

## ภาคผนวก ค

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ใบรับรองผลการตรวจวิเคราะห์

## คุณภาพอากาศในบรรยากาศ

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## Analysis / Test Report



TESTING  
No.0042

Lot ID: 24109974

Date Received : Oct 18, 2024  
Date Reported : Oct 24, 2024  
Report Number: 3118982-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	อากาศภายในอาคาร (A1)						
Date Analysis Commenced	Oct 21, 2024						
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag						
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)		
24109974-1	Oct 11 - Oct 12, 2024	0.047	0.026	755	33		
24109974-2	Oct 12 - Oct 13, 2024	0.042	0.025	755	32		
24109974-3	Oct 13 - Oct 14, 2024	0.042	0.021	755	32		
24109974-4	Oct 14 - Oct 15, 2024	0.054	0.032	755	32		
24109974-5	Oct 15 - Oct 16, 2024	0.047	0.026	755	32		
24109974-6	Oct 16 - Oct 17, 2024	0.048	0.027	755	31		
24109974-7	Oct 17 - Oct 18, 2024	0.039	0.021	755	31		
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 :	Noranon Tathongkham						
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.						

Approved by

Thanitak.

Thanita Kulsuriwong  
Scientist (4)

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

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## Analysis / Test Report



TESTING  
No.0042

Lot ID: 24109974

Date Received : Oct 18, 2024  
Date Reported : Oct 24, 2024  
Report Number: 3118982-2

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	อากาศภายนอกอาคาร (A2)						
Date Analysis Commenced	Oct 21, 2024						
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag						
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)		
24109974-8	Oct 11 - Oct 12, 2024	0.035	0.023	755	33		
24109974-9	Oct 12 - Oct 13, 2024	0.031	0.024	755	32		
24109974-10	Oct 13 - Oct 14, 2024	0.030	0.023	755	32		
24109974-11	Oct 14 - Oct 15, 2024	0.040	0.033	755	32		
24109974-12	Oct 15 - Oct 16, 2024	0.041	0.032	755	32		
24109974-13	Oct 16 - Oct 17, 2024	0.033	0.026	755	31		
24109974-14	Oct 17 - Oct 18, 2024	0.031	0.023	755	31		
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 :	Noranon Tathongkham						
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.						

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## Analysis / Test Report



**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24109974**  
Date Received : Oct 18, 2024  
Date Reported : Oct 24, 2024  
Report Number: 3118982-3

Page 1 of 1

Sample Description	Air Quality	Location			
Date Analysis Commenced	Oct 21, 2024				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24109974-15	Oct 11 - Oct 12, 2024	0.029	0.023	755	33
24109974-16	Oct 12 - Oct 13, 2024	0.027	0.024	755	32
24109974-17	Oct 13 - Oct 14, 2024	0.027	0.020	755	32
24109974-18	Oct 14 - Oct 15, 2024	0.037	0.032	755	32
24109974-19	Oct 15 - Oct 16, 2024	0.040	0.030	755	32
24109974-20	Oct 16 - Oct 17, 2024	0.030	0.025	755	31
24109974-21	Oct 17 - Oct 18, 2024	0.032	0.022	755	31
Guideline		0.33	0.12	-	-

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Approved by

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24109974**  
Date Received : Oct 18, 2024  
Date Reported : Oct 24, 2024  
Report Number: 3118982-4

Page 1 of 1

Sample Description	Air Quality	Location			
Date Analysis Commenced	อากาศในร่ม (A4)				
Condition of Sample	Oct 21, 2024				
	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)
24109974-22	Oct 11 - Oct 12, 2024	0.039	0.022	755	33
24109974-23	Oct 12 - Oct 13, 2024	0.042	0.022	755	32
24109974-24	Oct 13 - Oct 14, 2024	0.042	0.023	755	32
24109974-25	Oct 14 - Oct 15, 2024	0.050	0.027	755	32
24109974-26	Oct 15 - Oct 16, 2024	0.052	0.022	755	32
24109974-27	Oct 16 - Oct 17, 2024	0.035	0.021	755	31
24109974-28	Oct 17 - Oct 18, 2024	0.033	0.020	755	31
Guideline		0.33	0.12	-	-
<b>Reference Method</b> Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J <b>Guideline :</b> Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004 <b>Sampled By :</b> Norranon Tathongkham <b>Remark :</b> - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.					

Thanitak.

Approved by

Thanita Kulsuriwong  
Scientist (4)

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Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109972**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3118968-1

Page 1 of 1

Sample Description		Air Quality					
Location	Address						
Parameter	Unit						
Measurement Date	Measurement by						
Norranon Tahongkham							
Time	24109972-1	24109972-2	24109972-3	24109972-4	24109972-5	24109972-6	24109972-7
	Oct 11, 2024	Oct 12, 2024	Oct 13, 2024	Oct 14, 2024	Oct 15, 2024	Oct 16, 2024	Oct 17, 2024
11:00 AM - 12:00 PM	0.0040	0.0038	0.0035	0.0037	0.0036	0.0032	0.0036
12:00 PM - 01:00 PM	0.0039	0.0055	0.0034	0.0040	0.0038	0.0033	0.0037
01:00 PM - 02:00 PM	0.0042	0.0051	0.0035	0.0039	0.0037	0.0032	0.0039
02:00 PM - 03:00 PM	0.0040	0.0049	0.0040	0.0039	0.0031	0.0036	0.0037
03:00 PM - 04:00 PM	0.0039	0.0045	0.0038	0.0041	0.0032	0.0030	0.0038
04:00 PM - 05:00 PM	0.0037	0.0044	0.0037	0.0038	0.0036	0.0031	0.0043
05:00 PM - 06:00 PM	0.0037	0.0043	0.0036	0.0038	0.0032	0.0036	0.0041
06:00 PM - 07:00 PM	0.0038	0.0039	0.0037	0.0040	0.0033	0.0031	0.0038
07:00 PM - 08:00 PM	0.0035	0.0041	0.0037	0.0038	0.0032	0.0031	0.0040
08:00 PM - 09:00 PM	0.0037	0.0039	0.0036	0.0038	0.0038	0.0036	0.0038
09:00 PM - 10:00 PM	0.0038	0.0036	0.0036	0.0039	0.0033	0.0031	0.0039
10:00 PM - 11:00 PM	0.0035	0.0039	0.0039	0.0037	0.0031	0.0031	0.0040
11:00 PM - 12:00 AM	0.0038	0.0038	0.0035	0.0036	0.0032	0.0028	0.0038
12:00 AM - 01:00 AM	0.0037	0.0037	0.0036	0.0036	0.0032	0.0036	0.0038
01:00 AM - 02:00 AM	0.0036	0.0036	0.0041	0.0036	0.0037	0.0032	0.0037
02:00 AM - 03:00 AM	0.0038	0.0036	0.0036	0.0036	0.0032	0.0030	0.0037
03:00 AM - 04:00 AM	0.0039	0.0035	0.0036	0.0039	0.0032	0.0028	0.0039
04:00 AM - 05:00 AM	0.0039	0.0036	0.0041	0.0037	0.0037	0.0030	0.0037
05:00 AM - 06:00 AM	0.0040	0.0035	0.0036	0.0037	0.0031	0.0030	0.0033
06:00 AM - 07:00 AM	0.0039	0.0036	0.0038	0.0039	0.0031	0.0030	0.0037
07:00 AM - 08:00 AM	0.0040	0.0036	0.0036	0.0037	0.0038	0.0033	0.0040
08:00 AM - 09:00 AM	0.0040	0.0035	0.0037	0.0037	0.0032	0.0034	0.0033
09:00 AM - 10:00 AM	0.0040	0.0032	0.0039	0.0036	0.0032	0.0032	0.0039
10:00 AM - 11:00 AM	0.0041	0.0036	0.0037	0.0037	0.0029	0.0031	0.0032
Average	0.0038	0.0039	0.0037	0.0038	0.0034	0.0032	0.0036
1hr - Maximum	0.0042	0.0055	0.0041	0.0041	0.0038	0.0036	0.0043
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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Approved by

*Orawan R.*

Orawan Rakkyong  
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Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109972**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145678-1

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Sample Description		Air Quality														
Location		ตำบลห้วยนาหมื่น (A2)														
Parameter		Sulfur Dioxide (ppm)														
Measurement Date		Oct 11, 2024 - Oct 18, 2024														
Measurement by		Norranon Tahongkham														
Time		24109972-8	24109972-9	24109972-10	24109972-11	24109972-12	24109972-13	24109972-14								
		Oct 11, 2024	Oct 12, 2024	Oct 13, 2024	Oct 14, 2024	Oct 15, 2024	Oct 16, 2024	Oct 17, 2024								
12:00 PM - 01:00 PM		0.0018	0.0020	0.0009	0.0023	0.0051	0.0035	0.0027								
01:00 PM - 02:00 PM		0.0014	0.0024	0.0020	0.0024	0.0056	0.0031	0.0027								
02:00 PM - 03:00 PM		0.0014	0.0035	0.0037	0.0023	0.0060	0.0033	0.0030								
03:00 PM - 04:00 PM		0.0014	0.0040	0.0043	0.0024	0.0064	0.0041	0.0037								
04:00 PM - 05:00 PM		0.0021	0.0040	0.0041	0.0028	0.0061	0.0049	0.0043								
05:00 PM - 06:00 PM		0.0021	0.0038	0.0041	0.0032	0.0057	0.0057	0.0048								
06:00 PM - 07:00 PM		0.0027	0.0039	0.0042	0.0035	0.0055	0.0055	0.0053								
07:00 PM - 08:00 PM		0.0028	0.0041	0.0041	0.0036	0.0053	0.0056	0.0053								
08:00 PM - 09:00 PM		0.0031	0.0033	0.0041	0.0036	0.0055	0.0054	0.0035								
09:00 PM - 10:00 PM		0.0033	0.0035	0.0042	0.0037	0.0053	0.0054	0.0052								
10:00 PM - 11:00 PM		0.0033	0.0037	0.0040	0.0039	0.0050	0.0054	0.0030								
11:00 PM - 12:00 AM		0.0035	0.0035	0.0035	0.0040	0.0045	0.0052	0.0029								
12:00 AM - 01:00 AM		0.0040	0.0037	0.0040	0.0041	0.0044	0.0054	0.0053								
01:00 AM - 02:00 AM		0.0042	0.0036	0.0041	0.0046	0.0044	0.0055	0.0029								
02:00 AM - 03:00 AM		0.0038	0.0035	0.0041	0.0045	0.0043	0.0055	0.0034								
03:00 AM - 04:00 AM		0.0025	0.0036	0.0040	0.0044	0.0043	0.0055	0.0026								
04:00 AM - 05:00 AM		0.0028	0.0036	0.0039	0.0045	0.0044	0.0053	0.0039								
05:00 AM - 06:00 AM		0.0025	0.0035	0.0037	0.0045	0.0038	0.0042	0.0031								
06:00 AM - 07:00 AM		0.0033	0.0035	0.0028	0.0041	0.0033	0.0030	0.0026								
07:00 AM - 08:00 AM		0.0020	0.0034	0.0024	0.0035	0.0030	0.0027	0.0027								
08:00 AM - 09:00 AM		0.0028	0.0027	0.0022	0.0027	0.0027	0.0026	0.0027								
09:00 AM - 10:00 AM		0.0022	0.0018	0.0017	0.0032	0.0038	0.0025	0.0030								
10:00 AM - 11:00 AM		0.0018	0.0012	0.0017	0.0041	0.0048	0.0026	0.0027								
11:00 AM - 12:00 PM		0.0019	0.0010	0.0020	0.0042	0.0046	0.0026	0.0026								
Average		0.0026	0.0032	0.0033	0.0036	0.0047	0.0044	0.0035								
1hr - Maximum		0.0042	0.0041	0.0043	0.0046	0.0064	0.0057	0.0053								
Standard 1hr - Average		0.3	0.3	0.3	0.3	0.3	0.3	0.3								
Standard 24 hrs - Average		0.12	0.12	0.12	0.12	0.12	0.12	0.12								
Standard Reference Method		: 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).														
		US EPA Method Part 53 and 58														



## Analysis / Test Report

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**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109972**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145679-1

Page 1 of 1

Sample Description	Air Quality	24109972-15	24109972-16	24109972-17	24109972-18	24109972-19	24109972-20	24109972-21
Location	พื้นที่อุตสาหกรรม (A3)							
Parameter	Sulfur Dioxide (ppm)							
Measurement Date	Oct 11, 2024 - Oct 18, 2024							
Measurement by	Norranon Tathongkham							
Time		Oct 11, 2024	Oct 12, 2024	Oct 13, 2024	Oct 14, 2024	Oct 15, 2024	Oct 16, 2024	Oct 17, 2024
09:00 AM - 10:00 AM		0.0068	0.0065	0.0070	0.0065	0.0069	0.0069	0.0082
10:00 AM - 11:00 AM		0.0066	0.0063	0.0067	0.0063	0.0069	0.0069	0.0084
11:00 AM - 12:00 PM		0.0062	0.0062	0.0066	0.0063	0.0071	0.0084	0.0081
12:00 PM - 01:00 PM		0.0062	0.0066	0.0065	0.0071	0.0078	0.0087	0.0082
01:00 PM - 02:00 PM		0.0062	0.0076	0.0066	0.0077	0.0083	0.0085	0.0082
02:00 PM - 03:00 PM		0.0066	0.0085	0.0066	0.0083	0.0086	0.0086	0.0083
03:00 PM - 04:00 PM		0.0068	0.0087	0.0069	0.0079	0.0080	0.0086	0.0086
04:00 PM - 05:00 PM		0.0068	0.0087	0.0075	0.0079	0.0080	0.0087	0.0085
05:00 PM - 06:00 PM		0.0080	0.0088	0.0081	0.0081	0.0084	0.0089	0.0083
06:00 PM - 07:00 PM		0.0084	0.0092	0.0087	0.0086	0.0088	0.0090	0.0077
07:00 PM - 08:00 PM		0.0089	0.0093	0.0087	0.0087	0.0090	0.0090	0.0071
08:00 PM - 09:00 PM		0.0091	0.0096	0.0090	0.0088	0.0091	0.0090	0.0069
09:00 PM - 10:00 PM		0.0091	0.0098	0.0089	0.0087	0.0091	0.0088	0.0064
10:00 PM - 11:00 PM		0.0090	0.0097	0.0091	0.0088	0.0090	0.0086	0.0060
11:00 PM - 12:00 AM		0.0090	0.0092	0.0092	0.0093	0.0092	0.0083	0.0061
12:00 AM - 01:00 AM		0.0091	0.0099	0.0092	0.0092	0.0092	0.0081	0.0058
01:00 AM - 02:00 AM		0.0091	0.0099	0.0091	0.0092	0.0092	0.0080	0.0056
02:00 AM - 03:00 AM		0.0092	0.0098	0.0093	0.0092	0.0092	0.0078	0.0057
03:00 AM - 04:00 AM		0.0092	0.0096	0.0092	0.0090	0.0092	0.0076	0.0058
04:00 AM - 05:00 AM		0.0090	0.0095	0.0090	0.0091	0.0092	0.0073	0.0065
05:00 AM - 06:00 AM		0.0091	0.0095	0.0092	0.0090	0.0089	0.0072	0.0073
06:00 AM - 07:00 AM		0.0089	0.0091	0.0089	0.0088	0.0087	0.0075	0.0079
07:00 AM - 08:00 AM		0.0078	0.0084	0.0076	0.0078	0.0081	0.0074	0.0081
08:00 AM - 09:00 AM		0.0070	0.0076	0.0069	0.0071	0.0071	0.0084	0.0084
Average		0.0080	0.0087	0.0081	0.0082	0.0084	0.0082	0.0073
1hr - Maximum		0.0092	0.0099	0.0093	0.0093	0.0092	0.0090	0.0086
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard								
Reference Method		: 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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S:\Report\Air SONDO-rp (5:19PM)



## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109972**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145682-1

Page 1 of 1

Sample Description	Air Quality	24109972-22	24109972-23	24109972-24	24109972-25	24109972-26	24109972-27	24109972-28
Location	พื้นที่อุตสาหกรรม (A4)							
Parameter	Sulfur Dioxide (ppm)							
Measurement Date	Oct 11, 2024 - Oct 18, 2024							
Measurement by	Norranon Tathongkham							
Time		Oct 11, 2024	Oct 12, 2024	Oct 13, 2024	Oct 14, 2024	Oct 15, 2024	Oct 16, 2024	Oct 17, 2024
10:00 AM - 11:00 AM		0.0036	0.0048	0.0057	0.0038	0.0030	0.0031	0.0041
11:00 AM - 12:00 PM		0.0036	0.0053	0.0057	0.0035	0.0031	0.0021	0.0038
12:00 PM - 01:00 PM		0.0033	0.0057	0.0038	0.0031	0.0026	0.0028	0.0036
01:00 PM - 02:00 PM		0.0028	0.0053	0.0031	0.0031	0.0024	0.0026	0.0032
02:00 PM - 03:00 PM		0.0030	0.0049	0.0030	0.0032	0.0028	0.0025	0.0029
03:00 PM - 04:00 PM		0.0033	0.0049	0.0033	0.0020	0.0025	0.0024	0.0027
04:00 PM - 05:00 PM		0.0035	0.0047	0.0037	0.0020	0.0022	0.0025	0.0027
05:00 PM - 06:00 PM		0.0038	0.0047	0.0037	0.0020	0.0034	0.0025	0.0028
06:00 PM - 07:00 PM		0.0040	0.0046	0.0036	0.0021	0.0036	0.0022	0.0027
07:00 PM - 08:00 PM		0.0044	0.0045	0.0035	0.0023	0.0021	0.0024	0.0027
08:00 PM - 09:00 PM		0.0047	0.0045	0.0037	0.0026	0.0023	0.0030	0.0028
09:00 PM - 10:00 PM		0.0047	0.0047	0.0038	0.0031	0.0030	0.0031	0.0029
10:00 PM - 11:00 PM		0.0047	0.0044	0.0041	0.0034	0.0020	0.0024	0.0027
11:00 PM - 12:00 AM		0.0023	0.0046	0.0042	0.0039	0.0022	0.0020	0.0028
12:00 AM - 01:00 AM		0.0026	0.0046	0.0042	0.0044	0.0022	0.0028	0.0028
01:00 AM - 02:00 AM		0.0038	0.0044	0.0043	0.0043	0.0035	0.0019	0.0029
02:00 AM - 03:00 AM		0.0046	0.0049	0.0047	0.0055	0.0023	0.0020	0.0026
03:00 AM - 04:00 AM		0.0048	0.0048	0.0046	0.0057	0.0034	0.0024	0.0025
04:00 AM - 05:00 AM		0.0052	0.0048	0.0047	0.0048	0.0025	0.0025	0.0025
05:00 AM - 06:00 AM		0.0050	0.0043	0.0046	0.0026	0.0030	0.0026	0.0027
06:00 AM - 07:00 AM		0.0041	0.0040	0.0039	0.0034	0.0028	0.0026	0.0029
07:00 AM - 08:00 AM		0.0032	0.0038	0.0037	0.0025	0.0029	0.0030	0.0030
08:00 AM - 09:00 AM		0.0035	0.0037	0.0036	0.0038	0.0030	0.0034	0.0030
09:00 AM - 10:00 AM		0.0040	0.0037	0.0038	0.0041	0.0030	0.0038	0.0031
Average		0.0039	0.0046	0.0040	0.0034	0.0027	0.0026	0.0029
1hr - Maximum		0.0052	0.0057	0.0057	0.0057	0.0036	0.0038	0.0041
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard								
Reference Method		: 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

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RJL

**Lot ID: 24109970**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3118967-1

Page 1 of 1

Sample Description		Air Quality						
Location		พื้นที่อุตสาหกรรมโรงงาน (A1)						
Parameter		Nitrogen dioxide (ppm)						
Measurement Date	Measurement by	Oct 11, 2024 - Oct 18, 2024						
		Noranon Takhongkham						
Time		24109970-1 Oct 11, 2024	24109970-2 Oct 12, 2024	24109970-3 Oct 13, 2024	24109970-4 Oct 14, 2024	24109970-5 Oct 15, 2024	24109970-6 Oct 16, 2024	24109970-7 Oct 17, 2024
11:00 AM - 12:00 PM		0.0021	0.0042	0.0031	0.0030	0.0053	0.0053	0.0022
12:00 PM - 01:00 PM		0.0026	0.0037	0.0029	0.0040	0.0053	0.0046	0.0035
01:00 PM - 02:00 PM		0.0031	0.0046	0.0030	0.0038	0.0044	0.0082	0.0033
02:00 PM - 03:00 PM		0.0036	0.0043	0.0029	0.0056	0.0048	0.0091	0.0035
03:00 PM - 04:00 PM		0.0045	0.0048	0.0033	0.0054	0.0048	0.0074	0.0030
04:00 PM - 05:00 PM		0.0055	0.0058	0.0044	0.0048	0.0054	0.0067	0.0032
05:00 PM - 06:00 PM		0.0050	0.0051	0.0042	0.0051	0.0052	0.0077	0.0030
06:00 PM - 07:00 PM		0.0044	0.0049	0.0060	0.0059	0.0053	0.0083	0.0029
07:00 PM - 08:00 PM		0.0054	0.0047	0.0060	0.0064	0.0051	0.0068	0.0026
08:00 PM - 09:00 PM		0.0059	0.0042	0.0058	0.0064	0.0060	0.0064	0.0043
09:00 PM - 10:00 PM		0.0056	0.0041	0.0048	0.0055	0.0060	0.0061	0.0044
10:00 PM - 11:00 PM		0.0046	0.0040	0.0052	0.0051	0.0060	0.0055	0.0053
11:00 PM - 12:00 AM		0.0046	0.0045	0.0044	0.0048	0.0061	0.0056	0.0051
12:00 AM - 01:00 AM		0.0043	0.0040	0.0043	0.0049	0.0054	0.0054	0.0051
01:00 AM - 02:00 AM		0.0040	0.0038	0.0043	0.0046	0.0050	0.0055	0.0042
02:00 AM - 03:00 AM		0.0046	0.0038	0.0037	0.0049	0.0048	0.0051	0.0043
03:00 AM - 04:00 AM		0.0041	0.0040	0.0035	0.0047	0.0048	0.0047	0.0046
04:00 AM - 05:00 AM		0.0038	0.0036	0.0034	0.0045	0.0047	0.0043	0.0042
05:00 AM - 06:00 AM		0.0040	0.0035	0.0033	0.0042	0.0048	0.0044	0.0041
06:00 AM - 07:00 AM		0.0041	0.0035	0.0036	0.0041	0.0047	0.0048	0.0043
07:00 AM - 08:00 AM		0.0047	0.0036	0.0040	0.0050	0.0066	0.0052	0.0040
08:00 AM - 09:00 AM		0.0052	0.0035	0.0043	0.0054	0.0060	0.0058	0.0035
09:00 AM - 10:00 AM		0.0045	0.0033	0.0037	0.0054	0.0049	0.0045	0.0035
10:00 AM - 11:00 AM		0.0044	0.0031	0.0036	0.0057	0.0056	0.0036	0.0036
Average		0.0044	0.0041	0.0041	0.0050	0.0053	0.0059	0.0038
1hr - Maximum		0.0059	0.0058	0.0060	0.0064	0.0066	0.0091	0.0053
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 :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RJL

**Lot ID: 24109970**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145675-1

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	สถานีโรงงาน (A2)	
Measurement Date	Measurement by	Nitrogen dioxide (ppm)	
		Noranon Takhongkham	
Time		24109970-8	24109970-9
		Oct 11, 2024	Oct 12, 2024
12:00 PM - 01:00 PM		0.0054	0.0034
01:00 PM - 02:00 PM		0.0061	0.0030
02:00 PM - 03:00 PM		0.0051	0.0030
03:00 PM - 04:00 PM		0.0053	0.0025
04:00 PM - 05:00 PM		0.0054	0.0037
05:00 PM - 06:00 PM		0.0061	0.0038
06:00 PM - 07:00 PM		0.0051	0.0050
07:00 PM - 08:00 PM		0.0059	0.0048
08:00 PM - 09:00 PM		0.0045	0.0042
09:00 PM - 10:00 PM		0.0052	0.0041
10:00 PM - 11:00 PM		0.0056	0.0039
11:00 PM - 12:00 AM		0.0052	0.0038
12:00 AM - 01:00 AM		0.0049	0.0039
01:00 AM - 02:00 AM		0.0048	0.0046
02:00 AM - 03:00 AM		0.0039	0.0042
03:00 AM - 04:00 AM		0.0018	0.0046
04:00 AM - 05:00 AM		0.0004	0.0036
05:00 AM - 06:00 AM		0.0031	0.0050
06:00 AM - 07:00 AM		0.0055	0.0042
07:00 AM - 08:00 AM		0.0041	0.0042
08:00 AM - 09:00 AM		0.0044	0.0040
09:00 AM - 10:00 AM		0.0056	0.0045
10:00 AM - 11:00 AM		0.0054	0.0050
11:00 AM - 12:00 PM		0.0058	0.0033
Average		0.0047	0.0040
1hr - Maximum		0.0061	0.0050
Standard 1hr - Average		0.170	0.170
Standard Reference Method	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552). : US EPA Method Part 50 App. F (Chemiluminescence)		

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nongjajok Rd., Nongjajok, Bankhai, Rayong Thailand 21120  
**P/O :** 5424057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109970**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145676-1

Page 1 of 1

Sample Description	Air Quality	
Location	พื้นที่อุตสาหกรรม (A3)	
Parameter	Nitrogen dioxide (ppm)	
Measurement Date	Oct 11, 2024 - Oct 16, 2024	
Measurement by	Norranon Taitongkham	
Time	24109970-15 Oct 11, 2024	24109970-16 Oct 12, 2024

09:00 AM - 10:00 AM	0.0045	0.0066	0.0029	0.0051	24109970-17 Oct 13, 2024	24109970-18 Oct 14, 2024	24109970-19 Oct 15, 2024	24109970-20 Oct 16, 2024	24109970-21 Oct 17, 2024
10:00 AM - 11:00 AM	0.0009	0.0029	0.0016	0.0034	0.0048	0.0048	0.0048	0.0048	0.0059
11:00 AM - 12:00 PM	0.0030	0.0016	0.0010	0.0015	0.0047	0.0069	0.0045	0.0045	0.0046
12:00 PM - 01:00 PM	0.0018	0.0010	0.0005	0.0011	0.0037	0.0062	0.0050	0.0050	0.0045
01:00 PM - 02:00 PM	0.0008	0.0008	0.0010	0.0037	0.0083	0.0073	0.0063	0.0063	0.0063
02:00 PM - 03:00 PM	0.0014	0.0084	0.0015	0.0047	0.0078	0.0073	0.0060	0.0060	0.0060
03:00 PM - 04:00 PM	0.0065	0.0042	0.0006	0.0086	0.0070	0.0066	0.0061	0.0061	0.0061
04:00 PM - 05:00 PM	0.0056	0.0063	0.0028	0.0053	0.0100	0.0073	0.0058	0.0058	0.0058
05:00 PM - 06:00 PM	0.0049	0.0057	0.0064	0.0050	0.0065	0.0053	0.0056	0.0056	0.0056
06:00 PM - 07:00 PM	0.0075	0.0064	0.0078	0.0072	0.0049	0.0081	0.0054	0.0054	0.0054
07:00 PM - 08:00 PM	0.0059	0.0057	0.0095	0.0098	0.0056	0.0087	0.0060	0.0060	0.0060
08:00 PM - 09:00 PM	0.0073	0.0047	0.0120	0.0122	0.0065	0.0071	0.0062	0.0062	0.0062
09:00 PM - 10:00 PM	0.0059	0.0034	0.0110	0.0097	0.0128	0.0059	0.0059	0.0059	0.0059
10:00 PM - 11:00 PM	0.0050	0.0045	0.0080	0.0090	0.0104	0.0058	0.0049	0.0049	0.0049
11:00 PM - 12:00 AM	0.0038	0.0041	0.0076	0.0108	0.0076	0.0059	0.0053	0.0053	0.0053
12:00 AM - 01:00 AM	0.0044	0.0055	0.0055	0.0097	0.0075	0.0068	0.0062	0.0062	0.0062
01:00 AM - 02:00 AM	0.0051	0.0051	0.0055	0.0073	0.0067	0.0063	0.0055	0.0055	0.0055
02:00 AM - 03:00 AM	0.0073	0.0041	0.0052	0.0065	0.0061	0.0059	0.0051	0.0051	0.0051
03:00 AM - 04:00 AM	0.0077	0.0049	0.0047	0.0063	0.0056	0.0037	0.0053	0.0053	0.0053
04:00 AM - 05:00 AM	0.0061	0.0052	0.0048	0.0048	0.0062	0.0033	0.0049	0.0049	0.0049
05:00 AM - 06:00 AM	0.0048	0.0073	0.0042	0.0048	0.0042	0.0028	0.0043	0.0043	0.0043
06:00 AM - 07:00 AM	0.0047	0.0051	0.0045	0.0044	0.0042	0.0025	0.0050	0.0050	0.0050
07:00 AM - 08:00 AM	0.0049	0.0036	0.0038	0.0037	0.0034	0.0034	0.0042	0.0042	0.0042
08:00 AM - 09:00 AM	0.0070	0.0040	0.0049	0.0046	0.0061	0.0053	0.0056	0.0056	0.0056
Average	0.0049	0.0046	0.0049	0.0062	0.0065	0.0059	0.0054	0.0054	0.0054
1hr - Maximum	0.0077	0.0084	0.0120	0.0122	0.0128	0.0087	0.0063	0.0063	0.0063
Standard 1hr - Average	0.170	0.170	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 :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nongjajok Rd., Nongjajok, Bankhai, Rayong Thailand 21120  
**P/O :** 5424057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**Lot ID: 24109970**  
Date Received : Oct 18, 2024  
Date Reported : Oct 23, 2024  
Report Number: 3145677-1

Page 1 of 1

Sample Description	Air Quality	
Location	พื้นที่อุตสาหกรรม (A4)	
Parameter	Nitrogen dioxide (ppm)	
Measurement Date	Oct 11, 2024 - Oct 18, 2024	
Measurement by	Norranon Taitongkham	
Time	24109970-22 Oct 11, 2024	24109970-23 Oct 12, 2024

10:00 AM - 11:00 AM	0.0032	0.0035	0.0032	0.0032	24109970-24 Oct 13, 2024	24109970-25 Oct 14, 2024	24109970-26 Oct 15, 2024	24109970-27 Oct 16, 2024	24109970-28 Oct 17, 2024
11:00 AM - 12:00 PM	0.0029	0.0033	0.0034	0.0033	0.0034	0.0033	0.0033	0.0036	0.0044
12:00 PM - 01:00 PM	0.0032	0.0036	0.0032	0.0037	0.0032	0.0037	0.0037	0.0036	0.0047
01:00 PM - 02:00 PM	0.0034	0.0033	0.0031	0.0036	0.0036	0.0040	0.0040	0.0070	0.0046
02:00 PM - 03:00 PM	0.0039	0.0041	0.0038	0.0041	0.0038	0.0040	0.0040	0.0029	0.0052
03:00 PM - 04:00 PM	0.0037	0.0039	0.0048	0.0048	0.0048	0.0045	0.0045	0.0032	0.0053
04:00 PM - 05:00 PM	0.0040	0.0041	0.0038	0.0041	0.0038	0.0058	0.0058	0.0042	0.0049
05:00 PM - 06:00 PM	0.0043	0.0044	0.0035	0.0044	0.0035	0.0051	0.0051	0.0053	0.0042
06:00 PM - 07:00 PM	0.0044	0.0048	0.0035	0.0044	0.0035	0.0038	0.0038	0.0056	0.0048
07:00 PM - 08:00 PM	0.0047	0.0042	0.0037	0.0042	0.0037	0.0034	0.0037	0.0056	0.0043
08:00 PM - 09:00 PM	0.0042	0.0039	0.0033	0.0034	0.0034	0.0030	0.0030	0.0057	0.0039
09:00 PM - 10:00 PM	0.0039	0.0045	0.0036	0.0045	0.0036	0.0032	0.0032	0.0042	0.0043
10:00 PM - 11:00 PM	0.0035	0.0043	0.0031	0.0043	0.0031	0.0034	0.0034	0.0042	0.0041
11:00 PM - 12:00 AM	0.0036	0.0034	0.0035	0.0034	0.0035	0.0035	0.0044	0.0043	0.0039
12:00 AM - 01:00 AM	0.0039	0.0034	0.0041	0.0034	0.0041	0.0048	0.0040	0.0040	0.0039
01:00 AM - 02:00 AM	0.0040	0.0037	0.0040	0.0037	0.0041	0.0040	0.0040	0.0039	0.0045
02:00 AM - 03:00 AM	0.0037	0.0040	0.0038	0.0040	0.0038	0.0049	0.0035	0.0034	0.0045
03:00 AM - 04:00 AM	0.0036	0.0055	0.0039	0.0055	0.0039	0.0049	0.0040	0.0041	0.0045
04:00 AM - 05:00 AM	0.0057	0.0050	0.0047	0.0050	0.0047	0.0046	0.0050	0.0043	0.0060
05:00 AM - 06:00 AM	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0045	0.0052
06:00 AM - 07:00 AM	0.0036	0.0039	0.0032	0.0039	0.0032	0.0042	0.0035	0.0049	0.0041
07:00 AM - 08:00 AM	0.0033	0.0029	0.0023	0.0029	0.0023	0.0035	0.0030	0.0041	0.0039
08:00 AM - 09:00 AM	0.0037	0.0026	0.0029	0.0026	0.0029	0.0030	0.0030	0.0038	0.0038
09:00 AM - 10:00 AM	0.0042	0.0020	0.0034	0.0020	0.0034	0.0029	0.0029	0.0053	0.0050
Average	0.0039	0.0039	0.0036	0.0039	0.0036	0.0038	0.0038	0.0044	0.0045
1hr - Maximum	0.0057	0.0055	0.0047	0.0055	0.0047	0.0049	0.0058	0.0070	0.0060
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).  
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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

Approved by

*Orawan R.*  
Orawan Rakying  
Scientist (3)

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



## ความเร็วและทิศทางการ

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number 24109976-1 to 7

Parameter Wind Speed / Wind Direction

Location บ้านท่าช้างอุตสาหกรรมบ่อทราย (A1)

Sampling Date Oct 11 - Oct 18, 2024

Sampling by Norranon Tathongkham

Time	Oct 11 - Oct 12, 2024	Oct 12 - Oct 13, 2024	Oct 13 - Oct 14, 2024	Oct 14 - Oct 15, 2024	Oct 15 - Oct 16, 2024	Oct 16 - Oct 17, 2024	Oct 17 - Oct 18, 2024
WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
11:00 AM - 12:00 PM	2.0 62.0 ENE	0.5 332.0 NNW	0.7 110.0 ESE	0.0 -	0.9 319.0 NW	3.1 165.0 SSE	0.0 -
12:00 PM - 01:00 PM	0.4 98.0 E	-	3.7 55.0 NE	0.6 188.0 S	0.0 -	0.0 -	0.4 149.0 SSE
01:00 PM - 02:00 PM	0.0 -	0.3 247.0 WSW	1.6 88.0 E	0.0 -	0.5 312.0 NW	0.0 -	0.7 251.0 WSW
02:00 PM - 03:00 PM	1.1 174.0 S	1.0 317.0 NW	0.7 34.0 NE	0.0 -	0.0 -	0.2 -	0.0 -
03:00 PM - 04:00 PM	0.2 -	0.3 331.0 NNW	1.1 323.0 NW	0.0 -	0.0 -	0.2 -	0.0 -
04:00 PM - 05:00 PM	0.9 193.0 SSW	0.4 4.0 N	0.0 -	0.0 -	0.2 -	0.0 -	0.0 -
05:00 PM - 06:00 PM	0.5 215.0 SW	0.6 7.0 N	0.0 -	0.0 -	0.3 232.0 SW	0.0 -	0.3 330.0 NNW
06:00 PM - 07:00 PM	0.2 -	0.2 -	0.0 -	0.0 -	0.0 -	0.3 33.0 NNE	0.5 26.0 NNE
07:00 PM - 08:00 PM	0.2 -	0.3 45.0 NE	0.0 -	0.0 -	0.3 230.0 SW	0.5 33.0 NNE	0.6 25.0 NNE
08:00 PM - 09:00 PM	0.3 66.0 ENE	0.5 20.0 NNE	0.0 -	0.0 -	0.0 -	0.0 -	0.0 -
09:00 PM - 10:00 PM	0.2 -	0.5 20.0 NNE	0.0 -	0.0 -	0.4 183.0 S	0.2 -	0.0 -
10:00 PM - 11:00 PM	0.2 -	0.2 -	0.0 -	0.0 -	0.3 183.0 S	0.0 -	0.0 -
11:00 PM - 12:00 AM	0.4 336.0 NNW	0.2 -	0.0 -	0.0 -	0.0 -	0.2 -	0.6 16.0 NNE
12:00 AM - 01:00 AM	0.3 336.0 NNW	0.0 -	0.0 -	0.0 -	0.0 -	0.3 33.0 NNE	0.0 -
01:00 AM - 02:00 AM	0.5 336.0 NNW	0.6 20.0 NNE	0.0 -	0.0 -	0.2 -	0.0 -	0.3 17.0 NNE
02:00 AM - 03:00 AM	0.3 336.0 NNW	0.5 20.0 NNE	0.0 -	0.0 -	0.3 44.0 NE	0.0 -	0.3 213.0 SSW
03:00 AM - 04:00 AM	0.3 336.0 NNW	0.0 -	0.0 -	0.0 -	0.3 44.0 NE	0.3 33.0 NNE	0.0 -
04:00 AM - 05:00 AM	0.3 336.0 NNW	0.3 358.0 N	0.0 -	0.0 -	0.3 44.0 NE	0.5 33.0 NNE	0.0 -
05:00 AM - 06:00 AM	0.3 336.0 NNW	0.0 -	0.0 -	0.0 -	0.5 45.0 NE	0.3 33.0 NNE	0.5 65.0 ENE
06:00 AM - 07:00 AM	1.0 323.0 NW	0.3 358.0 N	0.0 -	0.0 -	0.0 -	0.0 -	0.3 344.0 NNW
07:00 AM - 08:00 AM	0.6 311.0 NW	0.4 86.0 E	0.4 65.0 ENE	0.0 -	0.2 -	0.0 -	0.4 332.0 NNW
08:00 AM - 09:00 AM	1.8 39.0 NE	0.9 48.0 NE	0.0 -	0.0 -	0.0 -	0.0 -	0.1 -
09:00 AM - 10:00 AM	1.1 45.0 NE	0.3 172.0 S	0.4 76.0 ENE	0.0 -	0.0 -	0.2 -	0.0 -
10:00 AM - 11:00 AM	0.0 -	0.5 37.0 NE	0.0 -	0.0 -	1.2 226.0 SW	0.2 -	0.1 -

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jitranont

Assistant General Manager

Approved by

Approved by

Sarayuth Jitranont

Assistant General Manager



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

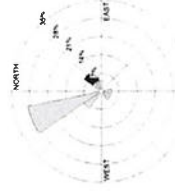
P/O : 54240057

Project Name : Monitoring

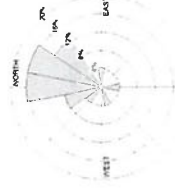
Project Location : WHA RIL

Page 2 of 2

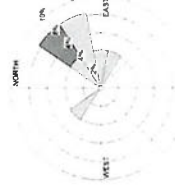
### Wind Rose



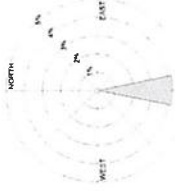
Date : Oct 11-12, 2024



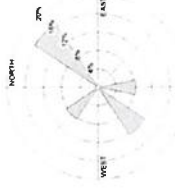
Date : Oct 12-13, 2024



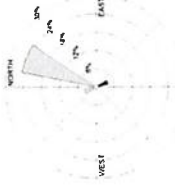
Date : Oct 13-14, 2024



Date : Oct 14-15, 2024



Date : Oct 15-16, 2024



Date : Oct 16-17, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	1.79
0.3-1.7	40.48
Calm	57.14

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Sarayuth Jitranont

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number 24109976-8 to 14

Parameter Wind Speed / Wind Direction

Location ต.นาหว้า อ.นาหว้า จ.หนองบัวลำภู (A2)

Sampling Date Oct 11 - Oct 18, 2024

Sampling by Norranon Tathongkham

Time		Oct 11 - Oct 12, 2024		Oct 12 - Oct 13, 2024		Oct 13 - Oct 14, 2024		Oct 14 - Oct 15, 2024		Oct 15 - Oct 16, 2024		Oct 16 - Oct 17, 2024		Oct 17 - Oct 18, 2024							
		WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)						
12:00 PM - 01:00 PM	1.8	149.0	SSE	1.1	205.0	SSW	2.0	154.0	SSE	0.9	49.0	NE	0.6	102.0	ESE	0.2	-	-	0.8	206.0	SSW
01:00 PM - 02:00 PM	1.1	155.0	SSE	1.0	255.0	WSW	0.8	168.0	SSE	1.0	3.0	N	2.3	84.0	E	0.8	171.0	S	1.1	252.0	WSW
02:00 PM - 03:00 PM	1.2	164.0	SSE	0.6	91.0	E	0.8	12.0	NNE	0.3	167.0	SSE	0.4	240.0	WSW	0.6	15.0	NNE	0.9	88.0	E
03:00 PM - 04:00 PM	0.5	150.0	SSE	1.5	105.0	ESE	0.8	62.0	ENE	1.4	149.0	SSE	0.9	194.0	SSW	0.3	61.0	ENE	0.3	106.0	ESE
04:00 PM - 05:00 PM	1.1	189.0	S	1.7	66.0	ENE	0.6	21.0	NNE	2.1	190.0	S	0.6	233.0	SW	1.3	22.0	NNE	1.5	65.0	ENE
05:00 PM - 06:00 PM	0.4	143.0	SE	0.7	112.0	ESE	3.2	39.0	NE	1.0	140.0	SE	0.9	219.0	SW	0.6	36.0	NE	1.2	115.0	ESE
06:00 PM - 07:00 PM	0.8	239.0	WSW	1.7	16.0	NNE	1.3	71.0	ENE	1.4	236.0	SW	1.9	187.0	S	0.7	68.0	ENE	2.0	19.0	NNE
07:00 PM - 08:00 PM	0.4	221.0	SW	1.6	34.0	NE	0.6	117.0	ESE	3.3	222.0	SW	0.7	137.0	SE	0.7	118.0	ESE	0.2	-	-
08:00 PM - 09:00 PM	0.3	252.0	WSW	0.2	-	-	2.3	84.0	E	2.5	255.0	WSW	2.3	168.0	SSE	1.4	87.0	E	0.7	0.0	N
09:00 PM - 10:00 PM	0.6	206.0	SSW	1.9	49.0	NE	2.6	102.0	ESE	2.3	205.0	SSW	0.5	154.0	SSE	1.0	101.0	E	0.4	50.0	NE
10:00 PM - 11:00 PM	0.6	229.0	SW	0.9	26.0	NNE	1.5	77.0	ENE	1.9	230.0	SW	1.6	177.0	S	0.4	78.0	ENE	1.8	25.0	NNE
11:00 PM - 12:00 AM	0.5	215.0	SW	0.0	-	-	2.3	127.0	SE	0.5	212.0	SSW	0.1	-	-	0.4	124.0	SE	0.6	43.0	NE
12:00 AM - 01:00 AM	0.8	179.0	S	0.9	228.0	SW	0.6	79.0	E	0.9	24.0	NNE	1.1	231.0	SW	0.4	176.0	S	0.8	49.0	NE
01:00 AM - 02:00 AM	0.9	129.0	SE	2.1	214.0	SW	0.6	125.0	SE	1.1	42.0	NE	0.4	213.0	SSW	0.6	130.0	SE	0.0	-	-
02:00 AM - 03:00 AM	0.9	170.0	S	0.1	-	-	0.3	86.0	E	0.4	1.0	N	0.6	254.0	WSW	0.3	169.0	S	0.5	40.0	NE
03:00 AM - 04:00 AM	0.0	-	-	0.1	-	-	0.4	100.0	E	0.0	-	-	0.2	-	-	0.5	155.0	SSE	0.2	-	-
04:00 AM - 05:00 AM	0.1	-	-	0.2	-	-	0.5	192.0	SSW	0.2	-	-	0.1	-	-	0.6	63.0	ENE	0.1	-	-
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.6	242.0	WSW	0.3	165.0	SSE	0.2	-	-	0.8	13.0	NNE	0.4	140.0	SE
06:00 AM - 07:00 AM	0.0	-	-	0.3	114.0	ESE	0.4	217.0	SW	0.6	142.0	SE	0.3	113.0	ESE	0.1	-	-	0.5	167.0	SSE
07:00 AM - 08:00 AM	0.1	-	-	0.4	64.0	ENE	0.5	235.0	SW	0.0	-	-	0.4	67.0	ENE	0.1	-	-	0.3	149.0	SSE
08:00 AM - 09:00 AM	0.4	119.0	ESE	1.1	32.0	NNE	0.3	139.0	SE	0.1	-	-	0.5	35.0	NE	0.1	-	-	0.5	245.0	WSW
09:00 AM - 10:00 AM	0.5	69.0	ENE	0.5	18.0	NNE	0.4	185.0	S	0.9	238.0	WSW	0.3	17.0	NNE	0.5	70.0	ENE	0.5	233.0	SW
10:00 AM - 11:00 AM	0.6	212.0	SSW	0.8	131.0	SE	1.0	40.0	NE	0.5	127.0	SE	0.3	128.0	SE	1.9	215.0	SW	2.2	238.0	WSW
11:00 AM - 12:00 PM	1.9	230.0	SW	0.9	177.0	S	1.4	26.0	NNE	0.5	77.0	ENE	1.8	178.0	S	1.7	229.0	SW	1.5	242.0	WSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/monitored sample(s) as indicated in this report. This report is for reference only and should not be used for legal or regulatory purposes without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuht Jitranont  
Assistant General Manager

Approved by

Sarayuht Jitranont  
Assistant General Manager



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

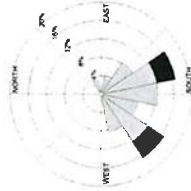
P/O : 54240057

Project Name : Monitoring

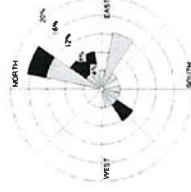
Project Location : WHA RIL

Page 2 of 2

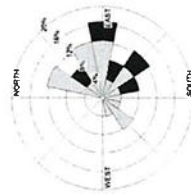
### Wind Rose



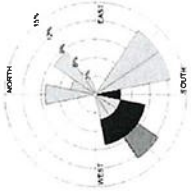
Date : Oct 11-12, 2024



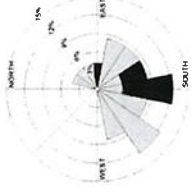
Date : Oct 12-13, 2024



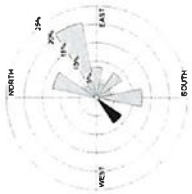
Date : Oct 13-14, 2024



Date : Oct 14-15, 2024



Date : Oct 15-16, 2024



Date : Oct 16-17, 2024

WS (m/s)	%
> 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	14.29
0.3-1.7	69.05
Calm	16.07

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Approved by

Sarayuht Jitranont  
Assistant General Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number 24109976-15 to 21

Parameter Wind Speed / Wind Direction

Location 4444444444444444 (A3)

Sampling Date Oct 11 - Oct 18, 2024

Sampling by Norranon Tathongkham

Time	Oct 11 - Oct 12, 2024	Oct 12 - Oct 13, 2024	Oct 13 - Oct 14, 2024	Oct 14 - Oct 15, 2024	Oct 15 - Oct 16, 2024	Oct 16 - Oct 17, 2024	Oct 17 - Oct 18, 2024
WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)
WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)
09:00 AM - 10:00 AM	0.4 175.0 S	2.5 166.7 SSE	1.0 148.8 SSE	1.0 64.1 ENE	0.8 91.1 E	0.5 68.6 ENE	0.4 340.6 NNW
10:00 AM - 11:00 AM	0.9 171.2 S	1.0 161.7 SSE	0.3 201.3 SSW	0.6 53.1 NE	1.1 131.8 SE	1.1 76.8 ENE	0.2 -
11:00 AM - 12:00 PM	2.0 174.5 S	1.0 168.2 SSE	1.0 162.3 SSE	1.3 59.8 ENE	2.4 149.6 SSE	2.1 306.0 NW	2.0 341.9 NNW
12:00 PM - 01:00 PM	0.9 165.5 SSE	1.0 164.2 SSE	0.6 240.5 WSW	1.7 330.2 NNW	0.5 129.6 SE	1.0 317.4 NW	1.8 355.0 N
01:00 PM - 02:00 PM	0.8 174.2 S	0.8 166.0 SSE	-	1.8 212.2 SSW	1.0 171.0 S	0.9 314.1 NW	1.0 310.5 NW
02:00 PM - 03:00 PM	0.1 -	1.1 164.9 SSE	1.5 311.9 NW	1.1 211.6 SSW	1.2 263.8 W	0.9 284.5 WNW	1.0 287.7 WNW
03:00 PM - 04:00 PM	1.6 180.5 S	1.9 143.5 SE	1.3 266.4 W	1.8 185.3 S	2.4 261.2 W	1.0 291.0 WNW	0.5 280.5 W
04:00 PM - 05:00 PM	0.1 -	1.0 163.8 SSE	0.2 -	0.3 142.7 SE	0.1 -	2.6 237.2 WSW	0.7 262.8 W
05:00 PM - 06:00 PM	0.2 -	0.9 173.0 S	0.3 204.4 SSW	1.2 127.8 SE	1.3 350.6 N	1.3 230.8 SW	1.0 240.9 WSW
06:00 PM - 07:00 PM	0.3 216.0 SW	0.3 163.0 SSE	0.1 -	1.0 231.7 SW	1.9 326.2 NW	0.8 233.6 SW	1.0 227.9 SW
07:00 PM - 08:00 PM	0.3 215.0 SW	0.9 150.5 SSE	0.7 222.7 SW	0.8 230.1 SW	0.6 328.4 NNW	0.1 -	-
08:00 PM - 09:00 PM	0.3 213.8 SW	0.6 193.9 SSW	0.1 -	0.7 258.6 WSW	0.5 343.2 NNW	2.2 224.1 SW	0.6 231.9 SW
09:00 PM - 10:00 PM	1.1 224.1 SW	0.3 250.9 WSW	0.7 272.2 W	0.1 -	0.4 245.3 WSW	0.8 224.0 SW	1.0 235.0 SW
10:00 PM - 11:00 PM	2.1 241.1 SW	-	0.6 231.1 SW	0.4 324.9 NW	0.1 -	1.1 224.7 SW	0.5 232.6 SW
11:00 PM - 12:00 AM	0.4 241.5 WSW	1.0 208.2 SSW	0.1 -	0.5 336.0 NNW	1.1 265.3 W	0.6 225.1 SW	0.5 306.9 NW
12:00 AM - 01:00 AM	0.3 241.9 WSW	0.3 305.6 NW	0.1 -	0.1 -	0.9 349.4 N	0.4 249.2 WSW	1.0 315.8 NW
01:00 AM - 02:00 AM	0.2 -	1.1 310.4 NW	0.2 -	0.6 266.2 W	2.3 354.2 N	0.3 287.1 WNW	0.2 -
02:00 AM - 03:00 AM	0.3 242.8 WSW	0.3 310.4 NW	1.0 289.4 WNW	0.9 266.1 W	1.9 338.3 NNW	1.2 346.9 NNW	0.3 305.0 NW
03:00 AM - 04:00 AM	0.1 -	1.0 286.1 WNW	0.3 289.3 WNW	1.0 266.1 W	0.6 356.9 N	1.1 343.3 NNW	1.1 275.0 W
04:00 AM - 05:00 AM	0.3 243.5 WSW	0.3 340.2 NNW	1.0 328.1 NNW	1.1 300.3 WNW	0.1 -	-	-
05:00 AM - 06:00 AM	1.0 243.8 WSW	0.6 339.8 NNW	1.0 357.8 N	1.0 337.4 NNW	0.3 357.6 N	0.1 -	0.2 -
06:00 AM - 07:00 AM	0.9 245.3 WSW	0.4 341.7 NNW	0.3 353.0 N	1.6 350.4 N	1.0 50.9 NE	1.0 342.0 NNW	0.2 -
07:00 AM - 08:00 AM	0.6 249.0 WSW	0.8 150.0 SE	0.8 55.1 NE	1.3 78.5 ENE	0.2 -	-	1.1 345.0 NNW
08:00 AM - 09:00 AM	0.6 208.4 SSW	0.6 136.1 SE	0.9 58.5 ENE	0.8 82.2 E	0.4 60.3 ENE	0.9 355.8 N	0.3 287.1 WNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont

Assistant General Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

P/O : 54240057

Project Name : Monitoring

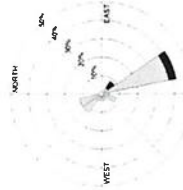
Project Location : WHA RIL

Page 2 of 2

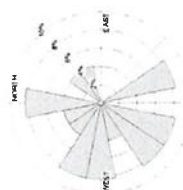
### Wind Rose



Date : Oct 11-12, 2024



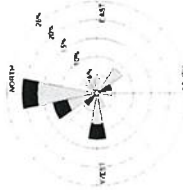
Date : Oct 12-13, 2024



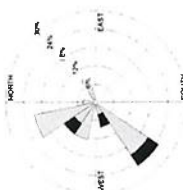
Date : Oct 13-14, 2024



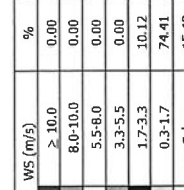
Date : Oct 14-15, 2024



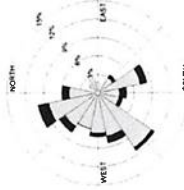
Date : Oct 15-16, 2024



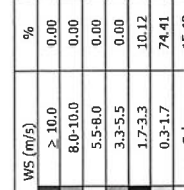
Date : Oct 16-17, 2024



Date : Oct 17-18, 2024



Date : Oct 18-19, 2024



Date : Oct 19-20, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.0-5.5	0.00
1.7-3.3	10.12
0.3-1.7	74.41
Calms	15.48

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Approved by

Sarayuth Jitranont

Assistant General Manager

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number 24109976-22 to 28

Parameter Wind Speed / Wind Direction

Location กรุงเทพมหานคร (A4)

Sampling Date Oct 11 - Oct 18, 2024

Sampling by Norranon Talhongkham

Time	Oct 11 - Oct 12, 2024		Oct 12 - Oct 13, 2024		Oct 13 - Oct 14, 2024		Oct 14 - Oct 15, 2024		Oct 15 - Oct 16, 2024		Oct 16 - Oct 17, 2024		Oct 17 - Oct 18, 2024								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
10:00 AM - 11:00 AM	1.1	123.0	ESE	1.2	160.0	SSE	1.8	62.0	ENE	0.9	329.0	NNW	2.0	116.0	ESE	1.3	184.0	S	1.2	82.0	E
11:00 AM - 12:00 PM	0.8	78.0	ENE	1.8	195.0	SSW	0.8	123.0	ESE	1.3	302.0	NNW	1.9	89.0	E	1.4	338.0	NNW	1.4	100.0	E
12:00 PM - 01:00 PM	1.1	50.0	NE	1.5	152.0	SSE	1.0	66.0	ENE	1.7	313.0	NW	1.5	100.0	E	1.0	255.0	WSW	0.7	86.0	E
01:00 PM - 02:00 PM	1.9	45.0	NE	1.7	95.0	E	1.6	259.0	WSW	1.2	312.0	NW	2.3	99.0	E	1.1	309.0	NW	1.1	88.0	E
02:00 PM - 03:00 PM	1.6	60.0	ENE	1.5	110.0	ESE	1.6	275.0	W	1.5	319.0	NW	1.5	105.0	ESE	1.3	314.0	NW	0.8	134.0	SE
03:00 PM - 04:00 PM	1.1	61.0	ENE	1.7	94.0	E	1.2	272.0	W	1.5	265.0	W	1.1	52.0	NE	1.6	307.0	NW	1.6	97.0	E
04:00 PM - 05:00 PM	1.0	47.0	NE	1.4	103.0	ESE	0.9	270.0	W	1.3	350.0	N	1.1	342.0	NNW	1.2	317.0	NW	2.8	97.0	E
05:00 PM - 06:00 PM	1.1	77.0	ENE	1.5	97.0	E	0.6	274.0	W	2.1	309.0	NW	1.3	301.0	NNW	1.3	324.0	NW	0.6	112.0	ESE
06:00 PM - 07:00 PM	2.3	337.0	NNW	1.0	50.0	NE	1.2	253.0	WSW	0.8	88.0	E	1.3	298.0	NNW	1.1	314.0	NW	0.4	95.0	E
07:00 PM - 08:00 PM	1.3	320.0	NW	0.4	66.0	ENE	1.8	269.0	W	1.2	43.0	NE	1.2	253.0	WSW	1.9	311.0	NW	0.7	349.0	N
08:00 PM - 09:00 PM	1.9	310.0	NW	1.2	58.0	ENE	2.0	317.0	NW	0.8	136.0	SE	1.1	346.0	NNW	1.8	302.0	WSW	1.7	336.0	NNW
09:00 PM - 10:00 PM	1.1	315.0	NW	0.7	58.0	ENE	1.6	263.0	W	1.7	116.0	ESE	0.6	326.0	NW	1.0	249.0	WSW	1.3	353.0	N
10:00 PM - 11:00 PM	1.3	309.0	NW	1.0	69.0	ENE	2.3	260.0	W	1.2	42.0	NE	1.1	252.0	WSW	1.0	261.0	W	2.0	333.0	NNW
11:00 PM - 12:00 AM	2.0	324.0	NW	0.7	67.0	ENE	2.6	264.0	W	0.9	54.0	NE	0.9	249.0	WSW	0.7	234.0	SW	1.5	334.0	NNW
12:00 AM - 01:00 AM	1.0	317.0	NW	0.4	190.0	SSE	1.3	281.0	W	0.8	71.0	ENE	0.3	249.0	WSW	1.1	253.0	WSW	0.9	332.0	NNW
01:00 AM - 02:00 AM	1.0	327.0	NNW	0.7	74.0	ENE	0.9	262.0	W	1.4	52.0	NE	0.4	110.0	ESE	1.1	238.0	WSW	0.8	334.0	NNW
02:00 AM - 03:00 AM	0.5	350.0	N	0.7	59.0	ENE	0.7	331.0	NNW	1.6	51.0	NE	0.6	118.0	ESE	0.8	262.0	W	0.8	334.0	NNW
03:00 AM - 04:00 AM	1.1	226.0	SW	0.4	58.0	ENE	0.7	310.0	NW	0.4	30.0	NNE	0.8	96.0	E	1.0	241.0	WSW	0.8	335.0	NNW
04:00 AM - 05:00 AM	1.0	140.0	SE	0.4	70.0	ENE	1.2	317.0	NW	0.7	37.0	NE	0.4	84.0	E	0.5	108.0	ESE	0.9	334.0	NNW
05:00 AM - 06:00 AM	2.1	152.0	SSE	1.4	71.0	ENE	1.6	305.0	NW	1.0	25.0	NNE	0.4	111.0	ESE	0.8	94.0	E	1.1	358.0	N
06:00 AM - 07:00 AM	1.8	154.0	SSE	0.4	73.0	ENE	1.6	329.0	NNW	1.2	49.0	NE	0.5	119.0	ESE	0.9	86.0	E	0.8	330.0	NNW
07:00 AM - 08:00 AM	2.1	123.0	ESE	0.7	64.0	ENE	1.3	340.0	NNW	0.9	60.0	ENE	0.7	157.0	SSE	0.6	163.0	SSE	1.3	351.0	N
08:00 AM - 09:00 AM	2.0	137.0	SE	0.7	101.0	E	1.2	346.0	NNW	1.7	71.0	ENE	1.4	111.0	ESE	1.2	90.0	E	1.3	331.0	NNW
09:00 AM - 10:00 AM	2.2	145.0	SE	0.7	101.0	E	1.4	331.0	NNW	2.0	56.0	NE	1.5	134.0	SE	1.1	88.0	E	1.2	343.0	NNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont

Assistant General Manager

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

Lot ID: 24109976

Date Received : Oct 18, 2024

Date Reported : Oct 24, 2024

Report Number : 3118988-1

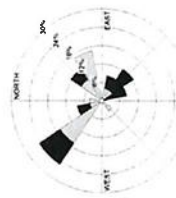
P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Page 1 of 2

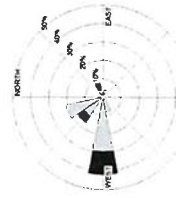
Wind Rose



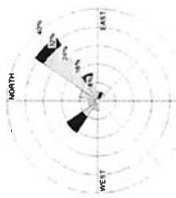
Date : Oct 11-12, 2024



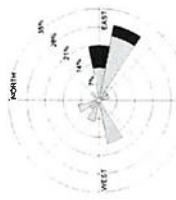
Date : Oct 12-13, 2024



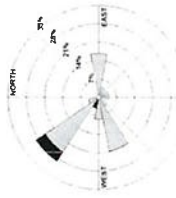
Date : Oct 13-14, 2024



Date : Oct 14-15, 2024



Date : Oct 15-16, 2024



Date : Oct 16-17, 2024

WS (m/s)	%
> 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	17.86
0.3-1.7	82.14
Calms	0.00

Date : Oct 11-18, 2024

Date : Oct 17-18, 2024

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Sarayuth Jitranont

Assistant General Manager

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TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141295-1

Page 1 of 1



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Sample Number	24109991-1
Parameter	Noise (Leq 24 hrs)
Location	พื้นที่สำนักงานและโรงรถรวม (N1)
Measurement Date	Oct 11 - Oct 12, 2024
Measurement by	Norranon Talhongsiam
Sound Level meter	Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	54.1	77.8	48.2
12:00 PM - 01:00 PM	53.3	68.5	47.6
01:00 PM - 02:00 PM	53.9	69.2	49.0
02:00 PM - 03:00 PM	55.0	73.9	49.1
03:00 PM - 04:00 PM	54.5	75.8	49.3
04:00 PM - 05:00 PM	55.4	70.5	50.1
05:00 PM - 06:00 PM	63.5	89.9	51.4
06:00 PM - 07:00 PM	60.3	86.5	52.0
07:00 PM - 08:00 PM	56.1	83.3	51.4
08:00 PM - 09:00 PM	55.2	85.9	50.9
09:00 PM - 10:00 PM	53.3	84.7	50.5
10:00 PM - 11:00 PM	52.5	67.5	51.1
11:00 PM - 12:00 AM	52.8	70.1	50.6
12:00 AM - 01:00 AM	51.6	64.5	49.9
01:00 AM - 02:00 AM	50.3	63.1	49.3
02:00 AM - 03:00 AM	50.2	70.2	48.8
03:00 AM - 04:00 AM	49.5	68.0	48.4
04:00 AM - 05:00 AM	51.6	68.9	48.9
05:00 AM - 06:00 AM	52.8	73.4	49.6
06:00 AM - 07:00 AM	54.2	76.9	49.9
07:00 AM - 08:00 AM	59.2	79.0	52.5
08:00 AM - 09:00 AM	56.0	72.2	50.3
09:00 AM - 10:00 AM	53.9	67.4	49.4
10:00 AM - 11:00 AM	53.8	70.3	48.8
Leq Average 24 hrs. (dB(A))	55.8	89.9	49.6
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	59.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน ฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่ามาตรฐานระดับเสียงในชุมชนไว้  
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงการจราจร และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management  
Chonticha Subongkloch  
Scientist (3)

Approved by

Supot Salameh  
Section Head



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141296-1

Page 1 of 1

Sample Number	24109991-2
Parameter	Noise (Leq 24 hrs)
Location	พื้นที่สำนักงานและโรงรถรวม (N1)
Measurement Date	Oct 12 - Oct 13, 2024
Measurement by	Norranon Talhongsiam
Sound Level meter	Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.3	73.6	47.7
12:00 PM - 01:00 PM	53.7	78.6	47.6
01:00 PM - 02:00 PM	59.9	86.9	49.5
02:00 PM - 03:00 PM	58.4	87.0	50.6
03:00 PM - 04:00 PM	54.3	72.7	50.2
04:00 PM - 05:00 PM	56.4	76.4	50.6
05:00 PM - 06:00 PM	54.4	76.8	49.0
06:00 PM - 07:00 PM	51.3	68.9	48.2
07:00 PM - 08:00 PM	54.9	77.3	50.1
08:00 PM - 09:00 PM	52.2	74.9	49.0
09:00 PM - 10:00 PM	51.2	67.8	49.5
10:00 PM - 11:00 PM	51.1	65.1	50.1
11:00 PM - 12:00 AM	52.1	73.0	49.7
12:00 AM - 01:00 AM	50.6	68.5	49.1
01:00 AM - 02:00 AM	50.6	67.0	49.2
02:00 AM - 03:00 AM	50.5	67.1	49.0
03:00 AM - 04:00 AM	50.9	67.5	49.7
04:00 AM - 05:00 AM	52.2	66.8	49.8
05:00 AM - 06:00 AM	52.3	72.0	49.5
06:00 AM - 07:00 AM	52.7	75.2	49.5
07:00 AM - 08:00 AM	57.4	78.7	49.7
08:00 AM - 09:00 AM	55.0	75.5	48.9
09:00 AM - 10:00 AM	52.3	71.4	46.9
10:00 AM - 11:00 AM	52.9	69.6	46.8
Leq Average 24 hrs. (dB(A))	54.2		
Lmax (dB(A))		87.0	
L90 (dB(A))			
Ldn (dB(A))	58.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงในชุมชน ฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่ามาตรฐานระดับเสียงในชุมชนไว้  
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงการจราจร และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management  
Chonticha Subongkloch  
Scientist (3)

Approved by

Supot Salameh  
Section Head



TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141297-1

## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-3
Parameter	Noise (Leq 24 hrs)
Location	บริเวณสำนักงานเขตนิคมอุตสาหกรรม (N1)
Measurement Date	Oct 13 - Oct 14, 2024
Measurement by	Norranon Tathongkham
Sound Level meter	Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	50.4	68.4	44.9
12:00 PM - 01:00 PM	47.6	63.2	43.7
01:00 PM - 02:00 PM	51.4	69.3	44.9
02:00 PM - 03:00 PM	49.4	69.3	44.4
03:00 PM - 04:00 PM	51.3	76.1	45.7
04:00 PM - 05:00 PM	51.2	71.4	45.2
05:00 PM - 06:00 PM	50.1	69.4	45.6
06:00 PM - 07:00 PM	52.0	74.6	48.0
07:00 PM - 08:00 PM	53.5	71.0	50.5
08:00 PM - 09:00 PM	51.1	73.2	49.1
09:00 PM - 10:00 PM	50.6	70.6	49.2
10:00 PM - 11:00 PM	50.3	68.8	49.3
11:00 PM - 12:00 AM	50.4	60.6	49.3
12:00 AM - 01:00 AM	48.9	63.3	48.1
01:00 AM - 02:00 AM	49.2	61.4	48.1
02:00 AM - 03:00 AM	49.1	66.4	48.6
03:00 AM - 04:00 AM	49.7	71.9	48.5
04:00 AM - 05:00 AM	48.8	61.1	47.7
05:00 AM - 06:00 AM	52.5	75.7	48.8
06:00 AM - 07:00 AM	52.5	72.8	47.8
07:00 AM - 08:00 AM	56.1	82.8	49.1
08:00 AM - 09:00 AM	53.3	78.7	47.0
09:00 AM - 10:00 AM	51.2	68.2	45.7
10:00 AM - 11:00 AM	52.3	74.9	48.3
Leq Average 24 hrs. (dB(A))	51.4	82.8	48.0
Lmax (dB(A))			48.0
L90 (dB(A))			
Ldn (dB(A))	57.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการแผ่รังสีเสียงในเวลากลางคืน (พ.ศ. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ปริมาณการแผ่รังสีเสียงในเวลากลางวัน และระดับเสียงที่ได้จากการประกอบกิจการ  
โรงงาน พ.ศ. 2548  
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameeh  
Section Head

Life Sciences

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495-61/ EMAIL

S:\Report\Air Noise rpt (12:00PM)



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-4
Parameter	Noise (Leq 24 hrs)
Location	บริเวณสำนักงานเขตนิคมอุตสาหกรรม (N2)
Measurement Date	Oct 11 - Oct 12, 2024
Measurement by	Norranon Tathongkham
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	51.7	68.7	45.2
01:00 PM - 02:00 PM	52.5	69.2	45.7
02:00 PM - 03:00 PM	52.0	67.9	47.0
03:00 PM - 04:00 PM	53.6	72.0	48.1
04:00 PM - 05:00 PM	54.7	72.5	49.1
05:00 PM - 06:00 PM	60.2	94.5	45.8
06:00 PM - 07:00 PM	54.7	72.2	49.4
07:00 PM - 08:00 PM	57.4	69.0	52.3
08:00 PM - 09:00 PM	54.7	72.3	50.2
09:00 PM - 10:00 PM	52.3	68.5	49.0
10:00 PM - 11:00 PM	51.0	66.6	47.1
11:00 PM - 12:00 AM	50.7	65.0	47.1
12:00 AM - 01:00 AM	48.5	64.8	45.3
01:00 AM - 02:00 AM	48.2	64.7	44.4
02:00 AM - 03:00 AM	48.0	61.0	44.3
03:00 AM - 04:00 AM	49.3	66.3	46.1
04:00 AM - 05:00 AM	52.1	69.4	47.5
05:00 AM - 06:00 AM	53.6	67.8	51.1
06:00 AM - 07:00 AM	55.2	72.3	51.2
07:00 AM - 08:00 AM	54.0	73.6	48.0
08:00 AM - 09:00 AM	52.3	70.0	46.2
09:00 AM - 10:00 AM	53.3	72.4	45.8
10:00 AM - 11:00 AM	51.4	69.2	45.5
11:00 AM - 12:00 PM	52.1	65.2	45.3
Leq Average 24 hrs. (dB(A))	53.6	94.5	47.0
Lmax (dB(A))			47.0
L90 (dB(A))			
Ldn (dB(A))	58.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการแผ่รังสีเสียงในเวลากลางคืน (พ.ศ. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ปริมาณการแผ่รังสีเสียงในเวลากลางวัน และระดับเสียงที่ได้จากการประกอบกิจการ  
โรงงาน พ.ศ. 2548  
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameeh  
Section Head

Life Sciences

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S:\Report\Air Noise rpt (12:00PM)

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141299-1

Page 1 of 1



## Analysis / Test Report

Cilent : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number	24109991-5
Parameter	Noise (Leq 24 hrs)
Location	ถนนพหลโยธิน (N2)
Measurement Date	Oct 12 - Oct 13, 2024
Measurement by	Norranon Tahongkham
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	53.6	68.0	46.4
01:00 PM - 02:00 PM	62.8	77.7	53.9
02:00 PM - 03:00 PM	53.2	68.1	48.1
03:00 PM - 04:00 PM	54.1	70.1	48.4
04:00 PM - 05:00 PM	54.7	70.0	49.6
05:00 PM - 06:00 PM	55.0	77.9	48.2
06:00 PM - 07:00 PM	53.8	69.7	49.3
07:00 PM - 08:00 PM	53.3	67.5	49.5
08:00 PM - 09:00 PM	52.5	73.6	47.8
09:00 PM - 10:00 PM	52.8	77.1	47.9
10:00 PM - 11:00 PM	49.5	67.4	46.1
11:00 PM - 12:00 AM	50.3	68.2	46.3
12:00 AM - 01:00 AM	49.8	66.4	45.7
01:00 AM - 02:00 AM	48.5	71.8	45.1
02:00 AM - 03:00 AM	48.2	66.6	44.9
03:00 AM - 04:00 AM	48.2	65.5	45.9
04:00 AM - 05:00 AM	51.8	69.5	46.7
05:00 AM - 06:00 AM	52.1	64.5	49.4
06:00 AM - 07:00 AM	53.9	66.3	50.2
07:00 AM - 08:00 AM	54.1	73.9	48.9
08:00 AM - 09:00 AM	55.2	76.6	48.4
09:00 AM - 10:00 AM	56.5	70.9	50.6
10:00 AM - 11:00 AM	53.8	68.4	45.8
11:00 AM - 12:00 PM	51.1	68.8	44.8
Leq Average 24 hrs. (dB(A))	54.3	77.9	
Lmax (dB(A))			47.9
L90 (dB(A))			
Ldn (dB(A))	58.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการจราจรที่คับคั่งในช่วงเวลา 15 (พ.ศ. 2540) เพื่อการทดสอบการเปลี่ยนแปลงของเสียง  
2. ปริมาณการจราจรที่คับคั่งในช่วงเวลา 15 (พ.ศ. 2540) เพื่อการทดสอบการเปลี่ยนแปลงของเสียง

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

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by  
Supot Salameh  
Section Head

Supt S.

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141300-1

Page 1 of 1



Cilent : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

Sample Number	24109991-6
Parameter	Noise (Leq 24 hrs)
Location	ถนนพหลโยธิน (N2)
Measurement Date	Oct 13 - Oct 14, 2024
Measurement by	Norranon Tahongkham
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	50.6	68.8	44.2
01:00 PM - 02:00 PM	50.2	68.6	43.3
02:00 PM - 03:00 PM	52.6	72.6	45.9
03:00 PM - 04:00 PM	54.3	79.7	48.5
04:00 PM - 05:00 PM	54.4	75.9	49.3
05:00 PM - 06:00 PM	52.1	71.6	46.7
06:00 PM - 07:00 PM	52.1	72.5	46.8
07:00 PM - 08:00 PM	52.4	71.2	47.5
08:00 PM - 09:00 PM	52.2	72.6	48.0
09:00 PM - 10:00 PM	50.8	67.6	45.0
10:00 PM - 11:00 PM	50.4	76.2	44.3
11:00 PM - 12:00 AM	47.7	64.3	44.6
12:00 AM - 01:00 AM	46.5	60.2	43.5
01:00 AM - 02:00 AM	46.7	66.9	43.4
02:00 AM - 03:00 AM	47.4	63.9	44.7
03:00 AM - 04:00 AM	48.9	61.7	46.3
04:00 AM - 05:00 AM	49.4	65.1	47.0
05:00 AM - 06:00 AM	52.4	72.2	48.9
06:00 AM - 07:00 AM	54.1	74.6	49.9
07:00 AM - 08:00 AM	53.4	73.3	46.6
08:00 AM - 09:00 AM	51.1	67.4	44.5
09:00 AM - 10:00 AM	50.4	65.7	44.3
10:00 AM - 11:00 AM	52.2	72.6	46.9
11:00 AM - 12:00 PM	52.7	78.1	46.9
Leq Average 24 hrs. (dB(A))	51.6		
Lmax (dB(A))		79.7	
L90 (dB(A))			46.3
Ldn (dB(A))	56.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการจราจรที่คับคั่งในช่วงเวลา 15 (พ.ศ. 2540) เพื่อการทดสอบการเปลี่ยนแปลงของเสียง  
2. ปริมาณการจราจรที่คับคั่งในช่วงเวลา 15 (พ.ศ. 2540) เพื่อการทดสอบการเปลี่ยนแปลงของเสียง

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

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by  
Supot Salameh  
Section Head

Supt S.

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TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141301-1

## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-7
Parameter	Noise (Leq 24 hrs)
Location	ชุมชนบ้านนาสวน (N3)
Measurement Date	Oct 11 - Oct 12, 2024
Measurement by	Norranon Takhongkham
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	54.3	85.9	42.7
10:00 AM - 11:00 AM	49.8	69.4	44.2
11:00 AM - 12:00 PM	48.0	66.4	43.3
12:00 PM - 01:00 PM	48.1	67.2	42.9
01:00 PM - 02:00 PM	47.3	68.5	43.0
02:00 PM - 03:00 PM	52.3	76.4	47.0
03:00 PM - 04:00 PM	59.0	89.1	46.6
04:00 PM - 05:00 PM	53.3	78.8	46.2
05:00 PM - 06:00 PM	66.5	88.3	55.5
06:00 PM - 07:00 PM	56.7	74.0	51.7
07:00 PM - 08:00 PM	56.5	71.6	51.4
08:00 PM - 09:00 PM	57.6	71.0	53.9
09:00 PM - 10:00 PM	54.3	75.0	49.7
10:00 PM - 11:00 PM	48.6	66.7	45.3
11:00 PM - 12:00 AM	50.9	79.2	46.1
12:00 AM - 01:00 AM	46.8	66.9	43.0
01:00 AM - 02:00 AM	45.5	63.1	42.8
02:00 AM - 03:00 AM	48.7	63.3	43.8
03:00 AM - 04:00 AM	50.4	61.7	46.6
04:00 AM - 05:00 AM	52.6	65.0	48.4
05:00 AM - 06:00 AM	54.1	72.5	51.5
06:00 AM - 07:00 AM	54.1	79.9	45.8
07:00 AM - 08:00 AM	64.5	78.1	45.7
08:00 AM - 09:00 AM	51.2	75.0	43.6

Leq Average 24 hrs. (dB(A))	57.0
Lmax (dB(A))	89.1
L90 (dB(A))	45.8
Ldn (dB(A))	59.7
Standard (dB(A))	70
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540 (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540)	
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540 (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540)	
13 ต.ค. พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management  
Chontichak  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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S:\Reports\_Air Noise pr (12 0 PM)



## Analysis / Test Report

TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141302-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-8
Parameter	Noise (Leq 24 hrs)
Location	ชุมชนบ้านนาสวน (N3)
Measurement Date	Oct 12 - Oct 13, 2024
Measurement by	Norranon Takhongkham
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	49.0	71.5	42.6
10:00 AM - 11:00 AM	49.7	75.9	42.9
11:00 AM - 12:00 PM	47.3	76.2	41.3
12:00 PM - 01:00 PM	48.5	72.6	41.5
01:00 PM - 02:00 PM	67.0	96.9	48.1
02:00 PM - 03:00 PM	54.2	75.0	48.4
03:00 PM - 04:00 PM	53.7	74.3	45.5
04:00 PM - 05:00 PM	63.6	83.7	45.6
05:00 PM - 06:00 PM	50.7	72.8	44.2
06:00 PM - 07:00 PM	54.7	80.2	50.2
07:00 PM - 08:00 PM	55.1	85.1	53.8
08:00 PM - 09:00 PM	54.9	78.5	52.0
09:00 PM - 10:00 PM	52.3	74.5	49.0
10:00 PM - 11:00 PM	52.7	80.5	47.9
11:00 PM - 12:00 AM	55.3	80.7	46.5
12:00 AM - 01:00 AM	47.2	65.2	44.5
01:00 AM - 02:00 AM	52.2	64.9	48.9
02:00 AM - 03:00 AM	53.3	63.1	48.7
03:00 AM - 04:00 AM	49.4	68.7	46.1
04:00 AM - 05:00 AM	52.8	78.1	48.0
05:00 AM - 06:00 AM	53.0	75.7	50.1
06:00 AM - 07:00 AM	53.2	80.7	45.7
07:00 AM - 08:00 AM	54.3	81.1	42.7
08:00 AM - 09:00 AM	50.7	79.4	42.5

Leq Average 24 hrs. (dB(A))	56.7
Lmax (dB(A))	96.9
L90 (dB(A))	46.1
Ldn (dB(A))	60.4
Standard (dB(A))	70
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540 (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540)	
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540 (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง ค่าเสียงรบกวนในชุมชน พ.ศ. 2540)	
13 ต.ค. พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management  
Chontichak  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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Analysis / Test Report

TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141303-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-9
Parameter	Noise (Leq 24 hrs)
Location	จุดตรวจตามมาตรฐาน (N3)
Measurement Date	Oct 13 - Oct 14, 2024
Measurement by	Norranon Tathongkham
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	48.6	67.1	43.2
10:00 AM - 11:00 AM	51.1	72.8	45.8
11:00 AM - 12:00 PM	51.0	73.7	43.8
12:00 PM - 01:00 PM	48.3	71.5	42.9
01:00 PM - 02:00 PM	53.4	81.8	44.4
02:00 PM - 03:00 PM	49.2	68.4	44.2
03:00 PM - 04:00 PM	52.5	79.2	46.5
04:00 PM - 05:00 PM	50.5	78.6	44.1
05:00 PM - 06:00 PM	51.5	72.4	46.1
06:00 PM - 07:00 PM	54.9	77.7	48.1
07:00 PM - 08:00 PM	49.5	66.7	47.0
08:00 PM - 09:00 PM	52.4	80.8	45.8
09:00 PM - 10:00 PM	55.7	79.4	44.9
10:00 PM - 11:00 PM	46.2	57.8	44.3
11:00 PM - 12:00 AM	44.7	60.9	42.5
12:00 AM - 01:00 AM	45.5	65.2	42.6
01:00 AM - 02:00 AM	49.1	77.6	42.3
02:00 AM - 03:00 AM	45.4	75.2	42.2
03:00 AM - 04:00 AM	48.0	80.6	42.8
04:00 AM - 05:00 AM	47.9	73.5	43.8
05:00 AM - 06:00 AM	51.9	73.1	47.2
06:00 AM - 07:00 AM	50.4	73.5	44.9
07:00 AM - 08:00 AM	60.7	77.0	44.7
08:00 AM - 09:00 AM	56.0	75.2	41.1

Leq Average 24 hrs. (dB(A))	52.5
Lmax (dB(A))	81.8
L90 (dB(A))	44.2
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดระดับเสียงแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เพื่อกำหนดมาตรฐานระดับเสียงโดยทั่วไป 2. ใช้มาตรฐานการวัดระดับเสียงการจราจร และระดับเสียงที่เกิดจากการประกอบกิจการ ทั้งนี้ พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management  
Chontichak  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.  
Supot Salameh  
Section Head

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



Analysis / Test Report

TESTING  
No.0042

Lot ID: 24109991

Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141304-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 1

Sample Number	24109991-10
Parameter	Noise (Leq 24 hrs)
Location	จุดตรวจตามมาตรฐาน (N4)
Measurement Date	Oct 11 - Oct 12, 2024
Measurement by	Norranon Tathongkham
Sound Level meter	Serial No. 623392

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	53.4	77.7	44.7
01:00 PM - 02:00 PM	52.5	72.0	44.8
02:00 PM - 03:00 PM	52.4	72.7	46.0
03:00 PM - 04:00 PM	50.6	68.3	44.4
04:00 PM - 05:00 PM	53.6	81.9	46.2
05:00 PM - 06:00 PM	63.9	85.4	48.2
06:00 PM - 07:00 PM	67.6	93.9	48.4
07:00 PM - 08:00 PM	53.3	69.5	46.8
08:00 PM - 09:00 PM	53.7	70.4	49.3
09:00 PM - 10:00 PM	51.9	70.7	43.5
10:00 PM - 11:00 PM	47.1	69.4	40.3
11:00 PM - 12:00 AM	47.9	74.0	40.0
12:00 AM - 01:00 AM	49.8	74.1	41.1
01:00 AM - 02:00 AM	43.0	60.9	38.1
02:00 AM - 03:00 AM	43.6	64.5	38.3
03:00 AM - 04:00 AM	41.8	62.4	37.2
04:00 AM - 05:00 AM	43.8	65.8	37.8
05:00 AM - 06:00 AM	47.5	66.6	39.5
06:00 AM - 07:00 AM	50.3	75.2	41.7
07:00 AM - 08:00 AM	57.5	86.1	47.3
08:00 AM - 09:00 AM	51.7	75.4	42.5
09:00 AM - 10:00 AM	50.3	66.8	42.3
10:00 AM - 11:00 AM	50.2	68.4	41.7
11:00 AM - 12:00 PM	49.6	69.1	41.9

Leq Average 24 hrs. (dB(A))	56.7
Lmax (dB(A))	93.9
L90 (dB(A))	42.3
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดระดับเสียงแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เพื่อกำหนดมาตรฐานระดับเสียงโดยทั่วไป 2. ใช้มาตรฐานการวัดระดับเสียงการจราจร และระดับเสียงที่เกิดจากการประกอบกิจการ ทั้งนี้ พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management  
Chontichak  
Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.  
Supot Salameh  
Section Head

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## Analysis / Test Report

TESTING  
No. 0042

Lot ID: 24109991

222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Date Received : Oct 16, 2024  
Date Reported : Oct 19, 2024  
Report Number: 3141306-1

Page 1 of 1

Sample Number	24109991-12
Parameter	Noise (Leq 24 hrs)
Location	ถนนพหลโยธิน (N4)
Measurement Date	Oct 13 - Oct 14, 2024
Measurement by	Norranon Tathongkham
Sound Level meter	Serial No. 623392
Time	
12:00 PM - 01:00 PM	49.6
01:00 PM - 02:00 PM	48.2
02:00 PM - 03:00 PM	68.3
03:00 PM - 04:00 PM	48.9
04:00 PM - 05:00 PM	53.6
05:00 PM - 06:00 PM	49.9
06:00 PM - 07:00 PM	50.6
07:00 PM - 08:00 PM	49.7
08:00 PM - 09:00 PM	49.6
09:00 PM - 10:00 PM	50.5
10:00 PM - 11:00 PM	49.2
11:00 PM - 12:00 AM	46.1
12:00 AM - 01:00 AM	46.4
01:00 AM - 02:00 AM	42.2
02:00 AM - 03:00 AM	42.9
03:00 AM - 04:00 AM	43.5
04:00 AM - 05:00 AM	44.6
05:00 AM - 06:00 AM	43.3
06:00 AM - 07:00 AM	49.9
07:00 AM - 08:00 AM	52.9
08:00 AM - 09:00 AM	50.3
09:00 AM - 10:00 AM	48.1
10:00 AM - 11:00 AM	47.6
11:00 AM - 12:00 PM	46.5
Lmax (dB(A))	
73.3	
L90 (dB(A))	
41.2	
39.5	
38.7	
41.1	
43.1	
44.1	
43.3	
43.8	
42.5	
41.7	
40.4	
39.4	
39.3	
37.3	
39.9	
39.7	
38.0	
39.1	
41.3	
43.5	
39.6	
38.0	
37.6	
38.5	

Leq Average 24 hrs. (dB(A))	48.9	
Lmax (dB(A))		81.3
L90 (dB(A))		
Ldn (dB(A))	53.0	38.7
Standard (dB(A))	70	115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงโกลาหลการประกอบกิจการ  
ฐานาน พ.ศ. 2548

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

Supot S.

**Approved by**

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# คุณภาพน้ำผิวดิน

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087577-1

Page 1 of 3

<b>Sample Number</b>	2482364-1
<b>Sampled Date</b>	Aug 13, 2024 9:44 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินท่าเรือสวนหลวง (SW1)
<b>Date Analysis Commenced</b>	Aug 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	2.33	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.002	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.14	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

### Microbiological Testing

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) Co., Ltd. is not responsible for the results of any tests conducted by other laboratories. This report is not reproduced except in full.

**Approved by**  
  
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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087577-1

Page 2 of 3

<b>Sample Number</b>	2482364-1
<b>Sampled Date</b>	Aug 13, 2024 9:44 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินท่าเรือสวนหลวง (SW1)
<b>Date Analysis Commenced</b>	Aug 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(A)</sup> Total Coliform	MPN/100mL	-	-	2400.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.38	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	401	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.9	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.42	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.2	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) Co., Ltd. is not responsible for the results of any tests conducted by other laboratories. This report is not reproduced except in full.

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Senior Manager

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglailok Rd., Nonglailok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087577-1

Page 3 of 3

<b>Sample Number</b>	2482364-1
<b>Sampled Date</b>	Aug 13, 2024 9:44 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินท่าเรือท่าเรือ (SW1)
<b>Date Analysis Commenced</b>	Aug 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.003	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	230	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	31	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 9)

**Sampling By :** Wanuyoo Chimpaklee, Smart Khumpklee

**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.
- (A) Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The Laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglailok Rd., Nonglailok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087578-1

Page 1 of 3

<b>Sample Number</b>	2482364-2
<b>Sampled Date</b>	Aug 13, 2024 10:30 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินท่าเรือท่าเรือ (SW2)
<b>Date Analysis Commenced</b>	Aug 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.002	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	0.87	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.18	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

## Microbiological Testing

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

Approved by

*D. Changchon*

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**

Date Received : Aug 13, 2024

Date Reported : Aug 20, 2024

Report Number : 3087578-1

Page 2 of 3

Sample Number	2482364-2
Sampled Date	Aug 13, 2024 10:30 AM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำประปา/น้ำทิ้งจากโรงงานที่ห้องเครื่องจักร 500 เมตร (SW2)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>1A</sup> Total Coliform	MPN/100mL	-	-	4900.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.42	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	149	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.9	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.46	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

*D. Chongchon*

Dej Chongchon  
Senior Manager



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**

Date Received : Aug 13, 2024

Date Reported : Aug 20, 2024

Report Number : 3087578-1

Page 3 of 3

Sample Number	2482364-2
Sampled Date	Aug 13, 2024 10:30 AM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำประปา/น้ำทิ้งจากโรงงานที่ห้องเครื่องจักร 500 เมตร (SW2)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.002	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	79	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)

**Sampling By :** Warunyo Chimphalee, Samart Khumphae

Remark :

- LOD : Limit of Detection
- "LOR" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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*D. Chongchon*

Dej Chongchon  
Senior Manager



## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number: 3087579-1

Page 1 of 3

Sample Number	2482364-3
Sample Date	Aug 13, 2024 10:20 AM
Sample Description	Group 3 : Surface Water (SW)
Location	จุดตรวจน้ำทิ้งจากโรงงาน (SW3)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation Standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	1.28	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.0010	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.09	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

### Microbiological Testing

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*D. Chanchon*

Dej Chanchon  
Senior Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number: 3087579-1

Page 2 of 3

Sample Number	2482364-3						
Sample Date	Aug 13, 2024 10:20 AM						
Sample Description	Group 3 : Surface Water (SW)						
Location	จุดตรวจน้ำทิ้งจากโรงงาน (SW3)						
Date Analysis Commenced	Aug 13, 2024						
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Physical Property	Colorless, odourless, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	9400.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.36	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	422	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	4.89	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	6.7	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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*D. Chanchon*

Dej Chanchon  
Senior Manager

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 3 of 3

Sample Number	2482364-3
Sampled Date	Aug 13, 2024 10:20 AM
Sample Description	Group 3 : Surface Water (SW)
Location	จุดตรวจน้ำผิวดินโรงงาน (SW3)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Phenol *	mg/L	0.0005	0.001	0.001	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	254	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 105-105 degree C	mg/L	-	5	8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)  
n: Change from Natural condition not more than 3 degree C  
Sampling By : Warunyo Chimphalee , Smart Khumplinee

- 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.
  - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
  - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Senior Manager

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 1 of 3

Sample Number	2482364-4
Sampled Date	Aug 13, 2024 9:55 AM
Sample Description	Group 3 : Surface Water (SW)
Location	จุดตรวจน้ำผิวดินตามแนวถนน (SW4)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
I <sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.0008	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
I <sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
I <sup>(A)</sup> Iron	mg/L	0.003	0.005	2.05	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
I <sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
I <sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STN 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
I <sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.002	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
I <sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.08	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Microbiological Testing

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Senior Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087580-1

Page 2 of 3

Sample Number	2482364-4
Sampled Date	Aug 13, 2024 9:55 AM
Sample Description	Group 3 : Surface Water (SW)
Location	เขาสวนกุ่มอุตสาหกรรม (SW4)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(1)</sup> Total Coliform	MPN/100mL	-	-	790.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.29	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (T)	Rayong
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	313	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.9	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.31	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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*D. Chanchon*

Dej Chanchon  
Senior Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087580-1

Page 3 of 3

Sample Number	2482364-4
Sampled Date	Aug 13, 2024 9:55 AM
Sample Description	Group 3 : Surface Water (SW)
Location	เขาสวนกุ่มอุตสาหกรรม (SW4)
Date Analysis Commenced	Aug 13, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.002	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	196	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	31	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)

**Sampling By :** Warunyo Chimpalae, Samart Khumpluee

Remark :

- LOD : Limit of Detection
- "L" : Lower than LOQ (Unit of Quantitation) / LOR (Unit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Senior Manager

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**

Date Received : Aug 13, 2024

Date Reported : Aug 20, 2024

Report Number : 3087581-1

Page 1 of 3

Sample Number	2482364-5			
Sampled Date	Aug 13, 2024 10:05 AM			
Sample Description	Group 3 : Surface Water (SW)			
Location	คลองน้ำดิบในทุ่งนาของเกษตรกร (SW5)			
Date Analysis Commenced	Aug 13, 2024			
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			
Physical Property	Yellow, some odour, solid and no turbid			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.0008	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	1.72	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.002	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.06	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

### Microbiological Testing

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Approved by

*D. Juman*

Dej Changchon

Senior Manager

## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**

Date Received : Aug 13, 2024

Date Reported : Aug 20, 2024

Report Number : 3087581-1

Page 2 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(A)</sup> Total Coliform	MPN/100mL	-	-	7900.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.17	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	276	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.4	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.65	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (b)	Rayong

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*D. Juman*

Dej Changchon

Senior Manager

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bangkok-Nonglajok Rd., Nonglajok, Bangkok, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

TESTING  
No.0042  
**Lot ID: 2482364**  
Date Received : Aug 13, 2024  
Date Reported : Aug 20, 2024  
Report Number : 3087581-1

Page 3 of 3

Sample Number	2482364-5						
Sample Date	Aug 13, 2024 10:05 AM						
Sample Description	Group 3 : Surface Water (SW)						
Location	แหล่งน้ำชุมชนบ้านสวนพริก (SW5)						
Date Analysis Commenced	Aug 13, 2024						
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Phenol *	mg/L	0.0005	0.001	0.004	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	176	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	24	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)

Sampling By : Warunyo Chimpalee , Samart Khumplee

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.  
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.  
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Approved by  
  
Dej Changchon  
Senior Manager





## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

TESTING  
No.0042

Lot ID: 24129609

Date Received : Dec 10, 2024

Date Reported : Dec 17, 2024

Report Number : 3195532-1

Page 1 of 3

Sample Number	24129609-1				
Sampled Date	Dec 10, 2024 1:37 PM				
Sample Description	Group 3 : Surface Water (SW)				
Location	คลองน้ำเค็มในทุ่งสวนพลา (SW1)				
Date Analysis Commenced	Dec 10, 2024				
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Physical Property	Yellow, odourless, no solid and turbid				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.0008	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	0.72	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.03	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

### Microbiological Testing

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.

222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120

P/O : 54240057

Project Name : Monitoring

Project Location : WHA RIL

TESTING  
No.0042

Lot ID: 24129609

Date Received : Dec 10, 2024

Date Reported : Dec 17, 2024

Report Number : 3195532-1

Page 2 of 3

Sample Number	24129609-1				
Sampled Date	Dec 10, 2024 1:37 PM				
Sample Description	Group 3 : Surface Water (SW)				
Location	คลองน้ำเค็มในทุ่งสวนพลา (SW1)				
Date Analysis Commenced	Dec 10, 2024				
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Physical Property	Yellow, odourless, no solid and turbid				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(A)</sup> Total Coliform	MPN/100mL	-	-	1100.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.39	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	984	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.7	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.09	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.5	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
Lot ID: 24129609  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195533-1

Page 3 of 3

Sample Number	24129609-1
Sampled Date	Dec 10, 2024 1:37 PM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำผืนดินใต้ถนนสาย 1 (SW1)
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Phenol *	mg/L	0.0005	0.001	0.001	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	512	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2500 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)  
n: Change from Natural condition not more than 3 degree C  
Sampling By : Nattawit Athornprommarat , Kardbundit Kitisupavanit

- 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.
  - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No. 0009.
  - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
Lot ID: 24129609  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195533-1

Page 1 of 3

Sample Number	24129609-2
Sampled Date	Dec 10, 2024 9:50 AM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำผืนดินใต้ถนนสาย 1 (SW2)
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Copper	mg/L	0.0003	0.0005	<0.0005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3500-Cr, B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.73	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.0006	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.02	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

Microbiological Testing

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195533-1

Page 2 of 3

<b>Sample Number</b>	24129609-2
<b>Sampled Date</b>	Dec 10, 2024 9:50 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำประปาบริเวณพื้นที่เกษตรกรรมฝั่งขวาของโครงการ 500 เมตร (SW2)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>1a)</sup> Total Coliform	MPN/100mL	-	-	11000.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.46	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	139	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.6	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.32	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location:** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195533-1

Page 3 of 3

<b>Sample Number</b>	24129609-2
<b>Sampled Date</b>	Dec 10, 2024 9:50 AM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำประปาบริเวณพื้นที่เกษตรกรรมฝั่งขวาของโครงการ 500 เมตร (SW2)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Colorless, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.003	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 Degree C	mg/L	-	5	71	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 Issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)  
n: Change from Natural condition not more than 3 degree C

**Sampling By :** Nattawut Atthomprommarat , Kardiundit Kittisupavanit

- Remark :
- LOD : Limit of Detection
  - "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
  - "C" : Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
  - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
  - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195534-1

Page 1 of 3

Sample Number	24129609-3			
Sampled Date	Dec 10, 2024 11:14 AM			
Sample Description	Group 3 : Surface Water (SW)			
Location	จุดตรวจน้ำผิวดินโครงการ (SW3)			
Date Analysis Commenced	Dec 10, 2024			
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			
Physical Property	Yellow, odourless, no solid and turbid			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3500-Cr B	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	0.75	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.07	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

### Microbiological Testing

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

Approved by  
**Photchanha S.**  
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Scientist (4)

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

TESTING  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195534-1

Page 2 of 3

Sample Number	24129609-3			
Sampled Date	Dec 10, 2024 11:14 AM			
Sample Description	Group 3 : Surface Water (SW)			
Location	จุดตรวจน้ำผิวดินโครงการ (SW3)			
Date Analysis Commenced	Dec 10, 2024			
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			
Physical Property	Yellow, odourless, no solid and turbid			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(A)</sup> Total Coliform	MPN/100mL	-	-	1700.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.38	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	2.8	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	898	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.6	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	0.003	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5530 D	Rayong

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location : WHA RIL

Page 3 of 3

Sample Number 24129609-3  
Sampled Date Dec 10, 2024 11:14 AM  
Sample Description Group 3 : Surface Water (SW)  
Location จอมบ่อน้ำผิวดินโรงงาน (SW3)  
Date Analysis Commenced Dec 10, 2024  
Condition of Sample Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	572	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	6	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)  
**n :** Change from Natural condition not more than 3 degree C  
**Sampling By :** Nattawit Athomprommarat , Kardbundit Kitisupavinit

- 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.
  - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
  - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by  
**Photchanas S.**  
Photchanas Seeda  
Scientist (4)

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## Analysis / Test Report

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
P/O :  
Project Name : Monitoring  
Project Location : WHA RIL

Lot ID: 24142383  
Date Received : Dec 20, 2024  
Date Reported : Dec 25, 2024  
Report Number : 3197358-1

Page 2 of 2

Sample Number 24142383-2  
Sampled Date Dec 20, 2024 9:40 AM  
Sample Description Group 3 : Surface Water (SW)  
Location จอมบ่อน้ำผิวดินโรงงาน (SW3)  
Date Analysis Commenced Dec 23, 2024  
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Colorless, odourless, no solid, and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Nitrate as N	mg/L	0.015	0.05	1.18	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)  
**n :** Change from Natural condition not more than 3 degree C  
**Sampling By :** Paramet Sattayakun

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

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195535-1

Page 1 of 3

<b>Sample Number</b>	24129609-4
<b>Sampled Date</b>	Dec 10, 2024 1:53 PM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินตามธรรมชาติ (SW4)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.0008	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3500-C F	Bangkok
<sup>(A)</sup> Iron	mg/L	0.003	0.005	0.75	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002. EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.002	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.03	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

## Microbiological Testing

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaoek Rd., Nonglaoek, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195535-1

Page 2 of 3

<b>Sample Number</b>	24129609-4
<b>Sampled Date</b>	Dec 10, 2024 1:53 PM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผืนดินตามธรรมชาติ (SW4)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
<sup>(A)</sup> Total Coliform	MPN/100mL	-	-	4900.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.31	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	612	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.97	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.2	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195535-1

Page 3 of 3

<b>Sample Number</b>	24129609-4
<b>Sampled Date</b>	Dec 10, 2024 1:53 PM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผัดน้ำจืดธรรมชาติ (SW4)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.002	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	344	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)

**n:** Change from Natural condition not more than 3 degree C  
**Sampling By :** Nattawut Athomprommarat , Kantbundit Kitisupavanit

- Remark :
- LOD : Limit of Detection
  - "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
  - Analytes marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
  - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
  - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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## Analysis / Test Report

**Client :** WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglajok Rd., Nonglajok, Bankhai, Rayong Thailand 21120  
**P/O :** 54240057  
**Project Name :** Monitoring  
**Project Location :** WHA RIL

**TESTING**  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195536-1

Page 1 of 3

<b>Sample Number</b>	24129609-5
<b>Sampled Date</b>	Dec 10, 2024 2:07 PM
<b>Sample Description</b>	Group 3 : Surface Water (SW)
<b>Location</b>	คลองน้ำผัดน้ำจืดธรรมชาติ (SW5)
<b>Date Analysis Commenced</b>	Dec 10, 2024
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
<b>Physical Property</b>	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>[A]</sup> Copper	mg/L	0.0003	0.0005	0.0009	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>[A]</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3500-Cr B	Bangkok
<sup>[A]</sup> Iron	mg/L	0.003	0.005	0.51	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>[A]</sup> Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>[A]</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>[A]</sup> Nickel	mg/L	0.0003	0.0005	0.003	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok
<sup>[A]</sup> Zinc	mg/L	0.003	0.005	0.02	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 3125 B.3030 F	Bangkok

## Microbiological Testing

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## Analysis / Test Report

TESTING  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195536-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

Page 2 of 3

Sample Number	24129609-5
Sampled Date	Dec 10, 2024 2:07 PM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำดิบในหมู่บ้านสวนจันทร์ (SW5)
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
(A) Total Coliform	MPN/100mL	-	-	790.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.20	≤0.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (F)	Rayong
BOD *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O C	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	495	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.7	≥2	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.95	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	4	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong

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

Approved by

**Photchanas S.**

Photchana Seeda  
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## Analysis / Test Report

TESTING  
No.0042  
**Lot ID: 24129609**  
Date Received : Dec 10, 2024  
Date Reported : Dec 17, 2024  
Report Number : 3195536-1

Client : WHA Rayong Industrial Land Co., Ltd.  
222 Moo 11, Bankhai-Nonglaloek Rd., Nonglaloek, Bankhai, Rayong Thailand 21120  
P/O : 54240057  
Project Name : Monitoring  
Project Location: WHA RIL

Page 3 of 3

Sample Number	24129609-5
Sampled Date	Dec 10, 2024 2:07 PM
Sample Description	Group 3 : Surface Water (SW)
Location	คลองน้ำดิบในหมู่บ้านสวนจันทร์ (SW5)
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, two BOD bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, odourless, no solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Phenol *	mg/L	0.0005	0.001	0.002	≤0.005	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5530 D	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	282	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

**Sampling By** : Nattawit Achomprimmarat , Kirdbunot Kiussupavant

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.
- (A) Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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

Approved by

**Photchanas S.**

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