00 AM	2.1	198.0 SSW	3.2	200.0 SSW	0.1	-	1.4 245.0 WSW	3.8	204.0 SSW	3.5	240.0 WSW	0.5	208.0 SSW	-	

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont

Assistant General Manager



Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Maabangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : Monitoring

Project Name : Monitoring

Project Location : Nontachal Upthamp

2292528-1 to 7

Parameter Wind Speed / Wind Direction

Location จ.ราชบุรี (Ban Phusai) (GPS 47p 0725767, 1434359)

Sampling Date Aug 01 - Aug 08, 2022

Sampling by Nontachal Upthamp

Analysis / Test Report

Lot ID : 2292528

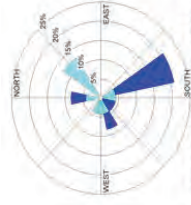
Date Received : Aug 08, 2022

Date Reported : Aug 17, 2022

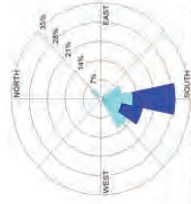
Report Number : 2387560-1

Page 2 of 2

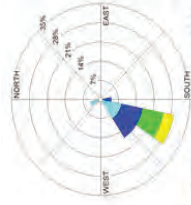
Wind Rose



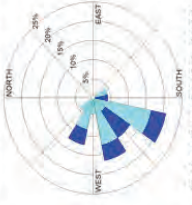
Date : Aug 01-02, 2022



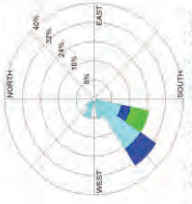
Date : Aug 02-03, 2022



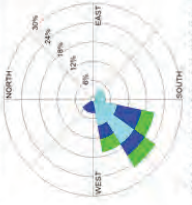
Date : Aug 03-04, 2022



Date : Aug 04-05, 2022



Date : Aug 05-06, 2022



Date : Aug 06-07, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	5.35
1.7-3.3	23.81
0.3-1.7	42.86
Calms	27.38

Date : Aug 01-08, 2022

Date : Aug 07-08, 2022

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Approved by

Sarayuth Jitranont

Assistant General Manager

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ภาคผนวก ค-3

คุณภาพน้ำทิ้ง



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report Number : 2373059-1

Page 1 of 1

Sample Number 2270813-1
Sample Date Jul 05, 2022 1:00 PM
Sample Description Wastewater
Location โรงบำบัดน้ำเสียโรงงาน (Sum Ph)
Date Analysis Commenced Jul 05, 2022
Condition of Sample Contained in one amber glass bottle and four 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	16	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	67	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	512	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :

- LOD : Limit of Detection
- "C" : 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

N. Banphit

Narumon Benchongkitt
Supervisor
โทรศัพท์ ๖-323-๙-๙445

Approved by

D. Juman

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-๙442

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9044-21/ EMAIL / CASH

S: Reports_AL_GL.rpt (4:23PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report Number : 2373059-2

Page 1 of 1

Sample Number 2270813-1
Sample Date Jul 05, 2022 1:00 PM
Sample Description Wastewater
Location โรงบำบัดน้ำเสียโรงงาน (Sum Ph)
Date Analysis Commenced Jul 06, 2022
Condition of Sample Contained in one amber glass bottle and 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							
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Gr (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :

- LOD : Limit of Detection
- "C" : 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

Savitree N.

Savitree Naisanglam
Manager
โทรศัพท์ ๖-204-๙-4709

Approved by

Kanokkorn Anek

Senior Manager
โทรศัพท์ ๖-204-๙-6111

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S: Reports_AL_GL.rpt (6:56PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report Number : 2373059-3

Page 1 of 1

Sample Number	2270813-1
Sampled Date	Jul 05, 2022 1:00 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced	Jul 05, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	-	-	0.016	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.6	≤5	APHA (2017), 4500-F(C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Tanasit Wongsaichai , Nantawat Sarin

Remark :

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

N. Banphit

Narumon Banphongkit
Supervisor

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S: Reports_LAL_GL.rpt (4/23PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report - umber : 237306091

Page 1 of 1

Sample Number	227081392
Sampled Date	Jul 05, 2022 1:10 PM
Sample Description	8 steelWater
Location	น้ำพักน้ำทิ้งของโรงงาน (รวม Pit 2)
Date Analysis Commenced	Jul 05, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment 9 preservation standards (APSA / UNEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
HBD (5 days at 20 Degree C)	mg/L	9	2	Q2	≤500	APSA (2017), 5210 H	Rayong
CBD	mg/L	1.5	5	16	≤750	APSA (2017), 5220 D	Rayong
Bil & Grease	mg/L	9	3	Q3	≤10	Based on APSA (2017), 5520 H	Rayong
pS (on site) <		9	9	7.7	5.59 - 0	Based on APSA (2017), 4500S (H)	Rayong
Total Dissolved solids Dried at 1f0 degree C	mg/L	9	5	4f0	≤3000	APSA (2017), 2540 C	Rayong
Total suspended solids Dried at 1039/05 degree C	mg/L	9	5	05	≤200	APSA (2017), 2540 D	Rayong

Guideline : - dilution on the Industrial Estate Authority of Thailand - o.76, H.E. 2560 : Criteria of WasteWater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Tanasit Wongsaichai , - antawet werin

Remark :

- LOD : Limit of Detection
- "Q" : 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

N. Banphit

- narumon Banphongkit
supervisor

โทรศัพท์ : 0823969445

Approved by

D. Juman

Dej Changchon
Senior Manager

โทรศัพท์ : 0823969442

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*0481/ EMAIL / CH6

W: Reports_LAL_GL.rpt (7:37PM)



Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Ananta City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : Monitoring

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report - umber : 237306092

Page 1 of 1

Sample Number 227081392
Sample Date Jul 05, 2022 1:10 PM
Sample Description 8 steelWater
Location บ้านท่าช้างทองโสธร (wum Pit 2)
Date Analysis Commenced Jul 06, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment 9 preservation standards (APSA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Sehivalent Chromium	mg/L	0.003	0.01	- ot Detected	≤0.25	xased on APSA (2017), 3500Gr (x)	xangkrok

Guideline : - otification on the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria onWasteWater characteristic Nom factory discharge to central WasteWater Treatment Plant

Sampled By : Tanasit 8 ongsachai , - antaWet varin

- Remark :
- LOD : Limit of Detection
 - LBD : Lower than LBO (Limit of Quantitation) / LBR (Limit of Reporting)
 - Q/Q : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Analyte(s) marked <L> are not included in scope of Accreditation 1w6/IEC 17025.
 - The laboratory has been accepted as an accredited laboratory complying with the 1w6/IEC 17025.

Technical Management

Savitree N.
vWitree - olanglam
Manager
โทร: ๐๖-๒๖๖๐ ๓๐๐๐

Approved by

Kanokorn Anek
Senior Manager
โทร: ๐๖-๒๖๖๐ ๓๐๐๐

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*0402/ BML / CM6

W/Reports_AL_Grpt (6.59PM)



Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Ananta City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : Monitoring

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2270813

Date Received : Jul 05, 2022

Date Reported : Jul 12, 2022

Report Number : 2373060-3

Page 1 of 1

Sample Number 2270813-2
Sample Date Jul 05, 2022 1:10 PM
Sample Description Wastewater
Location บ้านท่าช้างทองโสธร (Sum Pit 2)
Date Analysis Commenced Jul 05, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.3	≤5	APHA (2017), 4500-F(C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Tanasit Wongsachai , Nantawat Sarin

- Remark :
- LOD : Limit of Detection
 - <L> : 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

N. Banphit

Narumon Banchongkit
Supervisor

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S/Reports_AL_Grpt (4.24PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042

Lot ID: 2285768
Date Received : Aug 16, 2022
Date Reported : Aug 22, 2022
Report Number : 2372659-1

Page 1 of 1

Sample Number 2285768-1
Sampled Date Aug 16, 2022 1:05 PM
Sample Description 8 steelWater
Location บึงน้ำจืดบึงโสม (wum Pit)
Date Analysis Commenced Aug 16, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APSA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
HBD (5 days at 20 Degree C)	mg/L	-	2	0	≤500	APSA (2017), 5210 H	Rayong
CBD	mg/L	1.5	5	45	≤750	APSA (2017), 5220 D	Rayong
Bil & Grease	mg/L	-	3	<3	≤10	Based on APSA (2017), 5520 H	Rayong
pS (on site) *	-	-	-	7.7	5.5-9.0	Based on APSA (2017), 4500-S (H)	Rayong
Total Dissolved solids Dried at 190 degree C	mg/L	-	5	902	≤3000	APSA (2017), 2540 C	Rayong
Total suspended solids Dried at 103-105 degree C	mg/L	-	5	10	≤200	APSA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, H.E. 2560 : Criteria of WasteWater characteristic from factory discharge to central WasteWater Treatment Plant

Sampled By : Chainusorn Letnathakunchai , Panupong Manit

Remark :

- LOD : Limit of Detection
- "C" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation 1w6/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the 1w6/IEC 17025.

Technical Management

N. Banphit
Narumon Hanchongkitt
supervisor
โทรศัพท์ ๖-323-๓045

Approved by

D. Juman
Dej Changchon
senior Manager
โทรศัพท์ ๖-323-๓042

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004-21/ EMAIL / CM6

w/Reports_AL_Grpt (2.56PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009

Lot ID: 2285768
Date Received : Aug 16, 2022
Date Reported : Aug 23, 2022
Report Number : 2372658-2

Page 1 of 1

Sample Number 2285768-1
Sampled Date Aug 16, 2022 1:05 PM
Sample Description Wastewater
Location บึงน้ำจืดบึงโสม (Sum Pit)
Date Analysis Commenced Aug 17, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APSA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Hexavalent Chromium	mg/L	0.003	0.01	<0.01	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Chainusorn Letnathakunchai , Panupong Manit

Remark :

- LOD : Limit of Detection
- "C" : 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

Savitree N.
Savitree Naisangiam
Manager
โทรศัพท์ ๖-204-๓-4709

Approved by

Kanokorn Anek
Kanokorn Anek
Senior Manager
โทรศัพท์ ๖-204-๓-6111

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904-21/ EMAIL / CASH

S/Reports_AL_Grpt (3.39PM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2285768

Date Received : Aug 16, 2022

Date Reported : Aug 22, 2022

Report f umber : 237265-18

Page 1 of 1

Sample Number	22-576-N
Sample Date	Aug 16, 2022 1:05 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced	Aug 16, 2022
Condition of Sample	Contained in one amber glass bottle and 8ur plastic bottles, sample containers comply to pretreatment Npreservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	N	N	0.016	F o Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	2.0	≤5	APHA (2017), 4500F(C)	Rayong

Guideline : f oBication o8the Industrial Estate Authority o8Thailand f o.76, B.E. 2560 : Criteria o8wastewater characteristic 8om 8actory discharge to central

wastewater Treatment Plant

Sampled By : Chainusorn Lerthanakunchai , Panupong Manit

Remark :

- LOD : Limit o8Detection
- "≤" : Lower than LOQ (Limit o8Quantitation) / LOR (Limit o8Reporting)
- Analyte(s) marked * is/are not included in scope o8Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

This laboratory has not yet been accredited by the Thai Ministry of Natural Resources and Environmental Conservation (MNR) for the analysis of the above parameters. The results of the analysis are for information only and should not be used for legal or regulatory purposes. The laboratory is not responsible for the results of the analysis if the sample is not properly preserved or if the sample is not representative of the population.

Approved by

N. Banphit

f arumon Banchongkit
Supervisor

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2285766

Date Received : Aug 03, 2022

Date Reported : Aug 16, 2022

Report Number : 2405010-1

Page 1 of 1

Sample Number	2285766-2
Sample Date	Aug 03, 2022 1:10 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit 2)
Date Analysis Commenced	Aug 03, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOC (5 days at 20 degree C)	mg/L	-	2	8.2	≤500	APHA (2017), 5210 B	Rayong
COC	mg/L	1.5	5	17	≤750	APHA (2017), 5220 c	Rayong
Oil G <crease	mg/L	-	3	8.3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.3	5.5-D.0	Based on APHA (2017), 4500-H (B)	Rayong
Total dissolved Solids c ried at 180 degree C	mg/L	-	5	472	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids c ried at 103-105 degree C	mg/L	-	5	8.5	≤200	APHA (2017), 2540 c	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristics from factory discharge to ventral

wastewater Treatment Plant

Sampled By : Chainusorn Lerthanakunvhai , Thanasoun Namakunna

Remark :

- LOD : Limit of detection
- "8" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banphit

Narumon Banwhongkit
Supervisor

Approved by

D. Juman

cej Changyoon
Senior Manager

โทรศัพท์ 3-323-4-D45

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Anata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 2285766

cate Reveled : Aug 00, 2022
cate Reported : Aug 17, 2022

Report Number : 2405DI0-2

Page 1 of 1

Sample Number 2285766-2
Sample Date Aug 00, 2022 1:10 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งโรงงาน (Sum Pit 2)
Date Analysis Commenced Aug 10, 2022
Condition of Sample Contained in one amber glass bottle and 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 Hexavalent Chromium	mg/L	0.003	0.01	Not detected	≤0.25	Based on APHA (2017), 3500-Gr (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to ventral wastewater Treatment Plant

Sampled By : Chainusorn Lertnathakunvhai , Thanassou Namakuma

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

Chanatt L.
Chanattagarn Inyhom
Superior
โทร: 09-044-4710

Approved by

Kanokorn Anek
Kanokorn Anek
Senior Manager
โทร: 09-044-6111

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Anata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 2285766

cate Reveled : Aug 00, 2022
cate Reported : Aug 16, 2022

Report Number : 2405DI0-3

Page 1 of 1

Sample Number 2285766-2
Sample Date Aug 00, 2022 1:10 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งโรงงาน (Sum Pit 2)
Date Analysis Commenced Aug 00, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Flow rate *	m ³ /s	-	-	0.006	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.3	≤5	APHA (2017), 4500-F(C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to ventral wastewater Treatment Plant

Sampled By : Chainusorn Lertnathakunvhai , Thanassou Namakuma

Remark :
- LOC : Limit of detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
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Approved by

N. Banphit
Narumon Banvongkit
Superior

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Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22100880
vate Re9ei-ed : Dep 0c, 2022
vate Reported : Dep 15, 2022
Report 8 umber : 24351N01

Page 1 of 1

Sample Number	22100cc0f1
Sampled Date	Dep 0c, 2022 1:05 PM
Sample Description	wasteSater
Location	น้ำพักน้ำทิ้งของโรงงาน (Dum Pit)
Date Analysis Commenced	Dep 0c, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Box (5 days at 20 degree C)	mg/L	f	2	7c	≤500	APHA (2017), 5210 B	Rayong
COV	mg/L	1.5	5	364	≤750	APHA (2017), 5220 v	Rayong
Oil & Grease	mg/L	f	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		f	f	c.1	5.5fN0	Based on APHA (2017), 4500FH (B)	Rayong
Total Dissolved Solids dried at 100 degree C	mg/L	f	5	1250	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids dried at 103±0.5 degree C	mg/L	f	5	14	≤200	APHA (2017), 2540 v	Rayong

Guideline : 80% of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- %^m : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banphit

Sarunon Banthongkitt
Dupe-isor
โทรศัพท์ 02-204-3-4709

Approved by

D. Juman

vej ChangShon
Senior Manager
โทรศัพท์ 02-204-3-4709

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Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 22100880
Date Received : Sep 08, 2022
Date Reported : Sep 15, 2022
Report Number : 2435192-2

Page 1 of 1

Sample Number	22100880-1
Sampled Date	Sep 08, 2022 1:05 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced	Sep 09, 2022
Condition of Sample	Contained in one amber glass bottle and 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							
Hexavalent Chromium	mg/L	0.003	0.01	<0.01	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
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Technical Management

Savitree N.

Savitree Naisangiam
Manager
โทรศัพท์ 02-204-3-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 02-204-3-6111

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Analysis / Test Report

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 22100880

Date Received : Sep 08, 2022

Date Reported : Sep 15, 2022

Report Number : 2435193-2

Page 1 of 1

Sample Number	22100880-2
Sample Date	Sep 08, 2022 1:20 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากโรงโม่หิน (Sum Pit 2)
Date Analysis Commenced	Sep 09, 2022
Condition of Sample	Contained in one amber glass bottle and 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							
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-G (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pithaya Thongtaeng

Remark :

- L&D : Limit of Detection
- Q : Lower than L&D (Limit of Quantitation) / L&R (Limit of Reporting)
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Technical Management

Savitree N.
Manager

โทรศัพท์ 204-34709

Approved by

Kanokorn Anek
Senior Manager

โทรศัพท์ 204-6111

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Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22100880

Date Received : Sep 08, 2022

Date Reported : Sep 15, 2022

Report Number : 24351N3F

Page 1 of 1

Sample Number	22100cc0f2
Sample Date	Sep 08, 2022 1:20 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากโรงโม่หิน (Sum Pit 2)
Date Analysis Commenced	Sep 09, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
F&S rate *	m3/s	f	f	0.005	8.0 Standard	F&S meter	Rayong
Fluoride	mg/L	0.05	0.2	0.3	≤5	APHA (2017), 4500(F)(C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pithaya Thongtaeng

Remark :

- LOV : Limit of Variation
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

N. Bangkit
Super-Isor

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22110662
Date Received : Oct 20, 2022
Date Reported : Oct 27, 2022
Report Number : 2426274-1

Page 1 of 1

Sample Number 22110662-1
Sampled Date Oct 20, 2022 1:05 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งจากโรงงาน (Sum Ph)
Date Analysis Commenced Oct 20, 2022
Condition of Sample Contained in one amber glass bottle and four 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	10	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	43	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	600	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pathompong Kornasawat , Thanasoun Namakuma

Remark :

- LOD : Limit of Detection
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Technical Management

N. Banphit
Narumon Benchongkhit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Juman
Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 22110662
Date Received : Oct 20, 2022
Date Reported : Oct 27, 2022
Report Number : 2426274-2

Page 1 of 1

Sample Number 22110662-1
Sampled Date Oct 20, 2022 1:05 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งจากโรงงาน (Sum Ph)
Date Analysis Commenced Oct 21, 2022
Condition of Sample Contained in one amber glass bottle and 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							
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pathompong Kornasawat , Thanasoun Namakuma

Remark :

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

Savitree N.
Savitree Naisangiam
Manager
โทรศัพท์ ๖-204-๙-4709

Approved by

Kanokorn Anek
Kanokorn Anek
Senior Manager
โทรศัพท์ ๖-204-๙-6111

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22110662

Date Received : Oct 20, 2022

Date Reported : Oct 27, 2022

Report Number : 2426274-3

Page 1 of 1

Sample Number	22110662-1
Sampled Date	Oct 20, 2022 1:05 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	-	-	0.001	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	1.1	≤5	APHA (2017), 4500-F(C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Pachompong Korsawat , Thanasoun Namakuma

Remark :

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

N. Banphit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22110659

Date Received : Oct 04, 2022

Date Reported : Oct 11, 2022

Report Number : 24603-2N

Page 1 of 1

Sample Number	22110659P2
Sampled Date	Oct 04, 2022 1:20 PM
Sample Description	wastes after
Location	น้ำพักน้ำทิ้งของโรงงาน (Hum Pit 2)
Date Analysis Commenced	Oct 04, 2022
Condition of Sample	Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment Npres9ation standards (APBA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
ODv (5 days at 20 degree C)	mg/L	N	2	8.2	≤500	APBA (2017), 5210 O	Rayong
CDv	mg/L	1.5	5	21	≤750	APBA (2017), 5220 v	Rayong
Dil G <rease	mg/L	N	3	8.3	≤10	Based on APBA (2017), 5520 O	Rayong
pB (on site) *		N	N	7.7	5.5NW0	Based on APBA (2017), 4500IB (O)	Rayong
Total dissolved Solids vried at 1-0 degree C	mg/L	N	5	456	≤3000	APBA (2017), 2540 C	Rayong
Total Suspended Solids vried at 103M05 degree C	mg/L	N	5	8.5	≤200	APBA (2017), 2540 v	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Chainusorn Lerthanthakunchai , Panupong Manit

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

N. Banphit

faunon Oanchongkit
Superisior

Approved by

D. Juman

vej Changchon
Senior Manager

น้ำดื่มบรรจุขวด 24603-2N

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Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 22110659

date Received : Dct 04, 2022

date Reported : Dct 11, 2022

Report f umber : 24603-212

Page 1 of 1

Sample Number	2211065W2
Sample Date	Dct 04, 2022 1:20 PM
Sample Description	u asté ater
Location	อัสเตอแตร์ (Hum Pit 2)
Date Analysis Commenced	Dct 06, 2022
Condition of Sample	Contained in one amber glass bottle and 100 plastic bottles, sample containers comply to pretreatment Npreservation standards (APBA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Besibalent Chromium	mg/L	0.003	0.01	f ot v etected	00.25	<ased on APBA (2017), 3500G (<)	<angkok

Guideline : f otimization othe Industrial Estate Authority oWThailand f o.76, <E. 2560 : Criteria oW asté ater characteristic Wam Wctory discharge to central

asté ater Treatment Plant

Sampled By : Chainusorn Lerthanthalunchai , Panupong Manit

Remark :

- LDV : Limit oW election
- <e : Lo er than LDQ (Limit oWQuantitation) / LDR (Limit oWReporting)
- Analyte(s) marked s /s are not included in scope oWAccreditation 1x0/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying in the 1x0/IEC 17025.

Technical Management

Manager

Manager

Manager

Approved by

Manager

Manager

Manager

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Analysis / Test Report

Client : UACI (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22110659

date Received : Dct 04, 2022

date Reported : Dct 11, 2022

Report f umber : 24603-218

Page 1 of 1

Sample Number	2211065W2
Sample Date	Dct 04, 2022 1:20 PM
Sample Description	wastes ater
Location	บ่อกำจัดน้ำเสีย (Hum Pit 2)
Date Analysis Commenced	Dct 04, 2022
Condition of Sample	Contained in one amber glass bottle and 100 plastic bottles, sample containers comply to pretreatment Npreservation standards (APFA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
*6S rate B	m3/s	N	N	0.003	f o Hlandard	*6S meter	Rayong
*Iuride	mg/L	0.05	0.2	00.2	≤5	APFA (2017), 4500M(C)	Rayong

Guideline : f otimization othe Industrial Estate Authority o8Thailand f o.76, Q.E. 2560 : Criteria o8S astes ater characteristic 8om 8actory discharge to central

Sastes ater Treatment Plant

Sampled By : Chainusorn Lerthanthalunchai , Panupong Manit

Remark :

- LDV : Limit o8v election
- <O< : Lo8er than LD* (Limit o8* unitization) / LDR (Limit o8Reporting)
- Analyte(s) marked B/s are not included in scope o8Accreditation 1H/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying 8th the 1H/IEC 17025.

Approved by

Manager

Manager

Manager

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x:Reports_AL_Grpt (11:14AM)



Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22123810
9ate Re-iced : Doc 0v, 2022
9ate Reported : Doc 15, 2022
Report Dumber : 24N21N01

Page 1 of 1

Sample Number	22123v10F1
Sample Date	Doc 0v, 2022 1:10 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากโรงงาน (Sum Ph)
Date Analysis Commenced	Doc 0v, 2022
Condition of Sample	Contained in one amber glass bottle and 8ur plasti- bottles, sample -ontainers -omply to pretreatment f preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 9egree C)	mg/L	f	2	17	≤500	APHA (2017), 5210 B	Rayong
CO9	mg/L	1.5	5	v2	≤750	APHA (2017), 5220 9	Rayong
Oil & Grease	mg/L	f	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		f	f	v.1	5.5fN0	Based on APHA (2017), 4500FH (B)	Rayong
Total Dissolved Solids 9ried at 1v0 degree C	mg/L	f	5	452	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids 9ried at 103f.05 degree C	mg/L	f	5	6	≤200	APHA (2017), 2540 9	Rayong

Guideline : DotB-ation o8the Industrial Estate Authority o8Thailand Do.76, B.E. 2560 : Criteria o8wastewater -hara-teristi- 8om 8a- tory dis-harge to- entral wastewater Treatment Plant

Sampled By : Darunat thammassaro , Panupong Manit

Remark :
- LO9 : Limit o89 ete-tion
- "e" : Lower than LOQ (Limit o8Quantitation) / LOR (Limit o8Reporting)
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- The laboratory has been a--epled as an a--redified laboratory -omplying with the ISO/IEC 17025.

Technical Management

Darumon Ban-hongkitt
Supervisor
โทรศัพท์ ๖323๖๖๖45

Approved by

D. Juman

9ej Chang-hon
Senior Manager
โทรศัพท์ ๖323๖๖๖42

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0009
Lot ID: 22123810
8ate Re-iced : Doc 0v, 2022
8ate Reported : Doc 15, 2022
Report Dumber : 24N21N02

Page 1 of 1

Sample Number	22123v10F1
Sample Date	Doc 0v, 2022 1:10 PM
Sample Description	wastewater
Location	น้ำทิ้งจากโรงงาน (Hum Ph)
Date Analysis Commenced	Doc 0v, 2022
Condition of Sample	Contained in one amber glass bottle and 8ur plasti- bottles, sample -ontainers -omply to pretreatment f preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Hexavalent Chromium	mg/L	0.003	0.01	Dot 8ate-ted	<0.25	Based on APHA (2017), 3500Cr (-5)	Sangkrok

Guideline : DotWatation o8the Industrial Estate Authority o8Thailand Do.76, s.E. 2560 : Criteria o8wastewater -hara-teristi- 8om 8a- tory dis-harge to- entral wastewater Treatment Plant

Sampled By : Darunat thammassaro , Panupong Manit

Remark :
- LO8 : Limit o88 ete-tion
- "e" : Lower than LOQ (Limit o8Quantitation) / LOR (Limit o8Reporting)
- Analyte(s) marked * is/are not in-cluded in s-ope o8A--rediation ISO/IEC 17025.
- The laboratory has been a--epled as an a--redified laboratory -omplying with the ISO/IEC 17025.

Technical Management

Chanattagarn Im-hom
Supervisor
โทรศัพท์ ๖32๓๖๖๖๓๐

Approved by

Chanattagarn Im-hom

Kanokkorn Anek
Senior Manager
โทรศัพท์ ๖32๓๖๖๖๓๑

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22123810

9ate Re-elled : Doc 0v, 2022
9ate Reported : Doc 15, 2022
Report Dumber : 24N2 INWf3

Page 1 of 81

Sample Number	22123v10F1
Sample Date	Doc 0v, 2022 1:10 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced	Doc 0v, 2022
Condition of Sample	Contained in one amber glass bottle and 8ur plasti- bottles, sample -ontainers -omply to pretreatment f preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	f	f	0.0003	Do Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.7	≤5	APHA (2017), 4500F(C)	Rayong

Guideline : Dotib-ation o8the Industrial Estate Authority o8Thailand Do.76, B.E. 2560 : Criteria o8wastewater -hara-teristi- 8om 8a-tory dis-harge to-entral

wastewater Treatment Plant
Sampled By : Darunat thammassaro , Panupong Manit

Remark :
- LO9 : Limit o89ete-tion
- "≤" : Lower than LOQ (Limit o8Quantitation) / LOR (Limit o8Reporting)
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Approved by

N.Banyatit

Darumon Ban-hongkit
Supervisor

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Analysis / Test Report

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

TESTING
No.0042
Lot ID: 22123810

9ate Re-elled : Doc 0v, 2022
9ate Reported : Doc 15, 2022
Report Dumber : 24N2 INWf1

Page 1 of 81

Sample Number	22123v10F2
Sample Date	Doc 0v, 2022 1:20 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโรงงาน (Sum Pit 2)
Date Analysis Commenced	Doc 0v, 2022
Condition of Sample	Contained in one amber glass bottle and 8ur plasti- bottles, sample -ontainers -omply to pretreatment f preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BO9 (5 days at 20 9egree C)	mg/L	f	2	8.2	≤500	APHA (2017), 5210 B	Rayong
CO9	mg/L	1.5	5	N	≤750	APHA (2017), 5220 9	Rayong
Oil G <rease	mg/L	f	3	8.3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		f	f	v.5	5.5fN.0	Based on APHA (2017), 4500fH (B)	Rayong
Total 9issolved Solids 9ried at 1v0	mg/L	f	5	1N0	≤3000	APHA (2017), 2540 C	Rayong
degree C							
Total Suspended Solids 9ried at 103f105 degree C	mg/L	f	5	8.5	≤200	APHA (2017), 2540 9	Rayong

Guideline : Dotib-ation o8the Industrial Estate Authority o8Thailand Do.76, B.E. 2560 : Criteria o8wastewater -hara-teristi- 8om 8a-tory dis-harge to-entral

wastewater Treatment Plant
Sampled By : Darunat thammassaro , Panupong Manit

Remark :
- LO9 : Limit o89ete-tion
- "8." : Lower than LOQ (Limit o8Quantitation) / LOR (Limit o8Reporting)
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Technical Management

N.Banyatit

Darumon Ban-hongkit
Supervisor

Approved by

D.Juan

9ej Chang-hon
Senior Manager

น้ำดื่มและน้ำดื่ม 2323f4N42

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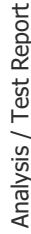
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Analysis / Test Report

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Thailand 21140
P/O : 4500021429

Analysis / Test Report

TESTING No.0009
Lot ID: 22135415
Date Received : Dec 13, 2020, 20:20
Date Reported : Dec 20, 2020, 10:20
Report Number : 2484630-20

Project Location:

.....

Page 1 of 1

Sample Number	22135415-1						
Sampled Date	Dec 13, 2022 1:10 PM						
Sample Description	Wastewater						
Location	น้ำทิ้งจากบ่อโถงการ (Sum Pit)						
Date Analysis Commenced	Dec 15, 2022						
Condition of Sample	Contained in one amber glass bottle and 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							
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok

Technical Management

Sawitree Noisangiam
Manager
ทะเบียนเลขที่ 7-204-3-4709

Carb

Kanokkorn Anek

ทะเบียนเลขที่ ว-204-จ-4709

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140
P/O : 4500021429
Project Name : Monitoring
Project Location :

TESTING
No.0042
Lot ID: 22135415
Date Received : Dec 13, 2022
Date Reported : Dec 20, 2022
Report Number : 2484630-3

Page 1 of 1

Sample Number 22135415-1
Sampled Date Dec 13, 2022 1:10 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced Dec 13, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	-	-	0.0003	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.5	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramet Sattayakun โทรศัทพ์ 3-323-9476 , Thanasoun Namakunna โทรศัทพ์ 3-204-8592

Remark :
- LOD : Limit of Detection
- "LOD" : 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.

N. Banphit

Approved by
Narumon Banchoangkit
Supervisor

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Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

TESTING
No.0042
Lot ID: 22135411
9ate ReDiced : 9eD06, 2022
9ate Reported : 9eD13, 2022
Report Number : 251v358-1

Page 1 of 1

Sample Number 22135411-1
Sampled Date 9eD06, 2022 1:18 PM
Sample Description Wastewater
Location บำบัดน้ำทิ้งของโรงงาน (Sum Pit)
Date Analysis Commenced 9eD06, 2022
Condition of Sample Contained in one amber glass bottle and four plastiD bottles, sample Dntainers Dmply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BO9 (5 days at 20 9egree C)	mg/L	-	2	80	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
CO9	mg/L	1.5	5	666	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 9	Rayong
Oil & Grease *	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-8.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (6)	Rayong
Total 9issolved Solids 9ried at 1v0 degree C	mg/L	-	5	2820	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids 9ried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 9	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater DharaderistD from factory discharge to Dentral wastewater Treatment Plant
Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
- LO9 : Limit of 9etection
- Q : Lower than LO< (Limit of <uantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in Scope of AD-acreditation ISO/IEC 17025.
- The laboratory has been adapted as an adRedited laboratory Dmplying with the ISO/IEC 17025.

N. Banphit

Technical Management
Narumon Banchoangkit
Supercisor
โทรศัทพ์ 3-323-9-8445

Approved by

9ej ChangDon
Senior Manager
โทรศัทพ์ 3-323-9-8442

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Life Sciences **RIGHT SOLUTIONS RIGHT PARTNER**

8044-21/ EMAIL / CASH

S:\Reports\AL_GL.rpt (8:27AM)



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Maibyangporm, A. Pluakdaeng, Rayong
Thailand 21140

P/O : Monitoring

Project Name : Monitoring

Project Location :

TESTING

No.0042

Lot ID: 22135411

Date Received : Dec 06, 2022

Date Reported : Dec 13, 2022

Report Number : 2518360-3

Page 1 of 1

Sample Number 22135411-2
Sample Date Dec 06, 2022 1:29 PM
Sample Description Wastewater
Location โรงบำบัดน้ำเสียโรงงาน (Sum Pk 2)
Date Analysis Commenced Dec 06, 2022
Condition of Sample Contained in one amber glass bottle and four plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m ³ /s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	0.3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampled By : Paramet Sattayakun , Thanassou Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked "+" 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.

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Approved by

N. Banphit

Narumon Banphongkit
Supervisor

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9044-21/ EMAIL / Q&A

S:\Reports\AL_Grpt (9/28/04)

ภาคผนวก ค-4

ระดับเสียงในบรรยากาศโดยทั่วไป



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399356-1

Page 1 of 1

Sample Number 2292535-1
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 01 - Aug 02, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	46.1	76.4	42.9
10:00 AM - 11:00 AM	45.8	61.0	43.3
11:00 AM - 12:00 PM	44.8	57.9	42.2
12:00 PM - 01:00 PM	53.0	70.2	48.7
01:00 PM - 02:00 PM	52.9	73.0	50.1
02:00 PM - 03:00 PM	52.4	65.1	50.4
03:00 PM - 04:00 PM	48.9	57.1	47.6
04:00 PM - 05:00 PM	49.5	63.8	47.7
05:00 PM - 06:00 PM	49.5	65.1	47.6
06:00 PM - 07:00 PM	49.7	75.3	47.5
07:00 PM - 08:00 PM	50.8	62.0	49.1
08:00 PM - 09:00 PM	49.7	63.3	48.0
09:00 PM - 10:00 PM	48.5	58.6	47.4
10:00 PM - 11:00 PM	49.2	58.7	48.2
11:00 PM - 12:00 AM	51.0	66.1	48.6
12:00 AM - 01:00 AM	50.2	65.3	48.7
01:00 AM - 02:00 AM	50.8	70.0	48.9
02:00 AM - 03:00 AM	50.5	62.7	48.9
03:00 AM - 04:00 AM	50.4	59.6	48.8
04:00 AM - 05:00 AM	52.9	63.5	50.4
05:00 AM - 06:00 AM	50.7	60.2	49.6
06:00 AM - 07:00 AM	52.2	65.8	50.5
07:00 AM - 08:00 AM	51.8	66.3	49.8
08:00 AM - 09:00 AM	50.4	63.9	48.7

Leq Average 24 hrs. (dB(A)) 50.5
Lmax (dB(A)) 76.4
L90 (dB(A)) 48.7
Ldn (dB(A)) 57.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salameth
Section Head

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9044-21/ EMAIL

S:\Reports_Air Noise rpt (8:44AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399357-1

Page 1 of 1

Sample Number 2292535-2
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 02 - Aug 03, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	50.1	62.1	48.8
10:00 AM - 11:00 AM	50.7	72.1	48.4
11:00 AM - 12:00 PM	47.5	58.8	46.2
12:00 PM - 01:00 PM	46.5	56.0	44.6
01:00 PM - 02:00 PM	47.4	64.3	45.7
02:00 PM - 03:00 PM	47.9	66.2	45.9
03:00 PM - 04:00 PM	47.7	66.0	45.9
04:00 PM - 05:00 PM	47.9	75.0	45.8
05:00 PM - 06:00 PM	48.0	63.4	46.3
06:00 PM - 07:00 PM	51.2	64.4	48.9
07:00 PM - 08:00 PM	53.0	63.4	50.5
08:00 PM - 09:00 PM	52.1	77.7	48.5
09:00 PM - 10:00 PM	53.4	62.8	50.0
10:00 PM - 11:00 PM	52.0	57.2	50.0
11:00 PM - 12:00 AM	52.8	61.1	50.6
12:00 AM - 01:00 AM	54.1	62.8	50.8
01:00 AM - 02:00 AM	53.5	73.1	50.7
02:00 AM - 03:00 AM	51.1	57.1	49.8
03:00 AM - 04:00 AM	51.0	59.0	49.8
04:00 AM - 05:00 AM	50.8	64.4	49.6
05:00 AM - 06:00 AM	49.4	63.8	48.5
06:00 AM - 07:00 AM	50.4	63.9	48.9
07:00 AM - 08:00 AM	50.9	65.1	48.6
08:00 AM - 09:00 AM	49.8	68.6	47.4

Leq Average 24 hrs. (dB(A)) 50.9
Lmax (dB(A)) 77.7
L90 (dB(A)) 48.6
Ldn (dB(A)) 58.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salameth
Section Head

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S:\Reports_Air Noise rpt (8:44AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399358-1

Page 1 of 1

Sample Number 2292535-3
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 03 - Aug 04, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	47.4	64.4	45.5
10:00 AM - 11:00 AM	47.6	65.6	45.4
11:00 AM - 12:00 PM	47.8	66.8	45.3
12:00 PM - 01:00 PM	49.9	69.2	47.7
01:00 PM - 02:00 PM	50.2	74.1	47.7
02:00 PM - 03:00 PM	48.9	66.4	46.2
03:00 PM - 04:00 PM	52.4	84.4	46.9
04:00 PM - 05:00 PM	49.9	61.2	47.6
05:00 PM - 06:00 PM	49.9	60.5	47.6
06:00 PM - 07:00 PM	49.6	58.9	47.2
07:00 PM - 08:00 PM	49.2	65.4	45.7
08:00 PM - 09:00 PM	49.2	62.3	46.0
09:00 PM - 10:00 PM	48.4	60.5	46.0
10:00 PM - 11:00 PM	47.8	59.1	45.6
11:00 PM - 12:00 AM	49.6	68.6	46.1
12:00 AM - 01:00 AM	48.0	58.5	45.7
01:00 AM - 02:00 AM	48.2	58.8	46.4
02:00 AM - 03:00 AM	48.2	65.6	46.4
03:00 AM - 04:00 AM	47.9	56.9	45.2
04:00 AM - 05:00 AM	48.6	57.5	46.8
05:00 AM - 06:00 AM	49.1	69.4	46.9
06:00 AM - 07:00 AM	49.2	77.7	46.4
07:00 AM - 08:00 AM	49.7	60.9	47.7
08:00 AM - 09:00 AM	50.8	71.2	47.0

Leq Average 24 hrs. (dB(A)) 49.2
Lmax (dB(A)) 84.4
L90 (dB(A)) 46.4
Ldn (dB(A)) 55.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salameth
Section Head

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S:\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399359-1

Page 1 of 1

Sample Number 2292535-4
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 04 - Aug 05, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	51.3	76.6	46.6
10:00 AM - 11:00 AM	48.6	63.2	46.2
11:00 AM - 12:00 PM	49.3	61.5	46.6
12:00 PM - 01:00 PM	49.5	66.6	47.1
01:00 PM - 02:00 PM	51.7	76.1	48.2
02:00 PM - 03:00 PM	49.7	59.6	47.9
03:00 PM - 04:00 PM	49.2	61.8	46.7
04:00 PM - 05:00 PM	49.8	62.7	47.8
05:00 PM - 06:00 PM	50.3	66.4	47.9
06:00 PM - 07:00 PM	49.9	61.2	47.9
07:00 PM - 08:00 PM	49.2	67.3	47.1
08:00 PM - 09:00 PM	49.2	77.5	46.9
09:00 PM - 10:00 PM	48.9	66.8	46.7
10:00 PM - 11:00 PM	48.9	64.7	46.5
11:00 PM - 12:00 AM	48.4	64.6	46.0
12:00 AM - 01:00 AM	51.3	79.5	46.0
01:00 AM - 02:00 AM	51.0	75.9	46.8
02:00 AM - 03:00 AM	50.7	76.8	47.9
03:00 AM - 04:00 AM	50.3	69.3	48.3
04:00 AM - 05:00 AM	49.7	56.9	48.4
05:00 AM - 06:00 AM	49.3	58.1	47.7
06:00 AM - 07:00 AM	48.9	58.3	47.4
07:00 AM - 08:00 AM	49.6	60.4	48.0
08:00 AM - 09:00 AM	50.3	81.5	47.1

Leq Average 24 hrs. (dB(A)) 49.9
Lmax (dB(A)) 81.5
L90 (dB(A)) 47.1
Ldn (dB(A)) 56.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salameth
Section Head

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9044-21/ EMAIL

S:\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399360-1

Page 1 of 1

Sample Number 2292535-5
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 05 - Aug 06, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	49.9	66.7	47.7
10:00 AM - 11:00 AM	49.6	73.8	46.7
11:00 AM - 12:00 PM	48.2	58.5	46.1
12:00 PM - 01:00 PM	48.4	65.9	46.0
01:00 PM - 02:00 PM	49.4	63.8	46.8
02:00 PM - 03:00 PM	49.3	64.1	46.3
03:00 PM - 04:00 PM	49.3	65.1	46.9
04:00 PM - 05:00 PM	49.9	70.3	47.7
05:00 PM - 06:00 PM	48.1	56.5	45.9
06:00 PM - 07:00 PM	48.6	61.6	46.6
07:00 PM - 08:00 PM	48.1	65.9	45.7
08:00 PM - 09:00 PM	48.4	63.8	46.2
09:00 PM - 10:00 PM	48.2	60.9	45.9
10:00 PM - 11:00 PM	48.6	64.0	46.3
11:00 PM - 12:00 AM	50.1	76.6	46.4
12:00 AM - 01:00 AM	52.8	81.7	46.8
01:00 AM - 02:00 AM	49.8	65.0	47.0
02:00 AM - 03:00 AM	48.8	58.8	46.5
03:00 AM - 04:00 AM	48.2	61.9	45.4
04:00 AM - 05:00 AM	48.8	69.5	46.1
05:00 AM - 06:00 AM	46.9	57.9	44.7
06:00 AM - 07:00 AM	48.0	74.7	45.2
07:00 AM - 08:00 AM	49.3	69.4	46.0
08:00 AM - 09:00 AM	48.2	63.9	45.4

Leq Average 24 hrs. (dB(A)) 49.1
Lmax (dB(A)) 81.7
L90 (dB(A)) 46.2
Ldn (dB(A)) 55.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399361-1

Page 1 of 1

Sample Number 2292535-6
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 06 - Aug 07, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	47.6	59.1	45.2
10:00 AM - 11:00 AM	49.3	65.8	46.0
11:00 AM - 12:00 PM	48.8	60.1	46.9
12:00 PM - 01:00 PM	48.9	67.9	46.6
01:00 PM - 02:00 PM	47.5	57.7	45.5
02:00 PM - 03:00 PM	47.1	58.0	45.0
03:00 PM - 04:00 PM	48.0	60.3	45.5
04:00 PM - 05:00 PM	47.8	59.7	45.6
05:00 PM - 06:00 PM	47.2	59.3	45.8
06:00 PM - 07:00 PM	46.4	63.8	44.1
07:00 PM - 08:00 PM	44.5	54.8	42.7
08:00 PM - 09:00 PM	44.9	54.5	43.4
09:00 PM - 10:00 PM	46.5	52.4	45.2
10:00 PM - 11:00 PM	47.9	54.7	46.7
11:00 PM - 12:00 AM	48.1	55.2	46.8
12:00 AM - 01:00 AM	43.5	55.0	42.0
01:00 AM - 02:00 AM	49.3	69.6	44.4
02:00 AM - 03:00 AM	45.1	52.9	43.7
03:00 AM - 04:00 AM	46.9	70.4	43.7
04:00 AM - 05:00 AM	45.5	62.7	43.1
05:00 AM - 06:00 AM	45.9	49.3	45.3
06:00 AM - 07:00 AM	45.3	48.9	44.7
07:00 AM - 08:00 AM	48.2	78.8	44.7
08:00 AM - 09:00 AM	50.5	77.9	43.3

Leq Average 24 hrs. (dB(A)) 47.5
Lmax (dB(A)) 78.8
L90 (dB(A)) 45.0
Ldn (dB(A)) 53.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399362-1

Page 1 of 1

Sample Number 2292535-7
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727094, 1432212)
Measurement Date Aug 07 - Aug 08, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	48.9	59.1	46.0
10:00 AM - 11:00 AM	49.3	60.1	46.5
11:00 AM - 12:00 PM	47.8	58.5	44.2
12:00 PM - 01:00 PM	48.1	58.5	44.3
01:00 PM - 02:00 PM	49.5	61.6	45.5
02:00 PM - 03:00 PM	49.7	60.2	47.3
03:00 PM - 04:00 PM	50.7	65.7	48.2
04:00 PM - 05:00 PM	49.7	61.5	47.1
05:00 PM - 06:00 PM	49.6	57.7	47.3
06:00 PM - 07:00 PM	49.6	57.8	46.7
07:00 PM - 08:00 PM	49.0	64.3	45.3
08:00 PM - 09:00 PM	47.1	56.9	43.8
09:00 PM - 10:00 PM	46.4	56.0	42.6
10:00 PM - 11:00 PM	48.1	65.8	43.6
11:00 PM - 12:00 AM	50.4	71.4	46.4
12:00 AM - 01:00 AM	48.1	66.1	44.2
01:00 AM - 02:00 AM	47.5	65.4	43.9
02:00 AM - 03:00 AM	47.3	68.5	44.9
03:00 AM - 04:00 AM	46.1	76.6	40.3
04:00 AM - 05:00 AM	45.6	65.2	42.4
05:00 AM - 06:00 AM	47.6	68.3	41.9
06:00 AM - 07:00 AM	48.2	73.9	42.2
07:00 AM - 08:00 AM	54.8	86.3	45.4
08:00 AM - 09:00 AM	49.3	73.0	46.9

Leq Average 24 hrs. (dB(A)) 49.2
Lmax (dB(A)) 86.3
L90 (dB(A)) 44.9
Ldn (dB(A)) 54.6
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399363-1

Page 1 of 1

Sample Number 2292535-8
Parameter Noise (Leq 24 hrs.)
Location ตำบลโคกสูงโรงงาน (GPS 47P 0727793, 1433011)
Measurement Date Aug 01 - Aug 02, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.9	79.9	53.4
10:00 AM - 11:00 AM	59.1	78.9	54.1
11:00 AM - 12:00 PM	58.8	75.0	54.2
12:00 PM - 01:00 PM	60.6	77.0	52.9
01:00 PM - 02:00 PM	58.9	74.7	54.3
02:00 PM - 03:00 PM	59.0	74.7	54.6
03:00 PM - 04:00 PM	59.3	76.8	54.6
04:00 PM - 05:00 PM	60.5	86.0	53.8
05:00 PM - 06:00 PM	59.8	78.9	54.9
06:00 PM - 07:00 PM	58.6	78.5	53.0
07:00 PM - 08:00 PM	60.4	79.2	54.5
08:00 PM - 09:00 PM	58.2	86.9	52.1
09:00 PM - 10:00 PM	52.6	73.4	48.2
10:00 PM - 11:00 PM	54.9	75.2	48.3
11:00 PM - 12:00 AM	51.6	72.5	47.0
12:00 AM - 01:00 AM	52.7	74.1	47.6
01:00 AM - 02:00 AM	48.6	64.0	46.5
02:00 AM - 03:00 AM	49.8	70.8	47.4
03:00 AM - 04:00 AM	48.4	64.2	47.0
04:00 AM - 05:00 AM	52.0	73.1	46.9
05:00 AM - 06:00 AM	54.4	70.7	49.3
06:00 AM - 07:00 AM	60.8	76.7	55.1
07:00 AM - 08:00 AM	62.7	80.2	57.4
08:00 AM - 09:00 AM	60.4	88.8	54.7

Leq Average 24 hrs. (dB(A)) 58.2
Lmax (dB(A)) 88.8
L90 (dB(A)) 53.0
Ldn (dB(A)) 62.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8:45AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399364-1

Page 1 of 1

Sample Number : 2292535-9
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลเนินพลองโรงนา (GPS 47 0727793, 1433011)
Measurement Date : Aug 02 - Aug 03, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.3	76.5	54.5
10:00 AM - 11:00 AM	57.8	76.1	52.2
11:00 AM - 12:00 PM	56.7	76.4	50.8
12:00 PM - 01:00 PM	57.1	79.1	50.3
01:00 PM - 02:00 PM	59.4	84.4	53.4
02:00 PM - 03:00 PM	61.0	84.4	54.2
03:00 PM - 04:00 PM	58.6	74.8	53.9
04:00 PM - 05:00 PM	60.7	83.5	54.6
05:00 PM - 06:00 PM	59.2	72.8	55.2
06:00 PM - 07:00 PM	60.4	82.2	54.8
07:00 PM - 08:00 PM	62.0	79.5	56.2
08:00 PM - 09:00 PM	60.4	78.1	55.0
09:00 PM - 10:00 PM	55.2	74.0	51.9
10:00 PM - 11:00 PM	52.1	68.4	48.8
11:00 PM - 12:00 AM	51.7	77.2	48.1
12:00 AM - 01:00 AM	50.7	64.6	48.2
01:00 AM - 02:00 AM	50.0	68.0	47.6
02:00 AM - 03:00 AM	50.7	70.6	47.6
03:00 AM - 04:00 AM	49.5	64.0	47.8
04:00 AM - 05:00 AM	53.3	75.7	48.5
05:00 AM - 06:00 AM	54.9	74.2	50.1
06:00 AM - 07:00 AM	61.3	77.1	55.4
07:00 AM - 08:00 AM	62.7	82.5	57.1
08:00 AM - 09:00 AM	60.6	76.6	55.6

Leq Average 24 hrs. (dB(A)) : 58.5
Lmax (dB(A)) : 84.4
L90 (dB(A)) : 52.2
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) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการขนาน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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9044-21/ EMAIL

S:Reports_Air Noise rpt (8:47AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399365-1

Page 1 of 1

Sample Number : 2292535-10
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลเนินพลองโรงนา (GPS 47 0727793, 1433011)
Measurement Date : Aug 03 - Aug 04, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.8	77.5	54.4
10:00 AM - 11:00 AM	59.4	76.1	54.7
11:00 AM - 12:00 PM	59.0	79.1	53.9
12:00 PM - 01:00 PM	58.3	83.6	52.5
01:00 PM - 02:00 PM	60.3	78.1	56.9
02:00 PM - 03:00 PM	59.6	73.4	54.7
03:00 PM - 04:00 PM	58.7	73.6	53.9
04:00 PM - 05:00 PM	59.8	75.8	55.3
05:00 PM - 06:00 PM	59.7	81.5	55.8
06:00 PM - 07:00 PM	61.4	78.9	56.4
07:00 PM - 08:00 PM	60.9	79.2	56.4
08:00 PM - 09:00 PM	58.8	79.0	54.9
09:00 PM - 10:00 PM	55.2	77.1	49.5
10:00 PM - 11:00 PM	53.4	75.2	49.5
11:00 PM - 12:00 AM	54.7	78.8	48.2
12:00 AM - 01:00 AM	50.4	65.6	47.6
01:00 AM - 02:00 AM	49.8	63.4	48.2
02:00 AM - 03:00 AM	52.4	77.4	48.3
03:00 AM - 04:00 AM	50.6	69.4	47.9
04:00 AM - 05:00 AM	53.7	73.3	48.1
05:00 AM - 06:00 AM	55.7	75.5	50.2
06:00 AM - 07:00 AM	61.1	76.1	55.7
07:00 AM - 08:00 AM	62.9	81.0	56.6
08:00 AM - 09:00 AM	61.5	84.4	56.2

Leq Average 24 hrs. (dB(A)) : 58.7
Lmax (dB(A)) : 84.4
L90 (dB(A)) : 53.9
Ldn (dB(A)) : 62.6
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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S:Reports_Air Noise rpt (8:47AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399366-1

Page 1 of 1

Sample Number : 2292535-11
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลเนินพลองโรงนา (GPS 47 0727793, 1433011)
Measurement Date : Aug 04 - Aug 05, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.0	80.3	54.4
10:00 AM - 11:00 AM	57.9	78.1	52.5
11:00 AM - 12:00 PM	58.7	85.9	52.4
12:00 PM - 01:00 PM	56.5	79.0	51.6
01:00 PM - 02:00 PM	59.5	76.9	54.7
02:00 PM - 03:00 PM	57.9	74.8	52.9
03:00 PM - 04:00 PM	57.4	71.0	52.3
04:00 PM - 05:00 PM	61.0	77.7	56.0
05:00 PM - 06:00 PM	58.7	78.5	54.3
06:00 PM - 07:00 PM	60.1	84.6	54.1
07:00 PM - 08:00 PM	60.3	76.2	55.6
08:00 PM - 09:00 PM	58.6	75.8	53.6
09:00 PM - 10:00 PM	56.0	80.9	49.8
10:00 PM - 11:00 PM	53.3	70.1	49.4
11:00 PM - 12:00 AM	53.8	81.0	49.3
12:00 AM - 01:00 AM	53.5	75.6	49.5
01:00 AM - 02:00 AM	51.4	71.8	48.9
02:00 AM - 03:00 AM	52.9	74.2	49.0
03:00 AM - 04:00 AM	51.4	74.8	48.8
04:00 AM - 05:00 AM	54.1	76.0	49.0
05:00 AM - 06:00 AM	56.0	71.7	50.9
06:00 AM - 07:00 AM	62.4	82.0	56.0
07:00 AM - 08:00 AM	68.3	85.5	59.3
08:00 AM - 09:00 AM	61.0	77.0	56.1

Leq Average 24 hrs. (dB(A)) : 59.5
Lmax (dB(A)) : 85.9
L90 (dB(A)) : 52.4
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) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการขนาน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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9044-21/ EMAIL

S:Reports_Air Noise rpt (8:55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399367-1

Page 1 of 1

Sample Number : 2292535-12
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลเนินพลองโรงนา (GPS 47 0727793, 1433011)
Measurement Date : Aug 05 - Aug 06, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.5	77.2	53.9
10:00 AM - 11:00 AM	58.3	74.9	53.5
11:00 AM - 12:00 PM	63.7	80.6	60.6
12:00 PM - 01:00 PM	59.6	79.3	55.1
01:00 PM - 02:00 PM	57.3	73.4	52.4
02:00 PM - 03:00 PM	56.4	78.5	52.5
03:00 PM - 04:00 PM	58.1	88.9	53.6
04:00 PM - 05:00 PM	56.6	74.2	52.7
05:00 PM - 06:00 PM	58.7	78.9	53.8
06:00 PM - 07:00 PM	58.8	75.1	54.5
07:00 PM - 08:00 PM	59.2	77.8	53.8
08:00 PM - 09:00 PM	58.7	73.3	54.3
09:00 PM - 10:00 PM	58.4	75.1	53.8
10:00 PM - 11:00 PM	60.5	77.4	55.8
11:00 PM - 12:00 AM	58.5	76.0	53.5
12:00 AM - 01:00 AM	58.1	80.0	53.4
01:00 AM - 02:00 AM	60.5	75.2	54.9
02:00 AM - 03:00 AM	59.7	77.0	54.9
03:00 AM - 04:00 AM	60.9	76.0	56.5
04:00 AM - 05:00 AM	55.6	80.0	50.3
05:00 AM - 06:00 AM	56.1	76.6	49.8
06:00 AM - 07:00 AM	56.0	82.1	50.2
07:00 AM - 08:00 AM	55.8	78.1	49.9
08:00 AM - 09:00 AM	57.1	76.8	50.2

Leq Average 24 hrs. (dB(A)) : 58.8
Lmax (dB(A)) : 88.9
L90 (dB(A)) : 53.6
Ldn (dB(A)) : 65.3
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S:Reports_Air Noise rpt (8:55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: Z399368-1

Page 1 of 1

Sample Number 2292535-13
Parameter Noise (Leq 24 hrs.)
Location ตำบลพระนอนคลองโสด (GPS 47P 0727793, 1433011)
Measurement Date Aug 06 - Aug 07, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	52.9	72.1	49.0
10:00 AM - 11:00 AM	56.5	79.1	50.7
11:00 AM - 12:00 PM	51.9	68.2	48.5
12:00 PM - 01:00 PM	53.4	76.6	49.1
01:00 PM - 02:00 PM	50.6	67.0	48.4
02:00 PM - 03:00 PM	51.3	71.0	48.4
03:00 PM - 04:00 PM	49.9	63.2	48.5
04:00 PM - 05:00 PM	51.2	68.9	48.7
05:00 PM - 06:00 PM	53.3	74.0	50.0
06:00 PM - 07:00 PM	53.7	70.3	50.9
07:00 PM - 08:00 PM	56.0	71.0	51.5
08:00 PM - 09:00 PM	59.2	76.4	53.7
09:00 PM - 10:00 PM	63.2	77.8	58.3
10:00 PM - 11:00 PM	62.6	78.0	57.8
11:00 PM - 12:00 AM	62.9	79.0	58.1
12:00 AM - 01:00 AM	61.3	79.3	54.6
01:00 AM - 02:00 AM	58.9	75.4	54.0
02:00 AM - 03:00 AM	58.9	78.2	54.5
03:00 AM - 04:00 AM	60.0	79.7	53.6
04:00 AM - 05:00 AM	60.0	77.5	54.6
05:00 AM - 06:00 AM	58.6	80.1	53.2
06:00 AM - 07:00 AM	56.1	76.3	51.8
07:00 AM - 08:00 AM	57.4	75.0	53.3
08:00 AM - 09:00 AM	59.0	72.6	53.8

Leq Average 24 hrs. (dB(A)) 58.3
Lmax (dB(A)) 80.1
L90 (dB(A)) 51.8
Ldn (dB(A)) 66.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: Z399369-1

Page 1 of 1

Sample Number 2292535-14
Parameter Noise (Leq 24 hrs.)
Location ตำบลพระนอนคลองโสด (GPS 47P 0727793, 1433011)
Measurement Date Aug 07 - Aug 08, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 233183

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.6	76.1	54.1
10:00 AM - 11:00 AM	57.7	79.3	53.1
11:00 AM - 12:00 PM	58.3	71.7	53.8
12:00 PM - 01:00 PM	61.1	73.6	57.2
01:00 PM - 02:00 PM	59.5	79.0	55.8
02:00 PM - 03:00 PM	61.2	79.6	57.0
03:00 PM - 04:00 PM	57.3	71.6	53.6
04:00 PM - 05:00 PM	59.9	78.8	53.8
05:00 PM - 06:00 PM	64.0	91.2	55.9
06:00 PM - 07:00 PM	60.7	77.2	54.8
07:00 PM - 08:00 PM	63.2	85.8	57.1
08:00 PM - 09:00 PM	56.7	86.2	50.4
09:00 PM - 10:00 PM	55.6	80.0	49.9
10:00 PM - 11:00 PM	53.0	80.8	49.1
11:00 PM - 12:00 AM	53.4	70.4	49.2
12:00 AM - 01:00 AM	53.2	72.0	49.3
01:00 AM - 02:00 AM	51.8	68.9	48.3
02:00 AM - 03:00 AM	51.8	70.9	48.9
03:00 AM - 04:00 AM	51.0	69.8	48.5
04:00 AM - 05:00 AM	53.1	67.1	51.4
05:00 AM - 06:00 AM	50.4	64.6	48.7
06:00 AM - 07:00 AM	50.4	65.3	48.7
07:00 AM - 08:00 AM	49.9	62.6	48.9
08:00 AM - 09:00 AM	51.6	70.1	49.2

Leq Average 24 hrs. (dB(A)) 58.1
Lmax (dB(A)) 91.2
L90 (dB(A)) 50.4
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 เรื่องกำหนดระดับเสียงการขนาน และระดับเสียงที่เกิดจากอุปกรณ์การขนาน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: Z399370-1

Page 1 of 1

Sample Number 2292535-15
Parameter Noise (Leq 24 hrs.)
Location ตำบลพระนอนคลองโสด (GPS 47P 0727204, 1433094)
Measurement Date Aug 01 - Aug 02, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.4	81.2	59.0
10:00 AM - 11:00 AM	62.5	91.3	58.0
11:00 AM - 12:00 PM	59.7	80.3	57.4
12:00 PM - 01:00 PM	63.2	80.0	59.7
01:00 PM - 02:00 PM	61.4	88.9	58.3
02:00 PM - 03:00 PM	63.1	81.7	58.1
03:00 PM - 04:00 PM	60.1	81.5	57.7
04:00 PM - 05:00 PM	62.8	79.9	58.3
05:00 PM - 06:00 PM	66.1	80.7	60.4
06:00 PM - 07:00 PM	65.3	84.7	60.5
07:00 PM - 08:00 PM	67.0	80.6	63.2
08:00 PM - 09:00 PM	68.2	80.6	64.2
09:00 PM - 10:00 PM	67.0	81.5	63.0
10:00 PM - 11:00 PM	61.6	78.9	59.0
11:00 PM - 12:00 AM	63.1	77.8	59.1
12:00 AM - 01:00 AM	64.2	75.3	58.2
01:00 AM - 02:00 AM	60.2	75.9	58.0
02:00 AM - 03:00 AM	66.1	80.4	60.8
03:00 AM - 04:00 AM	66.6	80.6	60.4
04:00 AM - 05:00 AM	59.0	65.3	57.8
05:00 AM - 06:00 AM	62.4	77.2	58.8
06:00 AM - 07:00 AM	60.8	75.4	58.4
07:00 AM - 08:00 AM	64.1	80.4	58.8
08:00 AM - 09:00 AM	66.4	79.9	60.9

Leq Average 24 hrs. (dB(A)) 64.3
Lmax (dB(A)) 91.3
L90 (dB(A)) 58.8
Ldn (dB(A)) 70.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: Z399371-1

Page 1 of 1

Sample Number 2292535-16
Parameter Noise (Leq 24 hrs.)
Location ตำบลพระนอนคลองโสด (GPS 47P 0727204, 1433094)
Measurement Date Aug 02 - Aug 03, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.2	80.7	61.1
10:00 AM - 11:00 AM	63.0	91.1	59.8
11:00 AM - 12:00 PM	63.3	79.2	60.4
12:00 PM - 01:00 PM	57.0	67.7	56.1
01:00 PM - 02:00 PM	65.5	80.6	59.9
02:00 PM - 03:00 PM	66.6	81.9	61.2
03:00 PM - 04:00 PM	62.8	79.8	58.3
04:00 PM - 05:00 PM	58.9	76.3	57.1
05:00 PM - 06:00 PM	64.1	80.6	58.5
06:00 PM - 07:00 PM	61.4	72.8	59.2
07:00 PM - 08:00 PM	67.0	82.0	63.3
08:00 PM - 09:00 PM	68.6	81.7	64.1
09:00 PM - 10:00 PM	64.2	80.9	60.5
10:00 PM - 11:00 PM	61.6	69.5	58.9
11:00 PM - 12:00 AM	68.0	80.0	64.8
12:00 AM - 01:00 AM	74.0	80.5	73.0
01:00 AM - 02:00 AM	73.0	81.3	71.1
02:00 AM - 03:00 AM	69.0	75.3	65.8
03:00 AM - 04:00 AM	63.2	73.0	58.2
04:00 AM - 05:00 AM	60.2	68.9	57.3
05:00 AM - 06:00 AM	64.8	80.7	58.5
06:00 AM - 07:00 AM	61.8	75.4	58.7
07:00 AM - 08:00 AM	68.4	81.3	66.4
08:00 AM - 09:00 AM	65.5	78.9	59.7

Leq Average 24 hrs. (dB(A)) 66.9
Lmax (dB(A)) 91.1
L90 (dB(A)) 59.8
Ldn (dB(A)) 74.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.55AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399372-1

Page 1 of 1

Sample Number 2292535-17
Parameter Noise (Leq 24 hrs.)
Location ตำบลหนองละลอก (GPS 47P 0727204, 1433094)
Measurement Date Aug 03 - Aug 04, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.2	87.8	60.9
10:00 AM - 11:00 AM	62.7	79.3	58.1
11:00 AM - 12:00 PM	58.4	80.9	55.8
12:00 PM - 01:00 PM	62.4	85.5	57.5
01:00 PM - 02:00 PM	60.3	80.8	57.5
02:00 PM - 03:00 PM	66.1	89.9	60.8
03:00 PM - 04:00 PM	66.7	89.1	63.0
04:00 PM - 05:00 PM	59.1	77.2	56.3
05:00 PM - 06:00 PM	62.8	81.8	58.0
06:00 PM - 07:00 PM	65.1	79.0	61.5
07:00 PM - 08:00 PM	67.2	81.3	63.3
08:00 PM - 09:00 PM	68.7	82.5	65.0
09:00 PM - 10:00 PM	66.6	78.0	63.4
10:00 PM - 11:00 PM	63.9	73.8	60.1
11:00 PM - 12:00 AM	69.2	81.7	65.9
12:00 AM - 01:00 AM	75.0	79.5	73.7
01:00 AM - 02:00 AM	71.0	78.4	67.3
02:00 AM - 03:00 AM	66.8	75.2	62.9
03:00 AM - 04:00 AM	63.3	75.7	59.0
04:00 AM - 05:00 AM	63.8	79.8	58.4
05:00 AM - 06:00 AM	69.0	76.0	68.4
06:00 AM - 07:00 AM	70.4	77.5	69.0
07:00 AM - 08:00 AM	69.0	77.8	67.5
08:00 AM - 09:00 AM	68.8	79.9	67.5

Leq Average 24 hrs. (dB(A)) 67.7
Lmax (dB(A)) 89.9
L90 (dB(A)) 61.5
Ldn (dB(A)) 75.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงภายในโรงงาน และระดับเสียงที่ปล่อยจากอุปกรณ์ในโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supt Salameth
Section Head

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S\Reports_Air Noise rpt (8.86AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399373-1

Page 1 of 1

Sample Number 2292535-18
Parameter Noise (Leq 24 hrs.)
Location ตำบลหนองละลอก (GPS 47P 0727204, 1433094)
Measurement Date Aug 04 - Aug 05, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	69.0	90.0	67.1
10:00 AM - 11:00 AM	68.1	82.0	66.1
11:00 AM - 12:00 PM	66.5	93.2	65.5
12:00 PM - 01:00 PM	66.4	75.4	65.6
01:00 PM - 02:00 PM	67.0	79.6	66.0
02:00 PM - 03:00 PM	66.4	87.3	65.6
03:00 PM - 04:00 PM	64.7	80.3	63.4
04:00 PM - 05:00 PM	58.0	75.0	56.0
05:00 PM - 06:00 PM	65.4	81.3	60.7
06:00 PM - 07:00 PM	65.5	92.0	61.7
07:00 PM - 08:00 PM	64.7	74.8	62.1
08:00 PM - 09:00 PM	66.7	81.5	62.8
09:00 PM - 10:00 PM	60.5	72.7	58.5
10:00 PM - 11:00 PM	60.0	70.7	58.3
11:00 PM - 12:00 AM	60.0	69.6	58.1
12:00 AM - 01:00 AM	64.6	80.4	69.2
01:00 AM - 02:00 AM	60.8	77.5	57.3
02:00 AM - 03:00 AM	58.7	67.8	57.2
03:00 AM - 04:00 AM	58.4	66.5	57.2
04:00 AM - 05:00 AM	59.4	74.4	57.3
05:00 AM - 06:00 AM	66.7	81.0	62.0
06:00 AM - 07:00 AM	58.6	79.4	57.0
07:00 AM - 08:00 AM	61.3	77.4	57.7
08:00 AM - 09:00 AM	66.1	78.3	62.0

Leq Average 24 hrs. (dB(A)) 64.7
Lmax (dB(A)) 93.2
L90 (dB(A)) 60.7
Ldn (dB(A)) 69.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงภายในโรงงาน และระดับเสียงที่ปล่อยจากอุปกรณ์ในโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supt Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.86AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399374-1

Page 1 of 1

Sample Number 2292535-19
Parameter Noise (Leq 24 hrs.)
Location ตำบลหนองละลอก (GPS 47P 0727204, 1433094)
Measurement Date Aug 05 - Aug 06, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.1	75.9	57.6
10:00 AM - 11:00 AM	61.4	79.2	57.2
11:00 AM - 12:00 PM	60.3	80.6	58.0
12:00 PM - 01:00 PM	61.1	73.9	57.8
01:00 PM - 02:00 PM	58.3	81.5	56.3
02:00 PM - 03:00 PM	57.3	72.7	56.1
03:00 PM - 04:00 PM	62.2	78.9	57.6
04:00 PM - 05:00 PM	65.4	77.1	59.9
05:00 PM - 06:00 PM	66.5	80.3	63.0
06:00 PM - 07:00 PM	59.9	73.9	56.5
07:00 PM - 08:00 PM	67.6	82.5	62.7
08:00 PM - 09:00 PM	65.9	89.3	59.7
09:00 PM - 10:00 PM	58.7	74.2	56.0
10:00 PM - 11:00 PM	59.1	74.0	55.9
11:00 PM - 12:00 AM	60.8	73.6	56.9
12:00 AM - 01:00 AM	65.5	87.4	57.7
01:00 AM - 02:00 AM	66.3	78.9	63.5
02:00 AM - 03:00 AM	66.0	75.4	62.8
03:00 AM - 04:00 AM	69.4	82.3	66.0
04:00 AM - 05:00 AM	69.6	78.2	66.3
05:00 AM - 06:00 AM	70.1	81.1	66.3
06:00 AM - 07:00 AM	70.7	81.6	67.8
07:00 AM - 08:00 AM	66.3	79.9	61.3
08:00 AM - 09:00 AM	58.8	68.3	58.0

Leq Average 24 hrs. (dB(A)) 65.6
Lmax (dB(A)) 89.3
L90 (dB(A)) 58.0
Ldn (dB(A)) 73.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงภายในโรงงาน และระดับเสียงที่ปล่อยจากอุปกรณ์ในโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supt Salameth
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.86AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399375-1

Page 1 of 1

Sample Number 2292535-20
Parameter Noise (Leq 24 hrs.)
Location ตำบลหนองละลอก (GPS 47P 0727204, 1433094)
Measurement Date Aug 06 - Aug 07, 2022
Measurement by Nontchai Uppathamp
Sound Level meter Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.2	66.4	58.1
10:00 AM - 11:00 AM	59.8	66.6	58.6
11:00 AM - 12:00 PM	62.3	76.5	58.7
12:00 PM - 01:00 PM	61.9	77.7	58.2
01:00 PM - 02:00 PM	61.9	77.6	58.5
02:00 PM - 03:00 PM	66.6	81.3	60.1
03:00 PM - 04:00 PM	63.0	77.2	59.2
04:00 PM - 05:00 PM	60.6	75.5	58.8
05:00 PM - 06:00 PM	59.1	66.0	58.2
06:00 PM - 07:00 PM	59.1	67.0	58.1
07:00 PM - 08:00 PM	59.2	69.0	58.1
08:00 PM - 09:00 PM	69.2	76.8	68.0
09:00 PM - 10:00 PM	71.2	76.3	70.6
10:00 PM - 11:00 PM	70.0	75.2	69.5
11:00 PM - 12:00 AM	70.6	81.1	68.9
12:00 AM - 01:00 AM	70.8	80.4	68.9
01:00 AM - 02:00 AM	69.7	77.7	68.7
02:00 AM - 03:00 AM	69.6	87.7	68.3
03:00 AM - 04:00 AM	68.8	80.6	67.9
04:00 AM - 05:00 AM	68.5	73.3	67.1
05:00 AM - 06:00 AM	67.7	77.3	66.7
06:00 AM - 07:00 AM	67.0	71.9	66.4
07:00 AM - 08:00 AM	68.2	79.8	66.8
08:00 AM - 09:00 AM	68.1	82.8	67.2

Leq Average 24 hrs. (dB(A)) 67.3
Lmax (dB(A)) 87.7
L90 (dB(A)) 66.4
Ldn (dB(A)) 75.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงภายในโรงงาน และระดับเสียงที่ปล่อยจากอุปกรณ์ในโรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supt Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S\Reports_Air Noise rpt (8.86AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399376-1

Page 1 of 1

Sample Number : 2292535-21
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลหนองหลวงโคตรสาร (GPS 47P 0727204, 1433094)
Measurement Date : Aug 07 - Aug 08, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	68.4	91.0	67.6
10:00 AM - 11:00 AM	68.2	74.0	67.5
11:00 AM - 12:00 PM	68.6	76.5	67.8
12:00 PM - 01:00 PM	70.5	76.4	69.6
01:00 PM - 02:00 PM	70.5	79.8	69.6
02:00 PM - 03:00 PM	70.1	77.3	69.2
03:00 PM - 04:00 PM	71.3	80.6	69.5
04:00 PM - 05:00 PM	70.9	81.6	69.4
05:00 PM - 06:00 PM	70.0	77.1	69.4
06:00 PM - 07:00 PM	70.9	81.3	69.8
07:00 PM - 08:00 PM	71.5	81.6	69.8
08:00 PM - 09:00 PM	70.2	82.2	68.9
09:00 PM - 10:00 PM	69.5	75.8	68.7
10:00 PM - 11:00 PM	70.2	77.8	69.3
11:00 PM - 12:00 AM	69.9	77.8	68.7
12:00 AM - 01:00 AM	69.6	79.4	68.4
01:00 AM - 02:00 AM	68.9	78.0	68.2
02:00 AM - 03:00 AM	68.6	71.5	67.9
03:00 AM - 04:00 AM	65.6	76.4	64.4
04:00 AM - 05:00 AM	61.1	73.8	59.2
05:00 AM - 06:00 AM	62.3	78.5	58.7
06:00 AM - 07:00 AM	66.6	81.5	59.9
07:00 AM - 08:00 AM	61.0	76.4	58.6
08:00 AM - 09:00 AM	62.3	75.3	59.1

Leq Average 24 hrs. (dB(A)) : 69.1
Lmax (dB(A)) : 91.0
L90 (dB(A)) : 68.4
Ldn (dB(A)) : 74.6
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2540
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S:Reports_Air Noise rpt (9:08AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399377-1

Page 1 of 1

Sample Number : 2292535-22
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลหนองหลวงโคตรสาร (GPS 47P 0727619, 1433056)
Measurement Date : Aug 01 - Aug 02, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.9	73.8	65.3
10:00 AM - 11:00 AM	66.0	78.2	65.3
11:00 AM - 12:00 PM	66.1	86.6	65.3
12:00 PM - 01:00 PM	67.7	79.7	65.9
01:00 PM - 02:00 PM	66.7	74.8	66.0
02:00 PM - 03:00 PM	66.9	71.9	66.1
03:00 PM - 04:00 PM	66.7	73.9	66.0
04:00 PM - 05:00 PM	66.9	77.5	66.1
05:00 PM - 06:00 PM	67.0	80.8	66.1
06:00 PM - 07:00 PM	66.9	79.5	66.0
07:00 PM - 08:00 PM	67.0	83.3	66.1
08:00 PM - 09:00 PM	66.6	73.5	66.0
09:00 PM - 10:00 PM	66.6	79.6	66.0
10:00 PM - 11:00 PM	66.6	79.1	65.9
11:00 PM - 12:00 AM	66.4	72.2	65.9
12:00 AM - 01:00 AM	66.3	70.9	65.8
01:00 AM - 02:00 AM	66.1	71.1	65.6
02:00 AM - 03:00 AM	66.2	68.0	65.7
03:00 AM - 04:00 AM	66.4	68.1	65.9
04:00 AM - 05:00 AM	66.5	72.5	66.1
05:00 AM - 06:00 AM	66.5	77.9	65.9
06:00 AM - 07:00 AM	67.0	81.5	65.9
07:00 AM - 08:00 AM	66.9	83.3	65.8
08:00 AM - 09:00 AM	66.6	79.4	65.8

Leq Average 24 hrs. (dB(A)) : 66.6
Lmax (dB(A)) : 86.6
L90 (dB(A)) : 65.9
Ldn (dB(A)) : 72.9
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2540
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S:Reports_Air Noise rpt (9:08AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399378-1

Page 1 of 1

Sample Number : 2292535-23
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลหนองหลวงโคตรสาร (GPS 47P 0727619, 1433056)
Measurement Date : Aug 02 - Aug 03, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.9	77.6	66.0
10:00 AM - 11:00 AM	66.7	83.8	65.9
11:00 AM - 12:00 PM	66.5	78.0	65.8
12:00 PM - 01:00 PM	66.5	80.0	65.7
01:00 PM - 02:00 PM	68.1	89.5	65.7
02:00 PM - 03:00 PM	66.4	81.4	65.8
03:00 PM - 04:00 PM	66.2	73.7	65.6
04:00 PM - 05:00 PM	66.5	75.6	65.8
05:00 PM - 06:00 PM	66.8	80.5	66.0
06:00 PM - 07:00 PM	66.9	80.0	66.1
07:00 PM - 08:00 PM	67.0	79.7	66.1
08:00 PM - 09:00 PM	67.5	88.5	66.2
09:00 PM - 10:00 PM	66.9	78.7	66.4
10:00 PM - 11:00 PM	66.6	74.6	66.1
11:00 PM - 12:00 AM	67.0	76.8	66.4
12:00 AM - 01:00 AM	66.6	71.9	66.4
01:00 AM - 02:00 AM	66.4	70.4	65.9
02:00 AM - 03:00 AM	66.4	78.6	65.8
03:00 AM - 04:00 AM	66.4	70.4	65.9
04:00 AM - 05:00 AM	66.2	72.9	65.6
05:00 AM - 06:00 AM	66.4	86.4	65.7
06:00 AM - 07:00 AM	66.8	84.1	65.8
07:00 AM - 08:00 AM	66.7	76.5	65.8
08:00 AM - 09:00 AM	65.5	78.2	64.7

Leq Average 24 hrs. (dB(A)) : 66.7
Lmax (dB(A)) : 89.5
L90 (dB(A)) : 65.8
Ldn (dB(A)) : 73.0
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2540
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S:Reports_Air Noise rpt (9:10AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399379-1

Page 1 of 1

Sample Number : 2292535-24
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลหนองหลวงโคตรสาร (GPS 47P 0727619, 1433056)
Measurement Date : Aug 03 - Aug 04, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.6	80.6	63.7
10:00 AM - 11:00 AM	65.5	73.4	64.8
11:00 AM - 12:00 PM	66.1	75.1	65.2
12:00 PM - 01:00 PM	66.1	73.6	65.4
01:00 PM - 02:00 PM	66.5	86.0	65.6
02:00 PM - 03:00 PM	66.2	76.2	65.6
03:00 PM - 04:00 PM	66.5	76.0	65.8
04:00 PM - 05:00 PM	66.8	76.5	66.1
05:00 PM - 06:00 PM	67.0	80.6	66.2
06:00 PM - 07:00 PM	67.3	85.3	66.6
07:00 PM - 08:00 PM	67.4	80.6	66.6
08:00 PM - 09:00 PM	67.0	76.9	66.4
09:00 PM - 10:00 PM	66.8	74.7	66.2
10:00 PM - 11:00 PM	66.7	70.1	66.2
11:00 PM - 12:00 AM	66.6	70.4	66.2
12:00 AM - 01:00 AM	66.5	71.9	66.0
01:00 AM - 02:00 AM	66.6	75.2	66.2
02:00 AM - 03:00 AM	66.7	79.9	66.1
03:00 AM - 04:00 AM	66.9	69.0	65.9
04:00 AM - 05:00 AM	66.4	71.1	65.9
05:00 AM - 06:00 AM	66.7	83.2	66.1
06:00 AM - 07:00 AM	66.9	79.9	66.2
07:00 AM - 08:00 AM	67.1	80.8	66.1
08:00 AM - 09:00 AM	66.7	83.6	65.9

Leq Average 24 hrs. (dB(A)) : 66.6
Lmax (dB(A)) : 86.0
L90 (dB(A)) : 66.1
Ldn (dB(A)) : 73.0
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2540
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน พ.ศ. 2548

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supot Salameth
Section Head

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LIFE Sciences

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9044-21/ EMAIL

S:Reports_Air Noise rpt (9:10AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399380-1

Page 1 of 1

Sample Number : 2292535-25
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลโพธิ์ อำเภอวัง (GPS 47P 0727619, 1433056)
Measurement Date : Aug 04 - Aug 05, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.4	79.3	65.6
10:00 AM - 11:00 AM	65.9	79.5	65.2
11:00 AM - 12:00 PM	65.7	77.1	65.1
12:00 PM - 01:00 PM	66.0	78.3	65.4
01:00 PM - 02:00 PM	66.2	80.1	65.4
02:00 PM - 03:00 PM	66.2	81.7	65.5
03:00 PM - 04:00 PM	66.8	85.9	65.7
04:00 PM - 05:00 PM	66.2	75.1	65.5
05:00 PM - 06:00 PM	66.4	77.5	65.7
06:00 PM - 07:00 PM	67.3	79.9	65.9
07:00 PM - 08:00 PM	66.9	83.1	66.1
08:00 PM - 09:00 PM	66.8	76.8	66.2
09:00 PM - 10:00 PM	66.5	74.5	66.0
10:00 PM - 11:00 PM	66.4	76.7	65.9
11:00 PM - 12:00 AM	66.2	70.9	65.8
12:00 AM - 01:00 AM	66.3	71.6	65.8
01:00 AM - 02:00 AM	66.3	70.5	65.8
02:00 AM - 03:00 AM	66.6	75.8	66.1
03:00 AM - 04:00 AM	66.5	68.3	66.1
04:00 AM - 05:00 AM	66.5	71.1	66.0
05:00 AM - 06:00 AM	66.6	72.3	66.0
06:00 AM - 07:00 AM	66.8	75.8	66.1
07:00 AM - 08:00 AM	69.0	79.5	67.1
08:00 AM - 09:00 AM	67.6	76.7	66.4

Leq Average 24 hrs. (dB(A)) : 66.6
Lmax (dB(A)) : 85.9
L90 (dB(A)) : 65.8
Ldn (dB(A)) : 72.9
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. การวัดระดับเสียงสิ่งแวดล้อมด้วยวิธีวัดแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง
2. การวัดระดับเสียงตามมาตรฐานของประเทศไทย หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameh
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (9:10AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399381-1

Page 1 of 1

Sample Number : 2292535-26
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลโพธิ์ อำเภอวัง (GPS 47P 0727619, 1433056)
Measurement Date : Aug 05 - Aug 06, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	68.2	85.3	66.5
10:00 AM - 11:00 AM	66.8	73.2	66.0
11:00 AM - 12:00 PM	68.0	78.3	66.8
12:00 PM - 01:00 PM	66.4	85.9	65.5
01:00 PM - 02:00 PM	65.8	77.9	65.2
02:00 PM - 03:00 PM	65.9	78.8	65.3
03:00 PM - 04:00 PM	66.0	81.6	65.3
04:00 PM - 05:00 PM	66.1	78.9	65.3
05:00 PM - 06:00 PM	66.1	84.7	65.3
06:00 PM - 07:00 PM	65.7	74.8	65.2
07:00 PM - 08:00 PM	65.9	74.9	65.3
08:00 PM - 09:00 PM	65.7	83.6	65.7
09:00 PM - 10:00 PM	66.3	76.4	65.7
10:00 PM - 11:00 PM	66.8	79.4	65.8
11:00 PM - 12:00 AM	66.4	73.2	65.8
12:00 AM - 01:00 AM	66.9	79.5	66.1
01:00 AM - 02:00 AM	67.4	81.8	66.4
02:00 AM - 03:00 AM	66.8	74.0	66.3
03:00 AM - 04:00 AM	67.0	82.6	66.1
04:00 AM - 05:00 AM	66.4	78.7	65.8
05:00 AM - 06:00 AM	66.2	68.8	65.8
06:00 AM - 07:00 AM	66.6	85.8	65.9
07:00 AM - 08:00 AM	66.5	78.4	65.9
08:00 AM - 09:00 AM	66.6	72.2	66.1

Leq Average 24 hrs. (dB(A)) : 66.6
Lmax (dB(A)) : 85.9
L90 (dB(A)) : 65.8
Ldn (dB(A)) : 73.1
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. การวัดระดับเสียงสิ่งแวดล้อมด้วยวิธีวัดแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง
2. การวัดระดับเสียงตามมาตรฐานของประเทศไทย หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameh
Section Head

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S\Reports_Air Noise rpt (9:10AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399382-1

Page 1 of 1

Sample Number : 2292535-27
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลโพธิ์ อำเภอวัง (GPS 47P 0727619, 1433056)
Measurement Date : Aug 06 - Aug 07, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.5	71.6	66.0
10:00 AM - 11:00 AM	66.4	68.1	65.9
11:00 AM - 12:00 PM	66.3	71.0	65.8
12:00 PM - 01:00 PM	66.4	77.8	65.6
01:00 PM - 02:00 PM	66.3	72.1	65.7
02:00 PM - 03:00 PM	66.3	68.3	65.7
03:00 PM - 04:00 PM	66.4	68.3	65.9
04:00 PM - 05:00 PM	66.2	68.0	65.7
05:00 PM - 06:00 PM	66.3	71.2	65.8
06:00 PM - 07:00 PM	66.4	68.7	65.9
07:00 PM - 08:00 PM	66.4	74.9	65.8
08:00 PM - 09:00 PM	66.8	78.4	66.0
09:00 PM - 10:00 PM	66.1	78.2	65.4
10:00 PM - 11:00 PM	64.8	78.4	63.8
11:00 PM - 12:00 AM	64.9	80.6	63.8
12:00 AM - 01:00 AM	66.0	81.2	65.0
01:00 AM - 02:00 AM	66.2	77.3	65.6
02:00 AM - 03:00 AM	66.1	74.5	65.4
03:00 AM - 04:00 AM	66.0	76.2	65.3
04:00 AM - 05:00 AM	65.8	79.1	65.2
05:00 AM - 06:00 AM	65.6	72.5	64.9
06:00 AM - 07:00 AM	65.3	82.3	64.8
07:00 AM - 08:00 AM	65.9	70.0	65.3
08:00 AM - 09:00 AM	66.0	83.9	65.3

Leq Average 24 hrs. (dB(A)) : 66.1
Lmax (dB(A)) : 83.9
L90 (dB(A)) : 65.6
Ldn (dB(A)) : 72.2
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. การวัดระดับเสียงสิ่งแวดล้อมด้วยวิธีวัดแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง
2. การวัดระดับเสียงตามมาตรฐานของประเทศไทย หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameh
Section Head

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LIFE Sciences

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S\Reports_Air Noise rpt (9:11AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140
P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399383-1

Page 1 of 1

Sample Number : 2292535-28
Parameter : Noise (Leq 24 hrs.)
Location : ตำบลโพธิ์ อำเภอวัง (GPS 47P 0727619, 1433056)
Measurement Date : Aug 07 - Aug 08, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Serial No. 233184

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.1	76.0	65.6
10:00 AM - 11:00 AM	65.9	70.9	65.4
11:00 AM - 12:00 PM	66.5	78.6	65.8
12:00 PM - 01:00 PM	67.9	73.7	66.7
01:00 PM - 02:00 PM	67.1	82.0	66.4
02:00 PM - 03:00 PM	67.4	75.4	66.8
03:00 PM - 04:00 PM	67.0	80.0	66.4
04:00 PM - 05:00 PM	66.8	72.9	66.3
05:00 PM - 06:00 PM	67.0	79.3	66.4
06:00 PM - 07:00 PM	67.2	80.1	66.3
07:00 PM - 08:00 PM	66.8	73.7	66.2
08:00 PM - 09:00 PM	66.7	76.5	66.2
09:00 PM - 10:00 PM	66.7	69.1	66.2
10:00 PM - 11:00 PM	66.6	69.8	66.2
11:00 PM - 12:00 AM	66.7	80.7	66.0
12:00 AM - 01:00 AM	66.6	80.5	66.0
01:00 AM - 02:00 AM	66.3	73.7	65.8
02:00 AM - 03:00 AM	66.3	69.6	65.9
03:00 AM - 04:00 AM	66.7	71.0	65.8
04:00 AM - 05:00 AM	66.2	73.4	65.8
05:00 AM - 06:00 AM	66.2	68.0	65.8
06:00 AM - 07:00 AM	66.2	67.8	65.8
07:00 AM - 08:00 AM	66.8	77.1	66.1
08:00 AM - 09:00 AM	67.0	75.6	65.8

Leq Average 24 hrs. (dB(A)) : 66.7
Lmax (dB(A)) : 82.0
L90 (dB(A)) : 66.0
Ldn (dB(A)) : 72.9
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. การวัดระดับเสียงสิ่งแวดล้อมด้วยวิธีวัดแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง
2. การวัดระดับเสียงตามมาตรฐานของประเทศไทย หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง หรือวิธีวัดแบบสุ่มแบบต่อเนื่อง

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S
Supt Salameh
Section Head

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9044-21/ EMAIL

S\Reports_Air Noise rpt (9:11AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399384-1

Page 1 of 1

Sample Number 2292535-29
Parameter Noise (Leq 24 hrs.)
Location ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date Aug 01 - Aug 02, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	51.9	72.5	42.7
11:00 AM - 12:00 PM	63.9	79.2	57.7
12:00 PM - 01:00 PM	65.9	82.0	54.8
01:00 PM - 02:00 PM	52.9	78.6	44.0
02:00 PM - 03:00 PM	61.4	77.4	56.8
03:00 PM - 04:00 PM	57.7	76.4	50.8
04:00 PM - 05:00 PM	50.4	74.0	44.8
05:00 PM - 06:00 PM	52.1	67.7	50.0
06:00 PM - 07:00 PM	58.7	73.3	58.1
07:00 PM - 08:00 PM	59.9	69.5	58.7
08:00 PM - 09:00 PM	59.0	62.3	58.1
09:00 PM - 10:00 PM	57.9	61.7	55.9
10:00 PM - 11:00 PM	56.8	61.9	54.0
11:00 PM - 12:00 AM	58.5	62.5	55.9
12:00 AM - 01:00 AM	59.0	63.7	57.9
01:00 AM - 02:00 AM	57.6	64.2	54.7
02:00 AM - 03:00 AM	56.9	62.2	52.6
03:00 AM - 04:00 AM	56.1	63.8	52.0
04:00 AM - 05:00 AM	54.3	61.2	50.8
05:00 AM - 06:00 AM	49.3	68.9	45.8
06:00 AM - 07:00 AM	66.4	80.4	58.5
07:00 AM - 08:00 AM	65.5	82.1	56.3
08:00 AM - 09:00 AM	50.7	73.6	44.9
09:00 AM - 10:00 AM	64.1	78.5	57.9

Leq Average 24 hrs. (dG(A)) 60.4
Lmax (dG(A)) 82.1
L90 (dG(A)) 54.7
Ldn (dG(A)) 66.2
Bstandard (dG(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Bupot Balameth
Becton Head

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9044-21/ EMAIL

S:\Reports_Air Noise rpt (9:11AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399385-1

Page 1 of 1

Sample Number 2292535-30
Parameter Noise (Leq 24 hrs.)
Location ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date Aug 02 - Aug 03, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	52.7	73.4	48.7
11:00 AM - 12:00 PM	64.3	79.2	57.8
12:00 PM - 01:00 PM	59.2	77.8	50.1
01:00 PM - 02:00 PM	56.2	74.7	48.8
02:00 PM - 03:00 PM	53.8	86.1	45.2
03:00 PM - 04:00 PM	53.7	71.4	46.3
04:00 PM - 05:00 PM	50.0	71.4	44.4
05:00 PM - 06:00 PM	47.8	72.1	43.5
06:00 PM - 07:00 PM	56.9	71.4	54.9
07:00 PM - 08:00 PM	51.2	60.7	49.6
08:00 PM - 09:00 PM	55.5	72.6	50.8
09:00 PM - 10:00 PM	56.3	61.3	54.1
10:00 PM - 11:00 PM	52.1	63.4	50.2
11:00 PM - 12:00 AM	49.7	59.2	47.3
12:00 AM - 01:00 AM	48.5	56.1	46.1
01:00 AM - 02:00 AM	48.4	61.9	46.2
02:00 AM - 03:00 AM	47.1	57.5	45.5
03:00 AM - 04:00 AM	47.7	65.4	44.9
04:00 AM - 05:00 AM	48.3	54.6	45.1
05:00 AM - 06:00 AM	50.7	69.6	48.1
06:00 AM - 07:00 AM	64.0	78.3	55.8
07:00 AM - 08:00 AM	63.5	84.0	53.5
08:00 AM - 09:00 AM	50.4	74.4	43.1
09:00 AM - 10:00 AM	61.0	79.2	53.9

Leq Average 24 hrs. (dG(A)) 57.3
Lmax (dG(A)) 86.1
L90 (dG(A)) 48.1
Ldn (dG(A)) 62.4
Bstandard (dG(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Bupot Balameth
Becton Head

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LIFE Sciences

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9044-21/ EMAIL

S:\Reports_Air Noise rpt (9:11AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399386-1

Page 1 of 1

Sample Number 2292535-31
Parameter Noise (Leq 24 hrs.)
Location ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date Aug 03 - Aug 04, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	48.6	74.1	41.9
11:00 AM - 12:00 PM	63.3	81.5	57.4
12:00 PM - 01:00 PM	60.4	79.5	53.2
01:00 PM - 02:00 PM	50.5	73.3	45.0
02:00 PM - 03:00 PM	51.7	78.7	43.5
03:00 PM - 04:00 PM	55.2	77.0	47.0
04:00 PM - 05:00 PM	51.6	81.1	45.5
05:00 PM - 06:00 PM	55.0	76.4	46.4
06:00 PM - 07:00 PM	59.1	75.8	58.4
07:00 PM - 08:00 PM	59.2	63.6	58.3
08:00 PM - 09:00 PM	55.9	63.8	55.2
09:00 PM - 10:00 PM	53.0	60.5	51.7
10:00 PM - 11:00 PM	54.6	59.8	52.9
11:00 PM - 12:00 AM	51.9	58.2	50.5
12:00 AM - 01:00 AM	48.4	55.3	46.9
01:00 AM - 02:00 AM	49.9	59.6	47.8
02:00 AM - 03:00 AM	49.0	61.3	47.0
03:00 AM - 04:00 AM	48.8	55.9	46.8
04:00 AM - 05:00 AM	50.2	56.0	47.2
05:00 AM - 06:00 AM	52.6	65.1	49.8
06:00 AM - 07:00 AM	50.5	69.2	45.9
07:00 AM - 08:00 AM	64.5	81.6	55.7
08:00 AM - 09:00 AM	54.4	84.4	42.6
09:00 AM - 10:00 AM	62.7	88.5	54.7

Leq Average 24 hrs. (dG(A)) 57.2
Lmax (dG(A)) 88.5
L90 (dG(A)) 47.2
Ldn (dG(A)) 59.8
Bstandard (dG(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Bupot Balameth
Becton Head

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9044-21/ EMAIL

S:\Reports_Air Noise rpt (9:14AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399387-1

Page 1 of 1

Sample Number 2292535-32
Parameter Noise (Leq 24 hrs.)
Location ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date Aug 04 - Aug 05, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	58.1	88.0	42.4
11:00 AM - 12:00 PM	64.1	78.9	56.9
12:00 PM - 01:00 PM	61.4	81.9	54.2
01:00 PM - 02:00 PM	52.5	74.3	42.4
02:00 PM - 03:00 PM	50.5	73.9	42.7
03:00 PM - 04:00 PM	72.9	102.3	46.1
04:00 PM - 05:00 PM	70.4	101.0	44.8
05:00 PM - 06:00 PM	52.1	83.8	41.6
06:00 PM - 07:00 PM	54.2	65.5	53.2
07:00 PM - 08:00 PM	56.6	65.3	55.5
08:00 PM - 09:00 PM	52.7	60.2	51.1
09:00 PM - 10:00 PM	52.8	57.3	51.3
10:00 PM - 11:00 PM	51.4	57.2	50.2
11:00 PM - 12:00 AM	50.1	57.2	48.5
12:00 AM - 01:00 AM	47.8	56.3	45.1
01:00 AM - 02:00 AM	48.1	64.7	45.2
02:00 AM - 03:00 AM	45.8	52.2	44.6
03:00 AM - 04:00 AM	45.8	55.6	44.3
04:00 AM - 05:00 AM	49.0	61.8	45.0
05:00 AM - 06:00 AM	50.8	69.7	47.1
06:00 AM - 07:00 AM	65.2	79.7	56.9
07:00 AM - 08:00 AM	64.9	80.5	56.8
08:00 AM - 09:00 AM	58.3	74.9	45.2
09:00 AM - 10:00 AM	62.8	79.3	55.3

Leq Average 24 hrs. (dG(A)) 62.8
Lmax (dG(A)) 102.3
L90 (dG(A)) 46.1
Ldn (dG(A)) 65.3
Bstandard (dG(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

Remark :

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

Technical Management

Tharitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Bupot Balameth
Becton Head

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S:\Reports_Air Noise rpt (9:14AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399388-1

Page 1 of 1

Sample Number : 2292535-33
Parameter : Noise (Leq 24 hrs.)
Location : ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date : Aug 05 - Aug 06, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	50.5	76.1	44.2
11:00 AM - 12:00 PM	54.5	71.6	49.4
12:00 PM - 01:00 PM	65.7	80.4	59.6
01:00 PM - 02:00 PM	64.4	79.4	56.9
02:00 PM - 03:00 PM	50.4	70.8	43.4
03:00 PM - 04:00 PM	53.1	73.5	44.9
04:00 PM - 05:00 PM	50.6	71.0	43.9
05:00 PM - 06:00 PM	52.5	70.8	46.4
06:00 PM - 07:00 PM	56.2	74.8	46.8
07:00 PM - 08:00 PM	53.7	83.5	46.0
08:00 PM - 09:00 PM	52.9	83.0	44.3
09:00 PM - 10:00 PM	48.6	72.5	43.8
10:00 PM - 11:00 PM	72.9	102.6	41.3
11:00 PM - 12:00 AM	65.6	92.2	46.3
12:00 AM - 01:00 AM	58.0	64.2	56.5
01:00 AM - 02:00 AM	54.0	59.8	52.1
02:00 AM - 03:00 AM	50.3	58.2	49.1
03:00 AM - 04:00 AM	49.8	56.4	48.1
04:00 AM - 05:00 AM	50.0	55.8	48.0
05:00 AM - 06:00 AM	49.0	59.0	47.2
06:00 AM - 07:00 AM	48.5	54.7	47.0
07:00 AM - 08:00 AM	48.0	57.8	46.0
08:00 AM - 09:00 AM	46.3	59.0	44.7
09:00 AM - 10:00 AM	47.6	57.6	46.5

Leq Average 24 hrs. (dG(A))

61.4

Lmax (dG(A))

102.6

L90 (dG(A))

46.4

Ldn (dG(A))

70.2

Standard (dG(A))

70

Reference Method : IBO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการขนาน และระดับเสียงที่เกิดจากการประกอบกิจการ

โรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Bupot Balameth
Bection Head

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LIFE Sciences

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S:\Reports_Air Noise rpt (9:14AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399389-1

Page 1 of 1

Sample Number : 2292535-34
Parameter : Noise (Leq 24 hrs.)
Location : ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date : Aug 06 - Aug 07, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	47.5	59.7	46.1
11:00 AM - 12:00 PM	46.8	60.4	45.4
12:00 PM - 01:00 PM	48.1	56.1	44.1
01:00 PM - 02:00 PM	50.6	57.4	44.3
02:00 PM - 03:00 PM	45.5	55.1	44.6
03:00 PM - 04:00 PM	46.1	64.1	44.2
04:00 PM - 05:00 PM	45.6	53.8	43.8
05:00 PM - 06:00 PM	50.5	77.4	44.9
06:00 PM - 07:00 PM	50.0	73.4	45.0
07:00 PM - 08:00 PM	48.2	67.5	45.0
08:00 PM - 09:00 PM	48.7	69.6	45.0
09:00 PM - 10:00 PM	47.5	67.4	42.4
10:00 PM - 11:00 PM	50.0	71.9	42.5
11:00 PM - 12:00 AM	49.5	67.9	41.4
12:00 AM - 01:00 AM	49.4	66.3	44.2
01:00 AM - 02:00 AM	50.1	68.4	43.9
02:00 AM - 03:00 AM	47.6	73.0	43.0
03:00 AM - 04:00 AM	51.2	73.2	44.1
04:00 AM - 05:00 AM	48.2	67.7	43.6
05:00 AM - 06:00 AM	48.7	68.1	42.4
06:00 AM - 07:00 AM	47.5	71.1	42.0
07:00 AM - 08:00 AM	50.0	73.4	41.0
08:00 AM - 09:00 AM	49.3	70.3	40.5
09:00 AM - 10:00 AM	48.6	65.4	43.1

Leq Average 24 hrs. (dG(A))

48.8

Lmax (dG(A))

77.4

L90 (dG(A))

43.9

Ldn (dG(A))

55.6

Standard (dG(A))

70

Reference Method : IBO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการขนาน และระดับเสียงที่เกิดจากการประกอบกิจการ

โรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Bupot Balameth
Bection Head

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S:\Reports_Air Noise rpt (9:14AM)



Analysis / Test Report



TESTING
No.0042

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand
21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2292535
Date Received : Aug 08, 2022
Date Reported : Aug 16, 2022
Report Number: 2399390-1

Page 1 of 1

Sample Number : 2292535-35
Parameter : Noise (Leq 24 hrs.)
Location : ชุมชนบ้านคูไพร (Gan Phusal Community) (SPB 47P 0725739, 1434370)
Measurement Date : Aug 07 - Aug 08, 2022
Measurement by : Nontchai Uppathamp
Sound Level meter : Berial No. 296518

Time	Leq (dG(A))	Lmax (dG(A))	L90 (dG(A))
10:00 AM - 11:00 AM	49.3	69.6	42.8
11:00 AM - 12:00 PM	62.6	74.9	59.6
12:00 PM - 01:00 PM	55.9	76.8	52.8
01:00 PM - 02:00 PM	53.8	77.5	49.4
02:00 PM - 03:00 PM	55.2	79.9	47.8
03:00 PM - 04:00 PM	51.3	65.6	48.0
04:00 PM - 05:00 PM	61.0	63.0	60.6
05:00 PM - 06:00 PM	58.6	64.2	57.9
06:00 PM - 07:00 PM	52.0	66.3	46.4
07:00 PM - 08:00 PM	52.5	59.4	49.0
08:00 PM - 09:00 PM	53.0	57.4	49.5
09:00 PM - 10:00 PM	53.3	68.5	50.1
10:00 PM - 11:00 PM	52.4	57.5	48.9
11:00 PM - 12:00 AM	52.9	60.6	50.3
12:00 AM - 01:00 AM	51.6	57.5	49.4
01:00 AM - 02:00 AM	48.6	59.0	47.4
02:00 AM - 03:00 AM	46.3	55.5	44.4
03:00 AM - 04:00 AM	45.0	54.3	43.9
04:00 AM - 05:00 AM	45.2	62.5	44.3
05:00 AM - 06:00 AM	44.9	52.9	44.0
06:00 AM - 07:00 AM	46.1	68.1	44.2
07:00 AM - 08:00 AM	47.3	57.6	44.2
08:00 AM - 09:00 AM	47.7	55.4	45.2
09:00 AM - 10:00 AM	67.4	81.6	60.1

Leq Average 24 hrs. (dG(A))

57.0

Lmax (dG(A))

81.6

L90 (dG(A))

48.0

Ldn (dG(A))

59.0

Standard (dG(A))

70

Reference Method : IBO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการขนาน และระดับเสียงที่เกิดจากการประกอบกิจการ

โรงงาน พ.ศ. 2548

Remark :

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Bupot Balameth
Bection Head

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S:\Reports_Air Noise rpt (9:15AM)

ภาคผนวก ค-5

ระดับเสียงในบริเวณการทำงาน



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394506-1

Page 1 of 1

Sample Number 2292667-2
Parameter Noise (Leq 8 hrs.)
Location SBS Silo Filter (Hot Rolling)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	78.8	88.8	77.2
10:00 AM - 11:00 AM	75.5	86.1	66.2
11:00 AM - 12:00 PM	67.2	84.6	64.5
12:00 PM - 01:00 PM	67.9	87.0	64.1
01:00 PM - 02:00 PM	71.0	89.8	65.2
02:00 PM - 03:00 PM	66.9	79.2	63.9
03:00 PM - 04:00 PM	68.8	85.5	64.4
04:00 PM - 05:00 PM	67.2	84.6	64.5

Leq Average 8 hrs. (dB(A))

72.8

Lmax (dB(A))

89.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394507-1

Page 1 of 1

Sample Number 2292667-3
Parameter Noise (Leq 8 hrs.)
Location RM-150 Sheer (Hot Rolling)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:10 AM - 10:10 AM	85.3	102.8	71.0
10:10 AM - 11:10 AM	87.9	106.3	71.8
11:10 AM - 12:10 PM	77.5	95.6	70.8
12:10 PM - 01:10 PM	72.5	89.9	70.6
01:10 PM - 02:10 PM	72.3	78.3	71.0
02:10 PM - 03:10 PM	88.6	103.1	72.6
03:10 PM - 04:10 PM	86.9	103.7	73.6
04:10 PM - 05:10 PM	87.9	106.3	71.8

Leq Average 8 hrs. (dB(A))

85.6

Lmax (dB(A))

106.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Technical Management

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394508-1

Page 1 of 1

Sample Number 2292667-4
Parameter Noise (Leq 8 hrs.)
Location RM-Deliver Side (Hot Rolling)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:20 AM - 10:20 AM	88.1	100.5	76.5
10:20 AM - 11:20 AM	86.5	105.1	75.6
11:20 AM - 12:20 PM	77.7	93.0	75.6
12:20 PM - 01:20 PM	76.2	89.6	75.6
01:20 PM - 02:20 PM	76.0	78.3	75.6
02:20 PM - 03:20 PM	92.5	103.6	76.9
03:20 PM - 04:20 PM	92.2	102.7	78.3
04:20 PM - 05:20 PM	88.9	97.1	75.9
Leq Average 8 hrs. (dB(A))	88.3		
Lmax (dB(A))		105.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

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Supot Salamteh
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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394509-1

Page 1 of 1

Sample Number 2292667-5
Parameter Noise (Leq 8 hrs.)
Location FCY (Finishing)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:44 AM - 10:44 AM	84.7	91.4	83.9
10:44 AM - 11:44 AM	84.2	89.6	83.5
11:44 AM - 12:44 PM	84.0	89.7	83.5
12:44 PM - 01:44 PM	84.3	87.6	83.7
01:44 PM - 02:44 PM	85.7	103.8	79.0
02:44 PM - 03:44 PM	82.7	100.1	80.8
03:44 PM - 04:44 PM	82.5	88.5	81.2
04:44 PM - 05:44 PM	83.6	89.6	82.3

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

103.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Technical Management

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Supot Salamteh
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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394510-1

Page 1 of 1

Sample Number 2292667-6
Parameter Noise (Leq 8 hrs.)
Location 1CM (Cold Rolling)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:35 AM - 10:35 AM	86.7	100.7	80.7
10:35 AM - 11:35 AM	86.7	101.2	79.5
11:35 AM - 12:35 PM	83.8	99.6	79.5
12:35 PM - 01:35 PM	87.0	107.6	79.0
01:35 PM - 02:35 PM	82.3	103.1	78.6
02:35 PM - 03:35 PM	80.6	91.9	78.8
03:35 PM - 04:35 PM	87.9	104.0	79.7
04:35 PM - 05:35 PM	86.7	101.2	79.5

Leq Average 8 hrs. (dB(A))

85.8

Lmax (dB(A))

107.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

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Supot Salamteh
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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394511-1

Page 1 of 1

Sample Number 2292667-7
Parameter Noise (Leq 8 hrs.)
Location 2NSL-Deliver Side Spoon Area (Finishing)
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	75.4	103.1	70.4
11:00 AM - 12:00 PM	81.5	98.6	71.3
12:00 PM - 01:00 PM	78.2	94.8	71.4
01:00 PM - 02:00 PM	84.7	92.0	71.9
02:00 PM - 03:00 PM	74.1	88.4	70.5
03:00 PM - 04:00 PM	75.5	87.8	71.5
04:00 PM - 05:00 PM	77.3	77.3	77.3
05:00 PM - 06:00 PM	76.4	76.4	76.4
Leq Average 8 hrs. (dB(A))	79.4		
Lmax (dB(A))		103.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292667

Date Received : Aug 02, 2022

Date Reported : Aug 05, 2022

Report Number: 2394513-1

Page 1 of 1

Sample Number 2292667-9
Parameter Noise (Leq 8 hrs.)
Location Cold Rolling CY
Measurement Date Aug 02, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:20 AM - 11:20 AM	83.5	90.2	82.7
11:20 AM - 12:20 PM	83.0	88.4	82.3
12:20 PM - 01:20 PM	82.8	88.5	82.3
01:20 PM - 02:20 PM	83.1	86.4	82.5
02:20 PM - 03:20 PM	82.9	89.3	82.3
03:20 PM - 04:20 PM	82.8	93.7	82.3
04:20 PM - 05:20 PM	82.6	87.0	82.1
05:20 PM - 06:20 PM	82.8	88.5	82.3

Leq Average 8 hrs. (dB(A))

82.9

Lmax (dB(A))

93.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

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Approved by

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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 22101608

Date Received : Sep 20, 2022

Date Reported : Sep 22, 2022

Report Number: 2442137-1

Page 1 of 1

Sample Number 22101608-1
Parameter Noise (Leq 8 hrs.)
Location 1SCLP (Hot Rolling)
Measurement Date Sep 20, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.4	93.9	81.6
10:00 AM - 11:00 AM	87.5	93.5	82.2
11:00 AM - 12:00 PM	88.6	94.0	82.9
12:00 PM - 01:00 PM	80.1	87.3	79.5
01:00 PM - 02:00 PM	88.8	93.6	85.9
02:00 PM - 03:00 PM	87.5	93.5	84.9
03:00 PM - 04:00 PM	81.3	89.8	74.9
04:00 PM - 05:00 PM	75.1	84.0	73.2

Leq Average 8 hrs. (dB(A))

86.3

Lmax (dB(A))

94.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

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P/O :

Project Name : Monitoring

Project Location :

Lot ID: 22101608

Date Received : Sep 20, 2022

Date Reported : Sep 22, 2022

Report Number: 2442139-1

Page 1 of 1

Sample Number 22101608-3
Parameter Noise (Leq 8 hrs.)
Location 2SCLP (Hot Rolling)
Measurement Date Sep 20, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:56 AM - 09:56 AM	85.4	90.0	80.5
09:56 AM - 10:56 AM	85.0	89.5	80.4
10:56 AM - 11:56 AM	86.4	90.7	83.9
11:56 AM - 12:56 PM	78.7	87.6	76.8
12:56 PM - 01:56 PM	86.0	107.9	78.0
01:56 PM - 02:56 PM	85.3	93.0	80.9
02:56 PM - 03:56 PM	80.8	91.8	74.7
03:56 PM - 04:56 PM	74.7	83.6	72.8

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

107.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Supot Salamteh
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ระดับเสียงเฉลี่ยตลอดระยะเวลาการทำงาน



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Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292671

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number : 2388030-1

Page 1 of 3

Sample Number 2292671-2
Sampled Date Aug 02, 2022
Sample Description Noise Dose
Location 1CM (Cold Rolling)
Personal Sampling คุณประวิทย์ ยนต์กลาง
Date Analysis Commenced Aug 04, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:00 AM - 05:00 PM	%	-	1	11.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:00 AM - 05:00 PM	dB(A)	-	-	75.4	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 : Natthapon Jiengwareewong

Remark :

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

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Approved by

Wichan Choonharat
Assistant Manager



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Client : UACJ (Thailand) Co., Ltd.

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292671

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number : 2388030-1

Page 2 of 3

Sample Number 2292671-6
Sampled Date Aug 02, 2022
Sample Description Noise Dose
Location RM-delivery side (Hot Rolling) & RM-ISO-Sheer (Hot Rolling)
Personal Sampling คุณกิตติชัย นามนงคุณ
Date Analysis Commenced Aug 04, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:00 AM - 05:00 PM	%	-	1	47.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:00 AM - 05:00 PM	dB(A)	-	-	81.8	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 : Natthapon Jiengwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292671

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number : 2388030-1

Page 3 of 3

Sample Number 2292671-7
Sampled Date Aug 02, 2022
Sample Description Noise Dose
Location 2NSL-Drive side Spooh area (Finishing)
Personal Sampling คุณเจ็กกฤษ มิ่งท้วม
Date Analysis Commenced Aug 04, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:00 AM - 05:00 PM	%	-	1	28.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:00 AM - 05:00 PM	dB(A)	-	-	79.6	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 : Natthapon Jiengwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T.Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140
P/O : 4500018112
Project Name :
Project Location :

Lot ID: 2295582

Date Received : Aug 16, 2022

Date Reported : Dec 09, 2022

Report Number : 2516245-1

Page 28 of 36

Sample Number 2295582-31
Sampled Date Aug 11, 2022
Sample Description Noise Dose
Location Cold Rolling_CCY
Personal Sampling คุณประวิตร ยนต์กลาง
Date Analysis Commenced Aug 18, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	64.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	83.1	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)

Note : This Analysis test report is reissued to supersede report No 2394643-1 Reported : Aug 19,2022 due to revise analytical information

Sampled By : Norranon Tathongkham

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2299431

Date Received : Sep 20, 2022

Date Reported : Sep 22, 2022

Report Number : 2403145-1

Page 1 of 2

Sample Number 2299431-2
Sampled Date Sep 20, 2022
Sample Description Noise Dose
Location Slab Saw (Hot Rolling)
Personal Sampling คุณรุ่งศักดิ์ เจริญรส
Date Analysis Commenced Sep 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:00 AM - 05:00 PM	%	-	1	23.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:00 AM - 05:00 PM	dB(A)	-	-	78.7	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 : Norranon Tathongkham

Remark :

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

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Wichan Choonharat
Assistant Manager



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring
Project Location :

Lot ID: 2299431

Date Received : Sep 20, 2022

Date Reported : Sep 22, 2022

Report Number : 2403145-1

Page 2 of 2

Sample Number 2299431-3
Sampled Date Sep 20, 2022
Sample Description Noise Dose
Location Scalper (Hot Rolling)
Personal Sampling คุณเอกพันธ์ ทองพันธ์
Date Analysis Commenced Sep 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:00 AM - 05:00 PM	%	-	1	57.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:00 AM - 05:00 PM	dB(A)	-	-	82.6	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 : Norranon Tathongkham

Remark :

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

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Approved by

Wichan Choonharat
Assistant Manager

ภาคผนวก ค-7

คุณภาพอากาศในบริเวณการทำงาน



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 1 of 8

Sample Number	2292674-1
Sampled Date	Aug 02, 2022
Sample Description	Air Quality
Location	กระบวนการเตรียมวัตถุดิบ (Raw Material Preparing Process)
Date Analysis Commenced	Aug 05, 2022
Condition of Sample	Drawn into one filter paper placed in plastic cassette
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	0.25	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

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Approved by

Savitree N.

Savitree Noisangiam
Manager



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 2 of 8

Sample Number	2292674-2
Sampled Date	Aug 02, 2022
Sample Description	Air Quality
Location	พื้นที่กระบวนการหลอมและหล่ออลูมิเนียม (Melting and Casting Process Area)
Date Analysis Commenced	Aug 05, 2022
Condition of Sample	Drawn into one filter paper placed in plastic cassette
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	0.38	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

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Approved by

Sawitree N.

Sawitree Noisangiam
Manager



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 3 of 8

Sample Number 2292674-3
Sampled Date Aug 02, 2022
Sample Description Air Quality
Location พื้นที่กระบวนการรีดร้อน (Hot Rolling Process Area)
Date Analysis Commenced Aug 05, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 4 of 8

Sample Number 2292674-4
Sampled Date Aug 02, 2022
Sample Description Air Quality
Location กระบวนการเตรียมวัตถุดิบ (Raw Material Preparing Process)
Date Analysis Commenced Aug 05, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	0.17	5	Based on NIOSH (1998), 0600	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

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Sawitree N.

Sawitree Noisangiam
Manager



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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 5 of 8

Sample Number	2292674-5
Sampled Date	Aug 02, 2022
Sample Description	Air Quality
Location	พื้นที่กระบวนการหลอมและหล่ออลูมิเนียม (Melting and Casting Process Area)
Date Analysis Commenced	Aug 05, 2022
Condition of Sample	Drawn into one filter paper placed in plastic cassette
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Analysis / Test Report

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 6 of 8

Sample Number 2292674-6
Sampled Date Aug 02, 2022
Sample Description Air Quality
Location พื้นที่กระบวนการรีดร้อน (Hot Rolling Process Area)
Date Analysis Commenced Aug 05, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

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

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Sawitree N.

Sawitree Noisangiam
Manager



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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 7 of 8

Sample Number	2292674-7
Sampled Date	Aug 02, 2022
Sample Description	Air Quality
Location	พื้นที่กระบวนการหลอมและหล่ออลูมิเนียม (Melting and Casting Process Area)
Date Analysis Commenced	Aug 04, 2022
Condition of Sample	Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure	756 mmHg
Atmospheric Temperature	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Hydrochloric acid	09:00 AM - 11:00 AM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	MOL	Bangkok
Metals Testing									
Aluminium (Inhalable dust) (Fume)	09:00 AM - 11:00 AM	mg/m3	-	0.02	<0.02	No Standard	NIOSH (2003), 7301	-	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 : Tarin Octjinda

Remark :

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

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292674

Date Received : Aug 02, 2022

Date Reported : Aug 16, 2022

Report Number : 2388034-1

Page 8 of 8

Sample Number 2292674-8
Sampled Date Aug 02, 2022
Sample Description Air Quality
Location พื้นที่กระบวนการเคลือบแผ่นอลูมิเนียม (Coating Process Area)
Date Analysis Commenced Aug 04, 2022
Condition of Sample Drawn into one 10-L air sampling bag

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total VOC	10:00 AM - 12:00 PM	ppm	-	0.10	4.7	No Standard	Total VOC Analyzer	-	Bangkok

Guideline :

Sampled By : Tarin Octjinda

Remark :

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Sawitree N.

Sawitree Noisangiam
Manager

ภาคผนวก ค-8

ระดับความร้อนในบริเวณการทำงาน



Analysis / Test Report

Client : UACJ (Thailand) Co., Ltd.
7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292682

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number: 2388039-1

Page 1 of 3

Sample Number 2292682-1
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 02, 2022
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พื้นที่กระบวนการหลอมและหล่ออลูมิเนียม (Melting and Casting process Area)	120	29.8	27.5	35.0	34.3
Average (WBGT)		29.8			
Guideline WBGT (°C)		34.0			

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

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Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292682

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number: 2388039-1

Page 2 of 3

Sample Number 2292682-2
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 02, 2022
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พื้นที่กระบวนการรีดร้อน (Hot Rolling Process Area)	120	30.2	28.1	35.2	34.9
Average (WBGT)		30.2			
Guideline WBGT (°C)		34.0			

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

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Analysis / Test Report

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7/352 Moo 6, Amata City Industrial Estate, T. Mabyangporn, A. Pluakdaeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring

Project Location :

Lot ID: 2292682

Date Received : Aug 03, 2022

Date Reported : Aug 06, 2022

Report Number: 2388039-1

Page 3 of 3

Sample Number 2292682-3
Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date Aug 02, 2022
Measurement by Natthapon Jiengwareewong
Location ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
พื้นที่กระบวนการรีดเย็น (ส่วนการอบอ่อน) (Clod Rolling Process Area)	120	29.0	27.0	33.7	33.6
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

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

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