

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



Analysis / Test Report



TESTING
No.0042

Lot ID: 2330545

Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2597888-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Description		Air Quality			
Location	กรุงเทพมหานคร-กรุงเทพมหานคร (GPS 47P 0736058, 1402077)				
Date Analysis Commenced	May 31, 2023				
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)
2330545-1	May 20 - May 21, 2023	0.051	0.023	755	32
2330545-2	May 21 - May 22, 2023	0.064	0.030	755	32
2330545-3	May 22 - May 23, 2023	0.075	0.039	755	30
2330545-4	May 23 - May 24, 2023	0.053	0.025	755	30
2330545-5	May 24 - May 25, 2023	0.035	0.024	755	31
2330545-6	May 25 - May 26, 2023	0.054	0.027	755	30
2330545-7	May 26 - May 27, 2023	0.072	0.034	755	32
Guideline		0.33	0.12	-	-

Approved by

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2330545

Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2597888-2

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Description	Air Quality				
Location	กรุงเทพมหานคร (GPS 47P 0729433, 1412978)				
Date Analysis Commenced	May 31, 2023				
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)
2330545-8	May 20 - May 21, 2023	0.063	0.056	755	32
2330545-9	May 21 - May 22, 2023	0.067	0.059	755	32
2330545-10	May 22 - May 23, 2023	0.066	0.035	755	30
2330545-11	May 23 - May 24, 2023	0.056	0.034	755	30
2330545-12	May 24 - May 25, 2023	0.057	0.038	755	31
2330545-13	May 25 - May 26, 2023	0.071	0.041	755	30
2330545-14	May 26 - May 27, 2023	0.100	0.047	755	32
Guideline		0.33	0.12	-	-

Approved by

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2330545
Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2597888-3

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	สถานประกอบการ (GPS 47P 0725073, 1412550)	2330545-15	May 20 - May 21, 2023	0.043	0.027	755	32
Date Analysis Commenced	May 31, 2023	2330545-16	May 21 - May 22, 2023	0.040	0.029	755	32
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	2330545-17	May 22 - May 23, 2023	0.037	0.027	755	30
		2330545-18	May 23 - May 24, 2023	0.040	0.030	755	30
		2330545-19	May 24 - May 25, 2023	0.046	0.035	755	31
		2330545-20	May 25 - May 26, 2023	0.054	0.036	755	30
		2330545-21	May 26 - May 27, 2023	0.066	0.039	755	32
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 : Suphachai Wongsurchai

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

Thanitak.

Approved by

Thanita Kusurivong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2330545
Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2597888-4

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	สถานประกอบการ (GPS 47P 0731529, 1402602)	2330545-22	May 20 - May 21, 2023	0.040	0.024	755	32
Date Analysis Commenced	May 31, 2023	2330545-23	May 21 - May 22, 2023	0.049	0.029	755	32
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	2330545-24	May 22 - May 23, 2023	0.043	0.022	755	30
		2330545-25	May 23 - May 24, 2023	0.042	0.025	755	30
		2330545-26	May 24 - May 25, 2023	0.035	0.023	755	31
		2330545-27	May 25 - May 26, 2023	0.046	0.025	755	30
		2330545-28	May 26 - May 27, 2023	0.069	0.032	755	32
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 : Suphachai Wongsurchai

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2330548
Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2609729-1

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	โรงงานอุตสาหกรรม (GPS 47P 0735185, 1405871)						
Date Analysis Commenced	May 31, 2023						
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/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)		
2330548-1	May 20 - May 21, 2023	0.042	0.035	755	32		
2330548-2	May 21 - May 22, 2023	0.050	0.038	755	32		
2330548-3	May 22 - May 23, 2023	0.052	0.042	755	30		
2330548-4	May 23 - May 24, 2023	0.039	0.036	755	30		
2330548-5	May 24 - May 25, 2023	0.038	0.032	755	31		
2330548-6	May 25 - May 26, 2023	0.041	0.035	755	30		
2330548-7	May 26 - May 27, 2023	0.051	0.046	755	32		
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 :	Supachai Wongsurichai						
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.						

Approved by

Thanita Kulsurirong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2330549
Date Received : May 29, 2023
Date Reported : Jun 07, 2023
Report Number: 2609730-1

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	โรงงานอุตสาหกรรม (GPS 47P 0729829, 1403305)						
Date Analysis Commenced	May 31, 2023						
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/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)		
2330549-1	May 20 - May 21, 2023	0.051	0.038	755	32		
2330549-2	May 21 - May 22, 2023	0.078	0.070	755	32		
2330549-3	May 22 - May 23, 2023	0.056	0.039	755	30		
2330549-4	May 23 - May 24, 2023	0.060	0.042	755	30		
2330549-5	May 24 - May 25, 2023	0.066	0.038	755	31		
2330549-6	May 25 - May 26, 2023	0.061	0.034	755	30		
2330549-7	May 26 - May 27, 2023	0.075	0.042	755	32		
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 :	Supachai Wongsurichai						
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.						

Approved by

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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHCEO-ONE

Lot ID: 2329513

Date Received : May 29, 2023
Date Reported : Jun 03, 2023
Report Number: 2609668-1

Page 1 of 1

Sample Description		Air Quality		2329513-1		2329513-2		2329513-3		2329513-4		2329513-5		2329513-6		2329513-7	
Location		11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150		May 20, 2023		May 21, 2023		May 22, 2023		May 23, 2023		May 24, 2023		May 25, 2023		May 26, 2023	
Parameter		Nitrogen dioxide (ppm)															
Measurement Date		May 20, 2023 - May 27, 2023															
Measurement by		Suphachai Wongsurichai															
Time																	
10:00 AM - 11:00 AM		0.008		0.013		0.004		0.018		0.010		0.018		0.019		0.020	
11:00 AM - 12:00 PM		0.008		0.015		0.004		0.026		0.012		0.019		0.015		0.020	
12:00 PM - 01:00 PM		0.013		0.010		0.002		0.026		0.013		0.013		0.008		0.015	
01:00 PM - 02:00 PM		0.014		0.007		0.003		0.020		0.004		0.008		0.009		0.009	
02:00 PM - 03:00 PM		0.011		0.007		0.008		0.014		0.006		0.006		0.007		0.007	
03:00 PM - 04:00 PM		0.009		0.006		0.009		0.011		0.005		0.005		0.005		0.005	
04:00 PM - 05:00 PM		0.014		0.006		0.008		0.009		0.028		0.005		0.005		0.004	
05:00 PM - 06:00 PM		0.011		0.008		0.007		0.006		0.022		0.005		0.005		0.004	
06:00 PM - 07:00 PM		0.008		0.006		0.005		0.007		0.026		0.004		0.005		0.005	
07:00 PM - 08:00 PM		0.009		0.004		0.006		0.006		0.031		0.003		0.004		0.010	
08:00 PM - 09:00 PM		0.009		0.007		0.005		0.006		0.019		0.004		0.004		0.019	
09:00 PM - 10:00 PM		0.012		0.006		0.006		0.007		0.007		0.003		0.003		0.022	
10:00 PM - 11:00 PM		0.019		0.005		0.006		0.008		0.006		0.003		0.003		0.016	
11:00 PM - 12:00 AM		0.023		0.007		0.007		0.011		0.004		0.007		0.011		0.011	
12:00 AM - 01:00 AM		0.021		0.009		0.009		0.017		0.020		0.007		0.007		0.005	
01:00 AM - 02:00 AM		0.019		0.009		0.014		0.017		0.012		0.006		0.012		0.006	
02:00 AM - 03:00 AM		0.010		0.006		0.005		0.023		0.020		0.012		0.018		0.018	
03:00 AM - 04:00 AM		0.006		0.006		0.003		0.017		0.021		0.011		0.026		0.026	
04:00 AM - 05:00 AM		0.010		0.004		0.004		0.025		0.013		0.011		0.027		0.027	
05:00 AM - 06:00 AM		0.008		0.007		0.005		0.019		0.014		0.008		0.024		0.024	
06:00 AM - 07:00 AM		0.008		0.008		0.006		0.005		0.010		0.008		0.012		0.012	
07:00 AM - 08:00 AM		0.007		0.002		0.008		0.005		0.007		0.009		0.007		0.007	
08:00 AM - 09:00 AM		0.008		0.002		0.008		0.002		0.008		0.013		0.006		0.006	
09:00 AM - 10:00 AM		0.010		0.004		0.022		0.011		0.011		0.019		0.006		0.006	
Average		0.011		0.007		0.007		0.013		0.016		0.009		0.013		0.013	
1hr - Maximum		0.023		0.015		0.022		0.026		0.031		0.019		0.027		0.027	
Standard 1hr - Average		0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170	
Standard																	
Reference Method																	

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Approved by

Sanyat C.

Saranya Chalerthamrong
Scientist (4)

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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHCEO-ONE

TESTING
No.0042
Lot ID: 2330550
Date Received : May 29, 2023
Date Reported : Jun 02, 2023
Report Number: 2609734-1

Page 1 of 1

Sample Description		Air Quality			
Location	11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150				
Date Analysis Commenced	May 31, 2023				
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)
2330550-1	May 20 - May 21, 2023	0.043	0.034	755	32
2330550-2	May 21 - May 22, 2023	0.064	0.040	755	32
2330550-3	May 22 - May 23, 2023	0.075	0.037	755	30
2330550-4	May 23 - May 24, 2023	0.072	0.039	755	30
2330550-5	May 24 - May 25, 2023	0.052	0.040	755	31
2330550-6	May 25 - May 26, 2023	0.064	0.040	755	30
2330550-7	May 26 - May 27, 2023	0.074	0.045	755	32
Guideline		0.33	0.12		



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
Lot ID: 2329514
Date Received : May 29, 2023
P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Date Reported : Jun 03, 2023
Project Name : GLOW-OM-22-103
Report Number: 2672984-1
Project Location : GHECO-ONE

Page 1 of 1

Sample Description		Air Quality									
Location	พื้นที่อุตสาหกรรม-ลำน้ำพอง (GPS 47P 0736058, 1402077)										
Parameter	Nitrogen dioxide (ppm)										
Measurement Date	May 20, 2023 - May 27, 2023										
Measurement by	Suphachai Wongsurchai										
Time	2329514-1	2329514-2	2329514-3	2329514-4	2329514-5	2329514-6	2329514-7				
	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 25, 2023	May 26, 2023				
09:00 AM - 10:00 AM	0.004	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.004		
10:00 AM - 11:00 AM	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
11:00 AM - 12:00 PM	0.002	0.010	0.005	0.003	0.005	0.004	0.004	0.004	0.004	0.002	
12:00 PM - 01:00 PM	0.002	0.007	0.004	0.006	0.005	0.004	0.003	0.003	0.003	0.002	
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.007	0.004	0.004	0.003	0.003	0.003	0.006	
02:00 PM - 03:00 PM	0.004	0.002	0.004	0.007	0.003	0.003	0.004	0.003	0.003	0.004	
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.004	0.003	0.002	0.002	0.002	0.002	0.003	
04:00 PM - 05:00 PM	0.006	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.004	
05:00 PM - 06:00 PM	0.004	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	
10:00 PM - 11:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
01:00 AM - 02:00 AM	0.002	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
02:00 AM - 03:00 AM	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
03:00 AM - 04:00 AM	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.009	
04:00 AM - 05:00 AM	0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.009	
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	
Average	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.003	
1hr - Maximum	0.006	0.010	0.005	0.007	0.005	0.004	0.005	0.004	0.004	0.009	
Standard 1hr - Average	0.170	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 : GHECO-ONE COMPANY LIMITED
Lot ID: 2329514
Date Received : May 29, 2023
P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Date Reported : Jun 03, 2023
Project Name : GLOW-OM-22-103
Report Number: 2672985-1
Project Location : GHECO-ONE

Page 1 of 1

Sample Description		Air Quality									
Location	พิกัด (GPS 47P 0729433, 1412978)										
Parameter	Nitrogen dioxide (ppm)										
Measurement Date	May 20, 2023 - May 27, 2023										
Measurement by	Suphachai Wongsurchai										
Time		2329514-8	2329514-9	2329514-10	2329514-11	2329514-12	2329514-13	2329514-14			
		May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 25, 2023	May 26, 2023			
03:00 PM - 04:00 PM		0.015	0.009	0.016	0.011	0.009	0.003	0.029			
04:00 PM - 05:00 PM		0.025	0.018	0.019	0.017	0.003	0.003	0.018			
05:00 PM - 06:00 PM		0.030	0.024	0.021	0.025	0.003	0.003	0.014			
06:00 PM - 07:00 PM		0.011	0.007	0.008	0.008	0.003	0.007	0.006			
07:00 PM - 08:00 PM		0.007	0.005	0.006	0.005	0.006	0.006	0.004			
08:00 PM - 09:00 PM		0.007	0.004	0.004	0.004	0.004	0.004	0.005			
09:00 PM - 10:00 PM		0.005	0.003	0.003	0.004	0.004	0.003	0.003			
10:00 PM - 11:00 PM		0.004	0.003	0.003	0.003	0.004	0.003	0.003			
11:00 PM - 12:00 AM		0.003	0.003	0.003	0.003	0.004	0.003	0.003			
12:00 AM - 01:00 AM		0.003	0.003	0.003	0.003	0.006	0.004	0.003			
01:00 AM - 02:00 AM		0.005	0.003	0.003	0.003	0.007	0.008	0.004			
02:00 AM - 03:00 AM		0.004	0.003	0.004	0.007	0.008	0.004	0.004			
03:00 AM - 04:00 AM		0.004	0.003	0.003	0.005	0.008	0.004	0.007			
04:00 AM - 05:00 AM		0.004	0.003	0.003	0.004	0.011	0.005	0.005			
05:00 AM - 06:00 AM		0.003	0.003	0.003	0.005	0.007	0.006	0.005			
06:00 AM - 07:00 AM		0.003	0.003	0.004	0.006	0.008	0.008	0.005			
07:00 AM - 08:00 AM		0.003	0.003	0.003	0.017	0.007	0.010	0.004			
08:00 AM - 09:00 AM		0.003	0.004	0.004	0.017	0.006	0.008	0.006			
09:00 AM - 10:00 AM		0.004	0.006	0.007	0.012	0.006	0.008	0.008			
10:00 AM - 11:00 AM		0.006	0.007	0.009	0.007	0.005	0.006	0.012			
11:00 AM - 12:00 PM		0.011	0.006	0.007	0.008	0.004	0.013	0.013			
12:00 PM - 01:00 PM		0.010	0.009	0.009	0.008	0.005	0.012	0.018			
01:00 PM - 02:00 PM		0.005	0.014	0.008	0.011	0.006	0.019	0.016			
02:00 PM - 03:00 PM		0.007	0.014	0.006	0.013	0.004	0.024	0.019			
Average		0.008	0.007	0.007	0.009	0.006	0.007	0.009			
1hr - Maximum		0.030	0.024	0.021	0.025	0.011	0.024	0.029			
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 : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 2329514

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2672986-1

Page 1 of 1

Sample Description	Air Quality	2329514-15					2329514-16					2329514-17					2329514-18					2329514-19					2329514-20					2329514-21				
		May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023
Location	สุราษฎร์ธานี (GPS 47P 0725073, 1412550)																																			
Parameter	Nitrogen dioxide (ppm)																																			
Measurement Date	May 20, 2023 - May 27, 2023																																			
Measurement by	Suphachai Wongsurichai																																			

Time	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 25, 2023	May 26, 2023
02:00 PM - 03:00 PM	0.002	0.009	0.004	0.005	0.003	0.002	0.004
03:00 PM - 04:00 PM	0.003	0.004	0.002	0.004	0.003	0.002	0.003
04:00 PM - 05:00 PM	0.002	0.002	0.004	<0.001	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.001	0.002	0.002	0.004	0.002	0.002	0.004
06:00 PM - 07:00 PM	<0.001	0.006	0.001	0.002	0.002	0.002	0.028
07:00 PM - 08:00 PM	<0.001	<0.001	0.002	0.003	0.001	0.001	0.005
08:00 PM - 09:00 PM	<0.001	0.001	<0.001	0.003	0.002	0.002	0.004
09:00 PM - 10:00 PM	<0.001	0.001	<0.001	0.004	0.003	0.002	0.001
10:00 PM - 11:00 PM	0.001	0.001	0.001	0.003	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.003	0.002	0.004	0.003	0.003	0.002
12:00 AM - 01:00 AM	0.002	0.002	<0.001	0.004	0.002	0.004	0.002
01:00 AM - 02:00 AM	0.002	0.001	0.001	0.005	0.003	0.006	0.001
02:00 AM - 03:00 AM	0.002	0.001	0.002	0.004	0.004	0.008	0.002
03:00 AM - 04:00 AM	0.002	0.001	0.002	0.004	0.002	0.003	0.002
04:00 AM - 05:00 AM	0.001	0.002	0.002	0.004	0.003	0.002	0.003
05:00 AM - 06:00 AM	0.002	0.002	0.001	0.004	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.005	0.002	0.002	0.002	0.003	0.005
07:00 AM - 08:00 AM	0.002	0.003	0.001	0.004	0.003	0.004	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.001	0.004	0.007	0.011	0.003
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.005	0.019	0.022	0.003
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.009	0.026	0.010	0.002
11:00 AM - 12:00 PM	0.002	0.003	0.003	0.011	0.010	0.006	0.002
12:00 PM - 01:00 PM	0.008	0.006	0.003	0.005	0.004	0.007	0.003
01:00 PM - 02:00 PM	0.008	0.008	0.003	0.004	0.004	0.007	0.003
Average	0.002	0.003	0.002	0.004	0.005	0.005	0.004
1hr - Maximum	0.008	0.009	0.004	0.011	0.026	0.022	0.028
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	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 : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 2329514

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2597891-1

Page 1 of 1

Sample Description	Air Quality	2329514-22					2329514-23					2329514-24					2329514-25					2329514-26					2329514-27					2329514-28				
		May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023
Location	สุราษฎร์ธานี (GPS 47P 0731529, 1402602)																																			
Parameter	Nitrogen dioxide (ppm)																																			
Measurement Date	May 20, 2023 - May 27, 2023																																			
Measurement by	Suphachai Wongsurichai																																			

Time	May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 25, 2023	May 26, 2023
11:00 AM - 12:00 PM	0.002	0.001	0.003	0.004	0.004	0.005	0.006
12:00 PM - 01:00 PM	0.006	0.001	0.002	0.006	0.004	0.006	0.007
01:00 PM - 02:00 PM	0.009	0.001	0.003	0.007	0.003	0.010	0.006
02:00 PM - 03:00 PM	0.005	0.002	0.002	0.008	0.006	0.006	0.005
03:00 PM - 04:00 PM	0.004	0.002	0.007	0.008	0.007	0.004	0.013
04:00 PM - 05:00 PM	0.005	0.003	0.024	0.008	0.008	0.003	0.007
05:00 PM - 06:00 PM	0.004	0.004	0.010	0.008	0.005	0.004	0.006
06:00 PM - 07:00 PM	0.006	0.003	0.020	0.007	0.002	0.004	0.013
07:00 PM - 08:00 PM	0.003	0.004	0.020	0.002	0.005	0.008	0.010
08:00 PM - 09:00 PM	0.003	0.007	0.022	0.003	0.003	0.005	0.016
09:00 PM - 10:00 PM	0.004	0.010	0.021	0.003	0.006	0.004	0.015
10:00 PM - 11:00 PM	0.009	0.002	0.020	0.003	0.005	0.004	0.009
11:00 PM - 12:00 AM	0.012	0.004	0.020	0.004	0.005	0.004	0.016
12:00 AM - 01:00 AM	0.005	0.020	0.020	0.004	0.005	0.003	0.018
01:00 AM - 02:00 AM	0.002	0.014	0.014	0.003	0.006	0.003	0.019
02:00 AM - 03:00 AM	0.002	0.011	0.018	0.003	0.010	0.003	0.003
03:00 AM - 04:00 AM	0.002	0.006	0.017	0.003	0.004	0.009	0.003
04:00 AM - 05:00 AM	0.002	0.002	0.016	0.003	0.003	0.008	0.002
05:00 AM - 06:00 AM	0.002	0.003	0.017	0.003	0.003	0.012	0.003
06:00 AM - 07:00 AM	0.002	0.002	0.019	0.005	0.003	0.008	0.004
07:00 AM - 08:00 AM	<0.001	0.003	0.022	0.004	0.003	0.006	0.003
08:00 AM - 09:00 AM	0.001	0.002	0.022	0.004	0.004	0.004	0.004
09:00 AM - 10:00 AM	<0.001	0.003	0.023	0.004	0.004	0.004	0.005
10:00 AM - 11:00 AM	0.001	0.005	0.022	0.004	0.005	0.005	0.002
Average	0.004	0.005	0.016	0.005	0.005	0.005	0.008
1hr - Maximum	0.012	0.020	0.024	0.008	0.010	0.012	0.019
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	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 : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong, Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Description		Air Quality													
Location		Tsurutajige (GPS 47P 0730822, 1407369)													
Parameter		Nitrogen dioxide (ppm)													
Measurement Date		May 20, 2023 - May 27, 2023													
Measurement by		Sushachal Wongsojunchai													
		2330556-1		2330556-2		2330556-3		2330556-4		2330556-5		2330556-6		2330556-7	
	Time	May 20, 2023	May 21, 2023	May 21, 2023	May 22, 2023	May 22, 2023	May 23, 2023	May 23, 2023	May 24, 2023	May 24, 2023	May 25, 2023	May 25, 2023	May 26, 2023	May 26, 2023	
	01:00 PM - 02:00 PM	<0.001	0.006		0.005		0.005		0.005		0.004		0.004	0.005	
	02:00 PM - 03:00 PM	0.005	0.004		0.004		0.004		0.004		0.008		0.004	0.004	
	03:00 PM - 04:00 PM	0.004	0.007		0.004		0.004		0.005		0.009		0.005	0.004	
	04:00 PM - 05:00 PM	0.004	0.015		0.011		0.011		0.014		0.013		0.007	0.005	
	05:00 PM - 06:00 PM	0.006	0.028		0.008		0.008		0.017		0.006		0.006	0.005	
	06:00 PM - 07:00 PM	0.007	0.008		0.014		0.014		0.032		0.009		0.008	0.005	
	07:00 PM - 08:00 PM	0.008	0.010		0.009		0.009		0.008		0.006		0.005	0.003	
	08:00 PM - 09:00 PM	0.007	0.013		0.005		0.005		0.006		0.004		0.007	0.003	
	09:00 PM - 10:00 PM	0.004	0.006		0.004		0.004		0.005		0.004		0.004	0.003	
	10:00 PM - 11:00 PM	0.004	0.002		0.004		0.004		0.004		0.003		0.004	0.003	
	11:00 PM - 12:00 AM	0.003	0.002		0.003		0.003		0.008		0.006		0.004	0.005	
	12:00 AM - 01:00 AM	0.002	0.002		0.002		0.002		0.008		0.009		0.013	0.003	
	01:00 AM - 02:00 AM	0.003	0.002		0.004		0.004		0.010		0.003		0.003	0.007	
	02:00 AM - 03:00 AM	0.003	0.002		0.006		0.006		0.009		0.002		0.003	0.005	
	03:00 AM - 04:00 AM	0.003	0.003		0.011		0.011		0.010		0.005		0.003	0.003	
	04:00 AM - 05:00 AM	0.002	0.002		0.013		0.013		0.011		0.005		0.004	0.003	
	05:00 AM - 06:00 AM	0.005	0.004		0.012		0.012		0.016		0.009		0.006	0.005	
	06:00 AM - 07:00 AM	0.007	0.008		0.011		0.011		0.015		0.007		0.008	0.008	
	07:00 AM - 08:00 AM	0.007	0.010		0.012		0.012		0.016		0.010		0.009	0.007	
	08:00 AM - 09:00 AM	0.004	0.008		0.008		0.008		0.012		0.009		0.006	0.003	
	09:00 AM - 10:00 AM	0.002	0.004		0.006		0.006		0.005		0.004		0.003	0.003	
	10:00 AM - 11:00 AM	0.004	0.006		0.006		0.006		0.006		0.004		0.003	0.003	
	11:00 AM - 12:00 PM	0.006	0.006		0.006		0.006		0.008		0.004		0.005	0.005	
	12:00 PM - 01:00 PM	0.007	0.004		0.005		0.005		0.005		0.005		0.006	0.005	
	Average	0.004	0.007		0.007		0.007		0.010		0.006		0.005	0.005	
	1hr - Maximum	0.008	0.028		0.014		0.014		0.032		0.013		0.011	0.013	
	Standard 1hr - Average	0.170	0.170		0.170		0.170		0.170		0.170		0.170	0.170	

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

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10017-23/EMJ.03

S (Reports): Air SO₂NO_xrpt (0-12AM)

S:\Reports_Air SOxNOx.rpt (9:32AM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2330543

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2672994-1

Page 1 of 1

Sample Description			Air Quality
Location	ທ່າຫຼວງນ້ຳສົກລະໄຊ (GPS 47P-0736058, 1402077)		
Parameter	Sulfur Dioxide (ppm)		
Measurement Date	May 20, 2023 - May 27, 2023		
Measurement by	Suphachal Wongsurchai		
	2330543-1		2330543-2
Time	May 20, 2023	May 21, 2023	May 22, 2023
09:00 AM - 10:00 AM	0.001	0.001	0.001
10:00 AM - 11:00 AM	<0.001	0.001	0.001
11:00 AM - 12:00 PM	0.001	0.001	0.001
12:00 PM - 01:00 PM	0.001	0.001	0.002
01:00 PM - 02:00 PM	0.001	0.002	0.002
02:00 PM - 03:00 PM	0.001	0.002	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.001
04:00 PM - 05:00 PM	0.001	0.002	0.002
05:00 PM - 06:00 PM	0.001	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.001	0.001	0.001
10:00 PM - 11:00 PM	0.001	0.001	0.002
11:00 PM - 12:00 AM	0.001	0.001	0.001
12:00 AM - 01:00 AM	0.001	0.001	0.001
01:00 AM - 02:00 AM	0.001	0.001	0.001
02:00 AM - 03:00 AM	0.001	0.001	0.001
03:00 AM - 04:00 AM	0.002	0.001	0.002
04:00 AM - 05:00 AM	0.003	0.001	0.006
05:00 AM - 06:00 AM	0.003	0.001	0.003
06:00 AM - 07:00 AM	0.001	0.001	0.001
07:00 AM - 08:00 AM	0.001	0.001	0.001
08:00 AM - 09:00 AM	0.001	0.001	0.001
Average	0.001	0.001	0.002
1hr - Maximum	0.003	0.002	0.006
Standard 1hr - Average	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12
Standard			
Reference Method	: Notification of the National Environment Board No.10, 1992 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).		
	US EPA Method Part 53 and 58		

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Approved by

Savanya C.

**Chalermthamrong
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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Lot ID: 2330543

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2672996-1

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	Measurement Date	Measurement by
Sulfur Dioxide (ppm)		May 20, 2023 - May 27, 2023	Suphachai Wongsunchai
Time		2330543-8	2330543-9
03:00 PM - 04:00 PM		0.003	0.003
04:00 PM - 05:00 PM		0.004	0.003
05:00 PM - 06:00 PM		0.005	0.004
06:00 PM - 07:00 PM		0.004	0.004
07:00 PM - 08:00 PM		0.004	0.003
08:00 PM - 09:00 PM		0.004	0.003
09:00 PM - 10:00 PM		0.004	0.003
10:00 PM - 11:00 PM		0.004	0.004
11:00 PM - 12:00 AM		0.004	0.004
12:00 AM - 01:00 AM		0.004	0.003
01:00 AM - 02:00 AM		0.004	0.006
02:00 AM - 03:00 AM		0.004	0.004
03:00 AM - 04:00 AM		0.004	0.004
04:00 AM - 05:00 AM		0.004	0.004
05:00 AM - 06:00 AM		0.004	0.004
06:00 AM - 07:00 AM		0.004	0.004
07:00 AM - 08:00 AM		0.004	0.004
08:00 AM - 09:00 AM		0.005	0.005
09:00 AM - 10:00 AM		0.004	0.004
10:00 AM - 11:00 AM		0.004	0.004
11:00 AM - 12:00 PM		0.004	0.004
12:00 PM - 01:00 PM		0.004	0.004
01:00 PM - 02:00 PM		0.004	0.004
02:00 PM - 03:00 PM		0.003	0.003
03:00 PM - 04:00 PM		0.004	0.004
04:00 PM - 05:00 PM		0.004	0.004
05:00 PM - 06:00 PM		0.004	0.004
06:00 PM - 07:00 PM		0.004	0.004
07:00 PM - 08:00 PM		0.004	0.004
08:00 PM - 09:00 PM		0.004	0.004
09:00 PM - 10:00 PM		0.004	0.004
10:00 PM - 11:00 PM		0.004	0.004
11:00 PM - 12:00 PM		0.004	0.004
12:00 PM - 01:00 PM		0.003	0.003
01:00 PM - 02:00 PM		0.003	0.003
02:00 PM - 03:00 PM		0.003	0.003
Average		0.004	0.004
1hr - Maximum		0.005	0.006
Standard 1hr - Average		0.3	0.3
Standard 24 hrs - Average		0.12	0.12
Standard 24 hrs - Average		0.12	0.12
Standard		0.12	0.12
Reference Method		US EPA Method Part 53 and 58	US EPA Method Part 53 and 58

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NIGHT SOLUTIONS PRECISION TEAM

081-0111640

S (Repairs)_Ae SONOKO pr (9:10AM)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Lot ID: 2330543

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2672998-1

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	Measurement Date	Measurement by
Sulfur Dioxide (ppm)		May 20, 2023 - May 27, 2023	Suphachai Wongsunchai
Time		2330543-15	2330543-16
02:00 PM - 03:00 PM		<0.001	<0.001
03:00 PM - 04:00 PM		<0.001	<0.001
04:00 PM - 05:00 PM		0.001	<0.001
05:00 PM - 06:00 PM		<0.001	<0.001
06:00 PM - 07:00 PM		<0.001	<0.001
07:00 PM - 08:00 PM		<0.001	<0.001
08:00 PM - 09:00 PM		0.001	<0.001
09:00 PM - 10:00 PM		<0.001	<0.001
10:00 PM - 11:00 PM		0.001	<0.001
11:00 PM - 12:00 AM		0.002	0.002
12:00 AM - 01:00 AM		0.002	0.002
01:00 AM - 02:00 AM		0.001	0.001
02:00 AM - 03:00 AM		<0.001	0.001
03:00 AM - 04:00 AM		<0.001	0.002
04:00 AM - 05:00 AM		<0.001	0.004
05:00 AM - 06:00 AM		<0.001	0.002
06:00 AM - 07:00 AM		<0.001	0.002
07:00 AM - 08:00 AM		<0.001	0.003
08:00 AM - 09:00 AM		<0.001	0.003
09:00 AM - 10:00 AM		<0.001	0.003
10:00 AM - 11:00 AM		<0.001	0.003
11:00 AM - 12:00 PM		<0.001	0.002
12:00 PM - 01:00 PM		<0.001	0.002
01:00 PM - 02:00 PM		<0.001	0.002
Average		<0.001	0.002
1hr - Maximum		0.002	0.004
Standard 1hr - Average		0.3	0.3
Standard 24 hrs - Average		0.12	0.12
Standard 24 hrs - Average		0.12	0.12
Standard		0.12	0.12
Reference Method		US EPA Method Part 53 and 58	US EPA Method Part 53 and 58

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081-0111640

S (Repairs)_Ae SONOKO pr (9:10AM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2330546

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2609718-1

Page 1 of 1

Sample Description		Air Quality	
Location	กรุงเทพมหานคร (GPS 47P 0735185, 1405871)	Parameter	Sulfur Dioxide (ppm)
Measurement Date	May 20, 2023 - May 27, 2023	Measurement by	Suphachai Wongsurichai
Time		2330546-1	2330546-2
10:00 AM - 11:00 AM	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.003	0.002	0.003
02:00 PM - 03:00 PM	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.003	0.006	0.002
02:00 AM - 03:00 AM	0.003	0.006	0.002
03:00 AM - 04:00 AM	0.003	0.004	0.002
04:00 AM - 05:00 AM	0.003	0.004	0.002
05:00 AM - 06:00 AM	0.003	0.005	0.002
06:00 AM - 07:00 AM	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002
Average	0.002	0.003	0.002
1hr - Maximum	0.003	0.006	0.002
Standard 1hr - Average	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12

Time		2330546-3	2330546-4	2330546-5	2330546-6	2330546-7
10:00 AM - 11:00 AM	0.002	0.003	0.002	0.003	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.003	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.003	0.002	0.002
01:00 PM - 02:00 PM	0.003	0.002	0.003	0.003	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.003	0.003	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.003	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.004	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.003	0.005	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.004	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.004	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.003	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.004	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.003	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.003	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.001
01:00 AM - 02:00 AM	0.003	0.004	0.002	0.002	0.002	0.001
02:00 AM - 03:00 AM	0.003	0.004	0.002	0.002	0.002	0.001
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.001
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.002	0.001
05:00 AM - 06:00 AM	0.003	0.003	0.002	0.002	0.002	0.001
06:00 AM - 07:00 AM	0.002	0.003	0.002	0.002	0.002	0.001
07:00 AM - 08:00 AM	0.002	0.003	0.006	0.003	<0.001	0.001
08:00 AM - 09:00 AM	0.002	0.003	0.004	0.003	0.002	0.001
09:00 AM - 10:00 AM	0.002	0.002	0.003	0.002	0.002	0.002
Average	0.002	0.003	0.003	0.003	0.002	0.002
1hr - Maximum	0.003	0.005	0.006	0.005	0.002	0.002
Standard 1hr - Average	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
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).					
Reference Method	: US EPA Method Part 53 and 58					

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Sarinya Chalermthamrong
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2330553

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2609719-1

Page 1 of 1

Sample Description		Air Quality	
Location	กรุงเทพมหานคร (GPS 47P 0729829, 1403305)	Parameter	Sulfur Dioxide (ppm)
Measurement Date	May 20, 2023 - May 27, 2023	Measurement by	Suphachai Wongsurichai
Time		2330553-1	2330553-2
12:00 PM - 01:00 PM	0.002	0.001	0.002
01:00 PM - 02:00 PM	<0.001	0.001	0.002
02:00 PM - 03:00 PM	0.001	0.001	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.002
04:00 PM - 05:00 PM	0.001	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.003	0.003
10:00 PM - 11:00 PM	0.003	0.003	0.003
11:00 PM - 12:00 AM	0.002	0.003	0.004
12:00 AM - 01:00 AM	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.002	0.003	0.004
04:00 AM - 05:00 AM	0.002	0.003	0.003
05:00 AM - 06:00 AM	0.002	0.003	0.004
06:00 AM - 07:00 AM	0.003	0.003	0.004
07:00 AM - 08:00 AM	0.003	0.003	0.004
08:00 AM - 09:00 AM	0.002	0.003	0.003
09:00 AM - 10:00 AM	0.002	0.002	0.003
10:00 AM - 11:00 PM	0.001	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.002	0.002
Average	0.002	0.002	0.003
1hr - Maximum	0.003	0.003	0.004
Standard 1hr - Average	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12

Time		2330553-3	2330553-4	2330553-5	2330553-6	2330553-7
12:00 PM - 01:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.003
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.003
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.003	0.003	0.003
08:00 PM - 09:00 PM	0.002	0.002	0.003	0.003	0.003	0.002
09:00 PM - 10:00 PM	0.003	0.003	0.003	0.003	0.003	0.002
10:00 PM - 11:00 PM	0.003	0.003	0.004	0.003	0.003	0.002
11:00 PM - 12:00 AM	0.003	0.003	0.004	0.003	0.003	0.002
12:00 AM - 01:00 AM	0.003	0.003	0.004	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.004	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.004	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.002	0.003	0.004	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.002	0.003	0.004	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.002	0.003	0.004	0.004	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.003	0.004	0.004	0.004	0.003
07:00 AM - 08:00 AM	0.003	0.003	0.004	0.004	0.004	0.003
08:00 AM - 09:00 AM	0.002	0.003	0.004	0.003	0.003	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.003	0.003	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.002	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.003	0.003	0.003	0.002
1hr - Maximum	0.003	0.003	0.004	0.004	0.004	0.003
Standard 1hr - Average	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
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).					
Reference Method	: US EPA Method Part 53 and 58					

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Sarinya Chalermthamrong
Scientist (4)

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18517-21/EML

S:\Reports_Air SONOX.rpt (9:32AM)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Lot ID: 2330554

Date Received : May 29, 2023

Date Reported : Jun 03, 2023

Report Number: 2609720-1

Page 1 of 1

Sample Description	Air Quality	2330554-1	2330554-2	2330554-3	2330554-4	2330554-5	2330554-6	2330554-7
Location	ฟาร์มสุรา (GPS 47P 0730822, 1407366)							
Parameter	Sulfur Dioxide (ppm)							
Measurement Date	May 20, 2023 - May 27, 2023							
Measurement by	Suphachai Wongsunchai							
Time		May 20, 2023	May 21, 2023	May 22, 2023	May 23, 2023	May 24, 2023	May 25, 2023	May 26, 2023
01:00 PM - 02:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.004
05:00 PM - 06:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.003	0.002	0.002	0.002	0.001	0.001	0.002	0.002
07:00 PM - 08:00 PM	0.003	0.002	0.002	0.002	<0.001	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.003	0.002	0.002	0.002	0.001	0.002	0.002	0.003
09:00 PM - 10:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.003	0.002	0.002	0.001	0.001	0.001	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002
09:00 AM - 10:00 AM	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.003	0.002	0.001	0.001	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002
Average	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.002
1hr - Maximum	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.004
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).						
		US EPA Method Part 53 and 58						

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Saranya Chalermtantrong

Scientist (4)

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0017/01/0040

3. Reports_Life Sciences.pdf (3.22AM)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Lot ID: 2330576

Date Received : Jun 29, 2023

Date Reported : Jun 15, 2023

Report Number : 2597904-1

Page 1 of 7

Sample Number	2330576-1				
Sample Date	May 20, 2023				
Sample Description	Air Quality				
Location	ท่าอากาศยาน (GPS 47P 0729829, 1403305)				
Date Analysis Commenced	Jun 01, 2023				
Condition of Sample	Drawn into one filter paper placed in plastic cassette				
Barometric Pressure	755 mmHg				
Atmospheric Temperature	32.0 °C				
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOE)	Result
Metals Testing					
Arsenic	20/05/23 - 21/05/23	ug/m3		0.01	<0.01
Cadmium	20/05/23 - 21/05/23	ug/m3		0.01	<0.01
Lead	20/05/23 - 21/05/23	ug/m3		0.01	<0.01
Mercury (Particle Phase)	20/05/23 - 21/05/23	ug/m3		0.0005	<0.0005
Method					
United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4					
United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4					
United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4					
United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4					

Sampled By : Suphachai Wongsunchai

Remarks :

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

Approved by

Savitree N.

Savitree Nonsianglam

Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 2 of 7

Sample Number	2330576-2											
Sample Date	May 21, 2023											
Sample Description	Air Quality											
Location	กรุงเทพมหานคร (GPS 47P 0729829, 1403305)											
Date Analysis Commenced	Jun 01, 2023											
Condition of Sample	Drawn into one filter paper placed in plastic cassette											
Barometric Pressure	755 mmHg											
Atmospheric Temperature	32.0 °C											
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location					
Metals Testing												
Arsenic	21/05/23 - 22/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok					
Cadmium	21/05/23 - 22/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok					
Lead	21/05/23 - 22/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok					
Mercury (Particle Phase)	21/05/23 - 22/05/23	ug/m3	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok					

Sampled By : Suphachai Wongsurichai

Remark :

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

Savitree N.

Approved by

Savitree Nongiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 3 of 7

Sample Number	2330576-3										
Sample Date	May 22, 2023										
Sample Description	Air Quality										
Location	กรุงเทพมหานคร (GPS 47P 0729829, 1403305)										
Date Analysis Commenced	Jun 01, 2023										
Condition of Sample	Drawn into one filter paper placed in plastic cassette										
Barometric Pressure	755 mmHg										
Atmospheric Temperature	30.0 °C										
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location				
Metals Testing											
Arsenic	22/05/23 - 23/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok				
Cadmium	22/05/23 - 23/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok				
Lead	22/05/23 - 23/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok				
Mercury (Particle Phase)	22/05/23 - 23/05/23	ug/m3	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4	Bangkok				

Sampled By : Suphachai Wongsurichai

Remark :

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

Savitree N.

Approved by

Savitree Nongiam
Manager

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 4 of 7

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Barometric Pressure	Atmospheric Temperature	Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
2330576-4	May 23, 2023	Air Quality	ตำบลนาหว้า (GPS 47° 07'28.29", 14°03'30.5")	Jun 01, 2023	Drawn into one filter paper placed in plastic cassette	755 mmHg	30.0 °C								
Metals Testing															
Arsenic	23/05/23	-	24/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Cadmium	23/05/23	-	24/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Lead	23/05/23	-	24/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Mercury (Particle Phase)	23/05/23	-	24/05/23	ug/m3	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok

Sampled By : Suphachai Wongsurichai

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 5 of 7

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Barometric Pressure	Atmospheric Temperature	Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
2330576-5	May 24, 2023	Air Quality	ตำบลนาหว้า (GPS 47° 07'28.29", 14°03'30.5")	Jun 01, 2023	Drawn into one filter paper placed in plastic cassette	755 mmHg	31.0 °C								
Metals Testing															
Arsenic	24/05/23	-	25/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Cadmium	24/05/23	-	25/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Lead	24/05/23	-	25/05/23	ug/m3	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok
Mercury (Particle Phase)	24/05/23	-	25/05/23	ug/m3	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3-4							Bangkok

Sampled By : Suphachai Wongsurichai

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 6 of 7

Sample Number	2330576-6	Sample Date	May 25, 2023	Sample Description	Air Quality	Location	ตำบลนาเกลือ (GPS 47° 07'28.29", 140°33'05")	Date Analysis Commenced	Jun 01, 2023	Condition of Sample	Drawn into one filter paper placed in plastic cassette	Barometric Pressure	755 mmHg	Atmospheric Temperature	30.0 °C
Analyte		Sampled Date/time		Unit	LOD	LOQ (LOR)	Result	Method		Testing Location					
Metals Testing															
Arsenic		25/05/23	- 26/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Cadmium		25/05/23	- 26/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Lead		25/05/23	- 26/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Mercury (Particle Phase)		25/05/23	- 26/05/23	ug/m ³	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					

Sampled By : Suphachai Wongsurichai

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330576
Date Received : May 29, 2023
Date Reported : Jun 15, 2023
Report Number : 2597904-1

Page 7 of 7

Sample Number	2330576-7	Sample Date	May 26, 2023	Sample Description	Air Quality	Location	ตำบลนาเกลือ (GPS 47° 07'28.29", 140°33'05")	Date Analysis Commenced	Jun 01, 2023	Condition of Sample	Drawn into one filter paper placed in plastic cassette	Barometric Pressure	755 mmHg	Atmospheric Temperature	32.0 °C
Analyte		Sampled Date/time		Unit	LOD	LOQ (LOR)	Result	Method		Testing Location					
Metals Testing															
Arsenic		26/05/23	- 27/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Cadmium		26/05/23	- 27/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Lead		26/05/23	- 27/05/23	ug/m ³	-	0.01	<0.01	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					
Mercury (Particle Phase)		26/05/23	- 27/05/23	ug/m ³	-	0.0005	<0.0005	United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4		Bangkok					

Sampled By : Suphachai Wongsurichai

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID : 2330544
Date Received : May 29, 2023
Date Reported : Jun 06, 2023
Report Number : 2597889-1

Sample Number : 2330544-1 to 7
Parameter : Wind Speed / Wind Direction
Location : กรุงเทพมหานคร (GPS 47P 0736058, 1402077)
Sampling Date : May 20 - May 27, 2023
Sampling by : Suphachai Wongsurichai

Time	May 20 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
09:00 AM - 10:00 AM	0.3	302.0	NNW	0.6	269.0	W	1.2	260.0	W	1.3	253.0	WSW	0.6	256.0	WSW	0.5	98.0	E	0.4	308.0	NW
10:00 AM - 11:00 AM	1.8	259.0	W	0.3	249.0	WSW	1.1	271.0	W	1.7	262.0	W	2.2	283.0	NNW	0.9	325.0	NNW	0.9	310.0	NW
11:00 AM - 12:00 PM	2.4	242.0	WSW	0.3	304.0	NW	1.4	245.0	WSW	2.6	283.0	NNW	2.2	275.0	W	0.8	359.0	N	1.2	317.0	NW
12:00 PM - 01:00 PM	1.5	273.0	W	1.1	111.0	ESE	0.5	232.0	SW	1.0	173.0	S	1.1	261.0	W	1.1	357.0	N	1.5	332.0	NNW
01:00 PM - 02:00 PM	1.5	246.0	WSW	3.0	251.0	WSW	0.7	251.0	WSW	2.2	185.0	S	0.9	266.0	W	0.4	23.0	NNE	1.1	306.0	NW
02:00 PM - 03:00 PM	0.9	312.0	NW	0.7	317.0	NW	1.3	230.0	SW	0.6	216.0	SW	2.1	232.0	SW	1.2	69.0	ENE	2.1	227.0	SW
03:00 PM - 04:00 PM	1.4	62.0	ENE	1.5	214.0	SW	0.7	359.0	N	0.7	197.0	SSW	1.5	251.0	WSW	1.0	241.0	WSW	1.7	160.0	SSE
04:00 PM - 05:00 PM	1.0	69.0	ENE	0.9	350.0	N	1.2	201.0	SSW	0.9	189.0	S	1.9	320.0	NW	1.3	121.0	ESE	0.5	170.0	S
05:00 PM - 06:00 PM	1.0	299.0	NNW	0.6	272.0	NNE	1.0	270.0	W	2.9	271.0	W	2.9	394.0	N	3.3	170.0	S	0.7	239.0	WSW
06:00 PM - 07:00 PM	1.4	248.0	WSW	0.8	220.0	SW	1.5	347.0	NNW	4.1	217.0	SW	1.7	23.0	NNE	1.0	231.0	SW	1.5	207.0	SSW
07:00 PM - 08:00 PM	0.4	82.0	E	0.6	181.0	S	1.2	129.0	SE	1.6	34.0	NE	0.9	124.0	SE	1.0	201.0	SSW	0.2	-	-
08:00 PM - 09:00 PM	1.1	238.0	WSW	0.4	192.0	SSW	0.6	178.0	S	1.9	165.0	SSE	1.6	171.0	S	1.4	101.0	E	1.1	242.0	WSW
09:00 PM - 10:00 PM	0.9	249.0	WSW	1.1	258.0	WSW	1.5	212.0	SSW	2.6	137.0	SE	0.6	85.0	E	1.9	251.0	WSW	1.5	192.0	SSW
10:00 PM - 11:00 PM	0.7	221.0	SW	0.9	200.0	SSW	1.5	202.0	SSW	0.9	157.0	SSE	0.9	92.0	E	1.0	234.0	SW	1.0	210.0	SSW
11:00 PM - 12:00 AM	1.6	221.0	SW	1.0	221.0	SW	0.8	177.0	S	1.3	175.0	S	2.0	147.0	SSE	0.4	164.0	SSE	1.4	216.0	SW
12:00 AM - 01:00 AM	1.2	207.0	SSW	0.3	204.0	SSW	0.4	220.0	SW	0.8	240.0	WSW	1.2	194.0	SSW	4.3	184.0	S	1.9	206.0	SSW
01:00 AM - 02:00 AM	1.7	208.0	SSW	0.0	-	-	0.0	-	-	0.4	197.0	SSW	1.4	121.0	ESE	4.1	218.0	SW	0.0	-	-
02:00 AM - 03:00 AM	0.5	209.0	SSW	0.9	194.0	SSW	0.5	213.0	SSW	0.0	-	-	1.4	217.0	SW	1.3	155.0	SSE	0.4	224.0	SW
03:00 AM - 04:00 AM	0.1	-	-	0.3	242.0	WSW	0.0	-	-	0.0	-	-	0.4	141.0	SE	0.7	211.0	SSW	0.7	202.0	SSW
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.8	240.0	WSW	0.0	-	-	0.0	-	-	0.8	230.0	SW	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	1.1	189.0	S	0.4	127.0	SE	0.0	-	-	0.4	190.0	S
06:00 AM - 07:00 AM	0.4	247.0	WSW	0.0	-	-	0.0	-	-	1.9	251.0	WSW	0.3	237.0	WSW	0.0	-	-	0.3	212.0	SSW
07:00 AM - 08:00 AM	0.4	230.0	SW	0.3	236.0	SW	1.1	253.0	WSW	1.4	271.0	W	1.5	62.0	ENE	0.4	231.0	SW	0.0	-	-
08:00 AM - 09:00 AM	2.4	232.0	SW	0.5	220.0	SW	0.4	253.0	WSW	0.4	255.0	WSW	0.6	322.0	NW	0.0	-	-	0.2	-	-

Reference Method : Cup Anemometer & Anemometer Vane Method

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Approved by

Saranyit Jitrantorn
Assistant General Manager

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NIGHT SOLUTIONS NIGHT PARTNER



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID : 2330544
Date Received : May 29, 2023
Date Reported : Jun 06, 2023
Report Number : 2597889-1

Page 2 of 2

Wind Rose



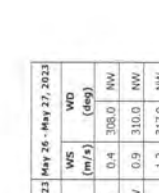
Date : May 20-21, 2023



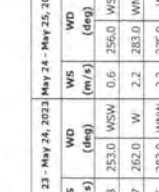
Date : May 21-22, 2023



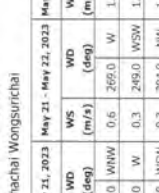
Date : May 22-23, 2023



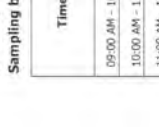
Date : May 23-24, 2023



Date : May 24-25, 2023



Date : May 25-26, 2023



Date : May 26-27, 2023

WS(m/s)	%
> 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	2.38
1.7-3.3	13.69
0.3-1.7	70.24
Calm	13.69

Approved by

Saranyit Jitrantorn
Assistant General Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID : 2330544

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2597899-1

Page 1 of 2

Sample Number : 2330544-8 to 14
Wind Speed / Wind Direction :
Location :
Sampling Date : May 20 - May 27, 2023
Sampling by : Suphachai Wongsurichai

Time	May 20 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023								
	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)							
03:00 PM - 04:00 PM	1.5	286.0	NNW	2.6	195.0	SSW	0.8	200.0	SSW	0.3	197.0	SSW	3.1	158.0	SSE	3.6	193.0	SSW	0.8	242.0	WSW
04:00 PM - 05:00 PM	3.1	315.0	NW	1.2	157.0	SSE	2.2	169.0	S	1.5	92.0	E	2.8	168.0	SSE	3.4	175.0	S	1.4	248.0	WSW
05:00 PM - 06:00 PM	2.0	166.0	SSE	0.9	222.0	SW	1.5	161.0	SSE	1.3	170.0	S	3.7	152.0	SSE	1.9	157.0	SSE	1.3	290.0	NNW
06:00 PM - 07:00 PM	3.8	209.0	SSW	2.5	160.0	SSE	0.4	164.0	SSE	1.6	168.0	SSE	3.3	193.0	SSW	2.8	223.0	SSW	2.4	302.0	NNW
07:00 PM - 08:00 PM	2.1	217.0	SW	0.6	143.0	SE	1.0	204.0	SSW	1.5	153.0	SSE	1.5	253.0	WSW	1.9	246.0	WSW	1.1	197.0	SSW
08:00 PM - 09:00 PM	1.8	214.0	SW	1.5	255.0	WSW	1.3	176.0	S	1.5	207.0	SSW	1.0	248.0	WSW	1.3	167.0	SSE	0.9	236.0	SW
09:00 PM - 10:00 PM	0.7	252.0	WSW	0.4	201.0	SSW	0.0	-	-	0.2	-	-	0.7	279.0	W	0.7	166.0	SSE	0.4	236.0	SW
10:00 PM - 11:00 PM	0.9	219.0	SW	0.8	208.0	SSW	0.3	178.0	S	1.0	359.0	N	0.8	221.0	SW	0.6	169.0	S	1.0	237.0	WSW
11:00 PM - 12:00 AM	3.0	228.0	SW	0.8	224.0	SW	0.0	-	-	0.0	-	-	1.4	169.0	S	0.9	192.0	SSW	1.3	252.0	WSW
12:00 AM - 01:00 AM	2.7	145.0	SE	0.0	-	-	1.7	228.0	SW	2.0	353.0	N	1.0	195.0	SSW	0.8	162.0	SSE	0.2	-	-
01:00 AM - 02:00 AM	1.1	239.0	WSW	0.4	210.0	SSW	1.0	347.0	NNW	0.7	353.0	N	1.4	327.0	NNW	2.5	271.0	W	0.3	260.0	W
02:00 AM - 03:00 AM	1.0	239.0	WSW	0.8	238.0	WSW	0.6	348.0	NNW	0.6	354.0	N	3.0	308.0	NW	1.9	238.0	WSW	0.0	-	-
03:00 AM - 04:00 AM	0.4	239.0	WSW	0.8	239.0	WSW	0.7	347.0	NNW	0.7	353.0	N	1.3	91.0	E	1.1	233.0	SW	1.7	285.0	NNW
04:00 AM - 05:00 AM	0.7	254.0	WSW	0.4	234.0	SW	0.6	348.0	NNW	0.4	354.0	N	1.8	252.0	WSW	0.5	235.0	SW	1.0	226.0	SW
05:00 AM - 06:00 AM	0.6	255.0	WSW	2.0	317.0	NW	0.8	348.0	NNW	0.5	353.0	N	0.8	359.0	N	0.7	290.0	NNW	0.7	229.0	SW
06:00 AM - 07:00 AM	0.7	23.0	NNE	0.7	320.0	NW	0.9	348.0	NNW	0.5	354.0	N	0.8	234.0	SW	1.1	350.0	N	1.1	263.0	W
07:00 AM - 08:00 AM	0.1	-	-	0.2	-	-	0.5	348.0	NNW	0.3	354.0	N	1.1	258.0	WSW	0.6	355.0	N	1.5	253.0	WSW
08:00 AM - 09:00 AM	1.2	56.0	NE	0.5	320.0	NW	0.6	260.0	W	1.2	135.0	SE	1.5	290.0	NNW	2.3	320.0	NW	0.8	214.0	SW
09:00 AM - 10:00 AM	0.1	-	-	1.4	218.0	SW	0.3	0.0	N	1.2	238.0	WSW	0.8	265.0	W	3.0	17.0	NNE	1.5	198.0	SSW
10:00 AM - 11:00 AM	1.5	29.0	NNE	0.8	226.0	SW	1.2	346.0	NNW	2.0	170.0	S	1.4	288.0	NNW	3.3	352.0	N	1.8	198.0	SSW
11:00 AM - 12:00 PM	1.0	258.0	WSW	0.3	250.0	WSW	0.4	146.0	SE	2.5	150.0	SSE	1.8	1.0	N	3.8	21.0	NNE	3.5	230.0	SW
12:00 PM - 01:00 PM	0.8	160.0	SSE	0.3	22.0	NNE	1.7	274.0	W	2.3	219.0	SW	3.7	13.0	NNE	4.1	4.0	N	0.6	251.0	SSW
01:00 PM - 02:00 PM	1.4	172.0	S	2.0	124.0	SE	0.3	197.0	SSW	1.3	349.0	N	3.9	248.0	WSW	1.5	223.0	SW	2.3	252.0	WSW
02:00 PM - 03:00 PM	1.3	161.0	SSE	0.1	-	-	1.2	157.0	SSE	1.7	343.0	NNW	3.5	210.0	SSW	1.0	280.0	W	1.6	314.0	NW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Saryuth Jitranont

Assistant General Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

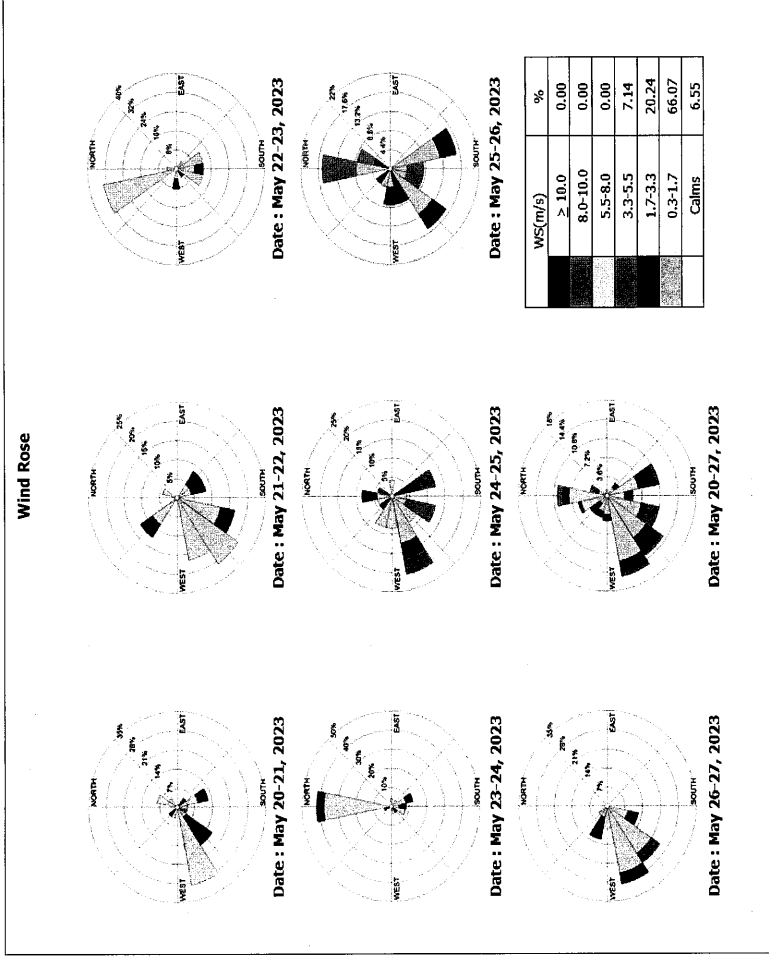
Lot ID : 2330544

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2597899-1

Page 2 of 2



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Saryuth Jitranont

Assistant General Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID : 2330544

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2597889-1

Page 1 of 2

Sample Number : 2330544-15 to 21

Parameter : Wind Speed / Wind Direction

Location : อุตสาหกรรม (GPS 47P 0725073, 1412550)

Sampling Date : May 20 - May 27, 2023

Sampling by : Subhachai Wongsurachai

Time	May 20 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023	
	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)
02:00 PM - 03:00 PM	1.1	16.0 NNE	1.1	145.0 SE	1.2	110.0 ESE	0.9	127.0 SE	0.6	90.0 E	0.0	-	0.0	-
03:00 PM - 04:00 PM	0.6	4.0 N	0.4	114.0 ESE	0.7	146.0 SE	0.2	-	0.3	101.0 E	1.9	132.0 SE	1.0	53.0 NE
04:00 PM - 05:00 PM	0.8	47.0 NE	0.7	213.0 SSW	0.5	75.0 ENE	0.1	-	0.5	93.0 E	2.0	180.0 S	0.1	-
05:00 PM - 06:00 PM	0.3	220.0 SW	0.4	137.0 SE	1.3	230.0 SW	0.0	-	0.2	-	1.2	179.0 S	0.8	359.0 N
06:00 PM - 07:00 PM	1.2	230.0 SW	0.3	159.0 SSE	0.2	-	1.4	110.0 ESE	1.4	174.0 S	1.6	137.0 SE	0.4	336.0 NNW
07:00 PM - 08:00 PM	0.8	194.0 SSW	0.2	-	1.0	217.0 SW	1.0	130.0 SE	1.0	88.0 E	2.0	146.0 SE	0.0	-
08:00 PM - 09:00 PM	0.7	165.0 SSE	0.0	-	0.2	-	0.1	-	0.0	-	0.0	-	0.0	-
09:00 PM - 10:00 PM	0.2	-	0.3	169.0 S	0.0	-	0.6	120.0 ESE	0.4	96.0 E	0.5	190.0 S	0.7	334.0 NNW
10:00 PM - 11:00 PM	0.4	228.0 SW	0.6	212.0 SSW	0.1	-	0.8	74.0 ENE	0.6	86.0 E	0.0	-	0.2	-
11:00 PM - 12:00 AM	0.3	222.0 SW	0.0	-	0.0	-	0.3	106.0 ESE	0.3	108.0 ESE	0.0	-	1.4	161.0 SSE
12:00 AM - 01:00 AM	2.5	101.0 E	1.0	146.0 SE	0.7	185.0 S	0.5	7.0 N	0.8	96.0 E	0.8	94.0 E	1.0	204.0 SSW
01:00 AM - 02:00 AM	0.9	165.0 SSE	0.9	121.0 ESE	0.4	184.0 S	0.5	75.0 ENE	0.8	42.0 NE	0.2	-	1.1	164.0 SSE
02:00 AM - 03:00 AM	0.5	165.0 SSE	0.0	-	0.6	138.0 SE	0.1	-	1.4	254.0 WSW	1.7	119.0 ESE	0.2	-
03:00 AM - 04:00 AM	0.0	-	0.2	-	0.7	137.0 SE	0.5	73.0 ENE	0.9	12.0 NNE	0.0	-	0.2	-
04:00 AM - 05:00 AM	0.0	-	1.2	257.0 WSW	0.4	137.0 SE	0.7	64.0 ENE	0.1	-	0.8	53.0 NE	1.0	184.0 S
05:00 AM - 06:00 AM	0.3	161.0 SSE	0.0	-	0.8	103.0 ESE	0.6	75.0 ENE	0.1	-	0.8	49.0 NE	0.9	40.0 NE
06:00 AM - 07:00 AM	0.6	47.0 NE	0.0	-	1.1	48.0 NE	0.4	75.0 ENE	0.6	12.0 NNE	1.1	66.0 ENE	1.3	69.0 ENE
07:00 AM - 08:00 AM	1.3	60.0 ENE	0.0	-	0.2	-	0.0	-	0.8	25.0 NNE	1.2	65.0 ENE	0.6	221.0 SW
08:00 AM - 09:00 AM	0.7	236.0 SW	0.4	229.0 SW	0.2	-	0.2	-	0.0	-	1.9	301.0 WNW	1.2	47.0 NE
09:00 AM - 10:00 AM	0.0	-	0.4	230.0 SW	1.1	203.0 WNW	0.3	253.0 WSW	0.5	262.0 W	1.4	309.0 NW	0.1	-
10:00 AM - 11:00 AM	1.1	190.0 S	1.9	314.0 NW	1.5	241.0 WSW	0.2	-	1.4	0.0 N	0.9	54.0 NE	0.3	196.0 SSW
11:00 AM - 12:00 PM	0.8	113.0 ESE	0.1	-	0.9	218.0 SW	0.5	94.0 E	0.0	-	0.4	47.0 NE	0.3	315.0 NW
12:00 PM - 01:00 PM	1.3	238.0 WSW	0.4	117.0 ESE	0.2	-	0.3	84.0 E	1.1	259.0 W	0.4	156.0 SSE	0.0	-
01:00 PM - 02:00 PM	1.0	217.0 SW	0.1	-	0.1	-	0.6	218.0 SW	0.0	-	0.5	114.0 ESE	0.0	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Saranyut Jitranont

Assistant General Manager

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Approved by

Saranyut Jitranont

Assistant General Manager



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID : 2330544

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2597889-1

Page 2 of 2

Wind Rose



Date : May 20-21, 2023



Date : May 21-22, 2023



Date : May 22-23, 2023



Date : May 23-24, 2023



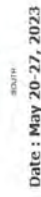
Date : May 24-25, 2023



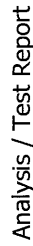
Date : May 25-26, 2023

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	4.17
0.3-1.7	63.69
Calm	32.14

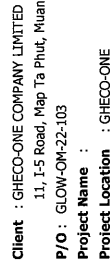
Date : May 26-27, 2023



Date : May 26-27, 2023



Analysis / Test Report



Lot ID : 2330544
Date Received : May
Date Reported : Jun
Report Number : 25

Sample Number	2330544-22 to 28
Parameter	Wind Speed / Wind Direction
Location	สวนหลวง ร.9 กรุงเทพมหานคร (GPS 47° 0731529, 1402602)
Sampling Date	May 20 - May 27, 2023
Sampling by	Suphachai Wongsurichai

Time		May 20 - May 31, 2023			May 21 - May 31, 2023			May 22 - May 31, 2023			May 23 - May 24, 2023			May 24 - May 25, 2023			May 25 - May 26, 2023			May 26 - May 27, 2023		
		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)	
	11:00 AM - 12:00 PM	0.8	262.0	W	1.0	213.0	SSW	1.3	52.0	NE	0.8	247.0	WSW	0.2	-	-	0.6	249.0	WSW	0.4	277.0	W
	12:00 PM - 01:00 PM	0.0	-	-	2.2	292.0	VNWX	0.6	268.0	W	0.8	247.0	WSW	0.2	-	-	1.0	101.0	E	0.7	246.0	WSW
	01:00 PM - 02:00 PM	0.5	28.0	NNE	2.1	285.0	VNWX	1.0	271.0	W	0.4	275.0	W	0.7	323.0	NW	0.8	64.0	ENE	0.8	302.0	VNWX
	02:00 PM - 03:00 PM	0.5	297.0	VNWX	1.5	259.0	W	1.9	303.0	VNWX	2.6	309.0	NW	0.6	273.0	W	0.5	256.0	WSW	2.4	271.0	W
	03:00 PM - 04:00 PM	1.6	322.0	VNWX	0.7	79.0	E	1.1	298.0	VNWX	2.1	265.0	W	1.5	293.0	VNWX	0.3	42.0	NE	1.4	266.0	W
	04:00 PM - 05:00 PM	3.0	327.0	VNWX	0.3	85.0	E	0.8	288.0	VNWX	1.9	315.0	NW	0.4	287.0	VNWX	0.7	76.0	ENE	3.4	347.0	VNWX
	05:00 PM - 06:00 PM	2.8	0.0	N	0.3	64.0	ENE	0.8	300.0	VNWX	1.9	115.0	ESE	1.0	331.0	VNWX	1.1	56.0	NE	1.0	247.0	WSW
	06:00 PM - 07:00 PM	1.5	273.0	W	0.8	328.0	VNWX	0.6	27.0	NNE	0.7	265.0	W	4.2	281.0	W	0.9	80.0	E	2.8	345.0	VNWX
	07:00 PM - 08:00 PM	1.8	226.0	SW	1.8	257.0	WSW	1.5	338.0	VNWX	1.2	277.0	W	2.5	36.0	NE	0.6	120.0	ESE	0.8	296.0	VNWX
	08:00 PM - 09:00 PM	1.6	130.0	SE	1.8	324.0	NW	2.4	271.0	W	1.2	293.0	VNWX	1.9	302.0	VNWX	0.9	114.0	ESE	1.1	249.0	WSW
	09:00 PM - 10:00 PM	1.9	84.0	E	2.7	294.0	VNWX	1.6	31.0	NNE	1.5	197.0	SSW	1.2	322.0	NW	1.5	143.0	SE	1.5	272.0	W
	10:00 PM - 11:00 PM	1.8	313.0	NW	1.5	225.0	SW	0.6	310.0	NW	1.7	270.0	W	3.2	306.0	NW	3.6	3.0	N	0.0	-	-
	11:00 PM - 12:00 AM	1.7	317.0	NW	1.2	276.0	W	1.2	298.0	VNWX	1.2	167.0	SSE	3.2	312.0	NW	1.5	255.0	WSW	1.0	304.0	NW
	12:00 AM - 01:00 AM	1.1	359.0	N	0.8	311.0	NW	1.5	292.0	VNWX	2.4	226.0	SW	0.6	221.0	SW	1.0	251.0	WSW	0.7	238.0	WSW
	01:00 AM - 02:00 AM	0.2	-	-	0.9	255.0	VNWX	1.1	300.0	VNWX	1.9	288.0	VNWX	0.6	228.0	SW	0.6	246.0	WSW	1.5	314.0	NW
	02:00 AM - 03:00 AM	0.8	295.0	VNWX	2.2	303.0	VNWX	0.9	254.0	WSW	1.2	56.0	NE	0.4	311.0	NW	2.3	319.0	NW	0.3	271.0	W
	03:00 AM - 04:00 AM	3.5	227.0	SW	1.6	298.0	VNWX	0.7	303.0	VNWX	2.3	267.0	W	1.5	131.0	SE	1.8	255.0	WSW	1.2	244.0	WSW
	04:00 AM - 05:00 AM	0.6	273.0	W	1.8	284.0	VNWX	1.9	317.0	NW	2.0	112.0	ESE	3.7	115.0	ESE	0.6	271.0	W	0.9	280.0	W
	05:00 AM - 06:00 AM	1.2	302.0	VNWX	1.2	269.0	W	1.4	275.0	W	0.8	147.0	SSE	1.1	257.0	WSW	2.4	329.0	VNWX	0.4	290.0	VNWX
	06:00 AM - 07:00 AM	1.8	303.0	VNWX	0.4	277.0	W	0.2	-	-	1.0	147.0	SSE	1.3	3.0	N	1.4	338.0	VNWX	0.5	297.0	VNWX
	07:00 AM - 08:00 AM	0.4	284.0	VNWX	0.9	291.0	VNWX	0.9	259.0	W	0.7	208.0	SSW	3.8	126.0	SE	0.8	296.0	VNWX	2.1	318.0	NW
	08:00 AM - 09:00 AM	0.0	-	-	1.7	284.0	VNWX	1.8	249.0	WSW	1.2	324.0	NW	0.5	164.0	SSE	1.1	305.0	NW	0.8	311.0	NW
	09:00 AM - 10:00 AM	0.9	310.0	NW	0.6	273.0	W	1.4	238.0	WSW	1.2	256.0	WSW	0.7	284.0	VNWX	1.1	324.0	NW	0.9	317.0	NW
	10:00 AM - 11:00 AM	0.8	290.0	VNWX	0.8	330.0	NW	0.7	310.0	NW	1.0	311.0	WSW	1.0	247.0	WSW	0.3	320.0	NW	0.6	293.0	VNWX

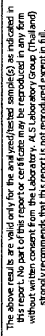
Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jittrantont
Assistant General Manager

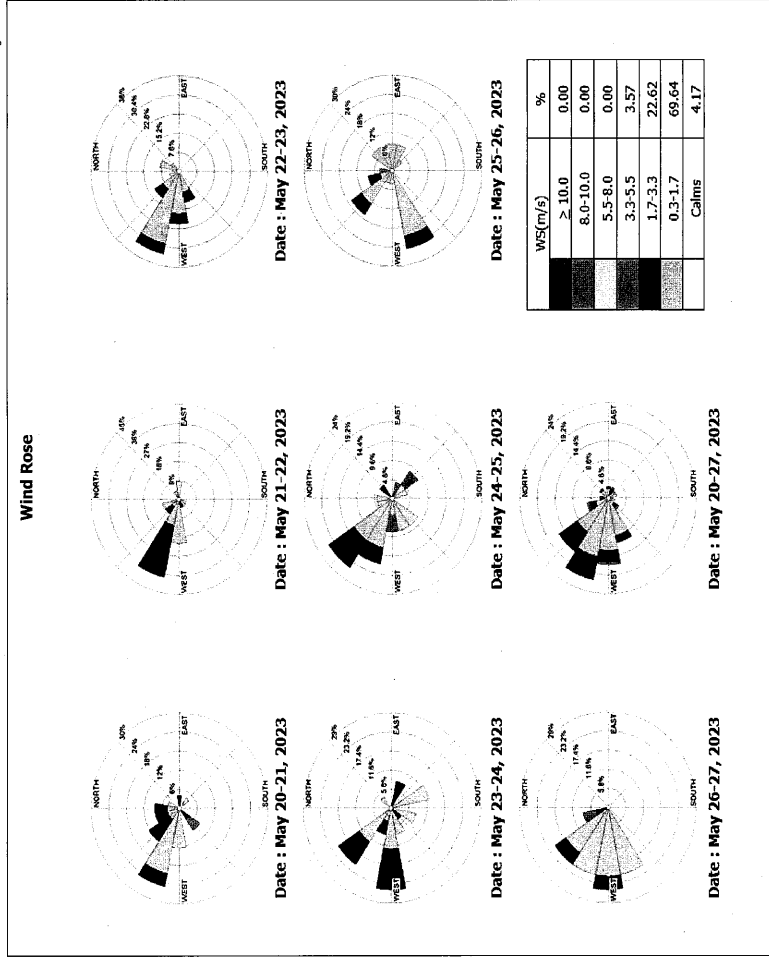
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID : 2330547
Date Received : May 29, 2023
Date Reported : Jun 06, 2023
Report Number : 2609723-1

Page 1 of 2

Sample Number : 2330547-1 to 7
Parameter : Wind Speed / Wind Direction
Location : โรงงานกลั่นและขึ้นรูปพลาสติก (GPS 47P 0735185, 1405871)
Sampling Date : May 20 - May 27, 2023
Sampling by : Suphachai Wongsurichai

Time	May 20 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023									
	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	0.9	271.0	W	0.5	174.0	S	0.9	187.0	S	1.2	178.0	S	0.3	224.0	SW	0.0	-	0.4	170.0	S		
11:00 AM - 12:00 PM	0.7	237.0	WSW	0.6	260.0	W	1.3	200.0	SSW	1.4	124.0	SE	0.0	-	0.2	-	-	0.0	-	-		
12:00 PM - 01:00 PM	0.8	85.0	E	1.3	194.0	SSW	0.3	175.0	S	0.3	158.0	SSE	0.6	42.0	NE	0.9	194.0	SSW	0.8	227.0	SW	
01:00 PM - 02:00 PM	0.4	87.0	E	1.3	223.0	SW	0.0	-	0.0	-	-	-	1.3	208.0	WNW	2.2	200.0	SSW	0.4	162.0	SSE	
02:00 PM - 03:00 PM	0.0	-	-	0.0	-	0.7	218.0	SW	0.9	260.0	W	0.0	-	1.3	260.0	W	0.6	204.0	SSW	-	-	
03:00 PM - 04:00 PM	3.2	152.0	SSE	0.5	159.0	SSE	2.4	174.0	S	1.2	263.0	W	0.8	179.0	S	0.5	259.0	W	0.7	128.0	SE	
04:00 PM - 05:00 PM	1.4	177.0	S	0.7	289.0	WNW	1.8	293.0	WNW	0.5	214.0	SW	1.5	277.0	W	0.0	-	-	0.9	352.0	N	
05:00 PM - 06:00 PM	2.1	183.0	S	0.0	-	0.0	-	0.9	242.0	WSW	0.2	-	-	1.1	219.0	SW	0.2	-	-	-	-	
06:00 PM - 07:00 PM	1.0	286.0	WNW	1.0	220.0	SW	1.6	261.0	W	1.2	223.0	SW	0.3	195.0	SSW	1.5	260.0	W	1.0	206.0	SSW	
07:00 PM - 08:00 PM	0.5	191.0	S	1.2	202.0	SSW	3.1	182.0	S	1.5	241.0	WSW	0.4	197.0	SSW	0.7	270.0	W	0.6	188.0	S	
08:00 PM - 09:00 PM	0.3	222.0	SW	0.5	233.0	SW	1.3	219.0	SW	0.6	235.0	SW	0.8	206.0	SSW	0.0	-	-	0.8	111.0	ESE	
09:00 PM - 10:00 PM	0.2	-	0.8	258.0	WSW	1.5	235.0	SW	0.5	111.0	ESE	0.3	202.0	SSW	0.5	188.0	S	0.9	143.0	SE		
10:00 PM - 11:00 PM	1.4	243.0	WSW	0.5	217.0	SW	0.8	185.0	S	0.3	313.0	NW	0.2	-	0.3	166.0	SSE	1.6	176.0	S		
11:00 PM - 12:00 AM	2.5	198.0	SSW	2.2	232.0	SW	1.3	233.0	SW	0.0	-	0.9	310.0	NW	0.0	-	1.5	230.0	SW	0.9	140.0	SE
12:00 AM - 01:00 AM	0.7	188.0	S	1.2	171.0	S	0.0	-	-	0.9	310.0	NW	0.0	-	1.5	230.0	SW	0.7	156.0	SSE		
01:00 AM - 02:00 AM	1.6	176.0	S	0.4	208.0	SSW	0.3	327.0	WNW	0.8	44.0	NE	1.2	91.0	E	1.2	213.0	SSW	1.0	139.0	SE	
02:00 AM - 03:00 AM	0.9	227.0	SW	2.4	175.0	S	0.5	8.0	N	0.7	359.0	N	0.6	134.0	SE	0.5	179.0	S	0.7	127.0	SE	
03:00 AM - 04:00 AM	0.4	208.0	SSW	0.8	174.0	S	0.0	-	-	1.7	8.0	N	0.8	148.0	SSE	0.2	-	-	1.1	88.0	E	
04:00 AM - 05:00 AM	1.1	68.0	ENE	0.1	-	0.3	320.0	NW	0.7	26.0	NNE	1.9	114.0	ESE	0.4	77.0	ENE	0.5	230.0	SW		
05:00 AM - 06:00 AM	0.5	293.0	WNW	0.0	-	0.8	321.0	NW	0.5	9.0	N	1.0	119.0	ESE	0.0	-	0.8	141.0	SE	-	-	
06:00 AM - 07:00 AM	0.2	-	0.3	77.0	ENE	0.0	-	-	1.0	15.0	NNE	1.9	90.0	E	0.3	341.0	NNW	0.7	115.0	ESE		
07:00 AM - 08:00 AM	0.0	-	0.5	99.0	E	0.2	-	0.7	321.0	NW	0.6	118.0	ESE	0.0	-	-	0.6	97.0	E	-	-	
08:00 AM - 09:00 AM	0.3	17.0	NNE	0.9	100.0	E	1.2	56.0	NE	0.1	-	0.4	106.0	ESE	0.1	-	-	1.3	246.0	WSW	-	-
09:00 AM - 10:00 AM	0.8	221.0	SW	0.4	184.0	S	0.7	148.0	SSE	0.0	-	0.2	-	0.6	113.0	ESE	1.0	213.0	SSW	-	-	

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Assistant General Manager

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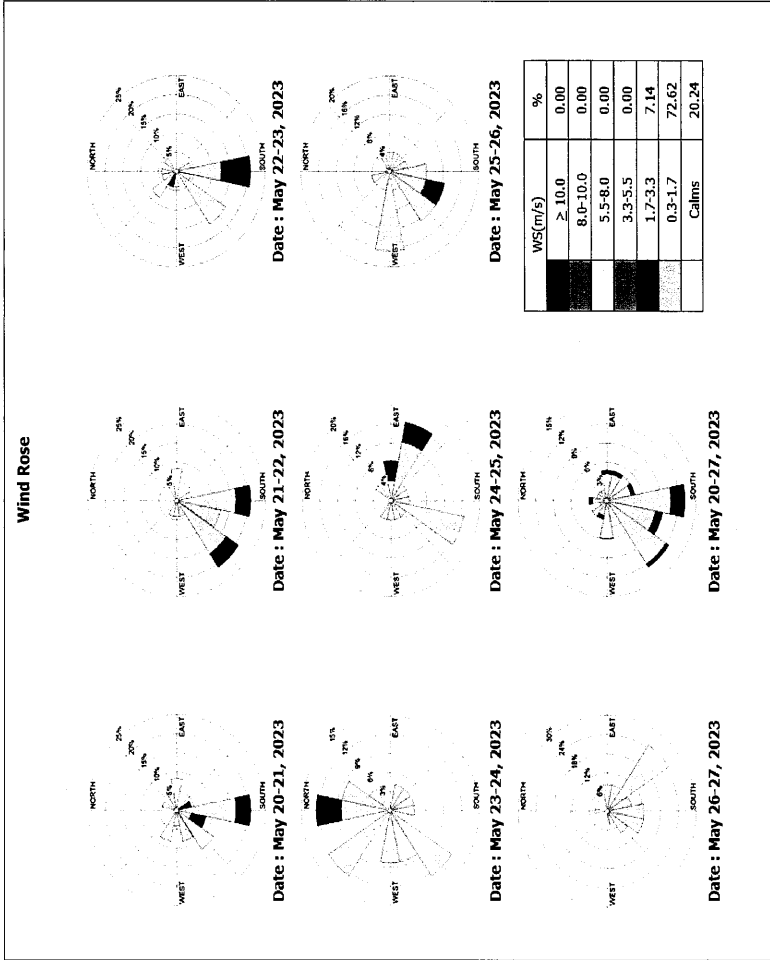


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID : 2330547
Date Received : May 29, 2023
Date Reported : Jun 06, 2023
Report Number : 2609723-1

Page 2 of 2



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Assistant General Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID : 2330551

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2609724-1

Page 1 of 2

Sample Number : 2330551-1 to 7
Parameter : Wind Speed / Wind Direction
Location : กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Sampling Date : May 20 - May 27, 2023
Sampling by : Suphachai Wongsurichai

Time	May 20 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023								
	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	1.7	359.0	N	2.2	197.0	SSW	1.4	220.0	SW	1.1	240.0	WSW	3.1	172.0	S	1.1	223.0	SW	1.6	249.0	WSW
01:00 PM - 02:00 PM	2.6	201.0	SSW	2.2	189.0	S	0.8	267.0	W	0.4	232.0	SW	1.3	228.0	SW	0.7	210.0	SSW	1.6	257.0	WSW
02:00 PM - 03:00 PM	1.0	270.0	W	1.1	271.0	W	2.0	194.0	SSW	0.8	263.0	W	2.2	231.0	SW	0.4	269.0	W	1.0	259.0	W
03:00 PM - 04:00 PM	2.2	347.0	NNW	0.9	217.0	SW	2.2	166.0	SSE	1.6	249.0	WSW	2.0	162.0	SSE	0.4	172.0	S	1.1	135.0	SE
04:00 PM - 05:00 PM	0.6	129.0	SE	2.1	34.0	NE	0.9	202.0	SSW	1.5	152.0	SSE	1.2	258.0	WSW	1.1	261.0	W	2.0	276.0	W
05:00 PM - 06:00 PM	0.7	178.0	S	1.5	165.0	SSE	0.8	139.0	SE	0.4	158.0	SSE	1.1	194.0	SSW	0.4	230.0	SW	1.8	163.0	SSE
06:00 PM - 07:00 PM	0.9	212.0	SSW	1.9	137.0	SE	0.7	242.0	WSW	0.6	226.0	SW	0.5	187.0	S	1.0	78.0	ENE	2.7	254.0	WSW
07:00 PM - 08:00 PM	2.9	202.0	SSW	2.9	157.0	SSE	2.4	178.0	S	0.8	230.0	SW	0.7	200.0	SSW	0.4	190.0	S	1.9	197.0	SSW
08:00 PM - 09:00 PM	4.1	177.0	S	1.7	175.0	S	1.4	205.0	SSW	1.0	236.0	SW	0.7	175.0	S	1.8	136.0	SE	0.6	182.0	S
09:00 PM - 10:00 PM	1.6	220.0	SW	0.9	240.0	WSW	0.9	207.0	SSW	0.6	304.0	NNW	0.8	275.0	W	3.0	166.0	SSE	1.2	131.0	SE
10:00 PM - 11:00 PM	1.9	201.0	SSW	1.6	197.0	SSW	0.4	241.0	WSW	0.9	64.0	ENE	1.6	132.0	SE	0.3	212.0	SSW	1.5	179.0	S
11:00 PM - 12:00 AM	2.6	213.0	SSW	0.6	171.0	S	0.0	-	-	1.0	333.0	NNW	0.6	199.0	SSW	1.3	142.0	SE	1.8	184.0	S
12:00 AM - 01:00 AM	0.9	233.0	SW	0.9	228.0	SW	1.5	290.0	NNW	1.6	13.0	NNE	2.3	235.0	SW	1.6	200.0	SSW	1.8	205.0	SSW
01:00 AM - 02:00 AM	1.3	240.0	WSW	2.0	191.0	S	0.4	244.0	WSW	1.3	3.0	N	1.4	288.0	W	2.0	215.0	SW	2.3	293.0	NNW
02:00 AM - 03:00 AM	0.8	190.0	S	1.2	189.0	S	0.5	250.0	WSW	0.7	9.0	N	0.7	270.0	W	0.3	267.0	W	2.9	210.0	SSW
03:00 AM - 04:00 AM	0.4	235.0	SW	1.4	251.0	WSW	0.0	-	-	1.0	264.0	W	0.9	263.0	W	1.0	276.0	W	0.4	205.0	SSW
04:00 AM - 05:00 AM	0.0	-	-	1.4	271.0	W	0.3	256.0	WSW	0.8	280.0	W	0.4	246.0	WSW	0.6	295.0	NNW	1.7	244.0	WSW
05:00 AM - 06:00 AM	0.5	253.0	WSW	0.4	255.0	WSW	0.4	271.0	W	0.6	272.0	W	0.2	-	-	0.3	270.0	W	2.0	260.0	W
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.8	244.0	WSW	0.3	256.0	WSW	0.0	-	-	0.1	-	-	1.8	198.0	SSW
07:00 AM - 08:00 AM	1.1	262.0	W	0.4	283.0	NNW	1.0	292.0	NNW	0.6	225.0	SW	0.1	-	-	1.1	263.0	W	3.0	195.0	SSW
08:00 AM - 09:00 AM	1.9	263.0	NNW	0.3	275.0	W	0.7	253.0	WSW	0.7	279.0	W	1.5	285.0	NNW	1.7	24.0	NNE	2.1	238.0	WSW
09:00 AM - 10:00 AM	1.4	173.0	S	1.5	261.0	W	0.6	246.0	WSW	1.6	180.0	S	1.2	214.0	SW	0.8	204.0	SSW	1.4	203.0	SSW
10:00 AM - 11:00 AM	0.4	185.0	S	0.6	266.0	W	0.9	250.0	WSW	1.4	230.0	SW	1.3	219.0	SW	2.0	278.0	W	1.5	250.0	SSW
11:00 AM - 12:00 PM	0.6	216.0	SW	0.8	193.0	SSW	0.6	255.0	WSW	0.9	207.0	SSW	1.3	258.0	WSW	0.7	238.0	WSW	1.1	206.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jitranont

Assistant General Manager

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Sarayuth Jitranont

Assistant General Manager



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

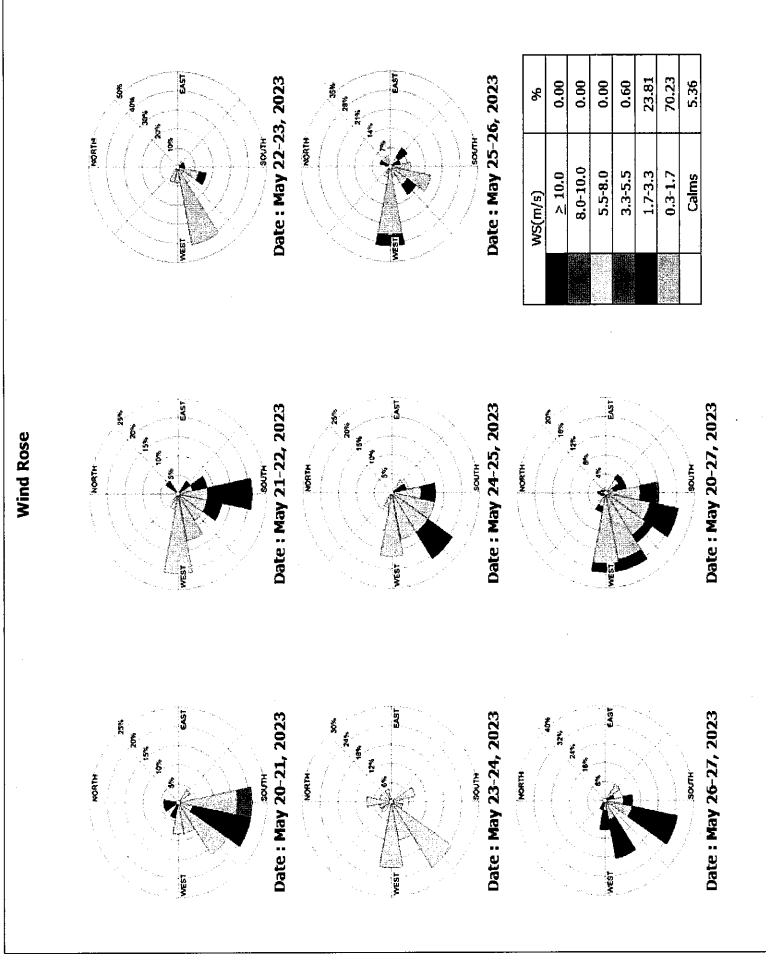
Lot ID : 2330551

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2609724-1

Page 2 of 2





Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID : 2330552

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2671609-1

Sample Number : 2330552-1 to 7

Parameter : Wind Speed / Wind Direction

Location : Samutprakan (GPS 47P 0730822, 1407369)

Sampling Date : May 20 - May 27, 2023

Sampling by : Suphachai Wongsurichai

Time	May 10 - May 21, 2023		May 21 - May 22, 2023		May 22 - May 23, 2023		May 23 - May 24, 2023		May 24 - May 25, 2023		May 25 - May 26, 2023		May 26 - May 27, 2023								
	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)							
01:00 PM - 02:00 PM	0.5	228.0	SW	1.4	232.0	SW	0.7	183.0	S	0.6	178.0	S	0.6	260.0	W	0.7	158.0	SSE	1.1	223.0	SW
02:00 PM - 03:00 PM	0.2	-	-	0.7	200.0	SSW	0.7	194.0	SSW	0.8	184.0	S	1.0	196.0	SSW	0.6	187.0	S	0.0	-	-
03:00 PM - 04:00 PM	0.8	283.0	NNW	0.6	145.0	SE	0.5	166.0	SSE	1.1	192.0	SSW	0.5	162.0	SSE	1.6	91.0	E	0.0	-	-
04:00 PM - 05:00 PM	0.3	340.0	NNW	2.9	114.0	ESE	1.2	123.0	ESE	0.2	-	-	0.5	99.0	E	0.9	139.0	SE	0.7	268.0	W
05:00 PM - 06:00 PM	2.0	316.0	NW	2.2	99.0	E	0.5	173.0	S	1.1	188.0	S	1.0	201.0	SSW	0.0	-	-	0.6	278.0	W
06:00 PM - 07:00 PM	0.1	-	-	0.4	126.0	SE	0.8	144.0	SE	0.3	120.0	ESE	0.5	119.0	ESE	0.2	-	-	0.4	250.0	WSW
07:00 PM - 08:00 PM	0.3	350.0	N	0.7	171.0	S	0.4	174.0	S	0.2	-	-	0.9	147.0	SSE	0.5	213.0	SSW	0.3	254.0	WSW
08:00 PM - 09:00 PM	4.1	290.0	WSW	1.8	67.0	ENE	0.5	187.0	S	0.5	168.0	SSE	0.3	184.0	S	0.0	-	-	1.0	258.0	WSW
09:00 PM - 10:00 PM	0.7	326.0	NNW	1.2	162.0	SSE	0.3	147.0	SSE	0.5	82.0	E	0.8	151.0	SSE	0.6	123.0	ESE	1.9	235.0	SW
10:00 PM - 11:00 PM	0.3	251.0	WSW	1.4	125.0	SE	0.3	290.0	NNW	1.2	355.0	N	0.6	153.0	SSE	0.4	161.0	SSE	1.0	267.0	W
11:00 PM - 12:00 AM	0.7	342.0	NNW	0.6	146.0	SE	0.0	-	-	0.0	-	-	0.5	145.0	SE	1.1	170.0	S	0.4	162.0	SSE
12:00 AM - 01:00 AM	0.0	-	-	0.8	204.0	SSW	0.6	232.0	SW	0.8	343.0	NNW	1.7	137.0	SE	0.5	169.0	S	0.3	161.0	SSE
01:00 AM - 02:00 AM	0.0	-	-	1.7	176.0	S	0.9	201.0	SSW	1.2	0.0	N	0.9	207.0	SSW	0.2	-	-	0.5	157.0	SSE
02:00 AM - 03:00 AM	0.6	219.0	SW	0.4	165.0	SSE	0.3	201.0	SSW	0.9	4.0	N	0.3	274.0	W	1.8	208.0	SSW	1.1	181.0	S
03:00 AM - 04:00 AM	0.6	209.0	SSW	0.2	-	-	0.6	271.0	W	1.0	359.0	N	0.7	244.0	WSW	0.2	-	-	1.4	129.0	SE
04:00 AM - 05:00 AM	0.0	-	-	1.4	166.0	SSE	0.7	359.0	N	0.6	17.0	NNE	0.1	-	-	0.1	-	-	1.1	130.0	SE
05:00 AM - 06:00 AM	3.1	265.0	W	0.0	-	-	1.2	5.0	N	0.9	10.0	N	0.6	207.0	SSW	0.7	199.0	SSW	0.8	209.0	SSW
06:00 AM - 07:00 AM	0.0	-	-	0.8	252.0	WSW	0.5	350.0	N	1.2	357.0	N	0.0	-	-	1.1	199.0	SSW	0.6	204.0	SSW
07:00 AM - 08:00 AM	0.3	275.0	W	1.4	214.0	SW	0.2	-	-	0.2	-	-	1.2	207.0	SSW	0.8	236.0	SW	0.4	212.0	SSW
08:00 AM - 09:00 AM	0.1	-	-	1.0	268.0	W	0.0	-	-	0.7	6.0	N	0.4	207.0	SSW	0.9	236.0	SW	2.3	210.0	SSW
09:00 AM - 10:00 AM	0.0	-	-	0.6	197.0	SSW	0.6	246.0	WSW	1.5	204.0	SSW	0.1	-	-	0.4	358.0	N	2.0	206.0	SSW
10:00 AM - 11:00 AM	0.2	-	-	0.2	-	-	0.6	187.0	S	0.2	-	-	0.0	-	-	0.7	254.0	WSW	1.9	247.0	WSW
11:00 AM - 12:00 PM	0.4	198.0	SSW	0.2	-	-	0.4	188.0	S	0.8	188.0	S	0.5	256.0	WSW	0.6	233.0	SW	1.8	261.0	W
12:00 PM - 01:00 PM	0.0	-	-	0.5	254.0	WSW	0.5	188.0	S	1.2	349.0	N	0.3	150.0	SSE	0.4	224.0	SW	0.9	199.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the wind speed and direction. No other data is included in this report. No part of the report or certificate may be reproduced in any form without written consent from the laboratory. (ALS Laboratory Group (Thailand) Co., Ltd. as ALS Limited Company) (Verify) recommend that this report is not reproduced except in full.

Approved by

Saranyuth Jitrantorn
Assistant General Manager

ADDRESS: 104 Phatthanasukan 40, Phatthanasukan Rd., Khwaeng Phatthanasukan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 0 2760 3000 / FAX: +66 0 2760 3197

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

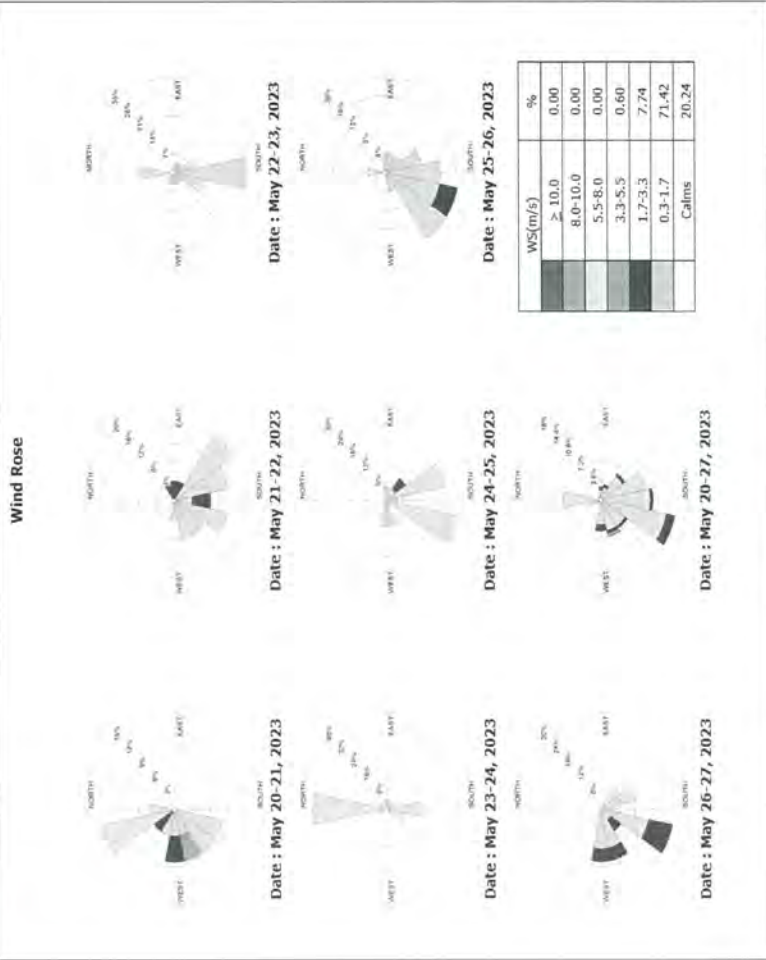
Lot ID : 2330552

Date Received : May 29, 2023

Date Reported : Jun 06, 2023

Report Number : 2671609-1

Page 2 of 2



Approved by

Saranyuth Jitrantorn
Assistant General Manager

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ภาคผนวก ค-2

องค์ประกอบของถ่านหิน



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2315625
Date Received : Mar 15, 2023
Date Reported : Apr 07, 2023
Report Number : 2564627-1

Page 1 of 3

Sample Number	2315625-1
Sampled Date	Mar 15, 2023 11:45 AM
Sample Description	Coal
Location	ถนนสุขุมวิท 1 AVRA 453
Date Analysis Commenced	Mar 18, 2023
Condition of Sample	Packed in two plastic bags, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	2.13	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	5.30	No Standard	ASTM, D7582-15	Bangkok
Moisture	%	-	-	16.48	No Standard	ASTM, D3302/3302M-17	Bangkok
Sulfur	%	-	-	0.95	1	ASTM, D4239-18 (Method A)	Bangkok

Guideline : Client Specification

Note : Analysis Results expressed on dry basis.

Sampling By : Panupong Manit

Remark :

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

The above results are valid only for the analyzed/tested sample(s) as indicated in the report. The results are not to be used for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sawitree N.

Sawitree Nolsangiam
Manager

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19537-2/J EMAIL

S:\Report\AU_Gr.pdf (10:09PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2315625
Date Received : Mar 15, 2023
Date Reported : Apr 07, 2023
Report Number : 2564627-1

Page 2 of 3

Sample Number	2315625-2
Sampled Date	Mar 15, 2023 11:50 AM
Sample Description	Coal
Location	ถนนสุขุมวิท 2 AVRA 451
Date Analysis Commenced	Mar 18, 2023
Condition of Sample	Packed in two plastic bags, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	1.86	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	13.22	No Standard	ASTM, D7582-15	Bangkok
Moisture	%	-	-	17.59	No Standard	ASTM, D3302/3302M-17	Bangkok
Sulfur	%	-	-	0.80	1	ASTM, D4239-18 (Method A)	Bangkok

Guideline : Client Specification

Note : Analysis Results expressed on dry basis.

Sampling By : Panupong Manit

Remark :

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

The above results are valid only for the analyzed/tested sample(s) as indicated in the report. The results are not to be used for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sawitree N.

Sawitree Nolsangiam
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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S:\Report\AU_Gr.pdf (10:02PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2315625

Date Received : Mar 15, 2023

Date Reported : Apr 07, 2023

Report Number : 2564627-1

Page 3 of 3

Sample Number	2315625-3
Sampled Date	Mar 15, 2023 12:05 PM
Sample Description	Coal
Location	อาณาเขตพื้นที่ 3 AVRA 446
Date Analysis Commenced	Mar 18, 2023
Condition of Sample	Packed in two plastic bags, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	1.53	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	7.73	No Standard	ASTM, D7582-15	Bangkok
Moisture	%	-	-	20.94	No Standard	ASTM, D3302/3302M-17	Bangkok
Sulfur	%	-	-	0.23	1	ASTM, D4239-18 (Method A)	Bangkok

Guideline : Client Specification

Note : Analysis Results expressed on dry basis.

Sampling By : Panupong Manit

Remark :

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

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Approved by

Savitree N.

Savitree Nongsangman

Manager

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S:\Report\AL\CL\WP (1000PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342021

Date Received : May 17, 2023

Date Reported : Jun 13, 2023

Report Number : 2654144-1

Page 1 of 3

Sample Number	2342021-1
Sampled Date	May 17, 2023 11:05 AM
Sample Description	Coal
Location	อาณาเขตพื้นที่ 1 Avra 453
Date Analysis Commenced	May 18, 2023
Condition of Sample	Packed in one glass bottle and two plastic bags, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Mercury	mg/kg	-	0.10	<0.10	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	6.00	No Standard	ASTM, D7582-15	Bangkok
Moisture	%	-	-	22.65	No Standard	ASTM, D3302/3302M-17	Bangkok
Sulfur	%	-	-	0.62	1	ASTM, D4239-18 (Method A)	Bangkok

Guideline : Client Specification

Note : Analysis Results expressed on dry basis.

Sampling By : Thanasorn Namakuma

Remark :

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

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Approved by

Savitree N.

Savitree Nongsangman

Manager

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S:\Report\AL\CL\WP (600PM)

ภาคผนวก ค-3

ระดับเสียง



TESTING
No.0042

Lot ID: 231765

Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615080-1

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	231765-1
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณท่าเรือไฟฟ้า
Measurement Date	Mar 27 - Mar 28, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.6	80.2	54.3
10:00 AM - 11:00 AM	55.4	72.6	54.1
11:00 AM - 12:00 PM	57.2	81.8	54.3
12:00 PM - 01:00 PM	55.7	64.1	54.6
01:00 PM - 02:00 PM	55.7	71.2	53.0
02:00 PM - 03:00 PM	54.6	63.6	52.9
03:00 PM - 04:00 PM	56.5	69.6	53.8
04:00 PM - 05:00 PM	56.5	72.8	54.0
05:00 PM - 06:00 PM	55.4	67.4	53.8
06:00 PM - 07:00 PM	55.0	73.8	53.1
07:00 PM - 08:00 PM	55.8	68.7	52.8
08:00 PM - 09:00 PM	56.0	63.9	53.3
09:00 PM - 10:00 PM	55.6	73.4	53.0
10:00 PM - 11:00 PM	54.7	68.1	53.1
11:00 PM - 12:00 AM	54.0	58.0	52.9
12:00 AM - 01:00 AM	53.9	58.2	52.9
01:00 AM - 02:00 AM	54.1	61.8	52.9
02:00 AM - 03:00 AM	54.6	59.4	53.4
03:00 AM - 04:00 AM	54.6	62.9	53.4
04:00 AM - 05:00 AM	55.2	65.4	53.4
05:00 AM - 06:00 AM	55.1	64.6	53.6
06:00 AM - 07:00 AM	55.5	64.1	54.0
07:00 AM - 08:00 AM	56.6	64.7	55.0
08:00 AM - 09:00 AM	57.8	79.8	53.6
Leq Average 24 hrs. (dB(A))	55.6	81.8	53.4
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	61.3	115	
Standard (dB(A))	70		

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากอุปกรณ์เครื่องจักร
โดย พ.ศ. 2548

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

Tharitak.

Approved by

Thanita Kulsuriwong
Scientist (4)

Supot Salamteh
Section Head

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RIGHT SOLUTIONS NIGHT PART TIME

19517-21/ EMAIL

S:\Reports_Air Noise.mt (3.3PM)



TESTING
No.0042

Lot ID: 231765

Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615081-1

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	231765-2
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณท่าเรือไฟฟ้า
Measurement Date	Mar 28 - Mar 29, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.8	68.1	53.6
10:00 AM - 11:00 AM	56.1	73.4	53.6
11:00 AM - 12:00 PM	54.4	63.5	52.5
12:00 PM - 01:00 PM	57.0	77.9	54.1
01:00 PM - 02:00 PM	60.4	74.4	54.0
02:00 PM - 03:00 PM	58.9	76.2	54.1
03:00 PM - 04:00 PM	61.2	82.7	54.8
04:00 PM - 05:00 PM	58.8	78.9	53.8
05:00 PM - 06:00 PM	56.6	74.8	53.4
06:00 PM - 07:00 PM	55.5	73.6	53.5
07:00 PM - 08:00 PM	63.9	69.5	54.2
08:00 PM - 09:00 PM	57.6	68.9	53.6
09:00 PM - 10:00 PM	55.5	62.8	53.6
10:00 PM - 11:00 PM	55.3	65.7	53.5
11:00 PM - 12:00 AM	54.7	59.3	53.5
12:00 AM - 01:00 AM	54.6	59.4	53.2
01:00 AM - 02:00 AM	54.6	66.0	54.1
02:00 AM - 03:00 AM	55.4	60.3	54.3
03:00 AM - 04:00 AM	55.4	59.4	53.7
04:00 AM - 05:00 AM	54.9	59.6	53.6
05:00 AM - 06:00 AM	54.8	59.6	53.9
06:00 AM - 07:00 AM	55.6	62.3	54.9
07:00 AM - 08:00 AM	56.7	68.7	54.9
08:00 AM - 09:00 AM	56.6	77.7	53.9
Leq Average 24 hrs. (dB(A))	57.6	82.7	
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	62.5	115	
Standard (dB(A))	70		

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากอุปกรณ์เครื่องจักร
โดย พ.ศ. 2548

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

Tharitak.

Approved by

Thanita Kulsuriwong
Scientist (4)

Supot Salamteh
Section Head

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19517-21/ EMAIL

S:\Reports_Air Noise.mt (3.3PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 231765

Date Received : Apr. 03, 2023
Date Reported : Apr. 06, 2023
Report Number: 2615082-1

Page 1 of 1



Client : GHCEO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103

Project Name :
Project Location : GHCEO-ONE

Page 1 of 1

Sample Number	231765-3
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณโรงไฟฟ้า
Measurement Date	Mar 29 - Mar 30, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.6	74.7	53.5
10:00 AM - 11:00 AM	55.4	66.9	53.5
11:00 AM - 12:00 PM	57.1	78.3	53.9
12:00 PM - 01:00 PM	56.8	68.7	53.2
01:00 PM - 02:00 PM	56.7	75.1	53.3
02:00 PM - 03:00 PM	57.8	74.8	53.9
03:00 PM - 04:00 PM	59.8	79.7	54.5
04:00 PM - 05:00 PM	56.2	76.0	53.7
05:00 PM - 06:00 PM	58.5	74.2	53.6
06:00 PM - 07:00 PM	57.0	73.3	54.1
07:00 PM - 08:00 PM	57.4	72.2	53.4
08:00 PM - 09:00 PM	57.6	63.3	54.4
09:00 PM - 10:00 PM	55.5	64.6	53.6
10:00 PM - 11:00 PM	55.6	62.9	54.1
11:00 PM - 12:00 AM	55.9	66.1	54.1
12:00 AM - 01:00 AM	55.4	64.9	53.9
01:00 AM - 02:00 AM	55.8	64.4	54.3
02:00 AM - 03:00 AM	56.9	65.0	55.3
03:00 AM - 04:00 AM	56.7	78.7	52.5
04:00 AM - 05:00 AM	54.7	67.0	52.5
05:00 AM - 06:00 AM	55.0	72.3	52.5
06:00 AM - 07:00 AM	56.3	62.0	53.1
07:00 AM - 08:00 AM	59.3	76.8	53.0
08:00 AM - 09:00 AM	59.3	73.3	52.9

Leq Average 24 hrs. (dB(A))	56.8
Lmax (dB(A))	79.7
L90 (dB(A))	53.6
Ldn (dB(A))	62.5
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Approved by

Supt S.

Thanita Kulsurwong
Scientist (4)

Supot Salameh
Section Head

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Analysis / Test Report

TESTING
No.0042

Lot ID: 231765

Date Received : Apr. 03, 2023
Date Reported : Apr. 06, 2023
Report Number: 2615083-1

Page 1 of 1



Client : GHCEO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103

Project Name :
Project Location : GHCEO-ONE

Page 1 of 1

Sample Number	231765-4
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณโรงไฟฟ้า
Measurement Date	Mar 30 - Mar 31, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.4	74.8	54.3
10:00 AM - 11:00 AM	55.5	67.6	54.3
11:00 AM - 12:00 PM	56.0	75.2	54.8
12:00 PM - 01:00 PM	62.3	95.1	55.5
01:00 PM - 02:00 PM	56.0	71.1	54.5
02:00 PM - 03:00 PM	56.4	77.2	54.4
03:00 PM - 04:00 PM	57.5	79.2	54.6
04:00 PM - 05:00 PM	56.9	72.9	55.1
05:00 PM - 06:00 PM	56.2	72.0	55.0
06:00 PM - 07:00 PM	55.9	69.7	54.9
07:00 PM - 08:00 PM	57.3	64.9	55.2
08:00 PM - 09:00 PM	58.5	70.2	55.1
09:00 PM - 10:00 PM	58.9	66.1	55.4
10:00 PM - 11:00 PM	58.2	70.6	55.4
11:00 PM - 12:00 AM	56.3	65.7	54.9
12:00 AM - 01:00 AM	56.5	66.2	54.7
01:00 AM - 02:00 AM	55.9	66.4	54.6
02:00 AM - 03:00 AM	55.6	63.4	54.4
03:00 AM - 04:00 AM	55.4	59.6	54.4
04:00 AM - 05:00 AM	56.3	69.1	54.9
05:00 AM - 06:00 AM	58.0	86.6	55.4
06:00 AM - 07:00 AM	57.8	75.2	55.3
07:00 AM - 08:00 AM	57.6	82.2	55.6
08:00 AM - 09:00 AM	55.8	68.2	54.5

Leq Average 24 hrs. (dB(A))	57.3
Lmax (dB(A))	95.1
L90 (dB(A))	63.3
Ldn (dB(A))	70
Standard (dB(A))	115

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Approved by

Supt S.

Thanita Kulsurwong
Scientist (4)

Supot Salameh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name : GHECO-ONE
Project Location : GHECO-ONE
Sample Number : 231765-5
Parameter : Noise (Leq 24 hrs.)
Location : บ้านนาใหม่
Measurement Date : Mar 31 - Apr 01, 2023
Measurement by : Tarn Oetjinda
Sound Level meter : Serial No. 472127
Lot ID: 231765
Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615084-1

Page 1 of 1

Sample Number	Parameter	Location	Measurement Date	Measurement by	Sound Level meter	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
231765-5	Noise (Leq 24 hrs.)	บ้านนาใหม่	Mar 31 - Apr 01, 2023	Tarn Oetjinda	Serial No. 472127	09:00 AM - 10:00 AM	55.8	78.3	54.5
						10:00 AM - 11:00 AM	55.3	70.1	54.2
						11:00 AM - 12:00 PM	55.6	74.6	54.0
						12:00 PM - 01:00 PM	65.2	82.8	54.9
						01:00 PM - 02:00 PM	56.0	73.8	54.5
						02:00 PM - 03:00 PM	56.1	72.6	54.9
						03:00 PM - 04:00 PM	56.4	80.5	55.2
						04:00 PM - 05:00 PM	56.3	67.2	55.1
						05:00 PM - 06:00 PM	56.2	70.7	55.2
						06:00 PM - 07:00 PM	57.7	72.8	55.5
						07:00 PM - 08:00 PM	56.9	69.8	55.8
						08:00 PM - 09:00 PM	56.1	67.9	55.1
						09:00 PM - 10:00 PM	57.4	62.1	55.9
						10:00 PM - 11:00 PM	57.2	65.3	55.6
						11:00 PM - 12:00 AM	56.8	63.8	55.6
						12:00 AM - 01:00 AM	57.3	64.4	55.8
						01:00 AM - 02:00 AM	56.9	65.5	55.5
						02:00 AM - 03:00 AM	56.4	68.8	55.2
						03:00 AM - 04:00 AM	56.2	61.6	55.1
						04:00 AM - 05:00 AM	56.7	70.8	55.5
						05:00 AM - 06:00 AM	57.4	71.4	55.7
						06:00 AM - 07:00 AM	58.3	72.4	55.8
						07:00 AM - 08:00 AM	57.1	81.2	54.9
						08:00 AM - 09:00 AM	56.3	79.2	54.7
Leq Average 24 hrs. (dB(A))							57.7	82.8	55.2
Lmax (dB(A))									55.2
L90 (dB(A))							63.6		
Ldn (dB(A))							70	115	
Standard (dB(A))									
Reference Method : ISO1996-1 and 1996-2									
Standard : 1. ประกาศกระทรวงมหาดไทย ฉบับที่ 15 (พ.ศ. 2540) ข้อกำหนดการประเมินเสียงโดยทั่วไป									
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการประเมินเสียงตามระบบ และระดับเสียงโดยพิจารณาจากประเภทการใช้									
โรงงาน พ.ศ. 2548									
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.									

Supt S.

Approved by

Supot Salamteh
Section Head

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19817-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name : GHECO-ONE
Project Location : GHECO-ONE
Sample Number : 231765-6
Parameter : Noise (Leq 24 hrs.)
Location : บ้านนาใหม่
Measurement Date : Mar 27 - Mar 28, 2023
Measurement by : Tarn Oetjinda
Sound Level meter : Serial No. 472126
Lot ID: 231765
Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615085-1

Page 1 of 1

Sample Number	Parameter	Location	Measurement Date	Measurement by	Sound Level meter	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
231765-6	Noise (Leq 24 hrs.)	บ้านนาใหม่	Mar 27 - Mar 28, 2023	Tarn Oetjinda	Serial No. 472126	09:00 AM - 10:00 AM	57.0	82.1	49.7
						10:00 AM - 11:00 AM	58.8	89.3	47.2
						11:00 AM - 12:00 PM	56.5	74.8	47.8
						12:00 PM - 01:00 PM	53.6	74.9	47.8
						01:00 PM - 02:00 PM	53.4	76.8	48.2
						02:00 PM - 03:00 PM	54.0	75.7	48.4
						03:00 PM - 04:00 PM	53.0	74.2	47.0
						04:00 PM - 05:00 PM	57.4	80.2	50.1
						05:00 PM - 06:00 PM	56.9	76.7	49.4
						06:00 PM - 07:00 PM	53.2	75.0	47.4
						07:00 PM - 08:00 PM	56.9	87.0	46.3
						08:00 PM - 09:00 PM	50.1	79.6	44.3
						09:00 PM - 10:00 PM	50.4	72.1	44.7
						10:00 PM - 11:00 PM	50.7	77.3	45.5
						11:00 PM - 12:00 AM	48.6	58.9	46.3
						12:00 AM - 01:00 AM	49.9	67.4	47.1
						01:00 AM - 02:00 AM	48.2	63.0	46.3
						02:00 AM - 03:00 AM	49.0	66.7	46.6
						03:00 AM - 04:00 AM	49.8	67.8	47.0
						04:00 AM - 05:00 AM	49.9	64.2	46.6
						05:00 AM - 06:00 AM	53.9	77.4	47.6
						06:00 AM - 07:00 AM	57.4	78.9	50.4
						07:00 AM - 08:00 AM	57.8	82.9	50.5
						08:00 AM - 09:00 AM	54.9	82.2	47.8
Leq Average 24 hrs. (dB(A))							54.6	89.3	47.2
Lmax (dB(A))									47.2
L90 (dB(A))							59.1		
Ldn (dB(A))							70	115	
Standard (dB(A))									
Reference Method : ISO1996-1 and 1996-2									
Standard : 1. ประกาศกระทรวงมหาดไทย ฉบับที่ 15 (พ.ศ. 2540) ข้อกำหนดการประเมินเสียงโดยทั่วไป									
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการประเมินเสียงตามระบบ และระดับเสียงโดยพิจารณาจากประเภทการใช้									
โรงงาน พ.ศ. 2548									
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.									

Tharitat.

Approved by

Supot Salamteh
Section Head

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S:\Reports_Air Noise.pr (3.36PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 231765
Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615086-1



Client: GHCEO-ONE COMPANY LIMITED
P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name :
Project Location : GHCEO-ONE

Page 1 of 1

Sample Number 231765-7
Parameter Noise (Leq 24 hrs.)
Location 11.5km.ต.พ.พ.
Measurement Date Mar 28 - Mar 29, 2023
Measurement by Tarin Oetjinda
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	52.8	73.2	48.1
10:00 AM - 11:00 AM	54.4	80.4	47.4
11:00 AM - 12:00 PM	58.7	84.5	50.1
12:00 PM - 01:00 PM	54.0	77.1	48.0
01:00 PM - 02:00 PM	52.9	68.3	47.7
02:00 PM - 03:00 PM	53.2	69.1	48.2
03:00 PM - 04:00 PM	53.6	80.1	48.6
04:00 PM - 05:00 PM	64.5	82.0	52.5
05:00 PM - 06:00 PM	64.6	83.0	50.6
06:00 PM - 07:00 PM	54.8	78.7	48.7
07:00 PM - 08:00 PM	52.6	72.3	46.9
08:00 PM - 09:00 PM	50.9	83.3	44.6
09:00 PM - 10:00 PM	48.6	72.3	43.4
10:00 PM - 11:00 PM	48.0	69.7	43.4
11:00 PM - 12:00 AM	46.4	66.8	42.4
12:00 AM - 01:00 AM	45.2	62.2	42.3
01:00 AM - 02:00 AM	44.9	68.6	41.2
02:00 AM - 03:00 AM	46.3	65.9	41.6
03:00 AM - 04:00 AM	45.2	63.5	41.5
04:00 AM - 05:00 AM	62.3	80.5	42.0
05:00 AM - 06:00 AM	70.7	83.2	57.9
06:00 AM - 07:00 AM	71.5	85.5	60.4
07:00 AM - 08:00 AM	67.8	83.3	49.4
08:00 AM - 09:00 AM	54.7	76.5	46.1

Leq Average 24 hrs. (dB(A)) 62.5
Lmax (dB(A)) 85.5
L90 (dB(A)) 47.4
Ldn (dB(A)) 70.9
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่เกิดจากอุปกรณ์การ
ใช้งาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanitak.

Approved by

Supt S.

Thanita Kulsuriwong
Scientist (4)

Supt Salameh
Section Head

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S:\Reports\Air Noise rpt (336PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 231765
Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615087-1



Client: GHCEO-ONE COMPANY LIMITED
P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Project Name :
Project Location : GHCEO-ONE

Page 1 of 1

Sample Number 231765-8
Parameter Noise (Leq 24 hrs.)
Location 11.5km.ต.พ.พ.
Measurement Date Mar 29 - Mar 30, 2023
Measurement by Tarin Oetjinda
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.2	80.6	46.2
10:00 AM - 11:00 AM	54.4	80.1	46.5
11:00 AM - 12:00 PM	56.8	79.4	48.1
12:00 PM - 01:00 PM	53.9	77.2	47.6
01:00 PM - 02:00 PM	54.7	76.1	47.6
02:00 PM - 03:00 PM	54.9	74.5	47.1
03:00 PM - 04:00 PM	53.8	74.7	46.3
04:00 PM - 05:00 PM	57.5	80.1	51.1
05:00 PM - 06:00 PM	56.3	70.9	51.0
06:00 PM - 07:00 PM	55.8	75.7	51.3
07:00 PM - 08:00 PM	54.1	80.3	50.5
08:00 PM - 09:00 PM	51.5	73.6	48.6
09:00 PM - 10:00 PM	51.1	74.0	47.7
10:00 PM - 11:00 PM	49.3	69.9	46.8
11:00 PM - 12:00 AM	49.0	71.5	46.7
12:00 AM - 01:00 AM	48.3	73.1	43.8
01:00 AM - 02:00 AM	45.0	65.2	42.9
02:00 AM - 03:00 AM	45.1	63.1	41.7
03:00 AM - 04:00 AM	48.5	70.9	41.9
04:00 AM - 05:00 AM	49.3	71.4	41.7
05:00 AM - 06:00 AM	53.5	81.2	46.1
06:00 AM - 07:00 AM	58.2	79.6	50.2
07:00 AM - 08:00 AM	56.3	75.5	49.0
08:00 AM - 09:00 AM	58.6	78.8	48.4

Leq Average 24 hrs. (dB(A)) 54.4
Lmax (dB(A)) 81.2
L90 (dB(A)) 47.1
Ldn (dB(A)) 58.9
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่เกิดจากอุปกรณ์การ
ใช้งาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanitak.

Approved by

Supt S.

Thanita Kulsuriwong
Scientist (4)

Supt Salameh
Section Head

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S:\Reports\Air Noise rpt (336PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 231765

Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615088-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	231765-9
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณขบวน
Measurement Date	Mar 30 - Mar 31, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.2	78.6	47.7
10:00 AM - 11:00 AM	56.3	80.7	47.3
11:00 AM - 12:00 PM	57.5	78.8	48.7
12:00 PM - 01:00 PM	55.6	77.0	46.5
01:00 PM - 02:00 PM	54.3	68.9	49.0
02:00 PM - 03:00 PM	53.9	77.6	47.0
03:00 PM - 04:00 PM	56.0	78.9	47.3
04:00 PM - 05:00 PM	57.8	79.2	50.7
05:00 PM - 06:00 PM	57.1	84.4	48.9
06:00 PM - 07:00 PM	54.0	78.0	47.1
07:00 PM - 08:00 PM	52.6	79.0	46.0
08:00 PM - 09:00 PM	53.6	81.2	45.4
09:00 PM - 10:00 PM	55.3	88.7	44.8
10:00 PM - 11:00 PM	50.2	73.2	44.9
11:00 PM - 12:00 AM	49.4	73.2	43.7
12:00 AM - 01:00 AM	48.7	77.5	43.1
01:00 AM - 02:00 AM	46.6	64.8	42.8
02:00 AM - 03:00 AM	48.3	74.2	43.5
03:00 AM - 04:00 AM	45.9	65.2	42.7
04:00 AM - 05:00 AM	51.3	76.8	43.1
05:00 AM - 06:00 AM	51.4	73.9	44.5
06:00 AM - 07:00 AM	55.9	73.9	49.6
07:00 AM - 08:00 AM	56.8	78.3	49.8
08:00 AM - 09:00 AM	55.2	71.9	49.1
Leq Average 24 hrs. (dB(A))	54.4		
Lmax (dB(A))	88.7		
L90 (dB(A))			47.0
Ldn (dB(A))	58.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ปริมาณการจราจรในเขตเมืองและพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดมาตรฐานเสียงโดยทั่วไป
2. ปริมาณการจราจรทางบกในพื้นที่เมืองและพื้นที่ชนบท และระดับเสียงที่ได้จากการจราจร

Issued on 2548

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

Tharitat.

Technical Management

Thanita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supt Salameh
Section Head

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19517-21/ EMAIL

S:\Reports_Air Noise pr (3.36PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 231765

Date Received : Apr 03, 2023
Date Reported : Apr 06, 2023
Report Number: 2615089-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	231765-10
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณขบวน
Measurement Date	Mar 31 - Apr 01, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	54.9	79.3	47.3
10:00 AM - 11:00 AM	57.9	77.5	48.1
11:00 AM - 12:00 PM	57.0	85.9	48.5
12:00 PM - 01:00 PM	54.6	75.5	47.6
01:00 PM - 02:00 PM	53.9	76.2	47.0
02:00 PM - 03:00 PM	56.1	80.5	47.8
03:00 PM - 04:00 PM	60.4	82.3	49.5
04:00 PM - 05:00 PM	65.1	80.5	51.6
05:00 PM - 06:00 PM	58.1	90.1	49.0
06:00 PM - 07:00 PM	58.5	84.0	50.5
07:00 PM - 08:00 PM	54.4	76.0	48.4
08:00 PM - 09:00 PM	52.2	76.9	44.9
09:00 PM - 10:00 PM	50.2	72.3	44.1
10:00 PM - 11:00 PM	50.7	77.3	45.3
11:00 PM - 12:00 AM	49.1	76.2	43.8
12:00 AM - 01:00 AM	50.0	70.1	44.2
01:00 AM - 02:00 AM	47.7	61.4	43.3
02:00 AM - 03:00 AM	47.9	64.0	44.2
03:00 AM - 04:00 AM	50.1	76.0	43.1
04:00 AM - 05:00 AM	47.3	68.1	43.1
05:00 AM - 06:00 AM	53.1	76.7	45.1
06:00 AM - 07:00 AM	55.6	80.9	48.5
07:00 AM - 08:00 AM	55.1	77.5	48.3
08:00 AM - 09:00 AM	59.4	82.4	47.4
Leq Average 24 hrs. (dB(A))	56.6		
Lmax (dB(A))		90.1	
L90 (dB(A))			47.3
Ldn (dB(A))	59.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ปริมาณการจราจรในเขตเมืองและพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดมาตรฐานเสียงโดยทั่วไป
2. ปริมาณการจราจรทางบกในพื้นที่เมืองและพื้นที่ชนบท และระดับเสียงที่ได้จากการจราจร

Issued on 2548

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

Tharitat.

Technical Management

Thanita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supt Salameh
Section Head

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19517-21/ EMAIL

S:\Reports_Air Noise pr (3.38PM)



TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662441-1

Page 1 of 1



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

P/O : GLOW-QM-22-103
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Sample Number : 2341976-1

Parameter : Noise (Leq 24 hrs.)

Location : บริเวณโรงไฟฟ้าเดิม

Measurement Date : May 15 - May 16, 2023

Measurement by : Tarin Ochiinda

Sound Level meter : Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.8	73.3	55.3
11:00 AM - 12:00 PM	57.2	79.6	55.0
12:00 PM - 01:00 PM	57.3	85.3	54.5
01:00 PM - 02:00 PM	55.6	67.9	54.4
02:00 PM - 03:00 PM	57.5	73.5	54.4
03:00 PM - 04:00 PM	55.8	70.7	54.5
04:00 PM - 05:00 PM	57.0	74.4	55.2
05:00 PM - 06:00 PM	57.4	83.2	55.5
06:00 PM - 07:00 PM	56.4	71.0	55.3
07:00 PM - 08:00 PM	56.5	66.3	55.3
08:00 PM - 09:00 PM	55.9	62.7	55.1
09:00 PM - 10:00 PM	56.5	68.4	55.1
10:00 PM - 11:00 PM	58.0	66.8	56.0
11:00 PM - 12:00 AM	57.2	67.7	55.6
12:00 AM - 01:00 AM	56.8	71.4	55.5
01:00 AM - 02:00 AM	56.4	74.4	54.8
02:00 AM - 03:00 AM	64.5	81.8	55.2
03:00 AM - 04:00 AM	70.0	84.0	55.7
04:00 AM - 05:00 AM	62.7	80.0	57.3
05:00 AM - 06:00 AM	57.2	71.4	55.8
06:00 AM - 07:00 AM	57.9	81.1	55.8
07:00 AM - 08:00 AM	58.2	71.1	56.0
08:00 AM - 09:00 AM	57.9	79.8	55.7
09:00 AM - 10:00 AM	58.1	73.9	55.9

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

L10 (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

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

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการ

รายงาน พ.ศ. 2548

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

Technical Management

Tharitat.

Scientist (4)

Supot Salameh

Section Head

Approved by

Supt S.

Supot Salameh

Section Head

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S:\Reports_Air Noise rpt (4:12PM)



Analysis / Test Report

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662442-1

Page 1 of 1



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

P/O : GLOW-QM-22-103
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name : GHCO-ONE

Project Location : GHCO-ONE

Sample Number : 2341976-2

Parameter : Noise (Leq 24 hrs.)

Location : บริเวณโรงไฟฟ้าเดิม

Measurement Date : May 16 - May 17, 2023

Measurement by : Tarin Ochiinda

Sound Level meter : Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.4	74.8	56.2
11:00 AM - 12:00 PM	59.4	82.9	55.9
12:00 PM - 01:00 PM	61.2	84.3	58.6
01:00 PM - 02:00 PM	63.0	80.3	61.1
02:00 PM - 03:00 PM	63.0	71.3	61.9
03:00 PM - 04:00 PM	62.9	76.6	62.0
04:00 PM - 05:00 PM	61.9	78.0	58.4
05:00 PM - 06:00 PM	59.8	81.1	58.2
06:00 PM - 07:00 PM	58.4	81.4	58.2
07:00 PM - 08:00 PM	58.2	68.8	55.9
08:00 PM - 09:00 PM	57.8	66.7	55.5
09:00 PM - 10:00 PM	57.5	65.8	55.5
10:00 PM - 11:00 PM	57.6	73.6	55.5
11:00 PM - 12:00 AM	59.7	70.1	57.2
12:00 AM - 01:00 AM	58.4	68.7	56.3
01:00 AM - 02:00 AM	56.0	63.4	55.2
02:00 AM - 03:00 AM	55.5	60.0	54.7
03:00 AM - 04:00 AM	55.4	58.6	54.6
04:00 AM - 05:00 AM	55.3	80.2	54.8
05:00 AM - 06:00 AM	56.3	86.2	55.1
06:00 AM - 07:00 AM	58.3	77.8	55.3
07:00 AM - 08:00 AM	57.3	71.9	55.2
08:00 AM - 09:00 AM	56.9	77.0	54.6
09:00 AM - 10:00 AM	56.6	77.0	54.6

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

L10 (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

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

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการ

รายงาน พ.ศ. 2548

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

Technical Management

Tharitat.

Scientist (4)

Supot Salameh

Section Head

Approved by

Supt S.

Supot Salameh

Section Head

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S:\Reports_Air Noise rpt (4:13PM)



TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662443-1

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-3
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณท่าเรือไฟฟ้า
Measurement Date	May 18 - May 19, 2023
Measurement by	Tarin Ocjinda
Sound Level meter	Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	55.7	69.5	54.9
11:00 AM - 12:00 PM	56.6	80.0	55.2
12:00 PM - 01:00 PM	56.6	74.1	55.1
01:00 PM - 02:00 PM	56.0	70.4	54.8
02:00 PM - 03:00 PM	56.9	77.1	54.9
03:00 PM - 04:00 PM	57.3	77.9	54.8
04:00 PM - 05:00 PM	61.0	85.1	55.1
05:00 PM - 06:00 PM	64.8	94.4	55.7
06:00 PM - 07:00 PM	61.1	94.4	55.5
07:00 PM - 08:00 PM	56.1	73.5	55.0
08:00 PM - 09:00 PM	55.8	65.9	55.0
09:00 PM - 10:00 PM	56.4	63.2	55.2
10:00 PM - 11:00 PM	56.0	61.6	54.9
11:00 PM - 12:00 AM	56.4	68.4	55.3
12:00 AM - 01:00 AM	56.2	65.7	55.2
01:00 AM - 02:00 AM	55.7	61.4	54.8
02:00 AM - 03:00 AM	55.5	60.2	54.6
03:00 AM - 04:00 AM	55.1	59.9	54.2
04:00 AM - 05:00 AM	55.2	63.6	54.6
05:00 AM - 06:00 AM	55.8	76.0	54.8
06:00 AM - 07:00 AM	57.0	79.4	54.9
07:00 AM - 08:00 AM	56.6	73.0	54.7
08:00 AM - 09:00 AM	56.1	72.0	54.6
09:00 AM - 10:00 AM	56.1	80.3	54.3
Leq Average 24 hrs. (dB(A))	57.7	94.4	54.9
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	62.8	115	
Standard (dB(A))	70		
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ			
โรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Thanitak.

Approved by

Supt S.

Approved by

Supt Salameh
Section Head

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S:\Reports_Air Noise rpt (4/12PM)



TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662444-1

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-4
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณท่าเรือไฟฟ้า
Measurement Date	May 18 - May 19, 2023
Measurement by	Tarin Ocjinda
Sound Level meter	Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.2	77.9	54.1
11:00 AM - 12:00 PM	55.5	76.5	54.1
12:00 PM - 01:00 PM	56.1	75.7	54.4
01:00 PM - 02:00 PM	56.0	76.0	54.7
02:00 PM - 03:00 PM	57.5	75.9	55.2
03:00 PM - 04:00 PM	58.6	73.0	56.4
04:00 PM - 05:00 PM	57.4	79.8	55.1
05:00 PM - 06:00 PM	56.8	73.1	55.2
06:00 PM - 07:00 PM	57.2	82.6	55.5
07:00 PM - 08:00 PM	56.7	74.6	55.2
08:00 PM - 09:00 PM	56.0	68.7	55.1
09:00 PM - 10:00 PM	56.6	64.6	55.3
10:00 PM - 11:00 PM	55.7	71.2	54.6
11:00 PM - 12:00 AM	56.0	61.8	54.8
12:00 AM - 01:00 AM	55.3	65.2	54.3
01:00 AM - 02:00 AM	55.1	58.0	54.4
02:00 AM - 03:00 AM	55.1	58.0	54.4
03:00 AM - 04:00 AM	55.3	58.5	54.5
04:00 AM - 05:00 AM	55.4	65.5	54.6
05:00 AM - 06:00 AM	56.1	71.3	54.8
06:00 AM - 07:00 AM	56.2	76.1	54.6
07:00 AM - 08:00 AM	57.3	75.6	54.7
08:00 AM - 09:00 AM	56.5	77.1	54.6
09:00 AM - 10:00 AM	63.6	90.8	54.5
Leq Average 24 hrs. (dB(A))	57.1	90.8	
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	62.4	115	
Standard (dB(A))	70		
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ			
โรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Thanitak.

Approved by

Supt S.

Approved by

Supt Salameh
Section Head

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19517-21/ EMAIL

S:\Reports_Air Noise rpt (4/13PM)



TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662445-1

Page 1 of 1



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-5
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณทางเดิน
Measurement Date	May 19 - May 20, 2023
Measurement by	Tarin Ocjinda
Sound Level meter	Serial No. 623387

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.8	82.0	54.3
11:00 AM - 12:00 PM	55.9	79.6	53.8
12:00 PM - 01:00 PM	56.8	95.7	53.5
01:00 PM - 02:00 PM	55.3	78.2	53.9
02:00 PM - 03:00 PM	57.2	77.4	54.5
03:00 PM - 04:00 PM	56.3	80.0	54.3
04:00 PM - 05:00 PM	55.4	71.0	54.3
05:00 PM - 06:00 PM	57.1	84.1	54.7
06:00 PM - 07:00 PM	56.1	75.1	54.9
07:00 PM - 08:00 PM	56.5	77.0	55.0
08:00 PM - 09:00 PM	56.1	67.1	55.2
09:00 PM - 10:00 PM	57.0	71.5	55.4
10:00 PM - 11:00 PM	58.1	71.5	55.7
11:00 PM - 12:00 AM	57.6	69.7	55.3
12:00 AM - 01:00 AM	55.2	65.9	54.2
01:00 AM - 02:00 AM	54.7	66.7	53.8
02:00 AM - 03:00 AM	54.7	57.9	53.9
03:00 AM - 04:00 AM	54.9	66.0	54.2
04:00 AM - 05:00 AM	54.9	72.1	54.2
05:00 AM - 06:00 AM	55.8	69.5	54.5
06:00 AM - 07:00 AM	56.7	71.8	54.9
07:00 AM - 08:00 AM	57.6	77.3	54.8
08:00 AM - 09:00 AM	57.2	80.4	55.1
09:00 AM - 10:00 AM	57.5	80.7	55.4

Leq Average 24 hrs. (dB(A))	56.5
Lmax (dB(A))	95.7
L90 (dB(A))	54.5
Ldn (dB(A))	

Standard (dB(A)) 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานเสียงรบกวน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
จากงาน พ.ศ. 2548

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

Supt S.

Approved by

Thanitak.

Technical Management

Supot Salameh
Section Head

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19517-21/ EMAIL

S: Reports_Air Noise (p) (4:13PM)



TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662446-1

Page 1 of 1



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-6
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณทางเดิน
Measurement Date	May 15 - May 16, 2023
Measurement by	Tarin Ocjinda
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	67.3	82.6	54.2
11:00 AM - 12:00 PM	58.2	75.8	52.1
12:00 PM - 01:00 PM	55.1	76.5	49.9
01:00 PM - 02:00 PM	54.4	75.0	47.8
02:00 PM - 03:00 PM	54.7	79.7	48.2
03:00 PM - 04:00 PM	55.4	71.7	48.3
04:00 PM - 05:00 PM	56.3	77.7	50.5
05:00 PM - 06:00 PM	56.7	77.3	51.3
06:00 PM - 07:00 PM	60.2	73.3	50.2
07:00 PM - 08:00 PM	53.3	73.2	47.7
08:00 PM - 09:00 PM	52.7	78.1	46.6
09:00 PM - 10:00 PM	55.3	83.4	46.1
10:00 PM - 11:00 PM	52.9	69.3	45.0
11:00 PM - 12:00 AM	54.8	69.0	45.8
12:00 AM - 01:00 AM	54.4	85.0	45.9
01:00 AM - 02:00 AM	64.0	77.9	49.4
02:00 AM - 03:00 AM	68.0	81.5	52.0
03:00 AM - 04:00 AM	58.3	83.0	52.5
04:00 AM - 05:00 AM	53.7	70.3	49.4
05:00 AM - 06:00 AM	56.0	78.7	51.3
06:00 AM - 07:00 AM	58.6	78.3	53.3
07:00 AM - 08:00 AM	59.2	82.9	53.2
08:00 AM - 09:00 AM	57.9	81.9	49.3
09:00 AM - 10:00 AM	55.2	76.6	48.4

Leq Average 24 hrs. (dB(A))	59.9
Lmax (dB(A))	85.0
L90 (dB(A))	67.3
Ldn (dB(A))	

Standard (dB(A)) 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานเสียงรบกวน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
จากงาน พ.ศ. 2548

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

Thanitak.

Technical Management

Supot Salameh
Section Head

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Life Sciences

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19517-21/ EMAIL

S: Reports_Air Noise (p) (4:14PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662447-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-7
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณภายใน
Measurement Date	May 16 - May 17, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.1	79.3	51.3
11:00 AM - 12:00 PM	58.0	72.2	51.4
12:00 PM - 01:00 PM	54.8	73.2	50.0
01:00 PM - 02:00 PM	56.3	78.3	51.1
02:00 PM - 03:00 PM	57.7	76.2	51.5
03:00 PM - 04:00 PM	56.3	77.4	49.7
04:00 PM - 05:00 PM	56.7	75.3	50.2
05:00 PM - 06:00 PM	55.8	75.7	50.1
06:00 PM - 07:00 PM	60.2	79.6	49.1
07:00 PM - 08:00 PM	55.3	86.3	47.5
08:00 PM - 09:00 PM	51.7	75.4	45.3
09:00 PM - 10:00 PM	52.2	70.1	45.8
10:00 PM - 11:00 PM	53.0	76.1	46.2
11:00 PM - 12:00 AM	51.9	70.6	46.4
12:00 AM - 01:00 AM	50.3	78.8	44.9
01:00 AM - 02:00 AM	47.7	68.4	44.7
02:00 AM - 03:00 AM	47.8	72.8	44.7
03:00 AM - 04:00 AM	47.3	68.7	45.0
04:00 AM - 05:00 AM	49.3	69.2	45.3
05:00 AM - 06:00 AM	54.5	74.7	48.3
06:00 AM - 07:00 AM	58.0	75.9	51.2
07:00 AM - 08:00 AM	56.6	73.7	49.9
08:00 AM - 09:00 AM	55.2	79.6	48.6
09:00 AM - 10:00 AM	56.0	73.6	51.7
Leq Average 24 hrs. (dB(A))	55.4		
Lmax (dB(A))	86.3		
L90 (dB(A))			48.6
Ldn (dB(A))	59.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมภายใน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงในสถานที่ทำงานและสถานที่สาธารณะ

ISSUE No. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Tharitat.

Technical Management

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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S:\Reports_Air Noise\pt (4:4PM)

19517-21/ EMAIL



Analysis / Test Report

TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662448-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2341976-8
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณภายใน
Measurement Date	May 17 - May 18, 2023
Measurement by	Tarin Ootjinda
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	55.8	77.8	48.3
11:00 AM - 12:00 PM	55.5	74.8	50.4
12:00 PM - 01:00 PM	56.6	77.2	51.3
01:00 PM - 02:00 PM	55.7	75.5	50.2
02:00 PM - 03:00 PM	56.5	81.6	50.4
03:00 PM - 04:00 PM	54.7	74.0	49.3
04:00 PM - 05:00 PM	56.1	81.8	49.4
05:00 PM - 06:00 PM	58.1	78.8	52.0
06:00 PM - 07:00 PM	56.0	77.2	48.8
07:00 PM - 08:00 PM	52.8	73.5	46.5
08:00 PM - 09:00 PM	50.4	71.2	44.9
09:00 PM - 10:00 PM	53.5	78.9	44.7
10:00 PM - 11:00 PM	51.6	73.7	45.0
11:00 PM - 12:00 AM	51.8	72.9	44.8
12:00 AM - 01:00 AM	46.7	59.3	43.8
01:00 AM - 02:00 AM	46.4	63.7	42.5
02:00 AM - 03:00 AM	46.7	70.0	43.6
03:00 AM - 04:00 AM	46.6	66.6	44.5
04:00 AM - 05:00 AM	50.2	68.3	45.2
05:00 AM - 06:00 AM	54.1	71.7	49.0
06:00 AM - 07:00 AM	57.9	78.1	51.6
07:00 AM - 08:00 AM	57.8	77.9	51.3
08:00 AM - 09:00 AM	55.6	77.4	49.4
09:00 AM - 10:00 AM	55.1	77.6	48.7
Leq Average 24 hrs. (dB(A))	54.7		
Lmax (dB(A))	81.8		
L90 (dB(A))			48.7
Ldn (dB(A))	59.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมภายใน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงในสถานที่ทำงานและสถานที่สาธารณะ

ISSUE No. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Tharitat.

Technical Management

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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19517-21/ EMAIL

S:\Reports_Air Noise\pt (4:4PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662449-1

Page 1 of 1



Client : GHCO-ONE COMPANY LIMITED

P/O : GLOW-QM-22-103
Project Name :
Project Location : GHCO-ONE

Sample Number : 2341976-9

Parameter : Noise (Leq 24 hrs.)

Location : บ้านนาอู่พู่

Measurement Date : May 18 - May 19, 2023

Measurement by : Tarin Ootjinda

Sound Level meter : Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.3	79.0	49.5
11:00 AM - 12:00 PM	57.6	82.1	50.9
12:00 PM - 01:00 PM	55.7	81.0	49.6
01:00 PM - 02:00 PM	56.3	76.1	49.4
02:00 PM - 03:00 PM	55.2	74.7	49.8
03:00 PM - 04:00 PM	57.7	83.6	50.9
04:00 PM - 05:00 PM	64.3	82.4	52.5
05:00 PM - 06:00 PM	63.6	83.1	52.7
06:00 PM - 07:00 PM	57.5	79.9	48.1
07:00 PM - 08:00 PM	51.9	70.5	46.3
08:00 PM - 09:00 PM	52.6	74.3	47.0
09:00 PM - 10:00 PM	52.7	79.3	44.9
10:00 PM - 11:00 PM	51.4	72.7	44.2
11:00 PM - 12:00 AM	51.0	76.3	44.1
12:00 AM - 01:00 AM	47.8	71.2	44.8
01:00 AM - 02:00 AM	46.3	60.4	45.3
02:00 AM - 03:00 AM	47.7	65.6	45.9
03:00 AM - 04:00 AM	48.3	67.9	46.2
04:00 AM - 05:00 AM	51.5	69.0	47.0
05:00 AM - 06:00 AM	65.7	81.4	55.1
06:00 AM - 07:00 AM	65.4	81.0	58.9
07:00 AM - 08:00 AM	62.7	83.8	50.8
08:00 AM - 09:00 AM	57.3	73.2	49.8
09:00 AM - 10:00 AM	57.3	72.2	50.0

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

Ldn (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

2. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

3. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

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

Technical Management

Tharitat.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

Section Head

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19512-21/ EMAIL

S:\Reports_Air Noise.rpt (4:14PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 2341976

Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662450-1

Page 1 of 1



Client : GHCO-ONE COMPANY LIMITED

P/O : GLOW-QM-22-103
Project Name :
Project Location : GHCO-ONE

Sample Number : 2341976-10

Parameter : Noise (Leq 24 hrs.)

Location : บ้านนาอู่พู่

Measurement Date : May 19 - May 20, 2023

Measurement by : Tarin Ootjinda

Sound Level meter : Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.9	75.0	50.5
11:00 AM - 12:00 PM	58.6	77.5	52.9
12:00 PM - 01:00 PM	57.0	83.3	49.6
01:00 PM - 02:00 PM	54.8	74.4	49.0
02:00 PM - 03:00 PM	55.0	75.2	50.4
03:00 PM - 04:00 PM	57.7	79.8	50.1
04:00 PM - 05:00 PM	64.3	80.4	52.0
05:00 PM - 06:00 PM	56.0	73.2	50.4
06:00 PM - 07:00 PM	54.7	77.6	47.8
07:00 PM - 08:00 PM	55.5	81.2	47.4
08:00 PM - 09:00 PM	52.1	76.9	46.4
09:00 PM - 10:00 PM	50.7	71.4	45.8
10:00 PM - 11:00 PM	48.4	66.6	44.6
11:00 PM - 12:00 AM	47.6	71.6	44.1
12:00 AM - 01:00 AM	46.0	64.8	44.1
01:00 AM - 02:00 AM	46.2	60.0	45.0
02:00 AM - 03:00 AM	47.0	71.6	44.9
03:00 AM - 04:00 AM	47.3	69.3	44.7
04:00 AM - 05:00 AM	49.7	69.6	45.0
05:00 AM - 06:00 AM	53.1	72.3	48.4
06:00 AM - 07:00 AM	57.2	78.6	50.0
07:00 AM - 08:00 AM	67.1	83.3	54.5
08:00 AM - 09:00 AM	63.3	78.6	50.3
09:00 AM - 10:00 AM	54.4	75.6	48.0

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

Ldn (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

2. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

3. ประกาศกระทรวงมหาดไทย เรื่อง เสียง (พ.ศ. 2540) (ประกาศกระทรวงมหาดไทย เรื่อง เสียง)

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

Technical Management

Tharitat.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

Section Head

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ภาคผนวก ค-4

คุณภาพน้ำทิ้ง (น้ำจืด)



Analysis / Test Report

TESTING
No.0042

Lot ID: 235821

Date Received : Jan 18, 2023
Date Reported : Jan 26, 2023
Report Number : 2544935-1

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	235821-1
Sample Date	Jan 18, 2023 10:30 AM
Sample Description	Wastewater
Location	โรงงานน้ำตาลทราย
Date Analysis Commenced	Jan 18, 2023
Condition of Sample	Contained in one BOD bottle, four glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	-	8.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500- H (B)	Rayong
Temperature *	Degree C	-	-	29.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	688	≤3000	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	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampling By : Paramet Sattayakun รหัสมาตรฐาน 3-323-3-9476 , Thanasoun Namakunna รหัสมาตรฐาน 3-204-3-8592

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

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor
รหัสมาตรฐาน 3-323-3-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
รหัสมาตรฐาน 3-323-3-9442

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Life Sciences

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Analysis / Test Report

TESTING
No.0009

Lot ID: 235821

Date Received : Jan 18, 2023
Date Reported : Jan 26, 2023
Report Number : 2544935-2

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	235821-1
Sample Date	Jan 18, 2023 10:30 AM
Sample Description	Wastewater
Location	โรงงานน้ำตาลทราย
Date Analysis Commenced	Jan 19, 2023
Condition of Sample	Contained in one BOD bottle, four glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.0008	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.001	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Sampling By : Paramet Sattayakun รหัสมาตรฐาน 3-323-3-9476 , Thanasoun Namakunna รหัสมาตรฐาน 3-204-3-8592

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

Technical Management

Savitree N.
Savitree Naisangiam
Manager
รหัสมาตรฐาน 3-204-3-4709

Approved by

Kanokkorn Anek
Senior Manager
รหัสมาตรฐาน 3-204-3-6111

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Life Sciences

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Jan 26, 2023

Report Number : 254935-3

TESTING
No.0009
Lot ID: 235821

Date Received : Jan 26, 2023

Report Number : 254935-3

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
235821-1	Jan 18, 2023 10:30 AM	Wastewater	นิคมอุตสาหกรรม	Jan 19, 2023	Contained in one BOD bottle, four glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Metals Testing							
Iron							mg/L	0.003	0.005	0.03	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *							ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *							ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9 *							ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
Water Testing													
Dissolved Oxygen *							mg/L	-	0.1	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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

Sampling By : Paramet Sattayakun วิเศษชัยชาญ 3-323-3-9476, Thanasoun Namakurua วิเศษชัยชาญ 3-204-3-8592

Remark :
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Approved by
Savitree N.
Savitree Naisangiam
Manager

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Feb 15, 2023

Report Number : 256462-1

TESTING
No.0042
Lot ID: 2315631

Date Received : Feb 15, 2023

Report Number : 256462-1

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2315631-1	Feb 15, 2023 10:10 AM	Wastewater	นิคมอุตสาหกรรม	Feb 15, 2023	Contained in one amber glass bottle, two glass vials, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
BOD (5 days at 20 Degree C)							mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD							mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *							mg/L	-	1	1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *								-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *							Degree C	-	-	29.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C							mg/L	-	5	588	≤3000	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampling By : Paramet Sattayakun วิเศษชัยชาญ 3-323-3-9476, Thanasoun Namakurua วิเศษชัยชาญ 3-204-3-8592

Remark :
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Technical Management
N. Banphit
Narumon Banchoangkit
Supervisor

Approved by

Dej Changchon
Senior Manager

วิเศษชัยชาญ 3-323-3-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2328178

Date Received : Mar 15, 2023

Date Reported : Mar 22, 2023

Report Number : 2591937-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location: GHECO-ONE

Page 1 of 1

Sample Number	2328178-1
Sample Date	Mar 15, 2023 10:00 AM
Sample Description	Wastewater
Location	โรงงานกระดาษเจสมร
Date Analysis Commenced	Mar 15, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	30.2	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	5	324	≤39250 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,250 mg/L (Refer to Lot ID 2328250-1)

Sampling By : Tanasit Wongsachai รหัสประจำตัว ๓-323-๙-9460, Panupong Manit รหัสประจำตัว ๓-204-๙-8600

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Technical Management

N. Bangphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว ๓-323-๙-9445

Approved by

D. Chuan

Dej Changchon
Senior Manager
รหัสประจำตัว ๓-323-๙-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2330617

Date Received : Apr 19, 2023

Date Reported : Apr 26, 2023

Report Number : 2597947-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Page 1 of 1

Sample Number	2330617-1
Sample Date	Apr 19, 2023 10:15 AM
Sample Description	Wastewater
Location	โรงงานกระดาษเจสมร
Date Analysis Commenced	Apr 19, 2023
Condition of Sample	Contained in two glass vials, one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	33.1	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	5	1800	≤38800 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,800 mg/L (Refer to Lot ID 2330669-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว ๓-323-๙-9476, Pattarapol Sawangjalarn รหัสประจำตัว ๓-204-๙-0002

Remark :

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Technical Management

N. Bangphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว ๓-323-๙-9445

Approved by

D. Chuan

Dej Changchon
Senior Manager
รหัสประจำตัว ๓-323-๙-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2342027
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2623847-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2342027-1
Sampled Date	May 17, 2023 9:50 AM
Sample Description	Wastewater
Location	โรงงานผลิตพลาสติก
Date Analysis Commenced	May 17, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong
Temperature *	Degree C	-	-	33.1	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	780	≤38150 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L. (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun วาณิฏาณวรี 323-3-9476, Thanassou Namakunna วาณิฏาณวรี 320-3-8592

Remark :

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

N. Banphit

Narumon Banphongkit
Supervisor
วาณิฏาณวรี 323-3-9445

Approved by

D. Chuan

Dej Chanchong
Senior Manager
วาณิฏาณวรี 323-3-9442

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2342027
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2623847-2

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2342027-1
Sampled Date	May 17, 2023 9:50 AM
Sample Description	Wastewater
Location	โรงงานผลิตพลาสติก
Date Analysis Commenced	May 18, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.0009	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L. (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun วาณิฏาณวรี 323-3-9476, Thanassou Namakunna วาณิฏาณวรี 320-3-8592

Remark :

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

Technical Management

Sawitree N.

Sawitree Nolsangiam
Manager
วาณิฏาณวรี 320-3-4709

Approved by

Look Anh.

Kenokom Anek
Senior Manager
วาณิฏาณวรี 320-3-6111

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Analysis / Test Report

TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342027

Date Received : May 17, 2023

Date Reported : May 25, 2023

Report Number : 2623847-3

Page 1 of 2

Sample Number	2342027-1
Sample Date	May 17, 2023 9:50 AM
Sample Description	Wastewater
Location	นิคมอุตสาหกรรม
Date Analysis Commenced	May 18, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.04	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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

Sawitree N.

Sawitree Nongsangiam
Manager

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Analysis / Test Report

TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342027

Date Received : May 17, 2023

Date Reported : May 25, 2023

Report Number : 2623847-3

Page 2 of 2

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

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Sawitree N.

Sawitree Nongsangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location: GHFCO-ONE

TESTING
No. 0009

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Page 1 of 1

Sample Number	235837-1						
Sample Date	Jan 18, 2023 11:20 AM						
Sample Description	Wastewater						
Location	บ้านใหม่สามนาถ ตำบล บ้านใหม่สามนาถ อำเภอ บ้านใหม่สามนาถ จังหวัด เชียงใหม่						
Date Analysis Commenced	Jan 19, 2023						
Condition of Sample	Contained in two vials, two amber glass bottles, two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.0010	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	0.0005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

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

Sampling By : Thanasoun Namakunna ทะเบียนเลขที่ 7-204-2-8592

Remark :

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

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- The laboratory has been accepted as an accredited laboratory complying with the

Conflicts of Interest

Technical Management

Saints N

11/1/88

Condition: Malnutrition

Sawitree Noisangiam

Senior Manager
หมายเลข 7-204-6111

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Analysis / Test Report

TESTING
No.0009

Lot ID: 235837

Date Received : Jan 18, 2023

Date Reported : Jan 26, 2023

Report Number : 2553141-2

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHCO-ONE

Page 1 of 1

Sample Number	235837-1
Sample Date	Jan 18, 2023 11:20 AM
Sample Description	Wastewater
Location	ถังเก็บน้ำเสียจากอาคาร (Chamber A)
Date Analysis Commenced	Jan 19, 2023
Condition of Sample	Contained in two vials, two amber glass bottles, two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	4.84	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok

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

Sampling By :

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

Savitree N.

Savitree Naisianglam
Manager

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Analysis / Test Report

TESTING
No.0009

Lot ID: 235837

Date Received : Jan 18, 2023

Date Reported : Jan 26, 2023

Report Number : 2553142-1

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHCO-ONE

Page 1 of 1

Sample Number	235837-2
Sample Date	Jan 18, 2023 11:05 AM
Sample Description	Wastewater
Location	ถังเก็บน้ำเสียจากอาคาร (Chamber B)
Date Analysis Commenced	Jan 19, 2023
Condition of Sample	Contained in two vials, two amber glass bottles, two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.0006	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112 F	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Sampling By : Thaisasorn Namakunima วิสิตินันท์ 7-204-9-8392

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

Technical Management

Savitree N.

Savitree Naisianglam
Manager

Approved by

Lab. Anh.

Kanokkorn Anek
Senior Manager

วิสิตินันท์ 7-204-9-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 235837

Date Received : Jan 18, 2023

Date Reported : Jan 26, 2023

Report Number : 2553142-2

Page 1 of 1

Sample Number	235837-2
Sampled Date	Jan 18, 2023 11:05 AM
Sample Description	Wastewater
Location	ถังพักน้ำในระบบบำบัดน้ำเสียจากภาคอุตสาหกรรม (Chamber B)
Date Analysis Commenced	Jan 19, 2023
Condition of Sample	Contained in two vials, two amber glass bottles, two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok

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

Sampling By :

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

Approved by
Savitree N.
Savitree Naisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 2342042

Date Received : May 17, 2023

Date Reported : May 25, 2023

Report Number : 2663031-1

Page 1 of 1

Sample Number	2342042-1
Sampled Date	May 17, 2023 10:40 AM
Sample Description	Wastewater
Location	ถังพักน้ำในระบบบำบัดน้ำเสียจากภาคอุตสาหกรรม (Chamber A)
Date Analysis Commenced	May 18, 2023
Condition of Sample	Contained in two amber glass bottles, four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Sampling By : Thanassou Namakunma วิศณุวราณี 3-204-a-8592

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

Technical Management
Savitree N.
Savitree Naisangiam
Manager

Approved by

Kanokorn Anek
Kanokorn Anek
Senior Manager
วิศณุวราณี 3-204-a-6111

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Analysis / Test Report

TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name : GHECO-ONE
Lot ID: 2342042
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2663031-2

Page 1 of 1

Sample Number	2342042-1
Sampled Date	May 17, 2023 10:40 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากกระบวนการบำบัดน้ำเสีย (Chamber A)
Date Analysis Commenced	May 18, 2023
Condition of Sample	Contained in two amber glass bottles, four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.09	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok

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

Sampling By : Thanasoun Namakunna วดีนุสาวัน ๖-204-๔-8592

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

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Approved by
Savitree N.
Savitree Nolsangiam
Manager

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Analysis / Test Report

TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name : GHECO-ONE
Lot ID: 2342042
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2663032-1

Page 1 of 1

Sample Number	2342042-2
Sampled Date	May 17, 2023 10:30 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากกระบวนการบำบัดน้ำเสียจากอาคารบำบัดน้ำ (Chamber B)
Date Analysis Commenced	May 18, 2023
Condition of Sample	Contained in two amber glass bottles, four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.001	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Sampling By : Thanasoun Namakunna วดีนุสาวัน ๖-204-๔-8592

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

Technical Management
Savitree N.
Savitree Nolsangiam
Manager
Approved by
Kanokorn Anek
Kanokorn Anek
Senior Manager
วดีนุสาวัน ๖-204-๔-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

TESTING
No.0009
Lot ID: 2342042
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2663032-2

Page 1 of 1

Sample Number	2342042-2						
Sampled Date	May 17, 2023 10:30 AM						
Sample Description	Wastewater						
Location	พื้นที่พัฒนารวมพื้นที่อุตสาหกรรมถ่านหิน (Chamber B)						
Date Analysis Commenced	May 18, 2023						
Condition of Sample	Contained in two amber glass bottles, four glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 5030B and 8260D	Bangkok

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

Sampling By : Thanasoun Namakunna

Remark :
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Approved by

Savitree N.

Savitree Nolsangiam
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ภาคผนวก ค-5

คุณภาพน้ำทิ้ง (น้ำทะเล)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Lot ID: 22152529

Date Received : Jan 04, 2023

Date Reported : Jan 12, 2023

Report Number : 2534348-1

Project Name :

Project Location :

Page 1 of 1

Sample Number	22152529-1
Sample Date	Jan 04, 2023 10:40 AM
Sample Description	Wastewater
Location	อุตสาหกรรมโรงงานในท้องถิ่น
Date Analysis Commenced	Jan 04, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	31.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31550	≤32450 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 27,450 mg/L (Refer to Lot ID 231042-1)

Sampling By : Chainum Lertnathakunchal รหัสประจำตัว 7-323-a-9461

Remark :

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

Technical Management

N. Banthongkit

Narumon Banthongkit
Supervisor
รหัสประจำตัว 7-323-a-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
รหัสประจำตัว 7-323-a-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Lot ID: 22152529

Date Received : Jan 04, 2023

Date Reported : Jan 12, 2023

Report Number : 2534348-2

Project Name :

Project Location :

Page 1 of 1

Sample Number	22152529-1
Sample Date	Jan 04, 2023 10:40 AM
Sample Description	Wastewater
Location	อุตสาหกรรมโรงงานในท้องถิ่น
Date Analysis Commenced	Jan 05, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47980	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	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	28.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 27,450 mg/L (Refer to Lot ID 231042-1)

Sampling By :

Remark :

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

Approved by

N. Banthongkit

Narumon Banthongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

TESTING
No.0042
Lot ID: 22152529

Date Received : Jan 04, 2023

Date Reported : Jan 12, 2023

Report Number : 2534348-3

Page 1 of 1

Sample Number	22152529-1
Sample Date	Jan 04, 2023 10:40 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Jan 05, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 27,450 mg/L (Refer to Lot ID 231042-1)

Sampling By : Chainusorn Lertnathakunchal วาสนาพร 3-323-9-9461

Remark :

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- <C : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Bangpit

Narumon Banchongkit
Supervisor
วาสนาพร 3-323-9-9445

Approved by

D. Jumsri

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 233419

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2539486-1

Page 1 of 1

Sample Number	233419-1
Sample Date	Jan 11, 2023 11:15 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Jan 11, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	30.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32450	≤38200 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,200 mg/L (Refer to Lot ID 231044-1)

Sampling By : Paramet Sattayakun วาสนาพร 3-323-9-9476

Remark :

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

Technical Management

N. Bangpit

Narumon Banchongkit
Supervisor
วาสนาพร 3-323-9-9445

Approved by

D. Jumsri

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

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S5 (Report)_AL_Gr_01 (103840)



Analysis / Test Report

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

Lot ID: 233419

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2539486-2

Client : GHECO-ONE COMPANY LIMITED

Lot ID: 233419

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Date Received : Jan 11, 2023

Date Reported : Jan 19, 2023

Report Number : 2539486-3

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Page 1 of 1

Page 1 of 1

Sample Number	233419-1						
Sample Date	Jan 11, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งโรงงานอุตสาหกรรม						
Date Analysis Commenced	Jan 12, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46250	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	6.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	27.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,200 mg/L (Refer to Lot ID 231044-1)

Sampling By :

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

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N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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S. Resereth_AL_Grpt (103844)

Sample Number	233419-1						
Sample Date	Jan 11, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งโรงงานอุตสาหกรรม						
Date Analysis Commenced	Jan 12, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,200 mg/L (Refer to Lot ID 231044-1)

Sampling By : Paramet Sattayakun วสผดฐวณท 323-9-9476

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

N. Banphit

Technical Management

Narumon Banchoangkit
Supervisor
วสผดฐวณท 323-9-9445

Approved by

Dej Changchon
Senior Manager
วสผดฐวณท 323-9-9442

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S. Resereth_AL_Grpt (103844)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 235829

Date Received : Jan 18, 2023

Date Reported : Jan 30, 2023

Report Number : 254960-1

Page 1 of 1

Sample Number	Sample Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
235829-1	Jan 18, 2023 11:50 AM	Wastewater	โรงงานผลิตผ้าไหมสาเกตบารอน	Jan 19, 2023	Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
						COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
						Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
						Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 235859-1)

Sampling By : Paramet Sattayakun รหัสมาตรฐาน 3-323-9-9476, Thanasoun Namakumna รหัสมาตรฐาน 3-204-9-8592

Remark :

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

Technical Management

N.Banyaphit

Narumon Banchoangkit

Supervisor

รหัสมาตรฐาน 3-323-9-9445

Approved by

D.Chuan

Dej Changchon

Senior Manager

รหัสมาตรฐาน 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 235829

Date Received : Jan 18, 2023

Date Reported : Jan 30, 2023

Report Number : 254960-2

Page 1 of 2

Sample Number	Sample Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
235829-1	Jan 18, 2023 11:50 AM	Wastewater	โรงงานผลิตผ้าไหมสาเกตบารอน	Jan 19, 2023	Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Metals Testing							
						Arsenic	mg/L	0.0003	0.0005	0.001	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
						Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
						Lead	mg/L	0.0003	0.0005	<0.0005	≤0.20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
						Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
						Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
						Water Testing							
						Sulfide as H ₂ S *	mg/L	-	0.01	<0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (D)	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 235859-1)

Sampling By : Paramet Sattayakun รหัสมาตรฐาน 3-323-9-9476, Thanasoun Namakumna รหัสมาตรฐาน 3-204-9-8592

Remark :

- LOD : Limit of Detection

Technical Management

Nant Somb

Nanthawadee Somboon

Specialist 1

รหัสมาตรฐาน 3-204-9-4716

Approved by

Kanokorn Anek

Senior Manager

รหัสมาตรฐาน 3-204-9-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :
Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 235829

Date Received : Jan 18, 2023
Date Reported : Jan 30, 2023
Report Number : 254960-2

Page 2 of 2

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

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :
Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 235829

Date Received : Jan 18, 2023
Date Reported : Feb 07, 2023
Report Number : 254960-4

Page 1 of 2

Analyte	Unit	LOD	LOQ	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.04	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	49060	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	7.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon *	ug/L	-	-	0.07	No Standard	Pre-Concentration, Fluorescence Spectrophotometric Method (EPA/821-R-94-010), Pre-Concentration, Fluorescence Spectrophotometric Method (EPA/821-R-94-010)	Bangkok
Salinity *	ppt	-	0.1	27.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Sulfate *	mg/L	0.6	2	2509	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Turbidity *	NTU	-	0.1	2.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 235859-1)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Nant Somb

Nanthawadee Sombon
Specialist 1

Technical Management

Nant Somb

Nanthawadee Sombon
Specialist 1

โทรศัพท์ 02-04-4716

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Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager

โทรศัพท์ 02-04-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

TESTING
No.0009
Lot ID: 235829

Date Received : Jan 18, 2023

Date Reported : Feb 07, 2023

Report Number : 254960-4

Page 2 of 2

Sampling By : Paramet Sattayakun , Thanasoun Namakuma

Remark :

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

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Lot ID: 235829

Date Received : Jan 18, 2023

Date Reported : Jan 30, 2023

Report Number : 254960-5

Page 1 of 1

Sample Number 235829-1

Sample Date Jan 18, 2023 11:50 AM

Sample Description Wastewater

Location จอห์นสันทรีฟาร์มอุตสาหกรรม สาธารณกิจกรม

Date Analysis Commenced Jan 18, 2023

Condition of Sample Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong
Temperature	Degree C	-	-	32.1	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31900	≤38000 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 235859-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476 , Thanasoun Namakuma รหัสประจำตัว 3-204-9-8592

Remark :

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

Approved by

Nant Somb
Nanthawadee Somboon
Specialist 1

Technical Management

N.Banphit

Narumon Banchoangkit
Supervisor

Approved by

Dhanon
Dej Changchon
Senior Manager

รหัสประจำตัว 3-323-9-9445

รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-1

Lot ID: 235834

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-1

Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-2

Lot ID: 235834

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-2

Page 1 of 1

Sample Number	235834-1
Sample Date	Jan 25, 2023 11:35 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Jan 26, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
pH at 25 degree C		-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	29.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	29100	≤37350 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L

Note : Total Dissolved Solids of receiving water is 32,350 mg/L (Refer to Lot ID 236144-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-9-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor

รหัสประจำตัว 7-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

รหัสประจำตัว 7-323-9-9442

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Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-2

Lot ID: 235834

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-2

Page 1 of 1

Sample Number	235834-1
Sample Date	Jan 25, 2023 11:35 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Jan 26, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	-	44200	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	-	5.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	26.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	1.5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L

Note : Total Dissolved Solids of receiving water is 32,350 mg/L (Refer to Lot ID 236144-1)

Sampling By : Paramet Sattayakun

Remark :

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

Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHCO-ONE

TESTING

No.0042

Lot ID: 235834

Date Received : Jan 25, 2023

Date Reported : Feb 01, 2023

Report Number : 2544950-3

Page 1 of 1

Sample Number	235834-1						
Sample Date	Jan 25, 2023 11:35 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Jan 26, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,350 mg/L (Refer to Lot ID 236144-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 323-9-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit

Supervisor

รหัสประจำตัว 323-9-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

รหัสประจำตัว 323-9-9442

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHCO-ONE

Lot ID: 2311895

Date Received : Feb 01, 2023

Date Reported : Feb 08, 2023

Report Number : 2556431-1

Page 1 of 1

Sample Number	2311895-1						
Sample Date	Feb 01, 2023 12:10 PM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	30.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	27750	≤35700 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,700 mg/L (Refer to Lot ID 2311823-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 323-9-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit

Supervisor

รหัสประจำตัว 323-9-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

รหัสประจำตัว 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Lot ID: 2314587

Date Received : Feb 08, 2023

Date Reported : Feb 15, 2023

Report Number : 2562141-1

Page 1 of 1

Sample Number	2314587-1
Sample Date	Feb 08, 2023 11:25 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการตากโสร้ง
Date Analysis Commenced	Feb 08, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
Water Testing						
pH at 25 degree C		-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	31.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	5	31300	≤35750 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,750 mg/L (Refer to Lot ID 2314608-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 323-9-9476

Remark :

- LOD : Limit of Detection

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

Technical Management

N. Banphit

Nanamon Banchongkit
Supervisor

รหัสประจำตัว 323-9-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager

รหัสประจำตัว 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Lot ID: 2314587

Date Received : Feb 08, 2023

Date Reported : Feb 15, 2023

Report Number : 2562141-2

Page 1 of 1

Sample Number	2314587-1
Sample Date	Feb 08, 2023 11:25 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการตากโสร้ง
Date Analysis Commenced	Feb 09, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	-	46210	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	-	6.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	28.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2150 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,750 mg/L (Refer to Lot ID 2314608-1)

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection

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

Approved by

N. Banphit

Nanamon Banchongkit
Supervisor

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Analysis / Test Report

TESTING

Client : GHECO-ONE COMPANY LIMITED

Lot ID: 2314587

Date Received : Feb 08, 2023

Date Reported : Feb 15, 2023

Report Number : 2562141-3

Client : GHECO-ONE COMPANY LIMITED

Analysis / Test Report

TESTING

Client : GHECO-ONE COMPANY LIMITED

Lot ID: 2315633

Date Received : Feb 15, 2023

Date Reported : Mar 09, 2023

Report Number : 2588362-1

P/O : GLOW-OW-22-103

Project Name : GHCO-ONE

Project Location: GHCO-ONE

Page 1 of 1

Page 1 of 1

Sample Number	2314587-1
Sampled Date	Feb 08, 2023 11:25 AM
Sample Description	Wastewater
Location	จุดตรวจน้ำทิ้งโรงงานอุตสาหกรรม
Date Analysis Commenced	Feb 08, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,750 mg/L (refer to Lot ID 2314608-1)

Sampling By : Paramet Sattayakun วรณัฐวณิช ๓-323-๙-๙476

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit

Supervisor

วณัฐวณิช ๓-323-๙-๙445

Approved by

D. Changchon

Dej Changchon

Senior Manager

วณัฐวณิช ๓-323-๙-๙442

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Page 1 of 1

Page 1 of 1

Sample Number	2315633-1
Sampled Date	Feb 15, 2023 2:30 PM
Sample Description	Wastewater
Location	จุดตรวจน้ำทิ้งโรงงานอุตสาหกรรม
Date Analysis Commenced	Feb 15, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *	-	-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	26450	≤37050 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,050 mg/L (Refer to Lot ID 2316839-1)

This Analysis test report is reissued to supersede report No.2564647-1, Date Reported : Feb 23, 2023 due to revise analytical information.

Sampling By : Paramet Sattayakun วรณัฐวณิช ๓-323-๙-๙476, Thanasoun Namakuma วรณัฐวณิช ๓-204-๙-8592

Remark :

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

Technical Management

N. Banphit

Narumon Banchongkit

Supervisor

วณัฐวณิช ๓-323-๙-๙445

Approved by

D. Changchon

Dej Changchon

Senior Manager

วณัฐวณิช ๓-323-๙-๙442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2315633
Date Received : Feb 15, 2023
Date Reported : Mar 09, 2023
Report Number : 2586362-3

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2315633-1	Feb 15, 2023 2:30 PM	Wastewater	จุดระบายน้ำทิ้งจากกระบวนการผลิต	Feb 16, 2023	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						Conductivity at 25 Degree C	micromhos/cm	-	0.5	37760	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	5.2	No Standard	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	0.30	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
						Salinity	ppt	-	0.1	20.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
						Turbidity	NTU	-	0.1	3.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : This Analysis test report is reissued to supersede report No.2564647-3, Date Reported : Feb 23, 2023 due to revise analytical information.

Sampling By : Paramet Sattayakun , Thanasoun Namakuma

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

N. Banphit

Approved by
Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2315634
Date Received : Feb 22, 2023
Date Reported : Mar 01, 2023
Report Number : 2564644-1

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2315634-1	Feb 22, 2023 11:15 AM	Wastewater	จุดระบายน้ำทิ้งจากกระบวนการผลิต	Feb 22, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
						Temperature	Degree C	-	-	32.6	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
						Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28600	≤37850 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,850 mg/L (Refer to Lot ID 2316930-1)

Sampling By : Paramet Sattayakun วรณัฐนันท์ 3-323-9-9476

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

N. Banphit

Approved by
Narumon Banchoangkit
Supervisor

Dej Changchon
Senior Manager

วรณัฐนันท์ 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

Lot ID: 2315634

Date Received : Feb 22, 2023

Date Reported : Mar 01, 2023

Report Number : 2564644-2

Page 1 of 1

Sample Number	2315634-1
Sample Date	Feb 22, 2023 11:15 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Feb 23, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	42420	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	6.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	26.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	0.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,850 mg/L (Refer to Lot ID 2316930-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042

Lot ID: 2315634

Date Received : Feb 22, 2023

Date Reported : Mar 01, 2023

Report Number : 2564644-3

Page 1 of 1

Sample Number	2315634-1
Sample Date	Feb 22, 2023 11:15 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Feb 23, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,850 mg/L (Refer to Lot ID 2316930-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

Dej Chingchon
Senior Manager

โทรศัพท์ : 323-9-9442

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S:\Report\AL_Gd.mt (6.1294)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2322798
Date Received : Mar 01, 2023
Date Reported : Mar 09, 2023
Report Number: 2580286-1

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2322798-1	Mar 01, 2023 11:15 AM	Wastewater	จุดรับน้ำทิ้งจากกระบวนการผลิต	Mar 01, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	pH at 25 degree C	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
						Temperature	Degree C	-	31.1	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
						Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	≤38400 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,400 mg/L. (Refer to Lot ID 2322827-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9476

Remark :

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

Technical Management

N. Banphit

Dej Changchon

Approved by

Nanumon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-9445

Senior Manager
รหัสประจำตัว 3-323-9442

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1957-21/PMAL

S:\Report\AL_G-mp (11-5949)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2322798
Date Received : Mar 01, 2023
Date Reported : Mar 09, 2023
Report Number: 2580286-2

Page 1 of 1

Sample Number	2322798-1											
Sampled Date	Mar 01, 2023 11:15 AM											
Sample Description	Wastewater											
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต											
Date Analysis Commenced	Mar 01, 2023											
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)											
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location					
Water Testing Conductivity at 25 Degree C	micromhos/cm	-	0.5	45520	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	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong					
Salinity	ppt	-	0.1	26.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong					
Turbidity	NTU	-	0.1	2.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong					

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,400 mg/L. (Refer to Lot ID 2322827-1)

Sampling By : Paramet Sattayakun

Remark :

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

Approved by

N. Banphit

Nanumon Banchoangkit
Supervisor

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S:\Report\AL_G-mp (11-5949)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

TESTING

No.0042

Lot ID: 2322798

Date Received : Mar 01, 2023

Date Reported : Mar 09, 2023

Report Number : 2580286-3

Page 1 of 1

Sample Number	2322798-1
Sampled Date	Mar 01, 2023 11:15 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Mar 02, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,400 mg/L (Refer to Lot ID 2322827-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476

Remark :

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

Technical Management

Narumon Banchongkit

Supervisor

รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon

Senior Manager

รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2325720

Date Received : Mar 08, 2023

Date Reported : Mar 15, 2023

Report Number : 2585821-1

Page 1 of 1

Sample Number	2325720-1
Sampled Date	Mar 08, 2023 11:20 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Mar 08, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	30.2	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33500	≤38300 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,300 mg/L (Refer to Lot ID 2325764-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476

Remark :

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

Technical Management

Narumon Banchongkit

Supervisor

รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon

Senior Manager

รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 23257720

Date Received : Mar 08, 2023

Date Reported : Mar 15, 2023

Report Number : 2585821-2

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
2325720-1	Mar 08, 2023 11:20 AM	Wastewater	พื้นที่รับน้ำทิ้งโรงงานอุตสาหกรรม	Mar 09, 2023	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing						
						Conductivity at 25 Degree C	microhmhos/cm	0.5	48790	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	7.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
						Salinity	ppt	0.1	29.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
						Turbidity	NTU	0.1	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,300 mg/L (Refer to Lot ID 2325764-1)

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2325720

Date Received : Mar 08, 2023

Date Reported : Mar 15, 2023

Report Number : 2585821-3

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
2325720-1	Mar 08, 2023 11:20 AM	Wastewater	พื้นที่รับน้ำทิ้งโรงงานอุตสาหกรรม	Mar 08, 2023	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing						
						BOD (5 days at 20 Degree C)	mg/L	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
						COD *	mg/L	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
						Oil & Grease *	mg/L	1	1	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3520 B	Rayong
						Total Suspended Solids Dried at 103-105 degree C	mg/L	5	8	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,300 mg/L (Refer to Lot ID 2325764-1)

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection

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

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

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

N. Banphit

Technical Management

Narumon Banchoangkit
Supervisor

วาดมณัฏฐ์ 7-323-9-9445

Approved by

Dej Changchon
Senior Manager

วาดมณัฏฐ์ 7-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Date Received : Mar 15, 2023
Date Reported : Mar 22, 2023
Report Number : 2591942-1
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042

Lot ID: 2328179
Date Received : Mar 15, 2023
Date Reported : Mar 22, 2023
Report Number : 2591942-1

Page 1 of 1

Sample Number	2328179-1						
Sampled Date	Mar 15, 2023 1:50 PM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Mar 15, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation Standards (APHA, USEPA)						
Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location	
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong	
pH at 25 degree C		-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500- H (B)	Rayong	
Temperature *	Degree C	-	32.8	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	18350	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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong	

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,250 mg/L (Refer to Lot ID 2328250-1)

Sampling By : Tanasit Wongsachai รหัสผู้เก็บ 3-323-4-9460 , Panupong Manit รหัสผู้เก็บ 3-204-4-8600

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสผู้เก็บ 3-323-4-9445

Approved by

D. Changchon

Dig Changchon
Senior Manager
รหัสผู้เก็บ 3-323-4-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Date Received : Mar 15, 2023
Date Reported : Mar 22, 2023
Report Number : 2591942-3
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328179

Date Received : Mar 15, 2023
Date Reported : Mar 22, 2023
Report Number : 2591942-3

Page 1 of 1

Sample Number	2328179-1						
Sample Date	Mar 15, 2023	1:50 PM					
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิตโรงงาน						
Date Analysis Commenced	Mar 16, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	29610	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	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	17.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,250 mg/L (Refer to Lot ID 2328250-1)

Sampling By : Tanasit Wongsachai , Panupong Manit

Remark :

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2328180
Date Received : Mar 22, 2023
Date Reported : Mar 29, 2023
Report Number : 2591945-1

Page 1 of 1

Sample Number	2328180-1									
Sample Date	Mar 22, 2023 11:15 AM									
Sample Description	Wastewater									
Location	จุดรับน้ำทิ้งจากกระบวนการผลิตจากโรงงาน									
Date Analysis Commenced	Mar 22, 2023									
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong			
Temperature	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong			
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	23750	≤37250 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong			

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,250 mg/L (Refer to Lot ID 2328369-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-9-9476

Remark :

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

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor
รหัสประจำตัว 7-323-9-9445

Approved by

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

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2328180
Date Received : Mar 22, 2023
Date Reported : Mar 29, 2023
Report Number : 2591945-2

Page 1 of 1

Sample Number	2328180-1						
Sample Date	Mar 22, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิตจากโรงงาน						
Date Analysis Commenced	Mar 23, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	36810	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	6.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	21.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,250 mg/L (Refer to Lot ID 2328369-1)

Sampling By : Paramet Sattayakun

Remark :

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

Approved by

N. Banphit
Narumon Banchoangkit
Supervisor

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Life Sciences

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHCO-ONE

TESTING
No.0042

Lot ID: 2328180

Date Received : Mar 29, 2023

Date Reported : Mar 29, 2023

Report Number : 2591945-3

Page 1 of 1

Sample Number	2328180-1						
Sample Date	Mar 22, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดสูบน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Mar 23, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 Degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,250 mg/L (Refer to Lot ID 2328369-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476

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

Technical Management

Narumon Banchongkit

Supervisor

รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon

Senior Manager

รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHCO-ONE

Lot ID: 2328181

Date Received : Mar 29, 2023

Date Reported : Apr 05, 2023

Report Number : 2591943-1

Page 1 of 1

Sample Number	2328181-1						
Sample Date	Mar 29, 2023 11:40 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Mar 29, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation Standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28450	≤37950 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,250 mg/L (Refer to Lot ID 2328370-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476

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

Technical Management

Narumon Banchongkit

Supervisor

รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon

Senior Manager

รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328181

Date Received : Mar 29, 2023

Date Reported : Apr 05, 2023

Report Number : 2591943-2

Page 1 of 1

Sample Number	2328181-1									
Sample Date	Mar 29, 2023 11:40 AM									
Sample Description	Wastewater									
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต									
Date Analysis Commenced	Mar 30, 2023									
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
Conductivity at 25 Degree C	micromhos/cm	-	0.5	41660	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	6.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong			
Salinity	ppt	-	0.1	25.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong			
Turbidity	NTU	-	0.1	1.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong			

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,950 mg/L (Refer to Lot ID 2328370-1)

Sampling By : Paramet Sattayakun

Remark :

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

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103

Project Name :

Project Location : GHECO-ONE

TESTING

No.0042

Lot ID: 2328181

Date Received : Mar 29, 2023

Date Reported : Apr 05, 2023

Report Number : 2591943-3

Page 1 of 1

Sample Number	2328181-1									
Sampled Date	Mar 29, 2023 11:40 AM									
Sample Description	Wastewater									
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต									
Date Analysis Commenced	Mar 29, 2023									
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong			
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong			
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong			
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong			

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,950 mg/L (Refer to Lot ID 2328370-1)

Sampling By : Paramet Sattayakun

Remark :

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

N. Banphit

Technical Management

Narumon Banchoangkit
Supervisor

Approved by

Dej Changchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHCO-ONE

Lot ID: 2330619

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2597951-1

Page 1 of 1

Sample Number	2330619-1
Sample Date	Apr 05, 2023 11:38 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
pH at 25 degree C	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (F)	Rayong
Temperature	Degree C	-	34.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	5	22350	≤38950 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,950 mg/L (Refer to Lot ID 2330682-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476

Remark :

- LOD : Limit of Detection

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

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

D. Changchon

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

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHCO-ONE

Lot ID: 2330619

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2597951-2

Page 1 of 1

Sample Number	2330619-1
Sample Date	Apr 05, 2023 11:38 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Apr 06, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	-	35430	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	-	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	21.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	1.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,950 mg/L (Refer to Lot ID 2330682-1)

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection

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

Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2330619
Date Received : Apr 05, 2023
Date Reported : Apr 12, 2023
Report Number : 2597951-3

Page 1 of 1

Sample Number	2330619-1						
Sampled Date	Apr 05, 2023 11:38 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Apr 06, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,950 mg/L. (Refer to Lot ID 2330682-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-a-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 7-323-a-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
รหัสประจำตัว 7-323-a-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330620
Date Received : Apr 12, 2023
Date Reported : Apr 21, 2023
Report Number : 2597950-1

Page 1 of 1

Sample Number	2330620-1						
Sampled Date	Apr 12, 2023 10:35 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Apr 12, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	35.7	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	24350	≤38500 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,500 mg/L. (Refer to Lot ID 2328368-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-a-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 7-323-a-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
รหัสประจำตัว 7-323-a-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103

Project Name : GHECO-ONE

Lot ID: 2330620

Date Received : Apr 12, 2023

Date Reported : Apr 21, 2023

Report Number : 2597950-2

Page 1 of 1

Sample Number	2330620-1
Sample Date	Apr 12, 2023 10:35 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Apr 13, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	0.5	37100	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	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	0.1	20.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2310 B	Rayong
Turbidity	NTU	0.1	1.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2150 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,500 mg/L (Refer to Lot ID 2328368-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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19351-211 (FNAI)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103

Project Name : GHECO-ONE

TESTING
No.0042
Lot ID: 2330620

Date Received : Apr 12, 2023

Date Reported : Apr 21, 2023

Report Number : 2597950-3

Page 1 of 1

Sample Number	2330620-1
Sample Date	Apr 12, 2023 10:35 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม
Date Analysis Commenced	Apr 12, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	1	3	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,500 mg/L (Refer to Lot ID 2328368-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

Dej Chingchon
Senior Manager

โทรศัพท์ 3-323-9-9442

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19351-211 (FNAI)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

TESTING
No.0042
Lot ID: 2330618

Date Received : Apr 19, 2023

Date Reported : Apr 26, 2023

Report Number : 2597948-1



Page 1 of 1

Sample Number	2330618-1						
Sampled Date	Apr 19, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการตากใบสมุทร						
Date Analysis Commenced	Apr 19, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation Standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	36.6	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	32450	≤38800 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,800 mg/L (Refer to Lot ID 2330669-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476 , Pattarapol Sawangjittam รหัสประจำตัว 3-204-9-0002

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

D. Changchon

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

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Life Sciences

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2330618

Date Received : Apr 19, 2023

Date Reported : Apr 26, 2023

Report Number : 2597948-3

Page 1 of 1

Sample Number	2330618-1						
Sampled Date	Apr 19, 2023 11:15 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการตากใบ						
Date Analysis Commenced	Apr 20, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	44820	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	5.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	27.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,800 mg/L (Refer to Lot ID 2330669-1)

Sampling By : Paramet Sattayakun , Pattarapol Sawangjittam

Remark :

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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

Life Sciences

RIGHT SOLUTIONS RIGHT PARTNER

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330621
Date Received : Apr 26, 2023
Date Reported : May 05, 2023
Report Number : 2597949-1

Page 1 of 1

Sample Number	2330621-1						
Sample Date	Apr 26, 2023 11:25 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต						
Date Analysis Commenced	Apr 26, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (F)	Rayong
Temperature	Degree C	-	-	35.8	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	29750	≤37800 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 2330676-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว : 323-9-9476

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

Technical Management

Narumon Banchongkit
Supervisor
รหัสประจำตัว : 323-9-9445

Approved by

Dej Changchon
Senior Manager
รหัสประจำตัว : 323-9-9442

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NIGHT SOLUTIONS PITCHAT PANTHIEE

19357-2/1 ENMEL

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330621
Date Received : Apr 26, 2023
Date Reported : May 05, 2023
Report Number : 2597949-2

Page 1 of 1

Sample Number	2330621-1						
Sample Date	Apr 26, 2023 11:25 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากกระบวนการบำบัดน้ำ						
Date Analysis Commenced	Apr 27, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	43763	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	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	26.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 2330676-1)

Sampling By : Paramet Sattayakun

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

Approved by

Narumon Banchongkit
Supervisor

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NIGHT SOLUTIONS PITCHAT PANTHIEE

19357-2/1 ENMEL

S:\Reports\AL_Grpt (11-22M4)



Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHCEO-ONE

TESTING
No.0042

Lot ID: 2330621

Date Received : Apr 26, 2023

Date Reported : May 05, 2023

Report Number : 2597949-3

Page 1 of 1

Sample Number	2330621-1
Sampled Date	Apr 26, 2023 11:25 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิตกระดาษ
Date Analysis Commenced	Apr 27, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L. (Refer to Lot ID 2330676-1)

Sampling By : Paramet Sattayakun รหัสผู้ตรวจ 3-323-9-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit

Supervisor

รหัสผู้ตรวจ 3-323-9-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

รหัสผู้ตรวจ 3-323-9-9442

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Life Sciences

RIGHT SOLUTIONS RIGHT PARTNER

195121/2/ML

S:\Report\AL_Gupr (11.23.24)



Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHCEO-ONE

Lot ID: 2342038

Date Received : May 03, 2023

Date Reported : May 11, 2023

Report Number : 2623912-1

Page 1 of 1

Sample Number	2342038-1
Sampled Date	May 03, 2023 11:10 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิตกระดาษ
Date Analysis Commenced	May 03, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.8	5.5-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	36.2	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	22350	≤38,100 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,100 mg/L. (Refer to Lot ID 2342376-1)

Sampling By : Paramet Sattayakun รหัสผู้ตรวจ 3-323-9-9476

Remark :

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

Technical Management

N. Banphit

Narumon Banchoangkit

Supervisor

รหัสผู้ตรวจ 3-323-9-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

รหัสผู้ตรวจ 3-323-9-9442

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Life Sciences

RIGHT SOLUTIONS RIGHT PARTNER

195121/2/ML

S:\Report\AL_Gupr (1.06.24)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342038

Date Received : May 03, 2023

Date Reported : May 11, 2023

Report Number : 2623912-2

Page 1 of 1

Sample Number	2342038-1	Sample Date	May 03, 2023 11:10 AM	Sample Description	Wastewater	Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	May 04, 2023	Date Analysis Sample	May 04, 2023	Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	33920	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	6.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	20.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,100 mg/L. (Refer to Lot ID 2342376-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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19517-21/EMAIL

S:\Report\All GL (m) (L) (ppm)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2342038

Date Received : May 03, 2023

Date Reported : May 11, 2023

Report Number : 2623912-3

Page 1 of 1

Sample Number	2342038-1	Sample Date	May 03, 2023 11:10 AM	Sample Description	Wastewater	Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	May 04, 2023	Date Analysis Sample	May 04, 2023	Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,100 mg/L. (Refer to Lot ID 2342376-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Technical Management

Narumon Banchoangkit
Supervisor

Approved by

Dej Changchon
Senior Manager

โทรศัพท์ 3-323-9-9442

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19517-21/EMAIL

S:\Report\All GL (m) (L) (ppm)



S:\Report\All GL (m) (L) (ppm)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342039
Date Received : May 10, 2023
Date Reported : May 17, 2023
Report Number : 2623903-1

Page 1 of 1

Sample Number	2342039-1						
Sample Date	May 10, 2023 11:00 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากโรงงาน						
Date Analysis Commenced	May 10, 2023						
Condition of Sample	Contained In one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
	Temperature	Degree C	-	35.8	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28250	≤38000 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 2342356-1)

Sampling By : Pathompong Korsawat รหัสประจำตัว 7-323-9-9468

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 7-323-9-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
รหัสประจำตัว 7-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342039
Date Received : May 10, 2023
Date Reported : May 17, 2023
Report Number : 2623903-2

Page 1 of 1

Sample Number	2342039-1									
Sample Date	May 10, 2023 11:00 AM									
Sample Description	Wastewater									
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม									
Date Analysis Commenced	May 11, 2023									
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing	Conductivity at 25 Degree C			micromhos/cm	-	0.5	40250	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	7.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity				ppt	-	0.1	24.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity				NTU	-	0.1	2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 2342356-1)

Sampling By : Pathompong Korsawat

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042

Lot ID: 2342039

Date Received : May 10, 2023
Date Reported : May 17, 2023
Report Number : 2629903-3

Page 1 of 1

Sample Number	2342039-1											
Sample Date	May 10, 2023 11:00 AM											
Sample Description	Wastewater											
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม											
Date Analysis Commenced	May 11, 2023											
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)											
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location					
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong					
	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong					
COD *	mg/L	-	1	1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Rayong					
Oil & Grease *	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong					
Total Suspended Solids Dried at 103-105 degree C	mg/L	-										

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,000 mg/L (Refer to Lot ID 2342356-1)

Sampling By : Pabhompong Komsawat รหัสผู้ตรวจ 7-323-a-9468

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

Technical Management

Narumon Benchongkit
Supervisor
รหัสผู้ตรวจ 7-323-a-9445

Approved by

Dej Changchon
Senior Manager
รหัสผู้ตรวจ 7-323-a-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103,32312678

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342035

Date Received : May 17, 2023
Date Reported : May 27, 2023
Report Number : 2623858-1

Page 1 of 1

Sample Number	2342035-1												
Sample Date	May 17, 2023 11:25 AM												
Sample Description	Wastewater												
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม												
Date Analysis Commenced	May 17, 2023												
Condition of Sample	Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)												
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location						
Water Testing pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong						
Temperature	Degree C	-	-	36.6	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong						
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	24300	≤38150 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong						

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun รหัสผู้ตรวจ 7-323-a-9476, Thanasoun Namakunna รหัสผู้ตรวจ 7-204-a-8592

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

Technical Management

Narumon Benchongkit
Supervisor
รหัสผู้ตรวจ 7-323-a-9445

Approved by

Dej Changchon
Senior Manager
รหัสผู้ตรวจ 7-323-a-9442

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103.32312678

Project Name :

Project Location: GHCO-ONE

TESTING

No.0009

Lot ID: 2342035

Date Received : May 17, 2023

Date Reported : May 30, 2023

Report Number : 2623858-2

Page 1 of 2

Sample Number 2342035-1

Sample Date May 17, 2023 11:25 AM

Sample Description Wastewater

Location กรุงเทพมหานคร กรุงเทพมหานคร

Date Analysis Commenced May 18, 2023

Condition of Sample Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.003	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Sulfide as H ₂ S *	mg/L	-	0.01	<0.01	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (D)	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476 , Thanasoun Namakuma รหัสประจำตัว 3-204-9-8592

Remark :

- LOD : Limit of Detection

Technical Management

Siriluk P.

Siriluk Puengpang

Supervisor

รหัสประจำตัว 3-204-9-4720

Approved by

Kanokkorn Anek

Senior Manager

รหัสประจำตัว 3-204-9-6111

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103.32312678

Project Name :

Project Location: GHCO-ONE

TESTING

No.0009

Lot ID: 2342035

Date Received : May 17, 2023

Date Reported : May 30, 2023

Report Number : 2623858-2

Page 2 of 2

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

Analyte(s) marked "N/A" are not included in scope of Accreditation ISO/IEC 17025.

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

Siriluk P.

Siriluk Puengpang

Supervisor

รหัสประจำตัว 3-204-9-4720

Approved by

Kanokkorn Anek

Senior Manager

รหัสประจำตัว 3-204-9-6111

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Analysis / Test Report

TESTING
No.0009

Analysis / Test Report

TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103.32312678

Project Name :

Project Location : GHECO-ONE

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QW-22-103.32312678

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342035

Date Received : May 17, 2023

Date Reported : May 30, 2023

Report Number : 2623858-3

Lot ID: 2342035

Date Received : May 17, 2023

Date Reported : May 30, 2023

Report Number : 2623858-3

Page 1 of 2

Page 2 of 2

Sample Number	2342035-1	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Sample Date	May 17, 2023 11:25 AM							
Sample Description	Wastewater							
Location	จุดรับน้ำทิ้งจากโรงงาน							
Date Analysis Commenced	May 18, 2023							
Condition of Sample	Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte								
Metals Testing								
Iron	mg/L	0.003	0.005	0.04	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F		Bangkok
Water Testing								
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	36210	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	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)		Rayong
Petroleum Hydrocarbon *	ug/L	-	-	2.20	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B		Bangkok
Salinity *	ppt	-	0.1	21.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B		Rayong
Sulfate *	mg/L	0.6	2	1702	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)		Rayong
Turbidity *	NTU	-	0.1	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B		Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun , Thanasoun Namakuma

Remark :

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

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Approved by
Siriluk Puenggang
Supervisor

Approved by
Siriluk Puenggang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103,323,2678
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2342035
Date Received : May 17, 2023
Date Reported : May 27, 2023
Report Number : 2623858-4

Page 1 of 1

Sample Number	2342035-1						
Sampled Date	May 17, 2023 11:25 AM						
Sample Description	Wastewater						
Location	จุดสูบน้ำทิ้งจากโรงงาน อําเภอยางชุมน้อย						
Date Analysis Commenced	May 18, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, two amber glass bottles and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,150 mg/L. (Refer to Lot ID 2342340-1)

Sampling By : Paramet Sattayakun วาณิชากร 323-3-9476 , Thanassun Namakunna วาณิชากร 323-3-8592

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

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
วาณิชากร 323-3-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
วาณิชากร 323-3-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342040
Date Received : May 24, 2023
Date Reported : May 31, 2023
Report Number : 2623894-1

Page 1 of 1

Sample Number	2342040-1						
Sampled Date	May 24, 2023 11:20 AM						
Sample Description	Wastewater						
Location	จุดสูบน้ำทิ้งจากโรงงาน						
Date Analysis Commenced	May 24, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	35.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28700	≤38200 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,200 mg/L. (Refer to Lot ID 2342357-1)

Sampling By : Paramet Sattayakun วาณิชากร 323-3-9476

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

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
วาณิชากร 323-3-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
วาณิชากร 323-3-9442

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Life Sciences

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342040
Date Received : May 24, 2023
Date Reported : May 31, 2023
Report Number : 2623894-2

Page 1 of 1

Sample Number	2342040-1											
Sample Date	May 24, 2023 11:20 AM											
Sample Description	Wastewater											
Location	จุดรับน้ำทิ้งนิคมอุตสาหกรรมถาวร											
Date Analysis Commenced	May 25, 2023											
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)											
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location					
Water Testing Conductivity at 25 Degree C	micromhos/cm	-	0.5	42460	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	5.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong				
Salinity	ppt	-	0.1	25.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong					
Turbidity	NTU	-	0.1	1.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong					


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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,200 mg/L (Refer to Lot ID 2342357-1)

Sampling By : Paramet Sattayakun

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

Approved by

Narumon Banchongkit
Supervisor

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18572-21L (FNAI)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342040
Date Received : May 24, 2023
Date Reported : May 31, 2023
Report Number : 2623894-3

Page 1 of 1

Sample Number	Sample Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
2342040-1	May 24, 2023 11:20 AM	Wastewater	จุดรับน้ำทิ้งนิคมอุตสาหกรรมถาวร	May 24, 2023	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing						
BOD (5 days at 20 Degree C)							mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *							mg/L	-	40	<40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *							mg/L	-	1	2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C							mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong


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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

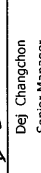
Note : Total Dissolved Solids of receiving water is 33,200 mg/L (Refer to Lot ID 2342357-1)

Sampling By : Paramet Sattayakun

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

Technical Management

Narumon Banchongkit
Supervisor

Approved by


Dej Changchon
Senior Manager

ยศธณณพ 3-323-9-9442

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18572-21L (FNAI)

S:\Report\AL GL-01 (2.38PW)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342041
Date Received : May 31, 2023
Date Reported : Jun 08, 2023
Report Number : 2623878-1

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2342041-1	May 31, 2023 10:20 AM	Wastewater	เขตนครอุตสาหกรรมบางปะกง	May 31, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
						Temperature	Degree C	-	-	35.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
						Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31050	≤39150 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun วัฒนาพร 3-323-9476

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
วัฒนาพร 3-323-9445

Approved by

D. Chingchon

Dej Chingchon
Senior Manager
วัฒนาพร 3-323-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342041
Date Received : May 31, 2023
Date Reported : Jun 08, 2023
Report Number : 2623878-2

Page 1 of 1

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2342041-1	May 31, 2023 10:20 AM	Wastewater	เขตนครอุตสาหกรรมบางปะกง	Jun 01, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						Conductivity at 25 Degree C	microhm/cm	-	0.5	45450	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	7.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 1900-O (C)	Rayong
						Salinity	ppt	-	0.1	26.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
						Turbidity	NTU	-	0.1	1.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Plakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556
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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCO-ONE

TESTING
No.0042
Lot ID: 2342041
Date Received : May 31, 2023
Date Reported : Jun 08, 2023
Report Number : 2623878-3

Page 1 of 1

Sample Number	2342041-1							
Sampled Date	May 31, 2023 10:20 AM							
Sample Description	Wastewater							
Location	จุดตรวจน้ำทิ้งโรงงานอุตสาหกรรม							
Date Analysis Commenced	Jun 01, 2023							
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong	
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong	
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong	

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-a-9476

Remark :

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

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-a-9445

Approved by

D. Phum
Dej Changchon
Senior Manager
รหัสประจำตัว 3-323-a-9442

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S:\Report\AL_GL\ref (11594)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCO-ONE

Lot ID: 2357778
Date Received : Jun 07, 2023
Date Reported : Jun 14, 2023
Report Number : 2656512-1

Page 1 of 1

Sample Number	2357778-1							
Sample Date	Jun 07, 2023 10:50 AM							
Sample Description	Wastewater							
Location	จุดตรวจน้ำทิ้งโรงงานอุตสาหกรรม							
Date Analysis Commenced	Jun 07, 2023							
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	
Temperature	Degree C	-	-	36.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34600	≤39150 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong	

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-a-9476

Remark :

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

Technical Management

N. Banphit
Narumon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-a-9445

Approved by

D. Phum
Dej Changchon
Senior Manager
รหัสประจำตัว 3-323-a-9442

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S:\Report\AL_GL\ref (11594)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11,1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2357778
Date Received : Jun 07, 2023
Date Reported : Jun 14, 2023
Report Number : 2656512-2

Page 1 of 1

Sample Number	Sample Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2357778-1	Jun 07, 2023 10:50 AM	Wastewater	จุดรับน้ำทิ้งจากกระบวนการในโรงงาน	Jun 08, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						Conductivity at 25 Degree C	micromhos/cm	-	0.5	49910	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	6.5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
						Salinity	ppt	-	0.1	29.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
						Turbidity	NTU	-	0.1	3.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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S:\Report\AL\GLO\m (152894)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11,1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2357778
Date Received : Jun 07, 2023
Date Reported : Jun 14, 2023
Report Number : 2656512-3

Page 1 of 1

Sample Number	Sample Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2357778-1	Jun 07, 2023 10:50 AM	Wastewater	จุดรับน้ำทิ้งจากกระบวนการในโรงงาน	Jun 08, 2023	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
						COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
						Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
						Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,150 mg/L (Refer to Lot ID 2342358-1)

Sampling By : Paramet Sattayakun

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

N. Banphit

Technical Management

Narumon Banchoangkit
Supervisor

Approved by

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHCO-ONE

Lot ID: 2357777

Date Received : Jun 14, 2023

Date Reported : Jun 22, 2023

Report Number : 2656531-1

Page 1 of 1

Sample Number	2357777-1
Sample Date	Jun 14, 2023 11:10 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Jun 14, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
Water Testing						
pH at 25 degree C		-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	36.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	5	33700	≤39650 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,650 mg/L (Refer to Lot ID 2357866-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว : 323-a-9476

Remark :

- LOD : Limit of Detection

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว : 323-a-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
รหัสประจำตัว : 323-a-9442

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHCO-ONE

Lot ID: 2357777

Date Received : Jun 14, 2023

Date Reported : Jun 22, 2023

Report Number : 2656531-2

Page 1 of 1

Sample Number	2357777-1
Sample Date	Jun 14, 2023 11:10 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Jun 15, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	-	49400	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	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	0.1	28.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	0.1	2.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,650 mg/L (Refer to Lot ID 2357866-1)

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHCO-ONE

TESTING
No.0042
Lot ID: 2357777
Date Received : Jun 14, 2023
Date Reported : Jun 22, 2023
Report Number : 2656531-3

Page 1 of 1

Sample Number	2357777-1						
Sample Date	Jun 14, 2023 11:10 AM						
Sample Description	Wastewater						
Location	จระเข้สามพันฟาร์มระบบบำบัดน้ำเสีย						
Date Analysis Commenced	Jun 14, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD *	mg/L	-	40	47	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,550 mg/L (Refer to Lot ID 2357866-1)

Sampling By : Paramet Sattayakun รหัสผู้ตรวจ 323-3-9476

Remark :

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

Technical Management

N.B. Banphit
Narumon Banchongkit
Supervisor
รหัสผู้ตรวจ 323-3-9445

Approved by

D. Chuan
Dej Changchon
Senior Manager
รหัสผู้ตรวจ 323-3-9442

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Life Sciences

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S:\Report\AL_GLP\1 (50299)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103.323.2678
Project Name :
Project Location : GHCO-ONE

TESTING
No.0042
Lot ID: 2357772
Date Received : Jun 21, 2023
Date Reported : Jun 28, 2023
Report Number : 2656508-1

Page 1 of 1

Sample Number	2357772-1						
Sample Date	Jun 21, 2023 12:05 PM						
Sample Description	Wastewater						
Location	จระเข้สามพันฟาร์มระบบบำบัดน้ำเสีย						
Date Analysis Commenced	Jun 21, 2023						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C *		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.9	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33450	≤39900 (1)	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	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,500 mg/L (Refer to Lot ID 2357805-1)

Sampling By : Paramet Sattayakun รหัสผู้ตรวจ 323-3-9476, Pattarapol Sawangjaitam รหัสผู้ตรวจ 204-3-0002

Remark :

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

Technical Management

N.B. Banphit
Narumon Banchongkit
Supervisor
รหัสผู้ตรวจ 323-3-9445

Approved by

D. Chuan
Dej Changchon
Senior Manager
รหัสผู้ตรวจ 323-3-9442

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Life Sciences

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S:\Report\AL_GLP\1 (103444)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103.32312678

Project Name :

Project Location : GHECO-ONE

Lot ID: 2357772

Date Received : Jun 21, 2023

Date Reported : Jun 28, 2023

Report Number : 2656508-6

Page 1 of 1

Sample Number	2357772-1
Sampled Date	Jun 21, 2023 12:05 PM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Jun 22, 2023
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	51630	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	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	27.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,900 mg/L (Refer to Lot ID 2357805-1)

Sampling By : Paramet Sattayakun , Pattarapol Sawangjalarn

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

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N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2357776

Date Received : Jun 28, 2023

Date Reported : Jul 05, 2023

Report Number : 2656534-1

Page 1 of 1

Sample Number	2357776-1
Sampled Date	Jun 28, 2023 11:10 AM
Sample Description	Wastewater
Location	จุดรับน้ำทิ้งจากกระบวนการผลิต
Date Analysis Commenced	Jun 28, 2023
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C	-	-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33900	≤39950 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,950 mg/L (Refer to Lot ID 2357820-1)

Sampling By : Chainusorn Lertmanthakunchai wstduanwst 3-323-a-9461

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

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

วตดูานวต 3-323-a-9442

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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCEO-ONE

Lot ID: 2357776
Date Received : Jun 28, 2023
Date Reported : Jul 05, 2023
Report Number : 2656534-2

Page 1 of 1

Sample Number	2357776-1						
Sampled Date	Jun 28, 2023 11:10 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม						
Date Analysis Commenced	Jun 29, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	51870	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	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	29.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,950 mg/L (Refer to Lot ID 2357820-1)

Sampling By : Chainusorn Lerthanakunchai

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

Approved by

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCEO-ONE

Lot ID: 2357776
Date Received : Jun 28, 2023
Date Reported : Jul 05, 2023
Report Number : 2656534-3

Page 1 of 1

Sample Number	2357776-1						
Sampled Date	Jun 28, 2023 11:10 AM						
Sample Description	Wastewater						
Location	จุดรับน้ำทิ้งจากโรงงานอุตสาหกรรม						
Date Analysis Commenced	Jun 29, 2023						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,950 mg/L (Refer to Lot ID 2357820-1)

Sampling By : Chainusorn Lerthanakunchai

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

Approved by

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Report to : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong
Thailand 21150
Attn : Umanin Punnouk
Phone : 0-3891-8950
Fax : -
Email : umarin.p@gpsgroup.com

Project Name : GHECO-ONE
Location : GHECO-ONE
P/O :

Lot ID: 233363
Date Received : Jan 10, 2023
Date Reported : Jan 20, 2023
Report Number: 2545762-1

CC Email :

Page 1 of 1

Reference Number 233363-1
Sampling Date Jan 09, 2023 5:05 PM
Sample Description Wastewater
Location น้ำทิ้งจากถังหมักจากฟาร์มเลี้ยงปลาในบ่อเลี้ยงปลาธรรมชาติ
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Date of Analysis Jan 18, 2023

Analyte	Unit	LOD	Result	Method
Water Testing pH at 25 degree C		-	6.4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
Total Dissolved Solids	mg/L	-	68	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C

Note: This Analysis test report is reissued to supersede report No.2539502-1, Date Reported : Jan 17, 2022 due to revise analytical information.

Remark :
1. LOD : Limit of Detection
2. "<" : Lower than LOQ (Limit of Quantitation)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the ALS Laboratory Group (Thailand) except as noted in full.

Approved by
N. Banphit
Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name : GHECO-ONE
Project Location : GHECO-ONE

TESTING
Lot ID: 235845
Date Received : Feb 15, 2023
Date Reported : Feb 21, 2023
Report Number: 2544993-1

Page 1 of 1

Sample Number 235845-1
Sampled Date Feb 15, 2023 11:30 AM
Sample Description Wastewater
Location น้ำทิ้งจากถังหมักจากฟาร์มเลี้ยงปลาในบ่อเลี้ยงปลาธรรมชาติ
Date Analysis Commenced Feb 15, 2023
Condition of Sample Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
Water Testing pH at 25 degree C		-	8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	944	≤35750 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,750 mg/L (Refer to Lot ID 2314608-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-9-9476 , Thanasoun Namakuma รหัสประจำตัว 7-204-9-8592

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Banphit
Narumon Banchoangkit
Supervisor

Approved by
D. Chongchon
Dej Chongchon
Senior Manager

รหัสประจำตัว 7-323-9-9445

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

TESTING

No.0042

Lot ID: 2328182

Date Received : Mar 22, 2023

Date Reported : Mar 28, 2023

Report Number : 2591946-1

Page 1 of 1

Sample Number	2328182-1
Sample Date	Mar 22, 2023 10:10 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังเก็บน้ำฝนจากโรงงานผลิตน้ำดื่ม
Date Analysis Commenced	Mar 22, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing pH at 25 degree C *				8.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	164	≤39250 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,250 mg/L (Refer to Lot ID 2328250-1)

Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-9-9476 , Thanasoun Namakunsa รหัสประจำตัว 3-204-9-8592

Remark :

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

N. Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

D. Changchon

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-10332312678

Project Name :

Project Location : GHECO-ONE

TESTING

No.0042

Lot ID: 2330622

Date Received : Apr 12, 2023

Date Reported : Apr 20, 2023

Report Number : 2597952-1

Page 1 of 1

Sample Number	2330622-1
Sample Date	Apr 11, 2023 4:30 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังเก็บน้ำฝนจากโรงงานผลิตน้ำดื่ม
Date Analysis Commenced	Apr 12, 2023
Condition of Sample	Contained in two plastic bottles, refrigerated (client container)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing pH at 25 degree C				8.4	5.5-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	2030	≤38900 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,900 mg/L (Refer to Lot ID 2330682-1)

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

Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name : GHECO-ONE

TESTING
No.0042

Lot ID: 2353912

Date Received : May 30, 2023

Date Reported : Jun 06, 2023

Report Number : 2649701-1

Page 1 of 1

Sample Number	2353912-1
Sampled Date	May 30, 2023 8:30 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังเก็บน้ำเสียภายในโรงงานฟาร์มไก่เนื้อในสวนเกษตรรวม condensate polisher
Date Analysis Commenced	May 30, 2023
Condition of Sample	Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing (A) Copper	mg/L	0.0003	0.0005	0.0006	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
	mg/L	0.015	0.05	1.45	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Water Testing Nitrate as N *	mg/L	-	-	7.2	5.5-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	468	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C) part NH3 (D)	Rayong

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

- 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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Approved by

Wilawan Borriak
Wilawan Borriak
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Name : GHECO-ONE

TESTING
No.0042

Lot ID: 2357782

Date Received : Jun 27, 2023

Date Reported : Jul 03, 2023

Report Number : 2656536-1

Page 1 of 1

Sample Number	2357782-1
Sampled Date	Jun 27, 2023 9:05 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังเก็บน้ำเสียภายในโรงงานฟาร์มไก่เนื้อในสวนเกษตรรวม condensate polisher
Date Analysis Commenced	Jun 27, 2023
Condition of Sample	Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing pH at 25 degree C		-	-	8.4	5.5-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1620	≤39900(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,900 mg/L (Refer to Lot ID 2357805-1)

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

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ภาคผนวก ค-6

คุณภาพน้ำทะเลชายฝั่ง



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 231042

Date Received : Jan 04, 2023

Date Reported : Jun 26, 2023

Report Number : 2534627-1 C2

Page 1 of 3

Sample Number	231042-1						
Sampled Date	Jan 04, 2023 1:55 PM						
Sample Description	Seawater						
Location	and I จักรวาลในน้ำและอากาศในทะเลสาบ						
Date Analysis Commenced	Jan 04, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.03	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48280	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 231042

Date Received : Jan 04, 2023

Date Reported : Jun 26, 2023

Report Number : 2534627-1 C2

Page 2 of 3

Sample Number	231042-1						
Sampled Date	Jan 04, 2023 1:55 PM						
Sample Description	Seawater						
Location	และ 1 บริเวณใกล้ถ้ำภูผาหินและถ้ำน้ำลอด						
Date Analysis Commenced	Jan 04, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
	Dissolved Oxygen	mg/L	-	0.1	5.6	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.06	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (TOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (TOC/UNESCO, 1984)	Bangkok
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Sulfate	mg/L	0.6	2	2591	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Temperature	Degree C	-	-	25.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	27450	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231042
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534627-1 C2

Page 3 of 3

Sample Number	231042-1						
Sampled Date	Jan 04, 2023 1:55 PM						
Sample Description	Seawater						
Location	อำเภอเมืองระยองจังหวัดระยอง						
Date Analysis Commenced	Jan 04, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	3.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline: Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai, Thanasoun Namakuma

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 236144
Date Received : Jan 25, 2023
Date Reported : Jul 21, 2023
Report Number : 2549834-1 C2

Page 1 of 1

Sample Number	236144-1						
Sampled Date	Jan 25, 2023 2:05 PM						
Sample Description	Seawater						
Location	สถานีนิเวศวิทยาทางน้ำแหลมลิ้น						
Date Analysis Commenced	Jan 25, 2023						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	29.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline: Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231180
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534649-1 C2

Page 1 of 3

Sample Number	231180-1												
Sample Date	Jan 04, 2023 2:30 PM												
Sample Description	Seawater												
Location	สถานี E บริเวณใกล้สะพานข้ามน้ำ												
Date Analysis Commenced	Jan 04, 2023												
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)												
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location						
Metals Testing													
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok						
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok						
Iron	mg/L	0.001	0.003	0.08	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok						
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok						
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok						
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok						
Water Testing													
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong						
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47600	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231180
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534649-1 C2

Page 2 of 3

Sample Number		231180-1											
Sample Date		Jan 04, 2023 2:30 PM											
Sample Description		Seawater											
Location		สถานี E บริเวณใกล้สะพานข้ามน้ำ											
Date Analysis Commenced		Jan 04, 2023											
Condition of Sample		Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)											
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location						
Water Testing													
Dissolved Oxygen	mg/L	-	0.1	4.2	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong						
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok						
pH at 25 degree C		-	-	7.4	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong						
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong						
Salinity	ppt	-	0.1	28.7	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong						
Sulfate	mg/L	0.6	2	2646	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong						
Temperature	Degree C	-	-	24.3	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong						
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	27850	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231180
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534619-1 C2

Page 3 of 3

Sample Number	231180-1						
Sampled Date	Jan 04, 2023 2:30 PM						
Sample Description	Seawater						
Location	สถานี E บริเวณใกล้จุดระบายน้ำทิ้ง						
Date Analysis Commenced	Jan 04, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	1.3	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai, Thanassoun Namakuma

Remark :

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 236145
Date Received : Jan 25, 2023
Date Reported : Jul 21, 2023
Report Number : 2545832-1 C2

Page 1 of 1

Sample Number	236145-1						
Sampled Date	Jan 25, 2023 2:58 PM						
Sample Description	Seawater						
Location	สถานี E บริเวณใกล้จุดระบายน้ำทิ้ง						
Date Analysis Commenced	Jan 25, 2023						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	30.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Parameet Sattayakun

Remark :

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231195
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number: 2534662-1 C2

Page 1 of 3

Sample Number	231195-1						
Sampled Date	Jan 04, 2023 2:20 PM						
Sample Description	Seawater						
Location	สถานี A อ่าวบ้านดอนระยะห่างน้ำฟ้า 500 เมตร						
Date Analysis Commenced	Jan 04, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.06	≤0.3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47950	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231195
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number: 2534662-1 C2

Page 2 of 3

Sample Number	231195-1							
Sampled Date	Jan 04, 2023 2:20 PM							
Sample Description	Seawater							
Location	สถานี A อ่าวบ้านดอนระยะน้ำฟ้า 500 เมตร							
Date Analysis Commenced	Jan 04, 2023							
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing	Dissolved Oxygen	mg/L	-	0.1	5.8	>4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	<0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok	
pH at 25 degree C		-	-	7.9	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong	
Salinity	ppt	-	0.1	29.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong	
Temperature	Degree C	-	-	25.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30600	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	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong	

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-03

Project Name :

Project Location: GHCO-ONE

Lot ID: 231195

Date Received : Jan 04, 2023

Date Reported : Jun 26, 2023

Report Number : 2534662-1 C2

Page 3 of 3

Sample Number	231195-1			
Sampled Date	Jan 04, 2023 2:20 PM			
Sample Description	Seawater			
Location	ด้าน A อ่าวบ้านดอนประจวบ 500 เมตร			
Date Analysis Commenced	Jan 04, 2023			
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai, Thanassou Namakuma

Remark :

- LOD : Limit of Detection

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

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHCO-ONE

Lot ID: 231206

Date Received : Jan 04, 2023

Date Reported : Jun 26, 2023

Report Number : 2534675-1 C2

Page 1 of 3

Sample Number	231206-1			
Sampled Date	Jan 04, 2023 2:25 PM			
Sample Description	Seawater			
Location	ด้าน D อ่าวบ้านดอนประจวบ 500 เมตร			
Date Analysis Commenced	Jan 04, 2023			
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.06	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Water Testing

BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47590	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231206
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534675-1 C2

Page 2 of 3

Sample Number 231206-1
Sample Date Jan 04, 2023 2:25 PM
Sample Description Seawater
Location อำเภอเมืองระยองประมาณน้ำลึก 500 เมตร
Date Analysis Commenced Jan 04, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	4.4	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	<0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (EPA-821-R-03-001) Pre-Concentration, Fluorescence Spectrophotometric Method (EPA-821-R-03-001)	Bangkok
pH at 25 degree C		-	-	7.7	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	24.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28450	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	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231206
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534675-1 C2

Page 3 of 3

Sample Number 231206-1
Sample Date Jan 04, 2023 2:25 PM
Sample Description Seawater
Location อำเภอเมืองระยองประมาณน้ำลึก 500 เมตร
Date Analysis Commenced Jan 04, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai, Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231207
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534688-1 C2

Page 1 of 3

Sample Number		231207-1
Sampled Date	Jan 04, 2023	2:40 PM
Sample Description	Seawater	
Location	อำเภอเมืองระยอง	
Date Analysis Commenced	Jan 04, 2023	
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.14	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47480	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231207
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534688-1 C2

Page 2 of 3

Sample Number		231207-1
Sampled Date	Jan 04, 2023	2:40 PM
Sample Description	Seawater	
Location	อำเภอเมืองระยอง	
Date Analysis Commenced	Jan 04, 2023	
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	6.1	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.12	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (TOCUMESCO, 1984) Pre-Concentration, Fluorescence Spectrophotometric Method (TOCUMESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - C (F)	Rayong
Salinity	ppt	-	0.1	28.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	25.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28800	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	-	2	10	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 231207
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534688-1 C2

Page 3 of 3

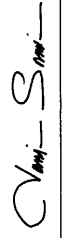
Sample Number 231207-1
Sampled Date Jan 04, 2023 2:40 PM
Sample Description Seawater
Location สถานี O อ่าวกลางทะเลระยะน้ำลึก 500 เมตร
Date Analysis Commenced Jan 04, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.9	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	6.4	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai , Thanasoun Namakunna

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

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Narin Saiseng
Supervisor

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

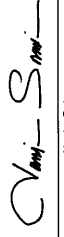
Lot ID: 231208
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534696-1 C2

Page 1 of 3

Sample Number 231208-1
Sampled Date Jan 04, 2023 2:10 PM
Sample Description Seawater
Location สถานี B อ่าวกลางทะเลระยะน้ำลึก 1,000 เมตร
Date Analysis Commenced Jan 04, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.12	≤0.3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Water Testing
BOD (5 days at 20 Degree C) mg/L - 2.0 <2
Conductivity at 25 Degree C micromhos/cm - 0.5 47810

Approved by

Narin Saiseng
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
Lot ID: 231208
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Date Received : Jan 04, 2023
P/O : GLOW-OM-22-103
Date Reported : Jun 26, 2023
Project Name :
Report Number : 2534696-1 C2
Project Location: GHECO-ONE

Page 2 of 3

Sample Number	231208-1
Sampled Date	Jan 04, 2023 2:10 PM
Sample Description	Seawater
Location	สถานี B อุทยานอุตสาหกรรมพื้นที่ 1,000 ไร่
Date Analysis Commenced	Jan 04, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Dissolved Oxygen	mg/L	-	0.1	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.06	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (EPA-816-0)	Bangkok
pH at 25 degree C		-	7.8	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	28.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Sulfate	mg/L	0.6	2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO ₄ (E)	Rayong
Temperature	Degree C	-	25.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	29950	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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0594-217 / EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
Lot ID: 231208
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
Date Received : Jan 04, 2023
P/O : GLOW-OM-22-103
Date Reported : Jun 26, 2023
Project Name :
Report Number : 2534696-1 C2
Project Location: GHECO-ONE

Page 3 of 3

Sample Number	231208-1
Sampled Date	Jan 04, 2023 2:10 PM
Sample Description	Seawater
Location	สถานี B อุทยานอุตสาหกรรมพื้นที่ 1,000 ไร่
Date Analysis Commenced	Jan 04, 2023
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	5	No Standard	Rayong
Transparency	m	-	-	1.2	Change from natural condition not more than 10% of the lowest transparency	Rayong
Turbidity	NTU	-	0.1	3.3	No Standard	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsochai, Thanassou Namakunna

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 236186
Date Received : Jan 25, 2023
Date Reported : Jul 21, 2023
Report Number : 2545849-1 C2

Page 1 of 1

Sample Number 236186-1
Sampled Date Jan 25, 2023 2:28 PM
Sample Description Seawater
Location อำเภอ B อำเภอเมืองระยอง จังหวัด 1,000 เมตร
Date Analysis Commenced Jan 25, 2023
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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15584-21 / ENAL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231209
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534701-1 C2

Page 1 of 3

Sample Number 231209-1
Sampled Date Jan 04, 2023 2:50 PM
Sample Description Seawater
Location อำเภอ C อำเภอเมืองระยอง จังหวัด 1,000 เมตร
Date Analysis Commenced Jan 04, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.04	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.00003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Water Testing

BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47670	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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15584-21 / ENAL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231209
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534701-1 C2

Page 2 of 3

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
231209-1	Jan 04, 2023 2:50 PM	Seawater	สถานี C อ่าวไทยตอนบนฝั่ง 1,000 เมตร	Jan 04, 2023	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						Dissolved Oxygen	mg/L	-	0.1	5.6	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
						Petroleum Hydrocarbon	ug/L	0.015	0.05	0.06	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOCLUNESCO, 1984) Pre-Concentration, Fluorescence Spectrophotometric Method (IOCLUNESCO, 1984)	Bangkok
						pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
						Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
						Salinity	ppt	-	0.1	28.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
						Temperature	Degree C	-	-	25.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
						Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30650	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	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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CVH-S

Narin Saiseng
Supervisor



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 231209
Date Received : Jan 04, 2023
Date Reported : Jun 26, 2023
Report Number : 2534701-1 C2

Page 3 of 3

Sample Number	Sampled Date	Sample Description	Location	Date Analysis Commenced	Condition of Sample	Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
231209-1	Jan 04, 2023 2:50 PM	Seawater	สถานี C อ่าวไทยตอนบนฝั่ง 1,000 เมตร	Jan 04, 2023	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)	Water Testing							
						Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
						Turbidity	NTU	-	0.1	3.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Tanasit Wongsachai / Thanassoun Namakumma

Remark :
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- LOR : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)

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Narin Saiseng
Supervisor



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 236195

Date Received : Jan 25, 2023
Date Reported : Jul 21, 2023
Report Number : 2545851-1 C2

Page 1 of 1

Sample Number 236195-1
Sample Date Jan 25, 2023 3:30 PM
Sample Description Seawater
Location and C alpha value equal to 1,000 uar
Date Analysis Commenced Jan 25, 2023
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	29.2	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311811

Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2557845-1 C2

Page 1 of 2

Sample Number 2311811-1
Sample Date Feb 01, 2023 9:41 AM
Sample Description Seawater
Location and I value equal to 1,000 uar
Date Analysis Commenced Feb 01, 2023
Condition of Sample Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47740	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	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	7.9	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	26.7	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	29950	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	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Savitree N.

Approved by

Savitree Nolsangiam
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311811
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2557845-1 C2

Page 2 of 2

Sample Number 2311811-1
Sampled Date Feb 01, 2023 9:44 AM
Sample Description Seawater
Location สถานี 1 บริเวณใกล้สะพานข้ามห้วยน้ำจืด
Date Analysis Commenced Feb 01, 2023
Condition of Sample Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

Approved by
Savitree N.
Savitree Nisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2314606
Date Received : Feb 08, 2023
Date Reported : Jul 21, 2023
Report Number : 2562159-1 C2

Page 1 of 1

Sample Number 2314606-1
Sampled Date Feb 08, 2023 10:30 AM
Sample Description Seawater
Location สถานี 1 บริเวณใกล้สะพานข้ามห้วยน้ำจืด
Date Analysis Commenced Feb 08, 2023
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pathompong Kornswat

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

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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311823
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number: 2556352-1 C2

Page 1 of 2

Sample Number	2311823-1						
Sample Date	Feb 01, 2023 10:25 AM						
Sample Description	Seawater						
Location	สถานี E บริเวณใกล้ประตูระบายน้ำ						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	478.0	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	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	27.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30700	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Life Sciences

USA-231/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311823
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number: 2556352-1 C2

Page 2 of 2

Sample Number	2311823-1						
Sampled Date	Feb 01, 2023 10:25 AM						
Sample Description	Seawater						
Location	สถานี E บริเวณใกล้ประตูระบายน้ำหัว						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.7	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Savitree Naisangiam
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Life Sciences

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311824

Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556351-1 C2

Page 1 of 2

Sample Number 2311824-1
Sample Date Feb 01, 2023 10:35 AM
Sample Description Seawater
Location สถานี A อำเภอเมืองระยองน้ำตื้น 500 เมตร
Date Analysis Commenced Feb 01, 2023
Condition of Sample Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47840	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	7.1	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	27.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30600	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311824

Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556351-1 C2

Page 2 of 2

Sample Number 2311824-1
Sample Date Feb 01, 2023 10:35 AM
Sample Description Seawater
Location สถานี A อำเภอเมืองระยองน้ำตื้น 500 เมตร
Date Analysis Commenced Feb 01, 2023
Condition of Sample Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2311825
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556349-1 C2

Page 1 of 2

Sample Number	2311825-1						
Sample Date	Feb 01, 2023 10:14 AM						
Sample Description	Sewater						
Location	สถานี D อภิบาลจากประมงบ้านท่าใหม่ 500 เมตร						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47950	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	7.3	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 -H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	27.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31400	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OW-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2311825
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556349-1 C2

Page 2 of 2

Sample Number	2311825-1						
Sampled Date	Feb 01, 2023 10:14 AM						
Sample Description	Seawater						
Location	สถานี D อภิบาลจากประมงบ้านท่าใหม่ 500 เมตร						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :
LOD : Limit of Detection
LOQ : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)

Approved by

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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311826
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556347-1 C2

Page 1 of 2

Sample Number		2311826-1					
Sampled Date		Feb 01, 2023 10:49 AM					
Sample Description		Seawater					
Location		อำเภอ อัญมณีจากอุตสาหกรรมน้ำพอง 500 เมตร					
Date Analysis Commenced		Feb 01, 2023					
Condition of Sample		Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47450	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	6.3	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.2	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	27.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31300	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	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311826
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556347-1 C2

Page 2 of 2

Sample Number		2311826-1					
Sampled Date		Feb 01, 2023 10:49 AM					
Sample Description		Seawater					
Location		สถานี O อัญมณีจากอุตสาหกรรมน้ำพอง 500 เมตร					
Date Analysis Commenced		Feb 01, 2023					
Condition of Sample		Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.6	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2311827
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556342-1 C2

Page 1 of 2

Sample Number	2311827-1						
Sample Date	Feb 01, 2023 10:05 AM						
Sample Description	Seawater						
Location	อำเภอเมืองระยอง ตำบลท่าเรือ 1,000 เมตร						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48020	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	7.5	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	27.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32150	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	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

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P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2311827
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556342-1 C2

Page 2 of 2

Sample Number	2311827-1						
Sampled Date	Feb 01, 2023 10:05 AM						
Sample Description	Seawater						
Location	สถานี B อำเภอเมืองระยอง ตำบลท่าเรือ 1,000 เมตร						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.6	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311828
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556341-1 C2

Page 1 of 2

Sample Number		2311828-1					
Sampled Date		Feb 01, 2023 11:00 AM					
Sample Description		Seawater					
Location		สถานี C อ่าวไทยตอนบนเขตพิเศษ 1,000 เมตร					
Date Analysis Commenced		Feb 01, 2023					
Condition of Sample		Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47730	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	8.2	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	26.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30950	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	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2311828
Date Received : Feb 01, 2023
Date Reported : Feb 16, 2023
Report Number : 2556341-1 C2

Page 2 of 2

Sample Number	2311828-1						
Sampled Date	Feb 01, 2023 11:00 AM						
Sample Description	Seawater						
Location	สถานี C อ่าวไทยตอนบนเขตเศรษฐกิจพิเศษ 1,000 เมตร						
Date Analysis Commenced	Feb 01, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2150 B	Rayong
Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)							
Sampled By : Paramet Sattayakun							

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Satayakun

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

Approved by

Savitree N.

Savitree Nongsangiam
Manager

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322820

Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580314-1 C2

Page 1 of 2

Sample Number	2322820-1									
Sample Date	Mar 01, 2023 10:09 AM									
Sample Description	Seawater									
Location	สถานี 1 บริเวณใกล้จุดลงหลักน้ำทะเลด้าน									
Date Analysis Commenced	Mar 01, 2023									
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong			
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49570	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	7.0	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong			
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong			
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong			
Salinity	ppt	-	0.1	29.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong			
Temperature	Degree C	-	-	29.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong			
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33700	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	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong			

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Approved by

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19984-217/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322820

Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580314-1 C2

Page 2 of 2

Sample Number	2322820-1									
Sampled Date	Mar 01, 2023 10:09 AM									
Sample Description	Seawater									
Location	สถานี 1 บริเวณใกล้จุดลงหลักน้ำทะเลด้าน									
Date Analysis Commenced	Mar 01, 2023									
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
Transparency	m	-	-	1.6	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong			
Turbidity	NTU	-	0.1	1.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong			

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2322827

Date Received : Mar 01, 2023

Date Reported : Mar 17, 2023

Report Number: 2580323-1 C2

Page 1 of 2

Sample Number	2322827-1
Sampled Date	Mar 01, 2023 10:51 AM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดระแนงน้ำทิ้ง
Date Analysis Commenced	Mar 01, 2023
Condition of Sample	Contained in three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49530	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	8.8	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (C)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.7	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33400	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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1554-231 / EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2322827

Date Received : Mar 01, 2023

Date Reported : Mar 17, 2023

Report Number: 2580323-1 C2

Page 2 of 2

Sample Number	2322827-1
Sampled Date	Mar 01, 2023 10:51 AM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดระแนงน้ำทิ้ง
Date Analysis Commenced	Mar 01, 2023
Condition of Sample	Contained in three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

Approved by

N. Banphit

Narumon Banphongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OH-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322828
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580322-1 C2

Page 1 of 2

Sample Number 2322828-1
Sample Date Mar 01, 2023 10:35 AM
Sample Description Seawater
Location สถานี A adjacent to the pier 500 meters
Date Analysis Commenced Mar 01, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49330	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	7.3	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	29.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32200	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	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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19584-2/J/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OH-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322828
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580322-1 C2

Page 2 of 2

Sample Number 2322828-1
Sample Date Mar 01, 2023 10:35 AM
Sample Description Seawater
Location สถานี A adjacent to the pier 500 meters
Date Analysis Commenced Mar 01, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2322829

Date Received : Mar 01, 2023

Date Reported : Mar 17, 2023

Report Number : 2580321-1 C2

100

1

Sampled Date	Mar 01, 2023 10:41 AM
Sample Description	Seawater
Location	สถานี D อ่าวไทยตอนบนฝั่ง 500 เมตร
Date Analysis Commenced	Mar 01, 2023
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Transparency	m	-	-	1.6	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

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

Guideline: Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattavakun

Remark :

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

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Analysis / Test Report


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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322830
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number: 2580318-1 C2

Page 1 of 2

Sample Number	2322830-1						
Sampled Date	Mar 01, 2023 11:06 AM						
Sample Description	Seawater						
Location	สถานีวิทยุทางอากาศบนน้ำลึก 500 เมตร						
Date Analysis Commenced	Mar 01, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49650	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	7.8	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	28.3	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31750	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	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322830
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number: 2580318-1 C2

Page 2 of 2

Sample Number	2322830-1						
Sampled Date	Mar 01, 2023 11:06 AM						
Sample Description	Seawater						
Location	สถานีวิทยุทางอากาศบนน้ำลึก 500 เมตร						
Date Analysis Commenced	Mar 01, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.9	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2322831
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580316-1 C2

Page 1 of 2

Sample Number	2322831-1						
Sampled Date	Mar 01, 2023 10:29 AM						
Sample Description	Seawater						
Location	สถานี B อำเภอเมืองระยองน้ำตื้น 1,000 เมตร						
Date Analysis Commenced	Mar 01, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49320	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	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	28.7	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30700	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	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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15894-2/1 EMAIL



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
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P/O : GLOW-ON-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2322831
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number : 2580316-1 C2

Page 2 of 2

Sample Number	2322831-1						
Sampled Date	Mar 01, 2023 10:29 AM						
Sample Description	Seawater						
Location	สถานี B อำเภอเมืองระยองน้ำตื้น 1,000 เมตร						
Date Analysis Commenced	Mar 01, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2150 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

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Approved by

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15894-2/1 EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322832
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number: 2580315-1 C2

Page 1 of 2

Sample Number 2322832-1
Sample Date Mar 01, 2023 11:19 AM
Sample Description Seawater
Location สถานี C อ่าวไทยตอนบนฝั่งตะวันออก 1,000 เมตร
Date Analysis Commenced Mar 01, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49790	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	7.9	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	28.3	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33900	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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19584-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2322832
Date Received : Mar 01, 2023
Date Reported : Mar 17, 2023
Report Number: 2580315-1 C2

Page 2 of 2

Sample Number 2322832-1
Sample Date Mar 01, 2023 11:19 AM
Sample Description Seawater
Location สถานี C อ่าวไทยตอนบนฝั่งตะวันออก 1,000 เมตร
Date Analysis Commenced Mar 01, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.7	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

Approved by

N. Banphit

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2330682

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2598021-1 C2

Page 1 of 2

Sample Number	2330682-1
Sampled Date	Apr 05, 2023 12:20 PM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดประมงน้ำจืด
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47630	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	6.3	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (C)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	35.5	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33950	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2330682

Date Received : Apr 05, 2023

Date Reported : Apr 12, 2023

Report Number : 2598021-1 C2

Page 2 of 2

Sample Number	2330682-1
Sampled Date	Apr 05, 2023 12:20 PM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดประมงน้ำจืด
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	6.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Nairapong

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330683
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number: 2598020-1 C2

Page 1 of 2

Sample Number 2330683-1
Sample Date Apr 05, 2023 11:54 AM
Sample Description Seawater
Location and A adjacent to the pier about 500 meters
Date Analysis Commenced Apr 05, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	microhm/cm	-	0.5	47740	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	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.1	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	34.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33850	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330683
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number: 2598020-1 C2

Page 2 of 2

Sample Number 2330683-1
Sample Date Apr 05, 2023 11:54 AM
Sample Description Seawater
Location and A adjacent to the pier about 500 meters
Date Analysis Commenced Apr 05, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.0	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	5.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330684
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number: 2598019-1 C2

Page 1 of 2

Sample Number 2330684-1
Sampled Date Apr 05, 2023 12:05 PM
Sample Description Seawater
Location อำเภอ D อำเภอเมืองระยองพื้นที่ 500 ไร่
Date Analysis Commenced Apr 05, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	microhm/cm	-	0.5	47750	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	6.7	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	34.6	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34100	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330684
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number: 2598019-1 C2

Page 2 of 2

Sample Number 2330684-1
Sampled Date Apr 05, 2023 12:05 PM
Sample Description Seawater
Location อำเภอ D อำเภอเมืองระยองพื้นที่ 500 ไร่
Date Analysis Commenced Apr 05, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.3	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330685
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598018-1 C2

Page 1 of 2

Sample Number		2330685-1					
Sample Date		Apr 05, 2023 12:44 PM					
Sample Description		Seawater					
Location		อำเภอ อ.อำเภอกนครพนมท่าฟ้าง 500 เมตร					
Date Analysis Commenced		Apr 05, 2023					
Condition of Sample		Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47200	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	8.2	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.3	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	33.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33150	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	-	2	3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2330685
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598018-1 C2

Page 2 of 2

Sample Number	2330685-1						
Sampled Date	Apr 05, 2023 12:44 PM						
Sample Description	Seawater						
Location	สถานี O ฝั่งน้ำจากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Apr 05, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

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15984-21 / EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330686
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598017-1 C2

Page 1 of 2

Sample Number		2330686-1					
Sampled Date		Apr 05, 2023 11:43 AM					
Sample Description		Seawater					
Location		สถานี B อู่เก็บน้ำจืดประจวบฯ 1,000 เมตร					
Date Analysis Commenced		Apr 05, 2023					
Condition of Sample		Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47390	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	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.1	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	32.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33950	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	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330686
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598017-1 C2

Page 2 of 2

Sample Number	2330686-1						
Sampled Date	Apr 05, 2023 11:43 AM						
Sample Description	Seawater						
Location	สถานี B อู่เก็บน้ำจืดประจวบฯ 1,000 เมตร						
Date Analysis Commenced	Apr 05, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330687
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598016-1 C2

Page 1 of 2

Sample Number	2330687-1									
Sample Date	Apr 05, 2023 1:07 PM									
Sample Description	Seawater									
Location	สถานี C อำเภอเมืองระยองท่าเรือ 1,000 เมตร									
Date Analysis Commenced	Apr 05, 2023									
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong			
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46630	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	9.3	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong			
pH at 25 degree C	-	-	-	8.4	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong			
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong			
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong			
Temperature	Degree C	-	-	33.6	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong			
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33600	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	-	2	9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong			

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OW-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2330687
Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598016-1 C2

Page 2 of 2

Sample Number		2330687-1					
Sample Date		Apr 05, 2023 1:07 PM					
Sample Description		Seawater					
Location		สถานี C อำเภอเมืองระยองท่าเรือ 1,000 เมตร					
Date Analysis Commenced		Apr 05, 2023					
Condition of Sample		Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	0.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	6.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

Approved by

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2330688

Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598015-1 C2

Page 1 of 2

Sample Number	2330688-1
Sampled Date	Apr 05, 2023 11:18 AM
Sample Description	Seawater
Location	สถานี I บริเวณใกล้ท่าเรืออุตสาหกรรมมาบตาพุด
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47650	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	6.7	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	32.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34300	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	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
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P/O : GLOW-QM-22-103
Project Name :
Project Location: GHCO-ONE

Lot ID: 2330688

Date Received : Apr 05, 2023
Date Reported : Apr 18, 2023
Report Number : 2598015-1 C2

Page 2 of 2

Sample Number	2330688-1
Sampled Date	Apr 05, 2023 11:18 AM
Sample Description	Seawater
Location	สถานี I บริเวณใกล้ท่าเรืออุตสาหกรรมมาบตาพุด
Date Analysis Commenced	Apr 05, 2023
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	3.0	Change from Natural condition not more than 10% or the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342375

Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2628546-1 C2

Page 1 of 3

Sample Number 2342375-1
Sample Date May 03, 2023 9:40 AM
Sample Description Seawater
Location อ่าวไทยตอนในจังหวัดสมุทรสาคร
Date Analysis Commenced May 03, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.27	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Water Testing

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342375

Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2628546-1 C2

Page 2 of 3

Sample Number 2342375-1
Sample Date May 03, 2023 9:40 AM
Sample Description Seawater
Location อ่าวไทยตอนในจังหวัดสมุทรสาคร
Date Analysis Commenced May 03, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	microhm/cm	-	0.5	42590	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	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (EPA 800.1, 1997) Spectrophotometric Method (EPA 800.1, 1997) Spectrophotometric Method (EPA 800.1, 1997)	Bangkok
pH at 25 degree C	-	-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 --H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	26.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Sulfate	mg/L	0.6	2	2367	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OH-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342375

Date Received : May 03, 2023

Date Reported : May 30, 2023

Report Number : 2628546-1 C2

Page 3 of 3

Sample Number		2342375-1					
Sampled Date		May 03, 2023 9:40 AM					
Sample Description		Seawater					
Location		สถานีบำรุงรักษาคุณภาพสิ่งแวดล้อม					
Date Analysis Commenced		May 03, 2023					
Condition of Sample		Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature	Degree C	-	-	30.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	28800	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	-	2	11	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	9.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumplinee

Remark :

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

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0594-331 EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342353

Date Received : May 24, 2023

Date Reported : Jul 21, 2023

Report Number : 2624723-1 C2

Page 1 of 1

Sample Number	2342353-1						
Sampled Date	May 24, 2023 9:46 AM						
Sample Description	Seawater						
Location	สถานีบำรุงรักษาคุณภาพสิ่งแวดล้อม						
Date Analysis Commenced	May 24, 2023						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	28.9	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342339
Date Received : May 17, 2023
Date Reported : Jul 21, 2023
Report Number : 2624705-1 C2

Page 1 of 1

Sample Number 2342339-1
Sampled Date May 17, 2023 10:54 AM
Sample Description Seawater
Location สถานี E บริเวณใกล้จุดระแนงน้ำฟ้า
Date Analysis Commenced May 17, 2023
Condition of Sample Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	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, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sansoen Khuyoksui

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

N. Banpait

Approved by

Narumon Banchongkit
Supervisor

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1594-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342376
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624762-1 C2

Page 1 of 3

Sample Number 2342376-1
Sampled Date May 03, 2023 10:40 AM
Sample Description Seawater
Location สถานี E บริเวณใกล้จุดระแนงน้ำฟ้า
Date Analysis Commenced May 03, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.07	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Water Testing

Siriluk P.

Approved by

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342376

Date Received : May 03, 2023

Date Reported : May 30, 2023

Report Number : 2624762-1 C2

Page 2 of 3

Sample Number		2342376-1					
Sampled Date		May 03, 2023 10:40 AM					
Sample Description		Seawater					
Location		สถานี E บริเวณใกล้สะพานนาพันห้า					
Date Analysis Commenced		May 03, 2023					
Condition of Sample		Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47510	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	6.8	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (EPA-816-0, 1994), Pre-Concentration, Fluorescence Spectrophotometric Method (EPA-816-0, 1994)	Bangkok
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

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Siriluk P.

Siriluk Puangpang
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15594-21/ENAL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342376

Date Received : May 03, 2023

Date Reported : May 30, 2023

Report Number : 2624762-1 C2

Page 3 of 3

Sample Number	2342376-1						
Sampled Date	May 03, 2023 10:40 AM						
Sample Description	Seawater						
Location	สถานี E บริเวณใกล้สะพานนาพันห้า						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33100	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	1.3	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong
Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)							

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumphlee

Remark :

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342377
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624761-1 C2

Page 1 of 3

Sample Number 2342377-1
Sample Date May 03, 2023 10:21 AM
Sample Description Seawater
Location อำเภอเมืองระยอง
Date Analysis Commenced May 03, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.06	≤0.3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342377
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624761-1 C2

Page 2 of 3

Sample Number 2342377-1
Sample Date May 03, 2023 10:21 AM
Sample Description Seawater
Location อำเภอเมืองระยอง
Date Analysis Commenced May 03, 2023
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47800	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	7.0	>4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.9	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342377

Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624761-1 C2

Page 3 of 3

Sample Number	2342377-1				
Sampled Date	May 03, 2023 10:21 AM				
Sample Description	Seawater				
Location	สถานี A อู่ประมงและศูนย์น้ำ 500 เมตร				
Date Analysis Commenced	May 03, 2023				
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification
Water Testing					
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32600	No Standard
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard
Transparency	m	-	-	1.5	Change from Natural condition not more than 10% of the lowest Transparency
Turbidity	NTU	-	0.1	3.1	No Standard

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumthilee

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342378

Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624760-1 C2

Page 1 of 3

Sample Number	2342378-1				
Sampled Date	May 03, 2023 10:28 AM				
Sample Description	Seawater				
Location	สถานี D อู่ประมงและศูนย์น้ำ 500 เมตร				
Date Analysis Commenced	May 03, 2023				
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification
Metals Testing					
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Copper	mg/L	0.001	0.003	Not Detected	≤0.008
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Iron	mg/L	0.001	0.003	0.05	≤0.3
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001
In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E					
Selenium	mg/L	0.003	0.01	Not Detected	No Standard
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F					
Water Testing					

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342378
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624760-1 C2

Page 2 of 3

Sample Number	2342378-1						
Sample Date	May 03, 2023 10:28 AM						
Sample Description	Seawater						
Location	สถานี D อ่าวไทยตอนบนฝั่ง 500 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47920	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	7.0	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IO/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IO/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	31.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

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Siriluk Puenggang
Supervisor

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15984-21/ ENAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342378
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624760-1 C2

Page 3 of 3

Sample Number	2342378-1						
Sampled Date	May 03, 2023 10:28 AM						
Sample Description	Seawater						
Location	สถานี D อ่าวไทยตอนบนฝั่ง 500 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33550	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	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumplhiee

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

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15984-21/ ENAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-03
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342379
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624759-1 C2

Page 1 of 3

Sample Number	2342379-1						
Sampled Date	May 03, 2023 10:51 AM						
Sample Description	Seawater						
Location	สถานีวิทยุกระจายเสียงแห่งประเทศไทย 500 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.001	0.003	0.15	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-ON-22-03
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342379
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624759-1 C2

Page 2 of 3

Sample Number	2342379-1						
Sampled Date	May 03, 2023 10:51 AM						
Sample Description	Seawater						
Location	สถานีวิทยุกระจายเสียงแห่งประเทศไทย 500 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	45240	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	7.0	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (TOC/UNESCO, 1984)	Bangkok
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	27.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	31.6	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

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15584-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342379
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624759-1 C2

Page 3 of 3

Sample Number	2342379-1						
Sampled Date	May 03, 2023 10:51 AM						
Sample Description	Seawater						
Location	สถานี อ. อำเภอนาเกลือ ระยะทาง 500 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31250	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	-	2	7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Transparency	m	-	-	1.1	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	7.5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Suravit Narapong , Samart Khumplee

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342366
Date Received : May 24, 2023
Date Reported : Jul 21, 2023
Report Number : 2624734-1 C2

Page 1 of 1

Sample Number	2342366-1						
Sampled Date	May 24, 2023 10:20 AM						
Sample Description	Seawater						
Location	สถานี O อำเภอจากกระเบองนาโพธิ์ 500 เมตร						
Date Analysis Commenced	May 24, 2023						
Condition of Sample	Contained in one plastic bottle and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	28.7	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Parinart Sattayakun

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11. I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Client : GHECO-ONE

11. I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Page 2 of 3

Page 1 of 1

Sample Number		2342380-1					
Sample Date	May 03, 2023 10:13 AM						
Sample Description	Seawater						
Location	สถานี B อ่าวปากน้ำประจวบประจวบฯ 1,000 เมตร						
Date Analysis Commenced	May 03, 2023						
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47880	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	7.3	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Sulfate	mg/L	0.6	2	2581	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong

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10584-31 / EMAT1

NIGHT SOLUTIONS NIGHT PATTERN



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-03
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342380
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624753-1 C2

Page 3 of 3

Sample Number	2342380-1				
Sample Date	May 03, 2023 10:13 AM				
Sample Description	Seawater				
Location	สถานี B อภิบาลจันทระชุมพล 1,000 เมตร				
Date Analysis Commenced	May 03, 2023				
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing					
Temperature	Degree C	-	31.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B
Total Dissolved Solids Dried at 180 degree C	mg/L	5	34650	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
Total Suspended Solids Dried at 103-105 degree C	mg/L	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
Transparency	m	-	1.6	Change from Natural condition not more than 10% of the lowest transparency	Visual Method
Turbidity	NTU	0.1	2.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumphlee

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-03
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342381
Date Received : May 03, 2023
Date Reported : May 30, 2023
Report Number : 2624752-1 C2

Page 1 of 3

Sample Number	2342381-1				
Sample Date	May 03, 2023 11:10 AM				
Sample Description	Seawater				
Location	สถานี C อภิบาลจันทระชุมพล 1,000 เมตร				
Date Analysis Commenced	May 03, 2023				
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification
Metals Testing					
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005
Copper	mg/L	0.001	0.003	Not Detected	≤0.008
Iron	mg/L	0.001	0.003	0.18	≤0.3
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001
Selenium	mg/L	0.003	0.01	Not Detected	No Standard
Water Testing					

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342381

Date Received : May 03, 2023

Date Reported : May 30, 2023

Report Number : 2624752-1 C2

Page 2 of 3

Sample Number		2342381-1					
Sampled Date		May 03, 2023 11:10 AM					
Sample Description		Seawater					
Location		สถานี C อ่าวหว้าจวนเกาะเต๋นน้ำลึก 1,000 เมตร					
Date Analysis Commenced		May 03, 2023					
Condition of Sample		Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	44440	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	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	Not Detected	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	27.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	31.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

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1554-21 / EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-ON-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2342381

Date Received : May 03, 2023

Date Reported : May 30, 2023

Report Number : 2624752-1 C2

Page 3 of 3

Sample Number	2342381-1					
Sampled Date	May 03, 2023 11:10 AM					
Sample Description	Seawater					
Location	สถานี C อ่าวหว้าจวนเกาะเต๋นน้ำลึก 1,000 เมตร					
Date Analysis Commenced	May 03, 2023					
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing						
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31400	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method
Turbidity	NTU	-	0.1	8.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong , Samart Khumplee

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2342372
Date Received : May 24, 2023
Date Reported : Jul 21, 2023
Report Number : 2624728-1 C2

Page 1 of 1

Sample Number 2342372-1
Sample Date May 24, 2023 10:28 AM
Sample Description Seawater
Location สถานี C อ่าวบ้านดอน หมู่บ้านท่าเรือ 1,000 เมตร
Date Analysis Commenced May 24, 2023
Condition of Sample Contained in one plastic bottle and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Salinity	ppt	-	0.1	29.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

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

N. Banphit

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357865
Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656698-1 C2

Page 1 of 2

Sample Number 2357865-1
Sample Date Jun 14, 2023 10:42 AM
Sample Description Seawater
Location สถานี 1 บริเวณใกล้จุดสูบน้ำเข้าแหล่ง
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	50040	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	7.1	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (7)	Rayong
Salinity	ppt	-	0.1	29.1	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.8	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34750	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	-	2	7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

N. Banphit

Approved by

Narumon Banchongkit
Supervisor

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19584-21/ENAL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357865

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656698-1 C2

Page 2 of 2

Sample Number 2357865-1
Sampled Date Jun 14, 2023 10:42 AM
Sample Description Seawater
Location สถานี E บริเวณใกล้จุดสูบน้ำดิบ
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narongpong

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

N. Banngkit

Approved by

Narumon Banchongkit
Supervisor

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19584-21/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357866

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656699-1 C2

Page 1 of 2

Sample Number 2357866-1
Sampled Date Jun 14, 2023 10:52 AM
Sample Description Seawater
Location สถานี E บริเวณใกล้จุดสูบน้ำดิบ
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	50030	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	7.3	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34650	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	-	2	8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

N. Banngkit

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357866
Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656699-1 C2

Page 2 of 2

Sample Number 2357866-1
Sampled Date Jun 14, 2023 10:52 AM
Sample Description Seawater
Location and E บริเวณใกล้สะพานน้ำท่า
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.1	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

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Narumon Banchongkit
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357878
Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656705-1 C2

Page 1 of 2

Sample Number 2357878-1
Sampled Date Jun 14, 2023 10:57 AM
Sample Description Seawater
Location and A บริเวณใกล้สะพานน้ำท่า 500 เมตร
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49990	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	8.1	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Q (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.6	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34750	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	-	2	9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357878

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656705-1 C2

Page 2 of 2

Sample Number	2357878-1			
Sampled Date	Jun 14, 2023 10:57 AM			
Sample Description	Seawater			
Location	สถานี A อ่าวไทยตอนในฝั่ง 500 เมตร			
Date Analysis Commenced	Jun 14, 2023			
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.1	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Nairapong

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357880

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656706-1 C2

Page 1 of 2

Sample Number	2357880-1		
Sampled Date	Jun 14, 2023 11:05 AM		
Sample Description	Seawater		
Location	สถานี D อ่าวไทยตอนในฝั่ง 500 เมตร		
Date Analysis Commenced	Jun 14, 2023		
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	microhm/cm	-	0.5	49990	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	6.8	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.7	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34850	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	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Approved by

Narumon Banchoangkit
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US94-21/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357880
Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number: 2656706-1 C2

Page 2 of 2

Sample Number	2357880-1						
Sample Date	Jun 14, 2023 11:05 AM						
Sample Description	Seawater						
Location	สถานี D อ่าวไทยตอนบนฝั่ง 500 เมตร						
Date Analysis Commenced	Jun 14, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	2.3	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

Remark :
- LOD : Limit of Detection
- $\mu\text{g/L}$: Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

N. Banphit

Approved by

Narumon Banchoangkit
Supervisor

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0984-211 EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-ON-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357882
Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number: 2656712-1 C2

Page 1 of 2

Sample Number	2357882-1						
Sample Date	Jun 14, 2023 11:19 AM						
Sample Description	Seawater						
Location	สถานี อ.อ่าวไทยตอนบนฝั่ง 500 เมตร						
Date Analysis Commenced	Jun 14, 2023						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	50010	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	6.7	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.5	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35100	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	-	2	8	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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N. Banphit
Narumon Banchoangkit
Supervisor

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0984-211 EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, L-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357882

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656712-1 C2

Page 2 of 2

Sample Number 2357882-1
Sampled Date Jun 14, 2023 11:19 AM
Sample Description Seawater
Location อำเภอเมืองระยองประมาณน้ำลึก 500 เมตร
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.7	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

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1994-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, L-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357885

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656714-1 C2

Page 1 of 2

Sample Number 2357885-1
Sampled Date Jun 14, 2023 11:37 AM
Sample Description Seawater
Location อำเภอเมืองระยองประมาณน้ำลึก 1,000 เมตร
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	microhm/cm	-	0.5	49920	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	7.5	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Salinity	ppt	-	0.1	29.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34150	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	-	2	7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357885

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656714-1 C2

Page 2 of 2

Sample Number 2357885-1
Sample Date Jun 14, 2023 11:37 AM
Sample Description Seawater
Location สถานี B อำเภอเมืองระยองท่าเรือ 1,000 เมตร
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357889

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656715-1 C2

Page 1 of 2

Sample Number 2357889-1
Sample Date Jun 14, 2023 11:50 AM
Sample Description Seawater
Location สถานี C อำเภอเมืองระยองท่าเรือ 1,000 เมตร
Date Analysis Commenced Jun 14, 2023
Condition of Sample Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48200	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	7.1	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	7.4	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 --H (5)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	29.7	Change from natural lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34300	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	-	2	7	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2357889

Date Received : Jun 14, 2023
Date Reported : Jun 23, 2023
Report Number : 2656715-1 C2

Page 2 of 2

Sample Number	2357889-1				
Sampled Date	Jun 14, 2023 11:50 AM				
Sample Description	Seawater				
Location	สถานี C อู่ทวนท่าอากาศยานน้ำพอง 1,000 เมตร				
Date Analysis Commenced	Jun 14, 2023				
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification
Water Testing					
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest Transparency
Turbidity	NTU	-	0.1	1.5	No Standard
					Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B
					Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Surawit Narapong

Remark :

- LOD : Limit of Detection
- %C : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) always recommends that this report is not reproduced except in full.

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ภาคผนวก ค-7

ทรัพยากรชีวภาพทางทะเล



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

Client : GHECO-ONE COMPANY LIMITED

Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แหล่งก้นพื้น
ตาราง ผลการวิเคราะห์แหล่งก้นพื้น (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)

สกุลแหล่งก้นพื้น	ปริมาณแหล่งก้นพื้น (หน่วยลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Division Cyanophyta					
Class Cyanophyceae					
Order Nostocales					
Family Oscillatoriaceae					
1. <i>Lyngbya</i> sp.	-	-	18,000	-	-
2. <i>Oscillatoria</i> sp.	22,000	35,000	73,000	30,000	110,000
Family Nostocaceae					
3. <i>Pseudanabaena</i> sp.	89,000	70,000	36,000	42,000	74,000
4. <i>Richelia</i> sp.	-	88,000	36,000	25,000	83,000
Division Chlorophyta					
Class Euglenophyceae					
Order Euglenales					
Family Euglenaceae					
5. <i>Phacus</i> sp.	-	-	-	-	8,000

ตาราง ผลการวิเคราะห์แหล่งก้นพื้น (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุลแหล่งก้นพื้น	ปริมาณแหล่งก้นพื้น (หน่วยลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Division Chromophyta					
Class Bacillariophyceae					
Order Biddulphiiales					
Suborder Coscinodiscineae					
Family Thalassiosiraceae					
6. <i>Cyclotella</i> sp.	60,000	70,000	182,000	237,000	559,000
7. <i>Lauderia</i> sp.	641,000	317,000	637,000	1,690,000	1,661,000
8. <i>Skeletonema</i> sp.	328,000	13,200,000	6,370,000	10,816,000	11,026,000
9. <i>Thalassiosira</i> sp.	2,682,000	2,112,000	2,002,000	2,366,000	2,567,000
Family Melosiraceae					
10. <i>Melosira</i> sp.	22,000	26,000	64,000	118,000	45,000
11. <i>Palmeria</i> sp.	7,000	-	-	-	-
Family Aulacoseiraceae					
12. <i>Aulacodiscus</i> sp.	15,000	-	-	-	-
Family Leptocyliindraceae					
13. <i>Corethron</i> sp.	30,000	-	-	127,000	113,000
Family Coscinodiscaceae					
14. <i>Coscinodiscus</i> sp.	596,000	123,000	73,000	68,000	121,000
15. <i>Paralia</i> sp.	224,000	9,000	100,000	8,000	23,000
Family Asterolampraceae					
16. <i>Asterolampra</i> sp.	-	-	46,000	-	-
17. <i>Asteromphalus</i> sp.	60,000	26,000	91,000	51,000	9,000
Family Hemidiscaceae					
18. <i>Actinophycus</i> sp.	142,000	106,000	36,000	101,000	68,000
Suborder Biddulphiineae					
Family Hemialacaeae					
19. <i>Dactyliosolen</i> sp.	-	1,089,000	728,000	-	151,000

ตาราง ผลการวิเคราะห์แหล่งก่อมลพิษ (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุลแหล่งก่อมลพิษ	ปริมาณแหล่งก่อมลพิษ (หน่วยต่อลูกบาศก์เมตร)					
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1
20. <i>Guinardia</i> sp.	745,000	1,056,000	1,274,000	2,028,000	1,963,000	2,208,000
21. <i>Proboxia</i> sp.	1,341,000	4,224,000	5,096,000	4,225,000	8,305,000	5,888,000
22. <i>Pseudosolenia</i> sp.	-	18,000	-	-	-	-
23. <i>Rhizosolenia</i> sp.	1,751,000	1,672,000	1,456,000	1,014,000	3,020,000	1,288,000
Suborder Rhizosoleniineae						
Family Rhizosoleniaceae						
24. <i>Cerataulina</i> sp.	89,000	308,000	1,001,000	845,000	2,114,000	1,840,000
25. <i>Climacodium</i> sp.	-	-	109,000	51,000	-	239,000
26. <i>Eucampia</i> sp.	2,086,000	704,000	273,000	144,000	136,000	-
27. <i>Hemiaulus</i> sp.	1,788,000	5,984,000	3,640,000	4,732,000	5,738,000	3,496,000
Family Cymatosiraceae						
28. <i>Cymatosira</i> sp.	89,000	62,000	46,000	-	242,000	-
Family Chaetoceraceae						
29. <i>Bacteriastrium</i> sp.	894,000	5,632,000	2,548,000	3,718,000	3,171,000	5,336,000
30. <i>Chaetoceros</i> sp.	4,619,000	40,832,000	24,206,000	43,264,000	33,220,000	41,952,000
Family Lithodismaceae						
31. <i>Bellerophlea</i> sp.	75,000	18,000	-	76,000	-	-
32. <i>Ditylum</i> sp.	149,000	18,000	9,000	17,000	45,000	18,000
33. <i>Helicotheca</i> sp.	268,000	53,000	-	-	30,000	-
Family Eupodiscaceae						
34. <i>Odontella</i> sp.	119,000	2,816,000	2,184,000	2,704,000	2,718,000	2,576,000
35. <i>Triceratium</i> sp.	-	-	-	-	-	9,000
Order Bacillariales						
Suborder Fragilariineae						
Family Fragilariaceae						
36. <i>Fragilaria</i> sp.	-	-	-	-	-	18,000

ตาราง ผลการวิเคราะห์แหล่งก่อมลพิษ (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุลแหล่งก่อมลพิษ	ปริมาณแหล่งก่อมลพิษ (หน่วยต่อลูกบาศก์เมตร)					
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1
Family Thalassionemataceae						
37. <i>Thalassionema</i> sp.	3,874,000	5,808,000	3,731,000	4,056,000	2,741,000	3,312,000
38. <i>Thalassiothrix</i> sp.	-	-	-	-	15,000	-
Family Tabellariaceae						
39. <i>Tabellaria</i> sp.	-	18,000	-	-	-	-
Family Licmophoriaceae						
40. <i>Licmophora</i> sp.	97,000	26,000	91,000	-	-	-
Family Striatellaceae						
41. <i>Sriatella</i> sp.	-	6,688,000	-	338,000	4,379,000	2,024,000
Suborder Bacillariineae						
Family Lyrellaceae						
42. <i>Lyrella</i> sp.	-	-	9,000	25,000	-	-
Family Naviculaceae						
43. <i>Amphora</i> sp.	149,000	343,000	637,000	135,000	529,000	294,000
44. <i>Diploneis</i> sp.	30,000	18,000	64,000	-	23,000	-
45. <i>Haslea</i> sp.	30,000	70,000	127,000	152,000	60,000	101,000
46. <i>Meunier</i> sp.	-	176,000	-	-	-	-
47. <i>Navicula</i> sp.	52,000	53,000	18,000	68,000	136,000	-
48. <i>Pinnularia</i> sp.	-	9,000	-	-	-	-
49. <i>Pleurosigma</i> sp.	112,000	106,000	291,000	110,000	491,000	147,000
50. <i>Trachyneis</i> sp.	30,000	88,000	73,000	93,000	53,000	-
Family Bacillariaceae						
51. <i>Cylindrotheca</i> sp.	209,000	3,344,000	3,822,000	1,521,000	2,416,000	3,864,000
52. <i>Nitzschia</i> sp.	37,000	97,000	291,000	34,000	211,000	9,000
53. <i>Pseudo-nitzschia</i> sp.	-	2,464,000	728,000	406,000	1,940,000	2,254,000
54. <i>Tryblionella</i> sp.	7,000	-	-	-	8,000	37,000

ตาราง ผลการวิเคราะห์แหล่งกอนพืช (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

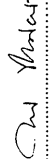
สกุลแหล่งกอนพืช	ปริมาณแหล่งกอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Family Surirellaceae					
55. <i>Entomonets</i> sp.	52,000	35,000	100,000	8,000	-
56. <i>Surirella</i> sp.	-	9,000	4,550,000	-	-
Class Dictyochophyceae					
Order Dictyochales					
Family Dictyochophyceae					
57. <i>Dictyocha</i> sp.	596,000	88,000	55,000	25,000	18,000
Class Dinophyceae					
Order Prorocentrales					
Family Prorocentraceae					
58. <i>Prorocentrum</i> sp.	82,000	35,000	36,000	59,000	37,000
Order Dinophysiales					
Family Dinophysaceae					
59. <i>Phalacroma</i> sp.	-	-	9,000	-	-
Order Gymnodiniales					
Family Gymnodiniaceae					
60. <i>Gymnodinium</i> sp.	-	62,000	118,000	59,000	9,000
61. <i>Gyrodinium</i> sp.	22,000	-	9,000	169,000	46,000
Order Gonyaulacales					
Family Ceratiaceae					
62. <i>Ceratium</i> sp.	134,000	53,000	9,000	76,000	101,000
Family Goniomomaceae					
63. <i>Alexandrium</i> sp.	-	-	-	25,000	18,000
64. <i>Gonyaulax</i> sp.	7,000	114,000	64,000	34,000	28,000
Family Pyrophacaceae					
65. <i>Pyrophacus</i> sp.	-	9,000	27,000	17,000	28,000

ตาราง ผลการวิเคราะห์แหล่งกอนพืช (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุลแหล่งกอนพืช	ปริมาณแหล่งกอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Order Peridinales					
Family Calciadinellaceae					
66. <i>Scrippsiella</i> sp.	-	53,000	46,000	25,000	-
Family Peridiniaceae					
67. <i>Peridinium</i> sp.	-	26,000	-	-	15,000
Family Podolampadaceae					
68. <i>Podolampas</i> sp.	7,000	-	-	-	-
Family Protoperidiniaceae					
69. <i>Protoperidinium</i> sp.	186,000	748,000	400,000	930,000	2,392,000
ชนิดแหล่งกอนพืช	46	53	51	46	42
ปริมาณแหล่งกอนพืช	24,644,000	101,208,000	67,639,000	86,832,000	98,493,000
ดัชนีความหลากหลายแหล่งกอนพืช	2.7392	2.2435	2.4676	1.9950	2.2169
ดัชนีความสม่ำเสมอแหล่งกอนพืช	0.7154	0.5651	0.6276	0.5211	0.5931

Sample Location : 1. สถานี 2311798-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อยื่น
2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
3. สถานี 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
5. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
6. สถานี 2311807-1 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

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



 (นางสาวณกรวรรณ ขวาค่อม) (นายอรณกต อินทรชาติ)
 ผู้วิเคราะห์ หัวหน้าสถานีวิจัยประมงสัตว์น้ำ

รายงานผลการวิเคราะห์แพลงก์ตอนพืช (Phytoplankton)

1. สถานี 2311798-1 : สถานี B บริเวณใต้จุดสูบน้ำเพื่อน้ำไปหล่อเย็น

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล และใน Division Chromophyta จำนวน 44 สกุล รวมทั้งหมด 46 สกุล มีปริมาณ 24,644,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 2.7392 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.7154 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 3 สกุล และใน Division Chromophyta จำนวน 50 สกุล รวมทั้งหมด 53 สกุล มีปริมาณ 101,208,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 2.2435 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.5651 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

3. สถานี 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 4 สกุล และใน Division Chromophyta จำนวน 47 สกุล รวมทั้งหมด 51 สกุล มีปริมาณ 67,639,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 2.4676 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.6276 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล และใน Division Chromophyta จำนวน 44 สกุล รวมทั้งหมด 46 สกุล มีปริมาณ 86,832,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.9950 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.5211 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

5. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 3 ชนิด ใน Division Chlorophyta จำนวน 1 ชนิด และใน Division Chromophyta จำนวน 47 ชนิด รวมทั้งหมด 51 ชนิด มีปริมาณ 91,360,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 2.4054 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.6118 รายละเอียดชนิดและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

6. สถานี 2311807-1 : สถานี C อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 3 สกุล และใน Division Chromophyta จำนวน 39 สกุล รวมทั้งหมด 42 สกุล มีปริมาณ 98,493,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Chlaetoceros* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 2.2169 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.5931 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง



Chaetoceros sp.



Thalassionema sp.



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

Client : GHECO-ONE COMPANY LIMITED
Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150
Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แหล่งก่อก้อนสัตว์
ตาราง ผลการวิเคราะห์แหล่งก่อก้อนสัตว์ (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)

สกุล/กลุ่มแหล่งก่อก้อนสัตว์	ปริมาณแหล่งก่อก้อนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Phylum Protozoa					
Subphylum Plasmodroma					
Class Sarcodina					
Subclass Rhizopoda					
Order Foraminiferida					
Suborder Radiolarida					
1. Globorotalia sp.	-	-	-	-	-
Subphylum Ciliophora					
Class Ciliata					
Subclass Spirotricha					
Order Tintinnida					
Family Tintinnididae					
2. Leptotintinus sp.	30,000	70,000	36,000	42,000	64,000
3. Tintinnidium sp.	7,000	35,000	18,000	338,000	101,000

ตาราง ผลการวิเคราะห์แหล่งก่อก้อนสัตว์ (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุล/กลุ่มแหล่งก่อก้อนสัตว์	ปริมาณแหล่งก่อก้อนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2311798-1	2311802-1	2311804-1	2311805-1	2311807-1
Family Codonellidae	298,000	194,000	118,000	85,000	113,000
4. Tintinnopsis sp.					
Family Codonellopsidae	-	-	27,000	-	15,000
5. Codonellopsis sp.					
6. Stenosemella sp.	75,000	79,000	36,000	25,000	38,000
Family Coxidiellidae					
7. Helicostomella sp.	15,000	62,000	82,000	17,000	45,000
Family Petalotrichidae					
8. Metacylis sp.	7,000	35,000	18,000	8,000	-
Family Tintinnidae					
9. Eutintinus sp.	15,000	-	-	8,000	9,000
Subclass Peritricha					
Order Peritrichida	60,000	18,000	91,000	-	28,000
10. Vorticella sp.					
Phylum Rotifera					
Class Monogononta					
Order Ploima					
Family Tricerceridae					
11. Trichocerca sp.	-	70,000	18,000	8,000	9,000
Family Asplanchnidae					
12. Asplanchna sp.	-	9,000	9,000	-	8,000
Phylum Annelida					
Class Polychaeta					
13. Polychaete larvae	-	-	36,000	-	-

ตาราง ผลการวิเคราะห์แหล่งกอนสัตว์ (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุล/กลุ่มแหล่งกอนสัตว์	ปริมาณแหล่งกอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1
Phylum Arthropoda						
Class Crustacea						
Subclass Copepoda						
14. Copepod nauplius	268,000	62,000	127,000	42,000	68,000	9,000
Order Calanoida						
15. Calanoid copepod	22,000	-	-	25,000	-	-
Order Cyclopoida						
16. Cyclopoid copepod	-	-	9,000	-	-	-
Subclass Cirripedia						
17. Cirripede nauplius	-	9,000	-	-	-	-
Phylum Mollusca						
Class Bivalvia						
18. Pelecypod larvae	22,000	9,000	64,000	8,000	-	28,000
Phylum Chordata						
Subphylum Urochordata						
Class Larvacea						
Family Oikopleuridae						
19. <i>Oikopleura</i> sp.	30,000	53,000	-	25,000	38,000	37,000
สกุล/กลุ่มแหล่งกอนสัตว์	12	13	14	12	10	12
ปริมาณแหล่งกอนสัตว์	849,000	705,000	689,000	631,000	401,000	698,000
ดัชนีความหลากหลายแหล่งกอนสัตว์	1.7804	2.2400	2.3440	1.6677	1.9913	1.8767
ดัชนีความสม่ำเสมอแหล่งกอนสัตว์	0.7165	0.8733	0.8882	0.6711	0.8648	0.7552

Sample Location : 1. สถานี 2311798-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปปล่อย
 2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
 3. สถานี 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
 4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร

- สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
- สถานี 2311807-1 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

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



 (นางสาวกนกวรรณ ชาวค้อน)
 ผู้วิเคราะห์



 (นายอลงกต อินทรชาติ)
 หัวหน้าสถานีวิจัยประมงสัตว์น้ำ

รายงานผลการวิเคราะห์แหล่งกตอนสัตว์ (Zooplankton)

1. สถาน 2311798-1 : สถาน I บริเวณใกล้จุดสอบนำเพื่อนำไปหลอเยน

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอสัตว์ใน Phylum Protozoa จำนวน 8 สกุล ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 9 สกุล และ 3 กลุ่ม มีปริมาณ 849,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นดอสัตว์ที่พบมากที่สุดคือ *Tinitinnopsis* sp. มีค่าดัชนีความหลากหลายของแมลงก้นดอสัตว์เท่ากับ 1.7804 และมีค่าดัชนีชี้วัดความสม่ำเสมอของแมลงก้นดอสัตว์เท่ากับ 0.7165 รายละเอียดสกุลกลุ่มและปริมาณแมลงก้นดอสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแมลงก่อดินเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก่อดินสัตว์ใน Phylum Protozoa จำนวน 7 สกุล ใน Phylum Rotifera จำนวน 2 สกุล ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 10 สกุล และ 3 กลุ่ม มีปริมาณ 705,000 หน่วยต่อลูกบาศก์เมตร แมลงก่อดินสัตว์ที่พบมากที่สุดคือ *Tumimopsis* sp. มีค่าดัชนีความหลากหลายของแมลงก่อดินสัตว์เท่ากับ 2.2400 และค่าดัชนีพื้นที่ความเสมอของแมลงก่อดินสัตว์เท่ากับ 0.8733 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก่อดินสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

3. สถานที่ 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทาง 500 เมตร

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอสัตว์ใน Phylum Protozoa จำนวน 8 สกุล ใน Phylum Rotifera จำนวน 2 สกุล ใน Phylum Amelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 2 กลุ่ม และใน Phylum Mollusca จำนวน 1 กลุ่ม รวมทั้งหมด 10 สกุล และ 4 กลุ่ม มีปริมาณ 689,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นดอสัตว์ที่พบมากที่สุดคือ Copepod nauplius (ตัวอ่อนโคพีพอดระยะนาอพลีส) มีค่าดัชนีความหลากหลายของแมลงก้นดอสัตว์เท่ากับ 2.3440 และมีค่าดัชนีดัชนีความสม่ำเสมอของแมลงก้นดอสัตว์เท่ากับ 0.8882 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก้นดอสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแมลงก่อดอนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก่อดอนสัตว์ใน Phylum Protozoa จำนวน 7 สกุล ใน Phylum Rotifera จำนวน 1 สกุล ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 9 สกุล และ 3 กลุ่ม มีปริมาณ 631,000 หน่วยต่อลูกบาศก์เมตร แมลงก่อดอนสัตว์ที่พบมากที่สุดคือ *Tintinnidium* sp. มีค่าดัชนีความหลากหลายของแมลงก่อดอนสัตว์เท่ากับ 1.6677 และค่าดัชนีชี้วัดความสม่ำเสมอของแมลงก่อดอนสัตว์เท่ากับ 0.6711 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก่อดอนสัตว์วิเคราะห์ ดังแสดงไว้ในตาราง

5. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอสัตว์ใน Phylum Protozoa จำนวน 7 สกุล ใน Phylum Rotifera จำนวน 1 สกุล ใน Phylum Arthropoda จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 9 สกุล และ 1 กลุ่ม มีปริมาณ 401,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนสัตว์ที่พบมากที่สุดคือ *Tinidinopsis* sp. มีค่าดัชนีความหลากหลายของแมลงก้นดอสัตว์เท่ากับ 1.9913 และมีค่าดัชนีชี้ความสม่ำเสมอของแมลงก้นดอสัตว์เท่ากับ 0.8648 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก้นดอสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

6. สถานี 2311807-1 : สถานี C อยู่ห่างจากกระบายนํ้าถึง 1,000 เมตร

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอสัตว์ใน Phylum Protozoa จำนวน 8 สกุล ใน Phylum Rotifera จำนวน 1 สกุล ใน Phylum Arthropoda จำนวน 1 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 10 สกุล และ 2 กลุ่ม มีปริมาณ 698,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นดอสัตว์ที่พบมากที่สุดคือ *Tinittopsis* sp. มีค่าดัชนีความหลากหลายของแมลงก้นดอสัตว์เท่ากับ 1.8767 และค่าที่ดัชนีดัชนีความสมของแมลงก้นดอสัตว์เท่ากับ 0.7552 รายละเอียดสกุลกลุ่มและปริมาณแมลงก้นดอสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง



Tintinnopsis sp.



Copepod nauplius



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

Client : GHECO-ONE COMPANY LIMITED

Address : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์น้ำดิน

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)						
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1	
Phylum Annelida							
Class Polychaeta							
Order Capitellida							
Family Capitellidae							
<i>Heteromastus</i> sp. (ไส้เดือนทะเล)			15	-	60	30	
Family Maldanidae							
<i>Euchemene</i> sp. (ไส้เดือนทะเล)		30	-	-	-	-	
Order Cirratulida							
Family Paraonidae							
<i>Paraonis</i> sp. (ไส้เดือนทะเล)			30	-	-	-	
Order Eunicida							
Family Eunicidae							
<i>Marphysa</i> sp. (ไส้เดือนทะเล)	30	45	-	-	45	104	
Family Lumbrineridae							
<i>Lumbrineris</i> sp. (ไส้เดือนทะเล)	-	-	-	-	15	-	

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)

(ต่อ)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)						
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1	
Order Ophelida							
Family Opheliidae							
<i>Armandia</i> sp. (ไส้เดือนทะเล)	30	-	15	15	-	-	
<i>Ophelina</i> sp. (ไส้เดือนทะเล)	-	-	-	45	-	-	
Order Orbiniida							
Family Orbiniidae							
<i>Scoloplos</i> sp. (ไส้เดือนทะเล)	-	15	-	-	15	-	
Order Phyllodocida							
Family Glyceridae							
<i>Glycera</i> sp. (ไส้เดือนทะเล)	15	15	-	-	-	-	
Family Nereididae							
<i>Nereis</i> sp. (เนเปียร์ง)	15	-	15	-	-	-	
Order Sabellida							
Family Sabellidae							
<i>Chone</i> sp. (ไส้เดือนทะเล)	-	-	-	-	-	15	
<i>Sabella</i> sp. (ไส้เดือนทะเล)	15	-	-	-	-	-	
Order Spionida							
Family Magelonidae							
<i>Magelona</i> sp. (ไส้เดือนทะเล)	-	15	15	15	-	-	
Order Terebellida							
Family Ampharetidae							
<i>Ampharete</i> sp. (ไส้เดือนทะเล)	-	-	-	-	15	-	
Phylum Arthropoda							
Class Malacostraca							
Order Amphipoda							
Family Ampeliscaidae							
<i>Ampelisca</i> sp. (แอมพิพอด)	15	15	15	-	-	15	

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)
(ต่อ)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)					
	2311798-1	2311802-1	2311804-1	2311805-1	2311806-1	2311807-1
Order Decapoda						
Family Diogenidae						
<i>Diogenes</i> sp. (ปูเสฉวน)	-	-	-	-	-	30
Order Tanaidacea						
Family Leptochelidae						
<i>Leptochelia</i> sp. (ท้านดาเซียน)	-	-	-	-	-	30
Phylum Mollusca						
Class Bivalvia						
Order Nuculanida						
Family Nuculanidae						
<i>Nuculana</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	15	-	-	-
Order Venerida						
Family Tellinidae						
<i>Tellina</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	-	-	-	30
Family Veneridae						
<i>Circe</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	15	-	-	-
<i>Placamen</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	15	-	-	-
<i>Timoclea</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	15	-	-	-	-
Phylum Chordata						
Class Leptocardii						
Order Amphioxiformes						
Family Branchiostomatidae						
<i>Branchiostoma</i> sp. (แอมฟิออกซัส)	-	-	-	-	30	-
ชนิดสัตว์น้ำดิน	6	7	9	3	6	7
ปริมาณสัตว์น้ำดิน	120	150	150	75	180	254
ค่าดัชนีความหลากหลายสัตว์น้ำดิน	1.7329	1.8344	2.1640	0.9503	1.6326	1.7090

Sample Location : 1. สถานี 2311798-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปปล่อยขึ้น
 2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
 3. สถานี 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
 4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
 5. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
 6. สถานี 2311807-1 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

Condition of Sample : contained in one plastic zip bag

ดร.จงเดช สิงคะวาณิช

(นายอรรถวุฒิ กัมพะวงศ์)

ผู้วิเคราะห์

ดร.จงเดช สิงคะวาณิช

(นายอรรถวุฒิ กัมพะวงศ์)

หัวหน้าสถานีวิจัยประมงสัตว์น้ำ

รายงานผลการวิเคราะห์สัตว์น้ำดิน (Benthos)

จากการวิเคราะห์ตัวอย่างสัตว์น้ำดิน เก็บตัวอย่างมาเมื่อวันที่ 1 กุมภาพันธ์ 2566 (จำนวน 6 สถานี) พบสัตว์น้ำดินจำนวน 4 Phylum ประกอบด้วย Annelida, Arthropoda, Mollusca และ Chordata ปริมาณสัตว์น้ำดินมีค่าอยู่ในช่วง 75-254 ตัวต่อตารางเมตร รายละเอียดการกระจายและปริมาณสัตว์น้ำดินในแต่ละสถานีมีดังนี้

1. สถานี 2311798-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อเย็น

พบสัตว์น้ำดินจำนวน 2 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Marphysa* sp. (ไส้เดือนทะเล), *Armandia* sp. (ไส้เดือนทะเล), *Glycera* sp. (ไส้เดือนทะเล), *Nereis* sp. (แม่เพรียง) และ *Sabella* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 30, 30, 15, 15 และ 15 ตัวต่อตารางเมตร ตามลำดับ และ Phylum Arthropoda พบ 1 สกุล ได้แก่ *Ampelisca* sp. (แอมเพียพอด) จำนวน 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.7329

2. สถานี 2311802-1 : สถานี A อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 3 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Eteimene* sp. (ไส้เดือนทะเล), *Marphysa* sp. (ไส้เดือนทะเล), *Scoloplos* sp. (ไส้เดือนทะเล), *Glycera* sp. (ไส้เดือนทะเล) และ *Magelona* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 30, 45, 15, 15 และ 15 ตัวต่อตารางเมตร ตามลำดับ Phylum Arthropoda พบ 1 สกุล ได้แก่ *Ampelisca* sp. (แอมเพียพอด) จำนวน 15 ตัวต่อตารางเมตร และ Phylum Mollusca พบ 1 สกุล ได้แก่ *Timoclea* sp. (หอยสองฝาชนิดหนึ่ง) จำนวน 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.8344

3. สถานี 2311804-1 : สถานี D อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 3 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Heteromastus* sp. (ไส้เดือนทะเล), *Paraonis* sp. (ไส้เดือนทะเล), *Armandia* sp. (ไส้เดือนทะเล), *Nereis* sp. (แม่เพรียง) และ *Magelona* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 15, 30, 15, 15 และ 15 ตัวต่อตารางเมตร ตามลำดับ Phylum Arthropoda พบ 1 สกุล ได้แก่ *Ampelisca* sp. (แอมเพียพอด) จำนวน 15 ตัวต่อตารางเมตร และ Phylum Mollusca พบ 3 สกุล ได้แก่ *Niculana* sp. (หอยสองฝาชนิดหนึ่ง), *Circe* sp. (หอยสองฝาชนิดหนึ่ง) และ *Placamen* sp. (หอยสองฝาชนิดหนึ่ง) จำนวนสกุลละ 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 2.1640

4. สถานี 2311805-1 : สถานี O อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 1 Phylum ประกอบด้วย Phylum Annelida พบ 3 สกุล ได้แก่ *Armandia* sp. (ไส้เดือนทะเล), *Ophelina* sp. (ไส้เดือนทะเล) และ *Magelona* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 15, 45 และ 15 ตัวต่อตารางเมตร ตามลำดับ ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 0.9503

5. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

พบสัตว์น้ำดินจำนวน 2 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Heteromastus* sp. (ไส้เดือนทะเล), *Marphysa* sp. (ไส้เดือนทะเล), *Lumbrineris* sp. (ไส้เดือนทะเล), *Scoloplos* sp. (ไส้เดือนทะเล) และ *Amphiare* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 60, 45, 15, 15 และ 15 ตัวต่อตารางเมตร ตามลำดับ และ Phylum Chordata พบ 1 สกุล ได้แก่ *Branchiostoma* sp. (แอมฟิโอจัสต์) จำนวน 30 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.6326

6. สถานี 2311807-1 : สถานี C อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

พบสัตว์น้ำดินจำนวน 3 Phylum ประกอบด้วย Phylum Annelida พบ 3 สกุล ได้แก่ *Heteromastus* sp. (ไส้เดือนทะเล), *Marphysa* sp. (ไส้เดือนทะเล) และ *Chone* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 30, 104 และ 15 ตัวต่อตารางเมตร ตามลำดับ Phylum Arthropoda พบ 3 สกุล ได้แก่ *Ampelisca* sp. (แอมเพียพอด), *Diogenes* sp. (ปูเสฉวน) และ *Leptochelia* sp. (พาโนดาเซียน) จำนวนสกุลละ 15, 30 และ 30 ตัวต่อตารางเมตร ตามลำดับ และ Phylum Mollusca พบ 1 สกุล ได้แก่ *Tellina* sp. (หอยสองฝาชนิดหนึ่ง) จำนวน 30 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.7090



สถานีวิจัยประมงศรีราชา
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อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : GHECO-ONE COMPANY LIMITED
Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150
Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน
ตาราง ผลการวิเคราะห์สัตว์น้ำวัยอ่อน (เก็บตัวอย่างวันที่ 1 กุมภาพันธ์ 2566)

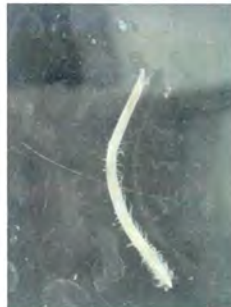
กลุ่มของสัตว์น้ำวัยอ่อน	ปริมาณสัตว์น้ำวัยอ่อน (หน่วยต่อลูกบาศก์เมตร)
	2311798-1 2311806-1
Phylum Arthropoda	
Class Crustacea	
Subclass Copepoda	
Copepod nauplii (ตัวอ่อนโคพีพอดระยะนาอูปเลียส)	268,000 68,000
Phylum Mollusca	
Class Bivalvia	
Pelecypod larvae (ตัวอ่อนหอยสองฝา)	22,000 -
จำนวนกลุ่มของสัตว์น้ำวัยอ่อนทั้งหมด	2 1
ปริมาณของสัตว์น้ำวัยอ่อนทั้งหมด	290,000 68,000



Placamen sp.



Marphysa sp.



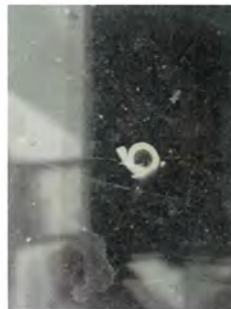
Armandia sp.



Nuculana sp.




Branchiostoma sp.




Glycera sp.

Sample Location : 1. สถานี 2311798-1 : สถานี 1 บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อเย็น
2. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

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


(นางสาวกนกวรรณ ขาวค้อน)
ผู้วิเคราะห์


(นายองกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน (Aquatic larvae)

1. สถานี 2311798-1 : สถานี 1 บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อเย็น

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Arthropoda จำนวน 1 กลุ่ม และใน Phylum Mollusca จำนวน 1 กลุ่ม รวมทั้งหมด 2 กลุ่ม มีปริมาณรวมทั้งหมด 290,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง

2. สถานี 2311806-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 1 กุมภาพันธ์ 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Arthropoda จำนวน 1 กลุ่ม มีปริมาณรวมทั้งหมด 68,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง



Copepod nauplius



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

Client : GHECO-ONE COMPANY LIMITED
Address : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150
Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แหล่งต้นพืช
ตาราง ผลการวิเคราะห์แหล่งต้นพืช (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)

สกุลแหล่งต้นพืช	ปริมาณแหล่งต้นพืช (หน่วยต่อลูกบาศก์เมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Division Cyanophyta					
Class Cyanophyceae					
Order Nostocales					
Family Oscillatoriaceae					
1. <i>Oscillatoria</i> sp.	2,848,000	526,000	358,000	167,000	42,000
Family Nostocaceae					
2. <i>Anabaena</i> sp.	18,000	-	-	-	-
3. <i>Pseudanabaena</i> sp.	9,000	84,000	100,000	18,000	33,000
Division Chlorophyta					
Class Chlorophyceae					
Order Chlorococcales					
Family Hydrodictyaceae					
4. <i>Podiatrum</i> sp.	-	8,000	-	-	-
Family Scenedesmeceae					
5. <i>Actinastrum</i> sp.	-	-	-	-	-

ตาราง ผลการวิเคราะห์แหล่งต้นพืช (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลแหล่งต้นพืช	ปริมาณแหล่งต้นพืช (หน่วยต่อลูกบาศก์เมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
6. <i>Scenedesmus</i> sp.	18,000	-	-	9,000	-
Order Zygomatales					
Family Desmidiaceae					
7. <i>Closterium</i> sp.	9,000	-	-	-	-
Class Euglenophyceae					
Order Euglenales					
Family Euglenaceae					
8. <i>Trachelomonas</i> sp.	-	-	-	-	-
Division Chromophyta					
Class Bacillariophyceae					
Order Biddulphiales					
Suborder Coscinodiscineae					
Family Thalassiosiraceae					
9. <i>Cyclotella</i> sp.	71,000	125,000	-	70,000	84,000
10. <i>Lauderia</i> sp.	-	8,000	-	-	58,000
11. <i>Skeletonema</i> sp.	142,000	6,513,000	11,741,000	20,064,000	10,855,000
12. <i>Stephanodiscus</i> sp.	-	-	20,000	-	-
13. <i>Thalassiosira</i> sp.	62,000	167,000	129,000	26,000	200,000
Family Melosiraceae					
14. <i>Paralia</i> sp.	-	17,000	-	62,000	401,000
Family Coscinodiscaceae					
15. <i>Coscinodiscus</i> sp.	27,000	25,000	100,000	79,000	33,000
Family Hemidiscaceae					
16. <i>Actinocyclus</i> sp.	-	-	-	-	8,000
Family Asterolampraceae					
17. <i>Asteromphalus</i> sp.	9,000	25,000	70,000	-	25,000

ตาราง ผลการวิเคราะห์แหล่งก่อมลพิษ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลแหล่งก่อมลพิษ	ปริมาณแหล่งก่อมลพิษ (หน่วยต่อลูกบาศก์เมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Family Heliopeltaceae					
18. <i>Actinoptychus</i> sp.	9,000	-	-	-	26,000
Suborder Biddulphiinae					
Family Hemiaulaceae					
19. <i>Dactylosolen</i> sp.	18,000	-	-	-	-
20. <i>Guinardia</i> sp.	125,000	376,000	100,000	-	125,000
21. <i>Probooscia</i> sp.	45,000	58,000	80,000	-	100,000
22. <i>Pseudosolenia</i> sp.	18,000	-	-	-	-
23. <i>Rhizosolenia</i> sp.	249,000	501,000	30,000	141,000	443,000
Suborder Rhizosoleniinae					
Family Rhizosoleniaceae					
24. <i>Cerataulina</i> sp.	178,000	752,000	318,000	-	919,000
25. <i>Climacodium</i> sp.	53,000	-	50,000	-	-
26. <i>Eucampia</i> sp.	27,000	17,000	-	-	-
27. <i>Hemiaulus</i> sp.	89,000	710,000	239,000	-	583,000
Family Cymatosiraceae					
28. <i>Cymatosira</i> sp.	-	75,000	-	-	-
Family Chaetoceraceae					
29. <i>Bacteriastrium</i> sp.	19,224,000	54,776,000	69,053,000	51,392,000	125,250,000
30. <i>Chaetoceros</i> sp.	12,104,000	22,044,000	27,860,000	20,944,000	54,743,000
Family Lithodesmaceae					
31. <i>Ditylum</i> sp.	15,842,000	4,676,000	5,572,000	211,000	1,086,000
32. <i>Helicotheca</i> sp.	57,138,000	4,175,000	5,970,000	528,000	6,513,000
Family Eupodiscaceae					
33. <i>Odontella</i> sp.	-	17,000	149,000	-	17,000
34. <i>Triceratium</i> sp.	89,000	134,000	159,000	9,000	100,000

ตาราง ผลการวิเคราะห์แหล่งก่อมลพิษ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลแหล่งก่อมลพิษ	ปริมาณแหล่งก่อมลพิษ (หน่วยต่อลูกบาศก์เมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Order Bacillariales					
Suborder Fragilariineae					
Family Fragilariaceae					
35. <i>Fragilaria</i> sp.	151,000	-	-	-	67,000
Family Thalassionemataceae					
36. <i>Thalassionema</i> sp.	107,000	100,000	-	-	92,000
Suborder Bacillariineae					
Family Achnantheaceae					
37. <i>Achnanthes</i> sp.	-	-	-	-	17,000
38. <i>Cocconeis</i> sp.	-	-	20,000	-	-
Family Lyrellaceae					
39. <i>Lyrella</i> sp.	-	-	10,000	-	8,000
Family Naviculaceae					
40. <i>Amphora</i> sp.	45,000	668,000	60,000	35,000	668,000
41. <i>Diploneis</i> sp.	-	58,000	20,000	-	33,000
42. <i>Meunier</i> sp.	-	-	109,000	-	33,000
43. <i>Navicula</i> sp.	36,000	192,000	30,000	35,000	17,000
44. <i>Pinnularia</i> sp.	-	-	60,000	-	75,000
45. <i>Pleurosigma</i> sp.	18,000	1,253,000	557,000	70,000	960,000
Family Bacillariaceae					
46. <i>Bacillaria</i> sp.	-	693,000	129,000	-	1,086,000
47. <i>Cylindrotheca</i> sp.	-	-	40,000	123,000	-
48. <i>Nitzschia</i> sp.	36,000	67,000	169,000	-	25,000
49. <i>Pseudo-nitzschia</i> sp.	-	25,000	30,000	-	84,000
50. <i>Tryblionella</i> sp.	-	8,000	-	-	-
Family Surirellaceae					
51. <i>Surirella</i> sp.	27,000	8,000	-	18,000	25,000

รายงานผลการวิเคราะห์แพลงก์ตอนพืช (Phytoplankton)

1. สถานี 2342333-1 : สถานี I บริเวณใกล้จุดบูมเพื่อไม่ให้ลอยขึ้น

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 3 สกุล ใน Division Chlorophyta จำนวน 2 สกุล และใน Division Chromophyta จำนวน 32 สกุล รวมทั้งหมด 37 สกุล มีปริมาณ 109,518,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Helicotheca* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.4087 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.3901 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

2. สถานี 2342334-1 : สถานี A อยู่ห่างจากจุดระยะบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล ใน Division Chlorophyta จำนวน 1 สกุล และใน Division Chromophyta จำนวน 36 สกุล รวมทั้งหมด 39 สกุล มีปริมาณ 99,767,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Bacteriastrium* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.5256 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.4164 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

3. สถานี 2342335-1 : สถานี D อยู่ห่างจากจุดระยะบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล และใน Division Chromophyta จำนวน 34 สกุล รวมทั้งหมด 36 สกุล มีปริมาณ 123,701,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Bacteriastrium* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.3575 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.3788 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

4. สถานี 2342336-1 : สถานี O อยู่ห่างจากจุดระยะบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล ใน Division Chlorophyta จำนวน 1 สกุล และใน Division Chromophyta จำนวน 24 สกุล รวมทั้งหมด 27 สกุล มีปริมาณ 96,923,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Bacteriastrium* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.2447 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.3777 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

5. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระยะบายน้ำถึง 1,000 เมตร

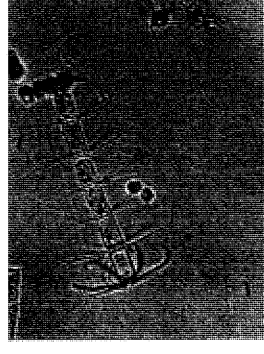
ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล และใน Division Chromophyta จำนวน 43 สกุล รวมทั้งหมด 45 สกุล มีปริมาณ 207,096,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Bacteriastrium* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.2010 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.3155 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง

6. สถานี 2342338-1 : สถานี C อยู่ห่างจากจุดระยะบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแพลงก์ตอนพืชใน Division Cyanophyta จำนวน 2 สกุล ใน Division Chlorophyta จำนวน 4 สกุล และใน Division Chromophyta จำนวน 26 สกุล รวมทั้งหมด 32 สกุล มีปริมาณ 42,777,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนพืชที่พบมากที่สุดคือ *Bacteriastrium* sp. มีค่าดัชนีความหลากหลายของแพลงก์ตอนพืชเท่ากับ 1.7839 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนพืชเท่ากับ 0.5147 รายละเอียดสกุลและปริมาณแพลงก์ตอนพืช ดังแสดงไว้ในตาราง



Chaetoceros sp.



Bacteriastrium sp.



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

Client : GHECO-ONE COMPANY LIMITED
Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150
Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แหล่งกักต่อนสัตว์
ตาราง ผลการวิเคราะห์แหล่งกักต่อนสัตว์ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)

สกุลกลุ่มแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยลูกบาศก์เมตร)			
	2342333-1	2342334-1	2342335-1	2342338-1
Phylum Protozoa				
Subphylum Plasmodroma				
Class Sarcodina				
Subclass Rhizopoda				
Order Testacida				
Family Euglyphidae				
1. <i>Euglypha</i> sp.	9,000	-	10,000	-
Subphylum Ciliophora				
Class Ciliata				
Subclass Spirotricha				
Order Tintinnida				
Family Codonellidae				
2. <i>Tintinnopsis</i> sp.	9,000	17,000	40,000	112,000
Family Codonellopsidae				
3. <i>Stenosomella</i> sp.	-	-	20,000	-

ตาราง ผลการวิเคราะห์แหล่งกักต่อนสัตว์ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลกลุ่มแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยลูกบาศก์เมตร)			
	2342333-1	2342334-1	2342335-1	2342338-1
Family Cyrtocercidae				
4. <i>Favella</i> sp.	-	-	-	8,000
Family Petalotrichidae				
5. <i>Metacervis</i> sp.	-	17,000	20,000	172,000
Family Tintinnidae				
6. <i>Amphorella</i> sp.	-	-	-	8,000
7. <i>Eutintinnus</i> sp.	18,000	8,000	30,000	9,000
Subclass Peritricha				
Order Peritrichida				
8. <i>Vorticella</i> sp.	-	-	40,000	69,000
Phylum Rotifera				
Class Monogononta				
Order Ploima				
Family Brachionidae				
9. <i>Brachionus</i> sp.	-	-	10,000	9,000
Family Lecanidae				
10. <i>Lecane</i> sp.	-	-	-	43,000
Family Tricerceridae				
11. <i>Trichocerca</i> sp.	-	-	-	9,000
Phylum Chaetognatha				
Class Sagittioidea				
Family Sagittidae				
12. <i>Sagitta</i> sp.	-	-	-	8,000
Phylum Annelida				
Class Polychaeta				
13. Polychaete larvae	-	33,000	10,000	64,000

ตาราง ผลการวิเคราะห์แหล่งกอนสัตว์ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุล/กลุ่มแหล่งกอนสัตว์	ปริมาณแหล่งกอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Phylum Arthropoda					
Class Crustacea					
Subclass Ostracoda					
Order Podocopa					
Family Cypridae					
14. <i>Cypridopsis</i> sp.	-	-	-	-	9,000
Subclass Copepoda					
15. Copepod nauplius	45,000	134,000	169,000	141,000	376,000
Order Calanoida					
16. Calanoid copepod	-	-	-	9,000	-
Order Cyclopoida					
17. Cyclopoid copepod	-	8,000	20,000	-	25,000
Order Harpacticoida					
18. Harpacticoid copepod	-	-	-	-	-
Phylum Mollusca					
Class Gastropoda					
19. Gastropod larvae	-	-	-	-	9,000
Class Bivalvia					
20. Pelecypod larvae	36,000	150,000	199,000	352,000	225,000
Phylum Echinodermata					
Class Asteroidea					
21. Bipinnaria larvae	-	25,000	-	-	-
Phylum Chordata					
Subphylum Urochordata					
Class Larvacea					
Family Oikopleuridae					
22. <i>Oikopleura</i> sp.	-	50,000	30,000	132,000	100,000
					120,000

ตาราง ผลการวิเคราะห์แหล่งกอนสัตว์ (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุล/กลุ่มแหล่งกอนสัตว์	ปริมาณแหล่งกอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1	2342338-1
สกุล/กลุ่มแหล่งกอนสัตว์	5	9	12	12	12	14
ปริมาณแหล่งกอนสัตว์	117,000	442,000	598,000	1,928,000	1,092,000	1,003,000
ดัชนีความหลากหลายแหล่งกอนสัตว์	1.4127	1.7271	1.9315	1.7164	1.8313	2.1496
ดัชนีความสม่ำเสมอแหล่งกอนสัตว์	0.8778	0.7860	0.7773	0.6907	0.7370	0.8145

Sample Location : 1. สถานี 2342333-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อเย็น
2. สถานี 2342334-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
3. สถานี 2342335-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
4. สถานี 2342336-1 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
5. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
6. สถานี 2342338-1 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

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



(นางสาวกนกวรรณ ขาวต่อน)

ผู้วิเคราะห์



(นายอภกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงสัตว์น้ำ

รายงานผลการวิเคราะห์แหล่งกตอนสัตว์ (Zooplankton)

1. สถานี 2342333-1 : สถานี I บริเวณใกล้จุดสบน้ำเพื่อนำไปปล่อย

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอตัวใน Phylum Protozoa จำนวน 3 สกุล ใน Phylum Arthropoda จำนวน 1 กลุ่ม และใน Phylum Mollusca จำนวน 1 กลุ่ม รวมทั้งหมด 3 สกุล และ 2 กลุ่ม มีปริมาณ 117,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นดอตัวที่พบมากที่สุดคือ Copepod nauplius (ตัวอ่อนโคปีพอดระยะนาอพลีส) มีค่าดัชนีความหลากหลายของแมลงก้นดอตัวเท่ากับ 1.4127 และมีค่าดัชนีความสม่ำเสมอของแมลงก้นดอตัวเท่ากับ 0.8778 รายละเอียดสกุลกลุ่มและปริมาณแมลงก้นดอตัวที่วิเคราะห์ดังแสดงไว้ในตาราง

2. สถานี 2342334-1 : สถานี A อยู่ห่างจากกระดาน้ำ 500 เมตร

ทำการเก็บตัวอย่างแมลงก้นดอเมื่อวันที่ 3 พฤษภาคม 2566จากการศึกษาวิเคราะห์ตัวอย่างแมลงก้นดอสัตว์ใน Phylum Protozoa จำนวน 3 สกุล ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม ใน Phylum Echinodermata จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 4 สกุล และ 5 กลุ่ม มีปริมาณ 442,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นดอสัตว์ที่พบมากที่สุดคือ Pelecyod larvae (ตัวอ่อนของสองหาง) มีค่าดัชนีความหลากหลายของแมลงก้นดอสัตว์เท่ากับ 1.7271 และมีค่าดัชนีความสม่ำเสมอของแมลงก้นดอสัตว์เท่ากับ 0.7860 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก้นดอสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

3. สถานี 2342335-1 : สถานี D อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

ทำการเก็บตัวอย่างแมลงด่อนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบแมลงด่อนสัตว์ใน Phylum Protozoa จำนวน 6 สกุล ใน Phylum Rotifera จำนวน 1 สกุล ใน Phylum Annelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งพบ 8 สกุล และ 4 กลุ่ม มีปริมาณ 598,000 หน่วยต่อลูกบาศก์เมตร แมลงด่อนสัตว์ที่พบมากที่สุดคือ Pelecyod larvae (ตัวอ่อนหอยสองฝา) มีค่าดัชนีความหลากหลายของแมลงด่อนสัตว์เท่ากับ 1.9315 และมีค่าดัชนีความสม่ำเสมอของแมลงด่อนสัตว์เท่ากับ 0.7773 รายละเอียดสกุล/กลุ่มและปริมาณแมลงด่อนสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

4. สถานี 2342336-1 : สถานี O อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

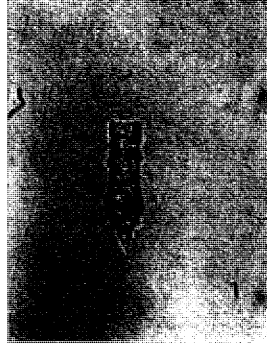
ทำการเก็บตัวอย่างแมลงก้นด่อนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวีดิโอว่าหอยแมลงก้นด่อนสัตว์ใน Phylum Protozoa จำนวน 5 สกุล ใน Phylum Rotifera จำนวน 2 สกุล ใน Phylum Annelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งพบ 8 สกุล และ 4 กลุ่ม มีปริมาณ 1,928,000 หน่วยต่อลูกบาศก์เมตร แมลงก้นด่อนสัตว์ที่พบบ่อยที่สุดคือ *Metacylis* sp. มีค่าดัชนีความหลากหลายของแมลงก้นด่อนสัตว์เท่ากับ 1.7164 และมีค่าดัชนีความสม่ำเสมอของแมลงก้นด่อนสัตว์เท่ากับ 0.6907 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก้นด่อนสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

5. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระยะป้ายนำทาง 1,000 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างแพลงก์ตอนสัตว์ใน Phylum Protozoa จำนวน 6 สกุล ใน Phylum Chaetognatha จำนวน 1 สกุล ใน Phylum Amelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 1 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 8 สกุล และ 4 กลุ่ม มีปริมาณ 1,092,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนสัตว์ที่พบมากที่สุดคือ Copepod nauplius (ตัวอ่อนโกฟ) พอดีระยะบนอพลีส มีค่าดัชนีความหลากหลายของแมลงก์ตอนสัตว์เท่ากับ 1.8313 และมีความซับซ้อนของแมลงก์ตอนสัตว์เท่ากับ 0.7370 รายละเอียดสกุล/กลุ่มและปริมาณแมลงก์ตอนสัตว์ที่วิเคราะห์ ดังแสดงไว้ในตาราง

6. สถานี 2342338-1 : สถานี C อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างแพลงก์ตอนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวีรหาระดับตัวอย่างพบแพลงก์ตอนสัตว์ใน Phylum Protozoa จำนวน 5 สกุล ใน Phylum Rotifera จำนวน 3 สกุล ใน Phylum Annelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 2 กลุ่ม ใน Phylum Mollusca จำนวน 2 กลุ่ม และใน Phylum Chordata จำนวน 1 สกุล รวมทั้งหมด 9 สกุล และมีปริมาณ 1,003,000 หน่วยต่อลูกบาศก์เมตร แพลงก์ตอนสัตว์ที่พบมากที่สุดคือ Copepod nauplius (ตัวอ่อนโคพีพอร์ระยะนาอพลีอัส) มีค่าดัชนีความหลากหลายของแพลงก์ตอนสัตว์เท่ากับ 2.1496 และมีค่าดัชนีความสม่ำเสมอของแพลงก์ตอนสัตว์เท่ากับ 0.8145 รายละเอียดสกุลกลุ่มและปริมาณแพลงก์ตอนสัตว์ที่วิเคราะห์ดังแสดงไว้ในตาราง



Tintinnopsis sp.

Pelecypod larvae



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

Client : GHECO-ONE COMPANY LIMITED

Address : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์น้ำดิน

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)					
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1	2342338-1
Phylum Annelida						
Class Polychaeta						
Order Capitellida						
Family Capitellidae					15	
<i>Heteromastus</i> sp. (ไส้เดือนทะเล)		30	-	-		-
Family Maldanidae						
<i>Euchlymene</i> sp. (ไส้เดือนทะเล)		119	-	-	-	-
Order Eunicida						
Family Eunicidae						
<i>Marphysa</i> sp. (ไส้เดือนทะเล)		60	30	-	15	134
Family Onuphidae						
<i>Diopatra</i> sp. (ไส้เดือนทะเล)		-	-	-	15	-
Order Orbiniida						
Family Orbiniidae						
<i>Scoloplos</i> sp. (ไส้เดือนทะเล)	-	119	89	15	-	15

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)					
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1	2342338-1
Order Phyllodoidea						
Family Glyceridae		15	-	15	-	-
<i>Glycera</i> sp. (ไส้เดือนทะเล)						
Family Nephtyidae						
<i>Nephtys</i> sp. (ไส้เดือนทะเล)	-	-	-	-	15	30
Family Nereididae						
<i>Nereis</i> sp. (เบรพัว)	-	-	-	15	-	-
Order Spionida						
Family Magelonidae						
<i>Magelona</i> sp. (ไส้เดือนทะเล)	-	-	-	-	45	30
Order Terebellida						
Family Ampharetidae						
<i>Ampharete</i> sp. (ไส้เดือนทะเล)	-	-	-	-	-	15
Phylum Arthropoda						
Class Malacostraca						
Order Amphipoda						
Family Ampeliscidae						
<i>Ampelisca</i> sp. (แอมพีพอด)	-	-	-	-	-	30
Order Decapoda						
Family Diogenidae						
<i>Diogenes</i> sp. (ปูเสฉวน)	-	-	-	-	15	15
Order Tanaidacea						
Family Leptocheilidae						
<i>Leptocheilia</i> sp. (พาโนดาเจียน)	15	-	-	-	15	-

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Phylum Mollusca					
Class Bivalvia					
Order Adapedonta					
Family Solenidae					
<i>Solen</i> sp. (หอยหลอด)	-	15	-	-	-
Order Myida					
Family Corbulidae					
<i>Corbula</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	104	-	15	-
Order Mytilida					
Family Mytilidae					
<i>Musculista</i> sp. (หอยกะพง)	-	89	-	-	30
Order Nuculanida					
Family Nuculanidae					
<i>Nuculana</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	-	-	45
Order Venerida					
Family Tellinidae					
<i>Tellina</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	15	15	15
Family Veneridae					
<i>Circe</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	-	-	15
<i>Dosinia</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	-	-	15
<i>Sinetta</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	15	-	-	-
Phylum Echinodermata					
Class Holothuroidea					
Order Holothuriida					
Family Holothuriidae					
<i>Holothuria</i> sp. (ปลิงทะเล)	-	-	-	-	15

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)
(ต่อ)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)				
	2342333-1	2342334-1	2342335-1	2342336-1	2342337-1
Class Ophiuroidea					
Order Amphilepididae					
Family Ophiotrichidae					
<i>Ophiotrix</i> sp. (ตาปลา)	30	-	15	-	15
Phylum Chordata					
Class Leptocardii					
Order Amphioxiformes					
Family Branchiostomatidae					
<i>Branchiostoma</i> sp. (แอมฟิออกซ์)	-	-	-	-	15
ชนิดสัตว์น้ำดิน	2	9	4	5	11
ปริมาณสัตว์น้ำดิน	45	566	149	75	240
ค่าดัชนีความหลากหลายสัตว์น้ำดิน	0.6365	1.9402	1.0928	1.6094	2.2740
					2.0982

Sample Location : 1. สถานี 2342333-1 : สถานี I บริเวณใกล้จุดสูบน้ำเพื่อนำไปหล่อเย็น
2. สถานี 2342334-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
3. สถานี 2342335-1 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
4. สถานี 2342336-1 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
5. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
6. สถานี 2342338-1 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

Condition of Sample : contained in one plastic zip bag

ดร.ณัฏฐ์ นิลวาล
(นายอรรถวุฒิ กันทะวงศ์)
ผู้วิเคราะห์

ดร.ณัฏฐ์ นิลวาล
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

รายงานผลการวิเคราะห์สัตว์น้ำดิน (Benthos)

จากการวิเคราะห์ตัวอย่างสัตว์น้ำดิน เก็บตัวอย่างเมื่อวันที่ 3 พฤษภาคม 2566 (จำนวน 6 สถานี) พบสัตว์น้ำดินจำนวน 4 Phylum ประกอบด้วย Annelida, Arthropoda, Mollusca, Echinodermata และ Chordata ปริมาณสัตว์น้ำดิน มีค่าอยู่ในช่วง 45-344 ตัวต่อตารางเมตร รายละเอียดการกระจายและปริมาณสัตว์น้ำดินในแต่ละสถานีมีดังนี้

1. สถานี 2342333-1 : สถานี 1 บริเวณใกล้จุดสูบน้ำเพื่อนำไปปล่อย

พบสัตว์น้ำดินจำนวน 2 Phylum ประกอบด้วย Phylum Arthropoda พบ 1 สกุล ได้แก่ *Leptochelia* sp. (ขาในดาเซียม) จำนวน 15 ตัวต่อตารางเมตร และ Phylum Echinodermata พบ 1 สกุล ได้แก่ *Ophiolithrix* sp. (ดาวทะเล) จำนวน 30 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 0.6365

2. สถานี 2342334-1 : สถานี A อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 2 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Heteromastus* sp. (ไส้เดือนทะเล), *Eteclymene* sp. (ไส้เดือนทะเล), *Marphysa* sp. (ไส้เดือนทะเล), *Scoloplos* sp. (ไส้เดือนทะเล) และ *Glycera* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 30, 119, 60, 119 และ 15 ตัวต่อตารางเมตร ตามลำดับ และ Phylum Mollusca พบ 4 สกุล ได้แก่ *Solen* sp. (หอยหลอด), *Corbula* sp. (หอยสองฝาชนิดหนึ่ง), *Musculista* sp. (หอยกะพง) และ *Sunetta* sp. (หอยสองฝาชนิดหนึ่ง) จำนวนสกุลละ 15, 104, 89 และ 15 ตัวต่อตารางเมตร ตามลำดับ ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.9402

3. สถานี 2342335-1 : สถานี D อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 3 Phylum ประกอบด้วย Phylum Annelida พบ 2 สกุล ได้แก่ *Marphysa* sp. (ไส้เดือนทะเล) และ *Scoloplos* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 30 และ 89 ตัวต่อตารางเมตร ตามลำดับ Phylum Mollusca พบ 1 สกุล ได้แก่ *Tellina* sp. (หอยสองฝาชนิดหนึ่ง) จำนวน 15 ตัวต่อตารางเมตร และ Phylum Echinodermata พบ 1 สกุล ได้แก่ *Ophiolithrix* sp. (ดาวทะเล) จำนวน 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.0928

4. สถานี 2342336-1 : สถานี O อยู่ห่างจากจุดระบายน้ำถึง 500 เมตร

พบสัตว์น้ำดินจำนวน 2 Phylum ประกอบด้วย Phylum Annelida พบ 3 สกุล ได้แก่ *Scoloplos* sp. (ไส้เดือนทะเล), *Glycera* sp. (ไส้เดือนทะเล) และ *Nereis* sp. (เมมพริง) จำนวนสกุลละ 15 ตัวต่อตารางเมตร และ Phylum Mollusca พบ 2 สกุล ได้แก่ *Corbula* sp. (หอยสองฝาชนิดหนึ่ง) และ *Tellina* sp. (หอยสองฝาชนิดหนึ่ง) จำนวนสกุลละ 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 1.6094

5. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

พบสัตว์น้ำดินจำนวน 4 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Heteromastus* sp. (ไส้เดือนทะเล), *Marphysa* sp. (ไส้เดือนทะเล), *Diopatra* sp. (ไส้เดือนทะเล), *Nephtys* sp. (ไส้เดือนทะเล) และ *Magelona* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 15, 15, 15, 15 และ 45 ตัวต่อตารางเมตร ตามลำดับ Phylum Arthropoda พบ 2 สกุล ได้แก่ *Diogenes* sp. (ปูเสฉวน) และ *Leptochelia* sp. (ขาในดาเซียม) จำนวนสกุลละ 15 ตัวต่อตารางเมตร Phylum Mollusca พบ 3 สกุล ได้แก่ *Musculista* sp. (หอยกะพง), *Niculana* sp. (หอยสองฝาชนิดหนึ่ง) และ *Tellina* sp. (หอยสองฝาชนิดหนึ่ง) จำนวนสกุลละ 30, 45 และ 15 ตัวต่อตารางเมตร ตามลำดับ และ Phylum Chordata พบ 1 สกุล ได้แก่ *Branchiostoma* sp. (แอมฟิออกจัส) จำนวน 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 2.2740

6. สถานี 2342338-1 : สถานี C อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

พบสัตว์น้ำดินจำนวน 5 Phylum ประกอบด้วย Phylum Annelida พบ 5 สกุล ได้แก่ *Marphysa* sp. (ไส้เดือนทะเล), *Scoloplos* sp. (ไส้เดือนทะเล), *Nephtys* sp. (ไส้เดือนทะเล), *Magelona* sp. (ไส้เดือนทะเล) และ *Ampharete* sp. (ไส้เดือนทะเล) จำนวนสกุลละ 134, 15, 30, 30 และ 15 ตัวต่อตารางเมตร ตามลำดับ Phylum Arthropoda พบ 2 สกุล ได้แก่ *Ampelisca* sp. (แอมฟิพอด) และ *Diogenes* sp. (ปูเสฉวน) จำนวนสกุลละ 30 และ 15 ตัวต่อตารางเมตร ตามลำดับ Phylum Mollusca พบ 2 สกุล ได้แก่ *Circe* sp. (หอยสองฝาชนิดหนึ่ง) และ *Dosinia* sp. (หอยสองฝาชนิดหนึ่ง) จำนวนสกุลละ 15 ตัวต่อตารางเมตร Phylum Echinodermata พบ 2 สกุล ได้แก่ *Holothuria* sp. (ปลิงทะเล) และ *Ophiolithrix* sp. (ดาวทะเล) จำนวนสกุลละ 15 ตัวต่อตารางเมตร และ Phylum Chordata พบ 1 สกุล ได้แก่ *Branchiostoma* sp. (แอมฟิออกจัส) จำนวน 15 ตัวต่อตารางเมตร ค่าดัชนีความหลากหลายของสัตว์น้ำดินในสถานีนี้มีค่าเท่ากับ 2.0982



Corbula sp.



Niculana sp.



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

Client : GHECO-ONE COMPANY LIMITED
Address : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand, 21150
Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน
ตาราง ผลการวิเคราะห์สัตว์น้ำวัยอ่อน (เก็บตัวอย่างวันที่ 3 พฤษภาคม 2566)

กลุ่มของสัตว์น้ำวัยอ่อน		ปริมาณสัตว์น้ำวัยอ่อน (หน่วยต่อลูกบาศก์เมตร)
	2342333-I	2342337-I
Phylum Annelida		
Class Polychaeta		
Polychaete larvae (ตัวอ่อน ไข่เคียนทะเล)	-	150,000
Phylum Arthropoda		
Class Crustacea		
Subclass Copepoda		
Copepod nauplii (ตัวอ่อน โคพีพอดระยะเนอพลีต)	45,000	376,000
Phylum Mollusca		
Class Bivalvia		
Pelecypod larvae (ตัวอ่อน หอยสองฝา)	36,000	225,000
จำนวนกลุ่มของสัตว์น้ำวัยอ่อนทั้งหมด	2	3
ปริมาณของสัตว์น้ำวัยอ่อนทั้งหมด	81,000	751,000

Sample Location : 1. สถานี 2342333-I : สถานี 1 บริเวณใกล้จุดสูบน้ำเพื่อนำไปปล่อย
2. สถานี 2342337-I : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

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


(นางสาวกนกวรรณ ขาวค้อน)
ผู้วิเคราะห์


(นายอรรถกมล อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน (Aquatic larvae)

1. สถานี 2342333-1 : สถานีบริเวณใกล้จุดสูบน้ำเพื่อนำไปปล่อย

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Arthropoda จำนวน 1 กลุ่ม และใน Phylum Mollusca จำนวน 1 กลุ่ม รวมทั้งหมด 2 กลุ่ม มีปริมาณรวมทั้งหมด 81,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง

2. สถานี 2342337-1 : สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 3 พฤษภาคม 2566 จากการศึกษาวิเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Annelida จำนวน 1 กลุ่ม ใน Phylum Arthropoda จำนวน 1 กลุ่ม และใน Phylum Mollusca จำนวน 1 กลุ่ม รวมทั้งหมด 3 กลุ่ม มีปริมาณรวมทั้งหมด 751,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง



Polychaete larvae

ภาคผนวก ค-8

อาชีพอนามัยและความปลอดภัย

ความร้อน



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Mar 31, 2023

Date Reported : Apr 04, 2023

Report Number: 2592618-1

Lot ID: 2321547

Date Received : Mar 31, 2023

Date Reported : Apr 04, 2023

Report Number: 2592618-1

Project Name :

Project Location :

Page 1 of 2

Sample Number	2321547-1
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Mar 30, 2023
Measurement by	Tarin Ootjinda
Location	บริเวณงาน 1 ชั้น (ค่า-บรรยากาศ อุณหภูมิ : - แสง : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อาคารแม่ข่าย	120	27.3	26.1	30.0	30.0
Average (WBGT)		27.3			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salanteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Date Received : Mar 31, 2023

Date Reported : Apr 04, 2023

Report Number: 2592618-1

Lot ID: 2321547

Project Name :

Project Location :

Page 2 of 2

Sample Number	2321547-2
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Mar 30, 2023
Measurement by	Tarin Ootjinda
Location	บริเวณงาน 1 ชั้น (ค่า-บรรยากาศ อุณหภูมิ : - แสง : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Steam turbine	120	29.0	27.5	32.5	32.4
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salanteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCO-ONE

Lot ID: 2342012

Date Received : May 18, 2023
Date Reported : May 22, 2023
Report Number: 2623778-1

Page 1 of 2

Sample Number	2342012-1				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	May 17, 2023				
Measurement by	Tarin Oajinda				
Location	บริเวณด้าน 1 ชั้น (ผ้าขนหนูในห้องน้ำ : อุณหภูมิ : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Steam turbine	120	28.0	26.6	31.4	31.1
Average (WBGT)		28.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salameh
Section Head

Approved by

Wichan Chonharat

Wichan Chonharat
Assistant Manager

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S:\Report\Air Heat\yl (725094)



Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHCO-ONE

Lot ID: 2342012

Date Received : May 18, 2023
Date Reported : May 22, 2023
Report Number: 2623778-1

Page 2 of 2

Sample Number	2342012-2				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	May 17, 2023				
Measurement by	Tarin Oajinda				
Location	บริเวณด้าน 1 ชั้น (ผ้าขนหนูในห้องน้ำ : อุณหภูมิ : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อากาศในห้อง	120	29.4	27.8	33.1	33.0
Average (WBGT)		29.4			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salameh
Section Head

Approved by

Wichan Chonharat

Wichan Chonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328405

Date Received : Apr 03, 2023

Date Reported : Apr 21, 2023

Report Number : 2627716-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Guideline Limit	Comment
Spot - อาคาร : 1st Floor : Steam Turbine										
1	2328405-1	30 Mar 2023	Day time	1	614	-	200-300	-	-	Pass
1	2328405-2	30 Mar 2023	Night time	1	252	-	200-300	-	-	Pass

Measurement by : Natthapon Jitwarewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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

Technical Management

Supt S.

Supot Salameeh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 15 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328421

Date Received : Mar 31, 2023

Date Reported : Apr 21, 2023

Report Number : 2627720-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Guideline Limit	Comment
Spot - อาคาร : 2nd Floor : Steam Turbine										
1	2328421-1	30 Mar 2023	Day time	1	318	-	200-300	-	-	Pass
1	2328421-2	30 Mar 2023	Night time	1	241	-	200-300	-	-	Pass

Measurement by : Natthapon Jitwarewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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

Technical Management

Supt S.

Supot Salameeh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328422

Date Received : Apr 03, 2023

Date Reported : Apr 21, 2023

Report Number : 2627722-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Guideline Limit	Comment
-------------	------------------	------------------	------------------	----------------	------------------------	---------	----------	---------	-----------------	---------

Spot - อาคาร : 3rd Floor : Steam Turbine

1	2328422-1	30 Mar 2023	Day time	1	312	-	200-300	-	-	Pass
1	2328422-2	30 Mar 2023	Night time	1	201	-	200-300	-	-	Pass

Measurement by : Natthapon Jitwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328423

Date Received : Apr 04, 2023

Date Reported : Apr 21, 2023

Report Number : 2627725-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Guideline Limit	Comment
-------------	------------------	------------------	------------------	----------------	------------------------	---------	----------	---------	-----------------	---------

Spot - อาคาร : 3rd Floor : Boiler Cool Feed

1	2328423-1	30 Mar 2023	Day time	1	667	-	200-300	-	-	Pass
1	2328423-2	30 Mar 2023	Night time	1	243	-	200-300	-	-	Pass

Measurement by : Natthapon Jitwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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

Supt S

Technical Management

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

Technical Management

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Lot ID: 2328424

Client : GHECO-ONE COMPANY LIMITED
11, F5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารควบคุม : Control Room									
1	2328424-1	30 Mar 2023	Day time	1	580	-	400-500	-	Pass
1	2328424-2	30 Mar 2023	Night time	1	640	-	400-500	-	Pass

Measurement by : Nathapon Jitwarewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Page 1 of 1



Analysis / Test Report

Lot ID: 2328425

Client : GHECO-ONE COMPANY LIMITED
11, F5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารควบคุม : 1st Floor : Front of Tool Room									
1	2328425-1	30 Mar 2023	Day time	1	501	-	200-300	-	Pass
1	2328425-2	30 Mar 2023	Night time	1	463	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Desk in Maintenance Room No.2									
2	2328425-3	30 Mar 2023	Day time	1	798	-	200-300	-	Pass
2	2328425-4	30 Mar 2023	Night time	1	569	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Desk in Maintenance Room No.1									
3	2328425-5	30 Mar 2023	Day time	1	814	-	200-300	-	Pass
3	2328425-6	30 Mar 2023	Night time	1	593	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Test Motor									
4	2328425-7	30 Mar 2023	Day time	1	612	-	200-300	-	Pass
4	2328425-8	30 Mar 2023	Night time	1	456	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Maintenance Room									
5	2328425-9	30 Mar 2023	Day time	1	892	-	200-300	-	Pass
5	2328425-10	30 Mar 2023	Night time	1	554	-	200-300	-	Pass

Measurement by : Nathapon Jitwarewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Page 1 of 1

Supt S.

Technical Management
Support Salamteh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Technical Management
Support Salamteh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ts Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2352290
Date Received : May 19, 2023
Date Reported : May 25, 2023
Report Number : 2660866-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Comment
Spot - อาคารชั้น : 1st Floor : Steam Turbine									
1	2352290-1	17 May 2023	Day time	1	205	-	200-300	-	Pass
1	2352290-2	17 May 2023	Night time	1	203	-	200-300	-	Pass

Measurement by : Noranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ts Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2353334
Date Received : May 19, 2023
Date Reported : May 25, 2023
Report Number : 2660868-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Spot/Min	Average	Comment
Spot - อาคารชั้น : 2nd Floor : Steam Turbine									
1	2353334-1	17 May 2023	Day time	1	371	-	200-300	-	Pass
1	2353334-2	17 May 2023	Night time	1	201	-	200-300	-	Pass

Measurement by : Noranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Supt S

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

Technical Management

Supt S

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED
P/O : GLOW-OM-22-103
Project Name :
Date Received : May 19, 2020
Date Reported : May 25, 2020
Report Number : 2660870-1
Lot ID: 23533335

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot Average	Guideline Limit Spot/Min Average	Comment
-------------	------------------	------------------	------------------	----------------	--------------------------------------	--	---------

	Spot - การหมุนไฟ : 3rd Floor : Steam Turbine		
1	2353335-1	Day time	1 290 - 200-300 - Pass
1	2353335-2	Night time	1 201 - 200-300 - Pass

Measurement by: Noranon Tathongtham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline: Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol. 135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supt S.

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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TEL +66 0 2760 3198 E-MAIL AUS@AUSLABGROUP.THAILAND.COM TEL +66 0 2760 3199



Analysis / Test Report

Lot ID: 2353337

Client : GHECO-ONE COMPANY LIMITED
11, 1/5 Road, Map Ta Phut, Muang, Rayong, Thailand 21150
P/O : GLOW-OM-22-103
Date Received : May 19, 2023
Date Reported : May 25, 2023
Report Number : 2660874-1

Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Average	Comment
Spot - อาคารควบคุม : Control Room									
1	2353337-1	17 May 2023	Day time	1	591	-	400-500	-	Pass
1	2353337-2	17 May 2023	Night time	1	575	-	400-500	-	Pass

Measurement by : Noranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Lot ID: 2353338

Client : GHECO-ONE COMPANY LIMITED
11, 1/5 Road, Map Ta Phut, Muang, Rayong, Thailand 21150
P/O : GLOW-OM-22-103
Date Received : May 17, 2023
Date Reported : May 25, 2023
Report Number : 2660876-1

Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux) Spot	Average	Guideline Limit Spot/Min	Average	Comment
Spot - อาคารควบคุม : 1st Floor : Front of Tool Room									
1	2353338-1	17 May 2023	Day time	1	643	-	200-300	-	Pass
1	2353338-2	17 May 2023	Night time	1	633	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Desk in Maintenance Room No.2									
2	2353338-3	17 May 2023	Day time	1	842	-	200-300	-	Pass
2	2353338-4	17 May 2023	Night time	1	378	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Desk in Maintenance Room No.1									
3	2353338-5	17 May 2023	Day time	1	730	-	200-300	-	Pass
3	2353338-6	17 May 2023	Night time	1	580	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Test Motor									
4	2353338-7	17 May 2023	Day time	1	659	-	200-300	-	Pass
4	2353338-8	17 May 2023	Night time	1	240	-	200-300	-	Pass
Spot - อาคารควบคุม : 1st Floor : Maintenance Room									
5	2353338-9	17 May 2023	Day time	1	700	-	200-300	-	Pass
5	2353338-10	17 May 2023	Night time	1	572	-	200-300	-	Pass

Measurement by : Noranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Supt S

Technical Management

Support Salamatih
Section Head

Approved by

Wichan Choonharat

Assistant Manager

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Assistant Manager

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ระดับเสียงเฉลี่ย 8 ชั่วโมง



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615093-1

Page 1 of 1

Sample Number	231766-1
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	Mar 27, 2023
Measurement by	Tarin Ootinda
Time	
09:00 AM - 10:00 AM	77.7
10:00 AM - 11:00 AM	77.4
11:00 AM - 12:00 PM	77.1
12:00 PM - 01:00 PM	77.1
01:00 PM - 02:00 PM	77.2
02:00 PM - 03:00 PM	77.6
03:00 PM - 04:00 PM	77.6
04:00 PM - 05:00 PM	81.3
Leq Average 8 hrs. (dB(A))	70.4
Lmax (dB(A))	81.3
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดเสียง	
ในการประกอบกิจการโรงงานที่มีผลกระทบต่อสิ่งแวดล้อมในการทำงาน พ.ศ.๒๕๖๑	

Technical Management

Thanitak.

Thanita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615094-1

Page 1 of 1

Sample Number	231766-2
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	Mar 28, 2023
Measurement by	Tarin Ootinda
Time	
09:00 AM - 10:00 AM	70.4
10:00 AM - 11:00 AM	77.9
11:00 AM - 12:00 PM	77.6
12:00 PM - 01:00 PM	77.5
01:00 PM - 02:00 PM	77.6
02:00 PM - 03:00 PM	77.5
03:00 PM - 04:00 PM	89.0
04:00 PM - 05:00 PM	77.8
Leq Average 8 hrs. (dB(A))	70.4
Lmax (dB(A))	89.0
Standard (dB(A))	140
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดเสียง	
ในการประกอบกิจการโรงงานที่มีผลกระทบต่อสิ่งแวดล้อมในการทำงาน พ.ศ.๒๕๖๑	

Technical Management

Thanitak.

Thanita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise pr (3:24PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615095-1

Page 1 of 1

Sample Number	231766-3
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	Mar 29, 2023
Measurement by	Tarin Oajinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	71.2	78.2	70.0
10:00 AM - 11:00 AM	70.7	77.8	69.8
11:00 AM - 12:00 PM	70.3	77.6	69.7
12:00 PM - 01:00 PM	70.1	77.9	69.5
01:00 PM - 02:00 PM	70.6	78.1	69.7
02:00 PM - 03:00 PM	70.8	78.9	69.9
03:00 PM - 04:00 PM	70.5	77.9	69.9
04:00 PM - 05:00 PM	70.3	77.6	69.6

Leq Average 8 hrs. (dB(A))	70.6
Lmax (dB(A))	86.9
Standard (dB(A))	90
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงสาธารณสุข เรื่อง มาตรฐานการประเมินค่ามลพิษทางเสียง ในการปฏิบัติงานโรงงานอุตสาหกรรมและการจราจร พ.ศ.๒๕๕๙

Technical Management

Tharitat.

Approved by

Supt S.

Thanita Kulsuriwong
Scientist (4)

Supot Salameh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615095-1

Page 1 of 1

Sample Number	231766-4
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	Mar 30, 2023
Measurement by	Tarin Oajinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	70.7	88.7	69.9
10:00 AM - 11:00 AM	70.8	78.1	70.0
11:00 AM - 12:00 PM	70.8	77.6	70.2
12:00 PM - 01:00 PM	71.6	80.7	70.9
01:00 PM - 02:00 PM	72.7	78.7	71.8
02:00 PM - 03:00 PM	74.4	90.9	72.0
03:00 PM - 04:00 PM	71.6	78.6	70.7
04:00 PM - 05:00 PM	70.7	78.4	70.0

Leq Average 8 hrs. (dB(A))	71.9
Lmax (dB(A))	90.9
Standard (dB(A))	140
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงสาธารณสุข เรื่อง มาตรฐานการประเมินค่ามลพิษทางเสียง ในการปฏิบัติงานโรงงานอุตสาหกรรมและการจราจร พ.ศ.๒๕๕๙

Technical Management

Tharitat.

Approved by

Supt S.

Thanita Kulsuriwong
Scientist (4)

Supot Salameh
Section Head

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P/O : GLOW-OM-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615097-1

Page 1 of 1

Sample Number	231766-5		
Parameter	Noise (Leq 8 hrs.)		
Location	Pump Station		
Measurement Date	Mar 31, 2023		
Measurement by	Tarin Ootjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	70.9	78.4	69.9
10:00 AM - 11:00 AM	70.4	77.8	69.7
11:00 AM - 12:00 PM	70.4	77.1	69.7
12:00 PM - 01:00 PM	70.4	77.7	69.7
01:00 PM - 02:00 PM	70.6	78.1	69.8
02:00 PM - 03:00 PM	70.5	77.4	69.9
03:00 PM - 04:00 PM	70.7	78.1	70.2
04:00 PM - 05:00 PM	70.8	77.8	70.4

Technical Management

Thanitak.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615098-1

Page 1 of 1

Sample Number	231766-6		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler		
Measurement Date	Mar 27, 2023		
Measurement by	Tarin Ootjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.9	75.8	62.8
10:00 AM - 11:00 AM	62.7	68.4	62.1
11:00 AM - 12:00 PM	62.5	66.7	61.8
12:00 PM - 01:00 PM	63.2	81.6	62.0
01:00 PM - 02:00 PM	62.6	79.3	61.9
02:00 PM - 03:00 PM	62.5	68.0	62.0
03:00 PM - 04:00 PM	62.7	65.9	62.1
04:00 PM - 05:00 PM	63.3	80.6	61.9

Technical Management

Thanitak.

Thanita Kulsurwong

Scientist (4)

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Supt S.

Supot Salameh

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615099-1

Page 1 of 1

Sample Number	231766-7
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Mar 28, 2023
Measurement by	Tarin Octjinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	64.3 68.8 63.5
10:00 AM - 11:00 AM	62.8 71.8 61.9
11:00 AM - 12:00 PM	62.3 67.7 61.8
12:00 PM - 01:00 PM	62.4 77.1 61.7
01:00 PM - 02:00 PM	62.1 61.7 61.7
02:00 PM - 03:00 PM	62.3 65.7 61.7
03:00 PM - 04:00 PM	62.5 67.5 61.9
04:00 PM - 05:00 PM	62.5 64.8 61.9
Leq Average 8 hrs. (dB(A))	62.7
Lmax (dB(A))	77.1
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประเทศพหุภาษากรม (ตั้ง มาตราฐานตามมาตรฐานไอเอส) ตามประกาศกรมโรงงานอุตสาหกรรมว่าด้วยการควบคุมค่าเสียง พ.ศ.๒๕๖๑	



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615100-1

Page 1 of 1

Sample Number	231766-8
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Mar 29, 2023
Measurement by	Tarin Octjinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	76.5 99.1 63.4
10:00 AM - 11:00 AM	63.9 76.4 62.1
11:00 AM - 12:00 PM	62.1 65.6 61.6
12:00 PM - 01:00 PM	63.9 68.9 62.1
01:00 PM - 02:00 PM	64.1 69.2 63.4
02:00 PM - 03:00 PM	63.2 70.4 62.3
03:00 PM - 04:00 PM	62.3 64.4 61.7
04:00 PM - 05:00 PM	62.5 65.0 61.7
Leq Average 8 hrs. (dB(A))	68.7
Lmax (dB(A))	99.1
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประเทศพหุภาษากรม (ตั้ง มาตราฐานตามมาตรฐานไอเอส) ตามประกาศกรมโรงงานอุตสาหกรรมว่าด้วยการควบคุมค่าเสียง พ.ศ.๒๕๖๑	

Technical Management

Tharitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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Technical Management

Tharitak.

Thanita Kulsuriwong
Scientist (4)

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Supt S.

Supot Salameh
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Analysis / Test Report

Client : GHCO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHCO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615101-1

Page 1 of 1

Sample Number	231766-9		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Ootjinda		
	Time	Leq (dB(A))	Lmax (dB(A))
	09:00 AM - 10:00 AM	62.5	65.0
	10:00 AM - 11:00 AM	62.8	76.0
	11:00 AM - 12:00 PM	62.4	70.5
	12:00 PM - 01:00 PM	61.8	64.1
	01:00 PM - 02:00 PM	62.5	67.5
	02:00 PM - 03:00 PM	65.5	84.4
	03:00 PM - 04:00 PM	62.0	64.3
	04:00 PM - 05:00 PM	62.0	65.6
			61.7
			62.0
			61.6
			61.4
			61.7
			61.7
			61.5
			61.5

Technical Management

Tharitat.

Approved by

Supt S.

Supot Salameh

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Client : GHCO-ONE COMPANY LIMITED

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P/O : GLOW-QM-22-103

Project Name :

Project Location : GHCO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615102-1

Page 1 of 1

Sample Number	231766-10		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler		
Measurement Date	Mar 31, 2023		
Measurement by	Tarin Ootjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.3	66.2	62.7
10:00 AM - 11:00 AM	63.5	67.7	62.9
11:00 AM - 12:00 PM	62.9	64.8	62.3
12:00 PM - 01:00 PM	62.6	68.1	61.9
01:00 PM - 02:00 PM	62.4	71.4	61.8
02:00 PM - 03:00 PM	62.2	66.6	61.7
03:00 PM - 04:00 PM	62.0	65.6	61.5
04:00 PM - 05:00 PM	62.3	66.8	61.7

Technical Management

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Supot Salameh

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615103-1

Page 1 of 1

Sample Number	231766-11			
Parameter	Noise (Leq 8 hrs.)			
Location	Turbine			
Measurement Date	Mar 27, 2023			
Measurement by	Tarin Ootinda			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM	79.1	85.1	78.8	
10:00 AM - 11:00 AM	79.0	79.9	78.8	
11:00 AM - 12:00 PM	78.9	79.9	78.7	
12:00 PM - 01:00 PM	78.9	79.8	78.7	
01:00 PM - 02:00 PM	78.9	79.9	78.7	
02:00 PM - 03:00 PM	79.0	79.8	78.8	
03:00 PM - 04:00 PM	79.0	80.0	78.8	
04:00 PM - 05:00 PM	79.1	82.2	78.8	

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและประเมินค่าเสียง

ในการประเมินค่าการรบกวนเสียงในสถานที่ทำงาน พ.ศ.๒๕๖๕



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615104-1

Page 1 of 1

Sample Number	231766-12			
Parameter	Noise (Leq 8 hrs.)			
Location	Turbine			
Measurement Date	Mar 28, 2023			
Measurement by	Tarin Ootinda			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM	79.2	80.6	79.0	
10:00 AM - 11:00 AM	79.2	80.2	79.0	
11:00 AM - 12:00 PM	79.1	80.0	78.9	
12:00 PM - 01:00 PM	79.1	80.0	78.9	
01:00 PM - 02:00 PM	79.0	80.1	78.8	
02:00 PM - 03:00 PM	79.0	80.0	78.9	
03:00 PM - 04:00 PM	79.1	80.1	78.9	
04:00 PM - 05:00 PM	79.2	80.2	79.0	

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและประเมินค่าเสียง

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Technical Management

Tharitat.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615105-1

Page 1 of 1

Sample Number	231766-13				
Parameter	Noise (Leq 8 hrs.)				
Location	Turbine				
Measurement Date	Mar 29, 2023				
Measurement by	Tarin Ocjinda				
Time		Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM		76.7	78.1	76.5	
10:00 AM - 11:00 AM		76.7	78.1	76.5	
11:00 AM - 12:00 PM		76.7	78.1	76.5	
12:00 PM - 01:00 PM		76.6	77.9	76.4	
01:00 PM - 02:00 PM		76.6	77.9	76.4	
02:00 PM - 03:00 PM		76.6	77.8	76.5	
03:00 PM - 04:00 PM		76.7	77.9	76.5	
04:00 PM - 05:00 PM		76.7	77.9	76.5	
Leq Average 8 hrs. (dB(A))		76.7			
Lmax (dB(A))			78.1		
Standard (dB(A))		90	140		
Reference Method	: ISO1996-1 and 1996-2				
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการสุ่มตรวจสอบค่าเฉลี่ย ในการประกาศการรับรองค่า/ผลการตรวจวัดค่าในโรงงาน พ.ศ.๒๕๖๓				

Technical Management

Thanitak.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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S:\Reports_Air Noise.m (3:27PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615106-1

Page 1 of 1

Sample Number	231766-14				
Parameter	Noise (Leq 8 hrs.)				
Location	Turbine				
Measurement Date	Mar 30, 2023				
Measurement by	Tarin Ocjinda				
Time		Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM		76.6	78.2	76.4	
10:00 AM - 11:00 AM		76.6	78.1	76.4	
11:00 AM - 12:00 PM		76.6	77.9	76.4	
12:00 PM - 01:00 PM		76.6	78.3	76.4	
01:00 PM - 02:00 PM		76.8	91.4	76.4	
02:00 PM - 03:00 PM		76.7	78.1	76.4	
03:00 PM - 04:00 PM		76.7	78.0	76.4	
04:00 PM - 05:00 PM		76.7	78.1	76.4	
Leq Average 8 hrs. (dB(A))		76.7			
Lmax (dB(A))			91.4		
Standard (dB(A))		90	140		
Reference Method	: ISO1996-1 and 1996-2				
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการสุ่มตรวจสอบค่าเฉลี่ย ในการประกาศการรับรองค่า/ผลการตรวจวัดค่าในโรงงาน พ.ศ.๒๕๖๓				

Technical Management

Thanitak.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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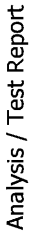


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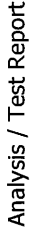
Project Location : GHECO-ONE

Report Number: 2615107-1

Leq Average 8 hrs. (dB(A))	76.6
Lmax (dB(A))	78.1
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมเสียง ในการประกอบกิจการโรงงานเกี่ยวกับค่าระดับเสียงในการทำงาน พ.ศ.๒๕๔๖	

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S:\Reports\ Air Noise.rpt (3:28PM)



Project Name :

Report Number: 2615108-1

Leq Average 8 hrs. (dB(A))	64.7
Lmax (dB(A))	80.6
Standard (dB(A))	90
Standard (dB(A))	140

Reference Method : ISO1996-1 and 1996-2
 Standard : กรมการขนส่งทางบก (กรมการขนส่งทางบก) (กรมการขนส่งทางบก)
 ในการประเมินการรับฟังเสียงเกี่ยวกับเสียงรบกวนจากการทำงาน พ.ศ.๒๕๕๖

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S:\Reports\ Air Noise.rpt (3:28PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615109-1

Page 1 of 1

Sample Number	231766-17
Parameter	Noise (Leq 8 hrs.)
Location	อาคารต้นตื้น
Measurement Date	Mar 28, 2023
Measurement by	Tarin Ocjinda
Time	
09:00 AM - 10:00 AM	72.6
10:00 AM - 11:00 AM	64.3
11:00 AM - 12:00 PM	63.8
12:00 PM - 01:00 PM	66.9
01:00 PM - 02:00 PM	76.5
02:00 PM - 03:00 PM	64.0
03:00 PM - 04:00 PM	64.5
04:00 PM - 05:00 PM	72.7
Leq Average 8 hrs. (dB(A))	67.2
Lmax (dB(A))	64.6
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดระดับความดังเสียงในที่ทำงาน พ.ศ.๒๕๔๖	
ในการประเมินค่าการรับฟังเสียงในที่ทำงานต้องปฏิบัติตามกฎหมาย พ.ศ.๒๕๔๖	

Technical Management

Thanitak.

Thantita Kulsuriwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OW-22-103

Project Name : GHECO-ONE

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615110-1

Page 1 of 1

Sample Number	231766-18
Parameter	Noise (Leq 8 hrs.)
Location	อาคารต้นตื้น
Measurement Date	Mar 29, 2023
Measurement by	Tarin Ocjinda
Time	
09:00 AM - 10:00 AM	65.3
10:00 AM - 11:00 AM	65.1
11:00 AM - 12:00 PM	64.8
12:00 PM - 01:00 PM	64.8
01:00 PM - 02:00 PM	64.8
02:00 PM - 03:00 PM	64.8
03:00 PM - 04:00 PM	65.3
04:00 PM - 05:00 PM	65.3
Leq Average 8 hrs. (dB(A))	65.0
Lmax (dB(A))	75.3
Standard (dB(A))	140
Reference Method : ISO1996-1 and 1996-2	
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดระดับความดังเสียงในที่ทำงาน พ.ศ.๒๕๔๖	
ในการประเมินค่าการรับฟังเสียงในที่ทำงานต้องปฏิบัติตามกฎหมาย พ.ศ.๒๕๔๖	

Technical Management

Thanitak.

Thantita Kulsuriwong

Scientist (4)

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Supot Salameh

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615111-1

Page 1 of 1

Sample Number	231766-19
Parameter	Noise (Leq 8 hrs.)
Location	อาคารด้านซ้าย
Measurement Date	Mar 30, 2023
Measurement by	Tarin Oajinda
Time	
09:00 AM - 10:00 AM	64.2
10:00 AM - 11:00 AM	63.9
11:00 AM - 12:00 PM	63.7
12:00 PM - 01:00 PM	63.8
01:00 PM - 02:00 PM	65.4
02:00 PM - 03:00 PM	63.8
03:00 PM - 04:00 PM	63.9
04:00 PM - 05:00 PM	64.6
Leq Average 8 hrs. (dB(A))	64.2
Lmax (dB(A))	80.7
Standard (dB(A))	90
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงสาธารณสุข เรื่อง มาตรฐานการควบคุมระดับเสียง ในการประกอบกิจการโรงงาน/ในสถานที่ก่อสร้าง/ในที่ทำงาน พ.ศ.๒๕๕๖

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 231766

Date Received : Apr 03, 2023

Date Reported : Apr 06, 2023

Report Number: 2615112-1

Page 1 of 1

Sample Number	231766-20
Parameter	Noise (Leq 8 hrs.)
Location	อาคารด้านซ้าย
Measurement Date	Mar 31, 2023
Measurement by	Tarin Oajinda
Time	
09:00 AM - 10:00 AM	62.4
10:00 AM - 11:00 AM	61.7
11:00 AM - 12:00 PM	61.4
12:00 PM - 01:00 PM	61.5
01:00 PM - 02:00 PM	61.3
02:00 PM - 03:00 PM	61.3
03:00 PM - 04:00 PM	61.6
04:00 PM - 05:00 PM	61.7
Leq Average 8 hrs. (dB(A))	61.6
Lmax (dB(A))	72.4
Standard (dB(A))	90
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงสาธารณสุข เรื่อง มาตรฐานการควบคุมระดับเสียง ในการประกอบกิจการโรงงาน/ในสถานที่ก่อสร้าง/ในที่ทำงาน พ.ศ.๒๕๕๖

Technical Management

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Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662418-1

Page 1 of 1

Sample Number	2342011-1
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	May 15, 2023
Measurement by	Tarin Oodinda
Time	
09:00 AM - 10:00 AM	74.1
10:00 AM - 11:00 AM	77.9
11:00 AM - 12:00 PM	71.0
12:00 PM - 01:00 PM	71.2
01:00 PM - 02:00 PM	71.0
02:00 PM - 03:00 PM	71.1
03:00 PM - 04:00 PM	70.8
04:00 PM - 05:00 PM	70.7
Leq Average 8 hrs. (dB(A))	73.1
Lmax (dB(A))	80.8
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ปกติการตรวจวัดเสียงตามวิธีมาตรฐานของประเทศไทย	
Standard : ปกติการตรวจวัดเสียงตามวิธีมาตรฐานของประเทศไทย	

Technical Management

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Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662419-1

Page 1 of 1

Sample Number	2342011-2
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	May 16, 2023
Measurement by	Tarin Oodinda
Time	
09:00 AM - 10:00 AM	71.7
10:00 AM - 11:00 AM	71.2
11:00 AM - 12:00 PM	71.2
12:00 PM - 01:00 PM	70.8
01:00 PM - 02:00 PM	70.8
02:00 PM - 03:00 PM	70.9
03:00 PM - 04:00 PM	71.3
04:00 PM - 05:00 PM	71.2
Leq Average 8 hrs. (dB(A))	71.1
Lmax (dB(A))	78.0
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ปกติการตรวจวัดเสียงตามวิธีมาตรฐานของประเทศไทย	
Standard : ปกติการตรวจวัดเสียงตามวิธีมาตรฐานของประเทศไทย	

Technical Management

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Thanita Kulsriwong

Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662422-1

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2342011-5
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	May 19, 2023
Measurement by	Tarin Ootjinda
Time	
09:00 AM - 10:00 AM	72.5
10:00 AM - 11:00 AM	72.5
11:00 AM - 12:00 PM	72.5
12:00 PM - 01:00 PM	72.7
01:00 PM - 02:00 PM	72.8
02:00 PM - 03:00 PM	72.8
03:00 PM - 04:00 PM	72.8
04:00 PM - 05:00 PM	72.9
Leq Average 8 hrs. (dB(A))	72.7
Lmax (dB(A))	78.4
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓	
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓	

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	72.5	77.9	72.0
10:00 AM - 11:00 AM	72.5	78.0	72.0
11:00 AM - 12:00 PM	72.5	78.0	72.1
12:00 PM - 01:00 PM	72.7	78.4	72.3
01:00 PM - 02:00 PM	72.8	78.4	72.4
02:00 PM - 03:00 PM	72.8	78.3	72.4
03:00 PM - 04:00 PM	72.8	78.3	72.5
04:00 PM - 05:00 PM	72.9	78.1	72.5
Leq Average 8 hrs. (dB(A))	72.7		
Lmax (dB(A))	78.4		
Standard (dB(A))	90		
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓			
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓			

กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓

Technical Management

Tharitat.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662423-1

P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Number	2342011-6
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	May 15, 2023
Measurement by	Tarin Ootjinda
Time	
09:00 AM - 10:00 AM	65.9
10:00 AM - 11:00 AM	64.2
11:00 AM - 12:00 PM	64.0
12:00 PM - 01:00 PM	63.7
01:00 PM - 02:00 PM	64.1
02:00 PM - 03:00 PM	63.8
03:00 PM - 04:00 PM	63.9
04:00 PM - 05:00 PM	63.9
Leq Average 8 hrs. (dB(A))	64.2
Lmax (dB(A))	88.6
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓	
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓	

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.9	88.6	64.0
10:00 AM - 11:00 AM	64.2	88.6	63.8
11:00 AM - 12:00 PM	64.0	88.6	63.6
12:00 PM - 01:00 PM	63.7	88.6	63.3
01:00 PM - 02:00 PM	64.1	88.6	63.5
02:00 PM - 03:00 PM	63.8	88.6	63.2
03:00 PM - 04:00 PM	63.9	88.6	63.4
04:00 PM - 05:00 PM	63.9	88.6	63.5
Leq Average 8 hrs. (dB(A))	64.2		
Lmax (dB(A))	88.6		
Standard (dB(A))	90		
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓			
Standard : กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓			

กรมควบคุมมลพิษฉบับที่ ๕ พ.ศ. ๒๕๕๓

Technical Management

Tharitat.

Thanita Kulsurwong

Scientist (4)

Approved by

Supt S.

Supot Salameh

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S:\Reports_Air Noise pr (4/08PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662424-1

Page 1 of 1

Sample Number	2342011-7
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	May 16, 2023
Measurement by	Tarin Oajinda
Time	
09:00 AM - 10:00 AM	64.6
10:00 AM - 11:00 AM	64.8
11:00 AM - 12:00 PM	64.4
12:00 PM - 01:00 PM	64.3
01:00 PM - 02:00 PM	63.9
02:00 PM - 03:00 PM	64.2
03:00 PM - 04:00 PM	63.8
04:00 PM - 05:00 PM	64.0
Leq Average 8 hrs. (dB(A))	64.3
Lmax (dB(A))	82.0
Standard (dB(A))	90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและประเมินค่าเสียง

ในการประเมินค่าเสียงจากแหล่งกำเนิดเสียงในที่ทำงาน พ.ศ.๒๕๖๓

Technical Management

Tharitat.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662425-1

Page 1 of 1

Sample Number	2342011-8
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	May 17, 2023
Measurement by	Tarin Oajinda
Time	
09:00 AM - 10:00 AM	64.1
10:00 AM - 11:00 AM	64.1
11:00 AM - 12:00 PM	64.0
12:00 PM - 01:00 PM	64.1
01:00 PM - 02:00 PM	63.6
02:00 PM - 03:00 PM	63.6
03:00 PM - 04:00 PM	63.4
04:00 PM - 05:00 PM	63.8
Leq Average 8 hrs. (dB(A))	63.8
Lmax (dB(A))	69.4
Standard (dB(A))	90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและประเมินค่าเสียง

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Technical Management

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Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHCEO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662426-1

Page 1 of 1

Sample Number	2342011-9
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	May 18, 2023
Measurement by	Tarin Ootjinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	64.1 66.9 63.6
10:00 AM - 11:00 AM	64.0 66.2 63.5
11:00 AM - 12:00 PM	63.7 66.6 63.1
12:00 PM - 01:00 PM	64.5 69.1 63.7
01:00 PM - 02:00 PM	65.2 82.9 63.5
02:00 PM - 03:00 PM	64.5 71.1 63.6
03:00 PM - 04:00 PM	64.3 67.5 63.5
04:00 PM - 05:00 PM	64.5 67.7 63.7
Leq Average 8 hrs. (dB(A))	64.4
Lmax (dB(A))	82.9
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ปกติมาตรฐานการวัดเสียงในอาคารและบริเวณใกล้เคียง	
ตามประกาศกรมส่งเสริมการค้าระหว่างประเทศ พ.ศ.๒๕๖๓	

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Thanita Kulsurwong

Scientist (4)

Approved by

Supt S

Supot Salameh

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Analysis / Test Report

Client : GHCEO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHCEO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662427-1

Page 1 of 1

Sample Number	2342011-10
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	May 19, 2023
Measurement by	Tarin Ootjinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	64.0 69.1 63.3
10:00 AM - 11:00 AM	63.4 68.0 62.9
11:00 AM - 12:00 PM	63.2 65.9 62.8
12:00 PM - 01:00 PM	63.9 67.3 63.2
01:00 PM - 02:00 PM	64.4 66.9 63.9
02:00 PM - 03:00 PM	64.4 65.9 63.9
03:00 PM - 04:00 PM	64.3 68.2 63.8
04:00 PM - 05:00 PM	64.8 67.4 64.2
Leq Average 8 hrs. (dB(A))	64.1
Lmax (dB(A))	69.1
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : ปกติมาตรฐานการวัดเสียงในอาคารและบริเวณใกล้เคียง	
ตามประกาศกรมส่งเสริมการค้าระหว่างประเทศ พ.ศ.๒๕๖๓	

Technical Management

Thanita Kulsurwong

Scientist (4)

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P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662428-1

Page 1 of 1

Sample Number	2342011-11			
Parameter	Noise (Leq 8 hrs.)			
Location	Turbine			
Measurement Date	May 15, 2023			
Measurement by	Tarin Occlinda			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM	79.5	80.4	79.2	
10:00 AM - 11:00 AM	79.4	80.5	79.2	
11:00 AM - 12:00 PM	79.3	80.3	79.1	
12:00 PM - 01:00 PM	79.3	80.3	79.0	
01:00 PM - 02:00 PM	79.2	80.3	79.0	
02:00 PM - 03:00 PM	79.2	80.6	79.0	
03:00 PM - 04:00 PM	79.2	80.3	79.0	
04:00 PM - 05:00 PM	79.2	80.5	79.0	

Technical Management

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Thanita Kulsuriwong
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Supt S.

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P/O : GLOW-OW-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662429-1

Page 1 of 1

Sample Number	2342011-12			
Parameter	Noise (Leq 8 hrs.)			
Location	Turbine			
Measurement Date	May 16, 2023			
Measurement by	Tarin Occlinda			
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
	09:00 AM - 10:00 AM	79.3	80.4	79.1
	10:00 AM - 11:00 AM	79.3	80.1	79.1
	11:00 AM - 12:00 PM	79.3	80.2	79.1
	12:00 PM - 01:00 PM	79.4	80.3	79.2
	01:00 PM - 02:00 PM	79.4	80.3	79.2
	02:00 PM - 03:00 PM	79.3	80.4	79.1
	03:00 PM - 04:00 PM	79.4	80.4	79.2
	04:00 PM - 05:00 PM	79.5	80.7	79.3

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Scientist (4)

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662431-1

Sample Number	2342011-14
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	May 18, 2023
Measurement by	Tamr Occhipinda
Time	
09:00 AM - 10:00 AM	79.1
10:00 AM - 11:00 AM	79.1
11:00 AM - 12:00 PM	79.1
12:00 PM - 01:00 PM	79.1
01:00 PM - 02:00 PM	79.1
02:00 PM - 03:00 PM	79.1
03:00 PM - 04:00 PM	79.1
04:00 PM - 05:00 PM	79.1
Lmax (dB(A))	
79.9	
80.2	
80.1	
79.9	
80.1	
79.1	
80.2	
L90 (dB(A))	
78.9	
78.9	
78.9	
79.0	
79.0	
78.9	
78.9	
78.9	
78.9	

Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอกลับ
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖

Thanita K.

Technical Management

Approved by

Thanita Kulsuriwong

Supot Salamteh

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P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662432-1

Page 1 of 1

Sample Number	Parameter	Location	Measurement Date	Measurement by	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
2342011-15	Noise (Leq 8 hrs.)	Turbine	May 19, 2023	Tarin Ootjinda	09:00 AM - 10:00 AM	79.1	80.2	78.9
					10:00 AM - 11:00 AM	79.1	79.9	78.9
					11:00 AM - 12:00 PM	79.1	85.2	78.8
					12:00 PM - 01:00 PM	79.1	91.5	78.7
					01:00 PM - 02:00 PM	78.8	80.0	78.6
					02:00 PM - 03:00 PM	78.8	80.0	78.5
					03:00 PM - 04:00 PM	78.6	79.7	78.4
					04:00 PM - 05:00 PM	78.5	79.5	78.3
Leq Average 8 hrs. (dB(A))						78.9		
Lmax (dB(A))							91.5	
Standard (dB(A))						90	140	
Reference Method : ISO1996-1 and 1996-2								
Standard : กรมควบคุมมลพิษ (กรมควบคุมมลพิษ) ใช้มาตรฐานการวัดเสียงตามข้อกำหนดของกรมควบคุมมลพิษ								

Technical Management

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Thanita Kulsriwong
Scientist (4)

Approved by

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Supot Salameh
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P/O : GLOW-QM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662433-1

Page 1 of 1

Sample Number	Parameter	Location	Measurement Date	Measurement by	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
2342011-16	Noise (Leq 8 hrs.)	อาคารคนงาน	May 15, 2023	Tarin Ootjinda	09:00 AM - 10:00 AM	70.7	99.2	63.2
					10:00 AM - 11:00 AM	63.2	66.7	62.8
					11:00 AM - 12:00 PM	63.0	67.7	62.5
					12:00 PM - 01:00 PM	62.7	68.2	62.1
					01:00 PM - 02:00 PM	63.4	70.6	62.5
					02:00 PM - 03:00 PM	63.0	71.3	62.2
					03:00 PM - 04:00 PM	63.1	68.5	62.4
					04:00 PM - 05:00 PM	62.8	71.2	62.2
Leq Average 8 hrs. (dB(A))						65.1		
Lmax (dB(A))							99.2	
Standard (dB(A))						90	140	
Reference Method : ISO1996-1 and 1996-2								
Standard : กรมควบคุมมลพิษ (กรมควบคุมมลพิษ) ใช้มาตรฐานการวัดเสียงตามข้อกำหนดของกรมควบคุมมลพิษ								

Technical Management

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Thanita Kulsriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662434-1

Page 1 of 1

Sample Number	2342011-17
Parameter	Noise (Leq 8 hrs.)
Location	อาคารศูนย์
Measurement Date	May 16, 2023
Measurement by	Tarin Ocjinda
Time	
09:00 AM - 10:00 AM	64.7
10:00 AM - 11:00 AM	63.3
11:00 AM - 12:00 PM	63.1
12:00 PM - 01:00 PM	73.6
01:00 PM - 02:00 PM	70.0
02:00 PM - 03:00 PM	69.8
03:00 PM - 04:00 PM	63.0
04:00 PM - 05:00 PM	62.6
Leq Average 8 hrs. (dB(A))	63.5
Lmax (dB(A))	83.3
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : มาตรฐานการวัดเสียงของกรมโรงงานอุตสาหกรรม ฐานมาตรฐานการควบคุมเสียง	
ตามประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมเสียงของกรมโรงงานอุตสาหกรรม พ.ศ.๒๕๕๑	

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.7	83.3	63.3
10:00 AM - 11:00 AM	63.8	73.6	63.1
11:00 AM - 12:00 PM	63.4	70.0	62.8
12:00 PM - 01:00 PM	63.0	69.8	62.5
01:00 PM - 02:00 PM	63.2	70.2	62.6
02:00 PM - 03:00 PM	63.0	72.4	62.4
03:00 PM - 04:00 PM	63.1	72.0	62.6
04:00 PM - 05:00 PM	63.4	69.7	62.9
Leq Average 8 hrs. (dB(A))	63.5		
Lmax (dB(A))	83.3		
Standard (dB(A))	90		

Reference Method : ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดเสียงของกรมโรงงานอุตสาหกรรม ฐานมาตรฐานการควบคุมเสียง

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Technical Management

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Approved by

Supt S.

Thanita Kulsurwong

Scientist (4)

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662435-1

Page 1 of 1

Sample Number	2342011-18
Parameter	Noise (Leq 8 hrs.)
Location	อาคารศูนย์
Measurement Date	May 17, 2023
Measurement by	Tarin Ocjinda
Time	
09:00 AM - 10:00 AM	63.2
10:00 AM - 11:00 AM	63.1
11:00 AM - 12:00 PM	70.4
12:00 PM - 01:00 PM	63.0
01:00 PM - 02:00 PM	62.9
02:00 PM - 03:00 PM	62.6
03:00 PM - 04:00 PM	62.9
04:00 PM - 05:00 PM	63.1
Leq Average 8 hrs. (dB(A))	62.9
Lmax (dB(A))	70.4
Standard (dB(A))	90
Reference Method : ISO1996-1 and 1996-2	
Standard : มาตรฐานการวัดเสียงของกรมโรงงานอุตสาหกรรม ฐานมาตรฐานการควบคุมเสียง	
ตามประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมเสียงของกรมโรงงานอุตสาหกรรม พ.ศ.๒๕๕๑	

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.2	67.9	62.6
10:00 AM - 11:00 AM	63.1	70.4	62.7
11:00 AM - 12:00 PM	63.0	67.7	62.5
12:00 PM - 01:00 PM	62.9	68.5	62.3
01:00 PM - 02:00 PM	62.6	69.2	62.1
02:00 PM - 03:00 PM	62.9	69.5	62.2
03:00 PM - 04:00 PM	62.6	69.0	62.0
04:00 PM - 05:00 PM	63.1	66.8	62.6
Leq Average 8 hrs. (dB(A))	62.9		
Lmax (dB(A))	70.4		
Standard (dB(A))	90		

Reference Method : ISO1996-1 and 1996-2

Standard : มาตรฐานการวัดเสียงของกรมโรงงานอุตสาหกรรม ฐานมาตรฐานการควบคุมเสียง

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Technical Management

Tharitak.

Approved by

Supt S.

Thanita Kulsurwong

Scientist (4)

Supot Salamteh

Section Head

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S:\Report\Air Noise\pt (410PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662436-1

Page 1 of 1

Sample Number	2342011-19
Parameter	Noise (Leq 8 hrs.)
Location	อาคารศูนย์
Measurement Date	May 18, 2023
Measurement by	Tarin Oajinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	63.3 69.2 62.6
10:00 AM - 11:00 AM	63.2 65.7 62.7
11:00 AM - 12:00 PM	63.1 68.1 62.3
12:00 PM - 01:00 PM	63.4 80.3 62.4
01:00 PM - 02:00 PM	63.7 62.3 62.3
02:00 PM - 03:00 PM	63.8 70.7 62.6
03:00 PM - 04:00 PM	63.2 68.1 62.4
04:00 PM - 05:00 PM	63.5 67.8 62.6
Leq Average 8 hrs. (dB(A))	63.4
Lmax (dB(A))	80.3
Standard (dB(A))	90
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง
	สำหรับสถานที่ทำงานในอาคารและสถานที่สาธารณะ พ.ศ.๒๕๔๖

Technical Management

Thanitak.

Thantita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342011

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662437-1

Page 1 of 1

Sample Number	2342011-20
Parameter	Noise (Leq 8 hrs.)
Location	อาคารศูนย์
Measurement Date	May 19, 2023
Measurement by	Tarin Oajinda
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	62.9 67.4 62.5
10:00 AM - 11:00 AM	63.1 70.2 62.7
11:00 AM - 12:00 PM	63.5 68.1 62.8
12:00 PM - 01:00 PM	63.6 67.3 63.1
01:00 PM - 02:00 PM	64.1 81.2 62.6
02:00 PM - 03:00 PM	63.5 79.5 62.6
03:00 PM - 04:00 PM	62.7 68.8 62.1
04:00 PM - 05:00 PM	62.6 70.2 62.1
Leq Average 8 hrs. (dB(A))	63.3
Lmax (dB(A))	81.2
Standard (dB(A))	90
Reference Method	: ISO1996-1 and 1996-2
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง การกำหนดค่ามาตรฐานเสียง
	สำหรับสถานที่ทำงานในอาคารและสถานที่สาธารณะ พ.ศ.๒๕๔๖

Technical Management

Thanitak.

Thantita Kulsriwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616427-1

Page 1 of 1

Sample Number	2328406-1		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine A		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:57 AM - 10:57 AM	76.0	79.4	75.7
10:57 AM - 11:57 AM	76.0	79.5	75.6
11:57 AM - 12:57 PM	76.1	79.4	75.7
12:57 PM - 01:57 PM	76.1	79.5	75.8
01:57 PM - 02:57 PM	76.1	79.5	75.8
02:57 PM - 03:57 PM	76.1	79.6	75.7
03:57 PM - 04:57 PM	76.3	79.8	75.7
04:57 PM - 05:57 PM	76.3	79.8	75.8
Leq Average 8 hrs. (dB(A))	76.1		
Lmax (dB(A))		79.8	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับเสียงและเกณฑ์การประเมินผลกระทบจากเสียงรบกวนในอาคาร พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616428-1

Page 1 of 1

Sample Number	2328406-2		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine A		
Measurement Date	Mar 29, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:57 AM - 10:57 AM	75.6	79.3	75.2
10:57 AM - 11:57 AM	75.6	79.4	75.2
11:57 AM - 12:57 PM	75.6	79.1	75.2
12:57 PM - 01:57 PM	75.7	79.3	75.3
01:57 PM - 02:57 PM	75.6	79.2	75.3
02:57 PM - 03:57 PM	75.7	79.4	75.3
03:57 PM - 04:57 PM	75.7	79.3	75.3
04:57 PM - 05:57 PM	75.7	79.4	75.3
Leq Average 8 hrs. (dB(A))	75.7		
Lmax (dB(A))		79.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับเสียงและเกณฑ์การประเมินผลกระทบจากเสียงรบกวนในอาคาร พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Supot S.

Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616429-1

Page 1 of 1

Sample Number	2328406-3		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine A		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:57 AM - 10:57 AM	75.8	79.4	75.5
10:57 AM - 11:57 AM	75.8	79.5	75.4
11:57 AM - 12:57 PM	75.8	79.3	75.4
12:57 PM - 01:57 PM	75.9	79.8	75.4
01:57 PM - 02:57 PM	75.8	79.7	75.3
02:57 PM - 03:57 PM	75.8	79.5	75.4
03:57 PM - 04:57 PM	75.9	79.5	75.5
04:57 PM - 05:57 PM	75.8	79.5	75.4
Leq Average 8 hrs. (dB(A))	75.8		
Lmax (dB(A))		79.8	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับเสียงและเกณฑ์การประเมินผลกระทบจากเสียงรบกวนในอาคาร พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616430-1

Page 1 of 1

Sample Number	2328406-4		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine B		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	77.6	78.0	77.4
10:00 AM - 11:00 AM	77.5	77.9	77.3
11:00 AM - 12:00 PM	77.5	78.0	77.4
12:00 PM - 01:00 PM	77.5	79.8	77.4
01:00 PM - 02:00 PM	77.5	78.7	77.4
02:00 PM - 03:00 PM	77.6	80.6	77.4
03:00 PM - 04:00 PM	77.6	79.0	77.4
04:00 PM - 05:00 PM	76.9	78.6	76.7
Leq Average 8 hrs. (dB(A))	77.5		
Lmax (dB(A))		80.6	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับเสียงและเกณฑ์การประเมินผลกระทบจากเสียงรบกวนในอาคาร พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616431-1

Page 1 of 1

Sample Number	2328406-5			
Parameter	Noise (Leq 8 hrs.)			
Location	Boiler Feed Pump Turbine B			
Measurement Date	Mar 29, 2023			
Measurement by	Tarin Octjinda			
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
	09:00 AM - 10:00 AM	77.5	81.1	77.2
	10:00 AM - 11:00 AM	77.5	81.0	77.2
	11:00 AM - 12:00 PM	77.5	81.2	77.1
	12:00 PM - 01:00 PM	77.5	81.2	77.1
	01:00 PM - 02:00 PM	77.5	81.0	77.2
	02:00 PM - 03:00 PM	77.6	81.0	77.2
	03:00 PM - 04:00 PM	77.6	80.9	77.2
	04:00 PM - 05:00 PM	77.8	81.5	77.5
	Leq Average 8 hrs. (dB(A))	77.6		
	Lmax (dB(A))		81.5	
	Standard (dB(A))	90	140	
	Reference Method : ISO1996-1 and 1996-2			
	Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการกำหนดค่าความดังเสียง ในการประเมินผลกระทบจากเสียงรบกวนในโรงงาน พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Approved by

Supot Salamteh

Thanita Kulsuriwong
Scientist (4)Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616433-1

Page 1 of 1

Sample Number	2328406-7		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer A-B		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.3	77.7	58.4
10:00 AM - 11:00 AM	60.1	77.5	58.2
11:00 AM - 12:00 PM	59.4	76.0	58.2
12:00 PM - 01:00 PM	59.3	76.7	58.1
01:00 PM - 02:00 PM	59.2	77.3	58.1
02:00 PM - 03:00 PM	59.2	74.1	58.1
03:00 PM - 04:00 PM	59.3	74.6	58.2
04:00 PM - 05:00 PM	60.5	71.3	59.3
Leq Average 8 hrs. (dB(A))	59.7		
Lmax (dB(A))		77.7	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการกำหนดค่าความดังเสียง ในการประเมินผลกระทบจากเสียงรบกวนในโรงงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.

Approved by

Supot Salamteh

Thanita Kulsuriwong
Scientist (4)Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616432-1

Page 1 of 1

Sample Number	2328406-6		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine B		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	77.6	81.3	77.2
10:00 AM - 11:00 AM	77.6	81.4	77.1
11:00 AM - 12:00 PM	77.5	81.0	77.0
12:00 PM - 01:00 PM	77.4	81.3	77.0
01:00 PM - 02:00 PM	77.4	81.2	77.0
02:00 PM - 03:00 PM	77.5	81.0	77.1
03:00 PM - 04:00 PM	77.5	81.3	77.1
04:00 PM - 05:00 PM	77.6	81.4	77.1
Leq Average 8 hrs. (dB(A))	77.5		
Lmax (dB(A))		81.4	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการกำหนดค่าความดังเสียง ในการประเมินผลกระทบจากเสียงรบกวนในโรงงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.

Approved by

Supot Salamteh

Thanita Kulsuriwong
Scientist (4)Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616435-1

Page 1 of 1

Sample Number	2328406-9		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer A-B		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.9	78.4	58.7
10:00 AM - 11:00 AM	60.1	75.2	58.2
11:00 AM - 12:00 PM	58.5	71.3	57.6
12:00 PM - 01:00 PM	60.7	75.5	58.2
01:00 PM - 02:00 PM	60.9	75.7	58.4
02:00 PM - 03:00 PM	59.2	79.3	57.9
03:00 PM - 04:00 PM	58.9	72.9	57.9
04:00 PM - 05:00 PM	59.4	70.1	57.8
Leq Average 8 hrs. (dB(A))	59.9		
Lmax (dB(A))		79.3	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม เรื่อง การกำหนดค่าระดับความดังเสียง ในการประเมินค่าการโกลาหลจากเครื่องจักรกลในโรงงาน พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616436-1

Page 1 of 1

Sample Number	2328406-10		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer E-F		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.3	83.2	63.2
10:00 AM - 11:00 AM	63.2	75.0	62.4
11:00 AM - 12:00 PM	63.0	80.6	62.2
12:00 PM - 01:00 PM	63.3	82.2	62.2
01:00 PM - 02:00 PM	63.1	80.7	62.3
02:00 PM - 03:00 PM	63.4	85.0	62.0
03:00 PM - 04:00 PM	63.4	84.3	62.3
04:00 PM - 05:00 PM	63.8	78.4	63.2
Leq Average 8 hrs. (dB(A))	63.5		
Lmax (dB(A))		85.0	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม เรื่อง การกำหนดค่าระดับความดังเสียง ในการประเมินค่าการโกลาหลจากเครื่องจักรกลในโรงงาน พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
Section Head

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S:Reports_Air Noise rpt (11:05AM)

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Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salameth
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Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616437-1

Page 1 of 1

Sample Number	2328406-11		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer E-F		
Measurement Date	Mar 29, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.6	81.0	62.2
10:00 AM - 11:00 AM	63.5	81.3	60.9
11:00 AM - 12:00 PM	61.6	77.9	60.5
12:00 PM - 01:00 PM	62.6	80.0	61.2
01:00 PM - 02:00 PM	62.7	80.1	61.2
02:00 PM - 03:00 PM	62.1	77.1	60.9
03:00 PM - 04:00 PM	61.1	67.7	60.2
04:00 PM - 05:00 PM	61.0	65.3	60.2
Leq Average 8 hrs. (dB(A))	62.4		
Lmax (dB(A))		81.3	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม เรื่อง การกำหนดค่าระดับความดังเสียง ในการประเมินค่าการโกลาหลจากเครื่องจักรกลในโรงงาน พ.ศ.๒๕๖๓			



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Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616438-1

Page 1 of 1

Sample Number	2328406-12		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer E-F		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.9	77.3	60.4
10:00 AM - 11:00 AM	61.5	75.0	60.3
11:00 AM - 12:00 PM	61.5	80.5	60.1
12:00 PM - 01:00 PM	62.0	83.1	60.2
01:00 PM - 02:00 PM	62.4	82.3	60.3
02:00 PM - 03:00 PM	62.2	82.1	60.1
03:00 PM - 04:00 PM	62.1	79.2	60.3
04:00 PM - 05:00 PM	62.2	75.4	60.3
Leq Average 8 hrs. (dB(A))	62.0		
Lmax (dB(A))		83.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม เรื่อง การกำหนดค่าระดับความดังเสียง ในการประเมินค่าการโกลาหลจากเครื่องจักรกลในโรงงาน พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
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Supot Salameth
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Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616439-1

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Sample Number : 2328406-13
Parameter : Noise (Leq 8 hrs.)
Location : PA Fan A
Measurement Date : Mar 28, 2023
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	62.6	76.7	56.6
10:05 AM - 11:05 AM	62.6	75.3	56.9
11:05 AM - 12:05 PM	61.6	75.7	55.6
12:05 PM - 01:05 PM	61.5	74.2	55.8
01:05 PM - 02:05 PM	61.9	83.9	55.6
02:05 PM - 03:05 PM	61.4	75.4	55.8
03:05 PM - 04:05 PM	61.4	74.8	55.5
04:05 PM - 05:05 PM	61.9	78.5	56.3

Leq Average 8 hrs. (dB(A)) : 61.9
Lmax (dB(A)) : 83.9
Standard (dB(A)) : 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นานาการคุ้มครองความปลอดภัย
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Technical Management

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Scientist (4)

Approved by

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Supot Salamteh
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Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616440-1

Page 1 of 1

Sample Number : 2328406-14
Parameter : Noise (Leq 8 hrs.)
Location : PA Fan A
Measurement Date : Mar 29, 2023
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	67.0	84.8	60.4
10:05 AM - 11:05 AM	63.7	77.8	57.6
11:05 AM - 12:05 PM	61.7	75.8	55.6
12:05 PM - 01:05 PM	64.7	73.4	60.9
01:05 PM - 02:05 PM	63.7	77.9	58.1
02:05 PM - 03:05 PM	62.8	80.1	56.6
03:05 PM - 04:05 PM	60.9	73.0	55.4
04:05 PM - 05:05 PM	61.2	72.8	55.6

Leq Average 8 hrs. (dB(A)) : 63.7
Lmax (dB(A)) : 84.8
Standard (dB(A)) : 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นานาการคุ้มครองความปลอดภัย
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Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616441-1

Page 1 of 1

Sample Number : 2328406-15
Parameter : Noise (Leq 8 hrs.)
Location : PA Fan A
Measurement Date : Mar 30, 2023
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	61.5	76.8	56.8
10:05 AM - 11:05 AM	61.1	75.2	55.5
11:05 AM - 12:05 PM	61.0	77.5	55.4
12:05 PM - 01:05 PM	61.8	75.7	56.9
01:05 PM - 02:05 PM	62.5	82.3	56.3
02:05 PM - 03:05 PM	60.9	74.5	55.8
03:05 PM - 04:05 PM	61.1	72.9	55.8
04:05 PM - 05:05 PM	61.2	75.4	56.1

Leq Average 8 hrs. (dB(A)) : 61.4
Lmax (dB(A)) : 82.3
Standard (dB(A)) : 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นานาการคุ้มครองความปลอดภัย
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Technical Management

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Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616442-1

Page 1 of 1

Sample Number : 2328406-16
Parameter : Noise (Leq 8 hrs.)
Location : PA Fan B
Measurement Date : Mar 28, 2023
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:08 AM - 10:08 AM	65.4	73.5	62.6
10:08 AM - 11:08 AM	64.8	71.0	61.7
11:08 AM - 12:08 PM	64.8	71.1	61.7
12:08 PM - 01:08 PM	64.8	72.4	61.6
01:08 PM - 02:08 PM	66.0	82.3	61.6
02:08 PM - 03:08 PM	65.0	71.6	62.0
03:08 PM - 04:08 PM	64.8	72.0	61.7
04:08 PM - 05:08 PM	64.8	72.3	61.8

Leq Average 8 hrs. (dB(A)) : 65.1
Lmax (dB(A)) : 82.3
Standard (dB(A)) : 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นานาการคุ้มครองความปลอดภัย
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Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616443-1

Page 1 of 1

Sample Number	2328406-17		
Parameter	Noise (Leq 8 hrs.)		
Location	PA Fan B		
Measurement Date	Mar 29, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:08 AM - 10:08 AM	67.9	82.5	62.8
10:08 AM - 11:08 AM	65.8	79.1	62.7
11:08 AM - 12:08 PM	65.3	71.3	62.4
12:08 PM - 01:08 PM	66.0	73.2	63.4
01:08 PM - 02:08 PM	66.0	79.3	62.9
02:08 PM - 03:08 PM	68.1	82.7	63.0
03:08 PM - 04:08 PM	64.9	71.2	61.9
04:08 PM - 05:08 PM	64.9	71.0	62.0
Leq Average 8 hrs. (dB(A))	66.3		
Lmax (dB(A))		82.7	
Standard (dB(A))	90	140	
Reference Method :	ISO1996-1 and 1996-2		
Standard :	ประเทศไทยตรวจวัดและรายงานเสียง มาตรฐานของประเทศไทยและ ตามมาตรฐานการรายงานเสียงของกรมควบคุมมลพิษในประเทศไทย พ.ศ.๒๕๖๓		



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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616444-1

Page 1 of 1

Sample Number	2328406-18		
Parameter	Noise (Leq 8 hrs.)		
Location	PA Fan B		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:08 AM - 10:08 AM	64.8	71.2	61.9
10:08 AM - 11:08 AM	64.8	74.7	61.6
11:08 AM - 12:08 PM	64.6	71.0	61.5
12:08 PM - 01:08 PM	64.7	71.0	61.7
01:08 PM - 02:08 PM	65.6	78.9	61.8
02:08 PM - 03:08 PM	64.8	71.2	61.7
03:08 PM - 04:08 PM	64.8	71.0	61.7
04:08 PM - 05:08 PM	65.4	71.2	62.5
Leq Average 8 hrs. (dB(A))	65.0		
Lmax (dB(A))		78.9	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการตรวจวัดและรายงานผลเสียง ในการประกอบกิจการโรงงานเกี่ยวกับผลการวัดเสียงในการทำงาน พ.ศ.๒๕๖๓			

Technical Management

Thanitak.
Thanita Kulsurwong
Scientist (4)

Approved by

Supt S
Supot Salamteh
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Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616445-1

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Sample Number	2328406-19		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan A		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	58.8	72.6	57.1
10:15 AM - 11:15 AM	57.9	73.1	56.5
11:15 AM - 12:15 PM	57.5	67.5	56.6
12:15 PM - 01:15 PM	60.1	72.6	56.1
01:15 PM - 02:15 PM	56.5	65.7	56.0
02:15 PM - 03:15 PM	57.2	65.3	56.5
03:15 PM - 04:15 PM	57.0	66.3	56.2
04:15 PM - 05:15 PM	57.3	66.2	56.5
Leq Average 8 hrs. (dB(A))	57.9		
Lmax (dB(A))		73.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและรายงานเสียง ในการประกอบกิจการโรงงานเกี่ยวกับผลการวัดและคำนวณค่าทางงาน พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616446-1

Page 1 of 1

Sample Number	2328406-20		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan A		
Measurement Date	Mar 29, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	58.6	66.4	57.2
10:15 AM - 11:15 AM	57.7	68.4	55.6
11:15 AM - 12:15 PM	56.8	70.2	55.6
12:15 PM - 01:15 PM	59.1	66.1	57.5
01:15 PM - 02:15 PM	59.3	66.5	57.8
02:15 PM - 03:15 PM	58.6	66.7	57.0
03:15 PM - 04:15 PM	57.5	62.7	56.6
04:15 PM - 05:15 PM	57.2	67.9	55.1
Leq Average 8 hrs. (dB(A))	58.2		
Lmax (dB(A))		70.2	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดและรายงานผลเสียง ในการประกอบกิจการโรงงานเกี่ยวกับความเข้มเสียงในการทำงาน พ.ศ.๒๕๖๓			

Technical Management

Thanitak.
Thanita Kulsurwong
Scientist (4)

Approved by

Supt S
Supot Salamteh
Section Head

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Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616447-1

Page 1 of 1

Sample Number	2328406-21
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan A
Measurement Date	Mar 30, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	58.5	66.3	57.1
10:15 AM - 11:15 AM	57.6	68.3	55.5
11:15 AM - 12:15 PM	56.7	70.1	55.5
12:15 PM - 01:15 PM	57.2	60.1	56.7
01:15 PM - 02:15 PM	57.4	62.2	56.8
02:15 PM - 03:15 PM	57.2	63.8	56.8
03:15 PM - 04:15 PM	57.3	73.7	56.8
04:15 PM - 05:15 PM	56.7	70.1	55.5
Leq Average 8 hrs. (dB(A))	57.4		
Lmax (dB(A))		73.7	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับความดังเสียง ในการประเมินค่าการสั่นสะเทือนและการวัดระดับเสียงในโรงงาน พ.ศ.๒๕๖๓		



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Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616448-1

Page 1 of 1

Sample Number	2328406-22
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	Mar 28, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:19 AM - 10:19 AM	64.5	72.1	63.5
10:19 AM - 11:19 AM	64.3	71.9	63.3
11:19 AM - 12:19 PM	64.9	77.0	63.4
12:19 PM - 01:19 PM	64.6	73.3	63.1
01:19 PM - 02:19 PM	64.2	69.5	63.0
02:19 PM - 03:19 PM	65.0	80.2	63.5
03:19 PM - 04:19 PM	64.7	70.9	63.4
04:19 PM - 05:19 PM	64.7	67.7	63.5
Leq Average 8 hrs. (dB(A))	64.6		
Lmax (dB(A))		80.2	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับความดังเสียง ในการประเมินค่าการสั่นสะเทือนและการวัดระดับเสียงในโรงงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot Salamteah
Section Head

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Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616449-1

Page 1 of 1

Sample Number	2328406-23
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	Mar 29, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:19 AM - 10:19 AM	65.2	75.4	63.3
10:19 AM - 11:19 AM	65.1	75.3	62.8
11:19 AM - 12:19 PM	65.3	82.4	63.0
12:19 PM - 01:19 PM	65.5	72.9	63.2
01:19 PM - 02:19 PM	65.8	82.1	63.5
02:19 PM - 03:19 PM	65.7	74.7	63.7
03:19 PM - 04:19 PM	66.2	76.9	64.6
04:19 PM - 05:19 PM	65.8	70.6	64.5
Leq Average 8 hrs. (dB(A))	65.6		
Lmax (dB(A))		82.4	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับความดังเสียง ในการประเมินค่าการสั่นสะเทือนและการวัดระดับเสียงในโรงงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Project Location : GHECO-ONE

Lot ID: 2328406
Date Received : Mar 31, 2023
Date Reported : Apr 06, 2023
Report Number: 2616450-1

Page 1 of 1

Sample Number	2328406-24
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	Mar 30, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:19 AM - 10:19 AM	64.3	71.6	63.0
10:19 AM - 11:19 AM	64.0	67.2	62.4
11:19 AM - 12:19 PM	64.3	71.7	62.8
12:19 PM - 01:19 PM	64.3	72.6	62.6
01:19 PM - 02:19 PM	64.5	76.5	62.9
02:19 PM - 03:19 PM	65.0	75.9	63.2
03:19 PM - 04:19 PM	64.4	67.7	63.0
04:19 PM - 05:19 PM	65.1	77.6	63.6
Leq Average 8 hrs. (dB(A))	64.5		
Lmax (dB(A))		77.6	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าระดับความดังเสียง ในการประเมินค่าการสั่นสะเทือนและการวัดระดับเสียงในโรงงาน พ.ศ.๒๕๖๓		

Technical Management

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Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616451-1

Page 1 of 1

Sample Number	2328406-25		
Parameter	Noise (Leq 8 hrs.)		
Location	FGD Air Blower		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:14 AM - 10:14 AM	60.4	70.5	59.4
10:14 AM - 11:14 AM	59.8	66.2	58.9
11:14 AM - 12:14 PM	59.8	67.3	59.0
12:14 PM - 01:14 PM	59.5	65.4	58.3
01:14 PM - 02:14 PM	58.9	64.4	58.1
02:14 PM - 03:14 PM	59.6	66.3	58.8
03:14 PM - 04:14 PM	59.3	63.1	58.5
04:14 PM - 05:14 PM	59.5	64.2	58.8
Leq Average 8 hrs. (dB(A))	59.6		
Lmax (dB(A))		70.5	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดระดับเสียง			
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Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616452-1

Page 1 of 1

Sample Number	2328406-26		
Parameter	Noise (Leq 8 hrs.)		
Location	FGD Air Blower		
Measurement Date	Mar 29, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:14 AM - 10:14 AM	59.4	64.8	58.5
10:14 AM - 11:14 AM	59.0	63.3	57.9
11:14 AM - 12:14 PM	58.9	64.1	57.9
12:14 PM - 01:14 PM	59.8	65.6	58.8
01:14 PM - 02:14 PM	59.9	65.6	59.0
02:14 PM - 03:14 PM	59.8	66.1	58.8
03:14 PM - 04:14 PM	60.0	67.4	59.1
04:14 PM - 05:14 PM	60.4	66.4	59.4
Leq Average 8 hrs. (dB(A))	59.7		
Lmax (dB(A))		67.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดระดับเสียง			
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Technical Management

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot Salamteb

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S:Reports_Air Noise.rpt (11:07AM)

19517-2U EMAIL

Technical Management

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Scientist (4)

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S:Reports_Air Noise.rpt (11:08AM)

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Analysis / Test Report

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616451-1

Page 1 of 1

Sample Number	2328406-27		
Parameter	Noise (Leq 8 hrs.)		
Location	FGD Air Blower		
Measurement Date	Mar 30, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:14 AM - 10:14 AM	59.4	71.3	58.3
10:14 AM - 11:14 AM	58.5	63.3	57.2
11:14 AM - 12:14 PM	58.8	67.3	57.6
12:14 PM - 01:14 PM	59.0	67.9	57.8
01:14 PM - 02:14 PM	60.9	78.4	58.5
02:14 PM - 03:14 PM	58.8	67.6	57.5
03:14 PM - 04:14 PM	58.9	64.6	58.1
04:14 PM - 05:14 PM	59.4	66.4	58.3
Leq Average 8 hrs. (dB(A))	59.3		
Lmax (dB(A))		78.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดระดับเสียง			
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Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616451-1

Page 1 of 1

Sample Number	2328406-28		
Parameter	Noise (Leq 8 hrs.)		
Location	Condenser		
Measurement Date	Mar 28, 2023		
Measurement by	Tarin Octjinda		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	75.7	84.1	75.0
10:00 AM - 11:00 AM	75.7	80.6	75.0
11:00 AM - 12:00 PM	75.6	80.4	74.9
12:00 PM - 01:00 PM	75.6	79.8	74.9
01:00 PM - 02:00 PM	75.6	80.0	74.9
02:00 PM - 03:00 PM	75.6	80.5	74.9
03:00 PM - 04:00 PM	75.6	80.2	75.0
04:00 PM - 05:00 PM	75.6	80.5	75.0
Leq Average 8 hrs. (dB(A))	75.6		
Lmax (dB(A))		84.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการทดสอบการวัดระดับเสียง			
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Technical Management

Thanita Kulsuriwong

Scientist (4)

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Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616455-1

Page 1 of 1

Sample Number	2328406-29
Parameter	Noise (Leq 8 hrs.)
Location	Condenser
Measurement Date	Mar 29, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	75.3	79.7	74.6
10:00 AM - 11:00 AM	75.3	80.1	74.6
11:00 AM - 12:00 PM	75.0	79.7	74.4
12:00 PM - 01:00 PM	75.1	79.7	74.4
01:00 PM - 02:00 PM	75.1	79.4	74.4
02:00 PM - 03:00 PM	75.1	79.7	74.4
03:00 PM - 04:00 PM	75.1	79.2	74.4
04:00 PM - 05:00 PM	75.1	79.7	74.4

Leq Average 8 hrs. (dB(A)) 75.1
Lmax (dB(A)) 80.1
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย
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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
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19517-21/ EMAIL

S:\Reports_Air Noise rpt (11:08AM)



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P/O :

Project Name :
Project Location : GHECO-ONE

Lot ID: 2328406

Date Received : Mar 31, 2023

Date Reported : Apr 06, 2023

Report Number: 2616456-1

Page 1 of 1

Sample Number	2328406-30
Parameter	Noise (Leq 8 hrs.)
Location	Condenser
Measurement Date	Mar 30, 2023
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	75.3	79.9	74.7
10:00 AM - 11:00 AM	75.4	80.0	74.8
11:00 AM - 12:00 PM	75.4	79.6	74.8
12:00 PM - 01:00 PM	75.4	80.0	74.8
01:00 PM - 02:00 PM	77.5	103.4	74.7
02:00 PM - 03:00 PM	75.3	80.5	74.6
03:00 PM - 04:00 PM	75.2	79.2	74.6
04:00 PM - 05:00 PM	75.2	80.1	74.6

Leq Average 8 hrs. (dB(A)) 75.7
Lmax (dB(A)) 103.4
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย
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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
Section Head

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S:\Reports_Air Noise rpt (11:12AM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662452-1

Page 1 of 1

Sample Number	2342013-1
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	May 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	77.5	84.2	77.0
10:00 AM - 11:00 AM	77.4	84.2	77.0
11:00 AM - 12:00 PM	77.3	80.2	76.9
12:00 PM - 01:00 PM	77.3	80.1	77.0
01:00 PM - 02:00 PM	77.2	85.4	76.9
02:00 PM - 03:00 PM	77.2	80.2	76.9
03:00 PM - 04:00 PM	77.2	80.2	76.9
04:00 PM - 05:00 PM	77.2	80.1	76.9

Leq Average 8 hrs. (dB(A)) 77.3
Lmax (dB(A)) 85.4
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย
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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662453-1

Page 1 of 1

Sample Number	2342013-2
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	May 17, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	77.5	84.2	77.0
10:00 AM - 11:00 AM	77.4	84.2	77.0
11:00 AM - 12:00 PM	77.3	80.2	76.9
12:00 PM - 01:00 PM	77.3	80.1	77.0
01:00 PM - 02:00 PM	77.3	85.4	76.9
02:00 PM - 03:00 PM	77.2	80.2	76.9
03:00 PM - 04:00 PM	77.2	80.2	76.9
04:00 PM - 05:00 PM	77.2	80.1	76.9

Leq Average 8 hrs. (dB(A)) 77.3
Lmax (dB(A)) 85.4
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย
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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameth
Section Head

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662454-1

Page 1 of 1

Sample Number	2342013-3		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine A		
Measurement Date	May 18, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	77.7	86.1	76.8
10:00 AM - 11:00 AM	77.4	87.9	76.8
11:00 AM - 12:00 PM	77.3	83.9	76.8
12:00 PM - 01:00 PM	77.0	80.1	76.7
01:00 PM - 02:00 PM	77.3	85.0	76.7
02:00 PM - 03:00 PM	77.2	82.7	76.7
03:00 PM - 04:00 PM	77.1	82.5	76.7
04:00 PM - 05:00 PM	77.2	84.0	76.7
Leq Average 8 hrs. (dB(A))	77.3		
Lmax (dB(A))		87.9	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในการประกอบกิจการโรงงาน/บริเวณที่มีการควบคุมมลพิษในอุตสาหกรรม พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662455-1

Page 1 of 1

Sample Number	2342013-4		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine B		
Measurement Date	May 16, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	76.1	82.5	75.8
10:00 AM - 11:00 AM	75.9	81.2	75.7
11:00 AM - 12:00 PM	75.6	75.9	75.5
12:00 PM - 01:00 PM	75.6	77.2	75.5
01:00 PM - 02:00 PM	75.6	86.5	75.5
02:00 PM - 03:00 PM	75.5	78.4	75.5
03:00 PM - 04:00 PM	75.5	76.8	75.4
04:00 PM - 05:00 PM	75.5	78.2	75.4
Leq Average 8 hrs. (dB(A))	75.7		
Lmax (dB(A))		86.6	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในการประกอบกิจการโรงงาน/บริเวณที่มีการควบคุมมลพิษในอุตสาหกรรม พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S

Supot Salamteh
Section Head

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662456-1

Page 1 of 1

Sample Number	2342013-5		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine B		
Measurement Date	May 17, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	75.6	77.7	75.5
10:00 AM - 11:00 AM	75.6	76.7	75.5
11:00 AM - 12:00 PM	75.5	77.6	75.4
12:00 PM - 01:00 PM	75.4	75.8	75.4
01:00 PM - 02:00 PM	75.4	78.6	75.3
02:00 PM - 03:00 PM	75.4	78.3	75.3
03:00 PM - 04:00 PM	75.4	82.5	75.3
04:00 PM - 05:00 PM	75.4	78.3	75.3
Leq Average 8 hrs. (dB(A))	75.5		
Lmax (dB(A))		82.5	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในการประกอบกิจการโรงงาน/บริเวณที่มีการควบคุมมลพิษในอุตสาหกรรม พ.ศ.๒๕๖๓			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662457-1

Page 1 of 1

Sample Number	2342013-6		
Parameter	Noise (Leq 8 hrs.)		
Location	Boiler Feed Pump Turbine B		
Measurement Date	May 18, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	75.6	84.3	75.4
10:00 AM - 11:00 AM	75.5	77.0	75.4
11:00 AM - 12:00 PM	75.4	78.0	75.3
12:00 PM - 01:00 PM	75.3	75.6	75.2
01:00 PM - 02:00 PM	75.4	82.6	75.3
02:00 PM - 03:00 PM	75.4	77.2	75.3
03:00 PM - 04:00 PM	75.3	76.7	75.2
04:00 PM - 05:00 PM	75.3	81.0	75.2
Leq Average 8 hrs. (dB(A))	75.4		
Lmax (dB(A))		84.3	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในการประกอบกิจการโรงงาน/บริเวณที่มีการควบคุมมลพิษในอุตสาหกรรม พ.ศ.๒๕๖๓			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S

Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662458-1

Page 1 of 1

Sample Number	2342013-7
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer A-B
Measurement Date	May 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.9	80.6	61.7
10:00 AM - 11:00 AM	62.3	74.6	61.4
11:00 AM - 12:00 PM	62.3	74.3	61.2
12:00 PM - 01:00 PM	61.0	74.1	60.5
01:00 PM - 02:00 PM	61.4	74.9	60.7
02:00 PM - 03:00 PM	61.0	73.0	60.4
03:00 PM - 04:00 PM	61.4	73.3	60.7
04:00 PM - 05:00 PM	61.4	64.1	60.8
Leq Average 8 hrs. (dB(A))	61.9		
Lmax (dB(A))		80.6	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าเสียงรบกวนเฉลี่ย ในการประกอบกิจการโรงงานเกี่ยวกับการควบคุมในการทำงาน พ.ศ.๒๕๖๓		



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662459-1

Page 1 of 1

Sample Number	2342013-8
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer A-B
Measurement Date	May 17, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.2	72.5	61.4
10:00 AM - 11:00 AM	61.5	71.5	60.7
11:00 AM - 12:00 PM	61.3	74.3	60.7
12:00 PM - 01:00 PM	61.2	71.5	60.6
01:00 PM - 02:00 PM	60.9	73.1	60.2
02:00 PM - 03:00 PM	60.7	73.0	60.0
03:00 PM - 04:00 PM	60.8	74.5	60.1
04:00 PM - 05:00 PM	61.0	72.7	60.2
Leq Average 8 hrs. (dB(A))	61.2		
Lmax (dB(A))		74.5	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าเสียงรบกวนเฉลี่ย ในการประกอบกิจการโรงงานเกี่ยวกับการควบคุมในการทำงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662460-1

Page 1 of 1

Sample Number	2342013-9
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer A-B
Measurement Date	May 18, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.7	77.9	61.3
10:00 AM - 11:00 AM	61.8	69.7	61.0
11:00 AM - 12:00 PM	61.5	67.6	60.9
12:00 PM - 01:00 PM	61.5	71.1	60.3
01:00 PM - 02:00 PM	62.9	80.8	60.5
02:00 PM - 03:00 PM	61.3	75.6	60.5
03:00 PM - 04:00 PM	61.7	69.9	60.7
04:00 PM - 05:00 PM	61.5	69.7	60.6
Leq Average 8 hrs. (dB(A))	61.8		
Lmax (dB(A))		80.8	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าเสียงรบกวนเฉลี่ย ในการประกอบกิจการโรงงานเกี่ยวกับการควบคุมในการทำงาน พ.ศ.๒๕๖๓		



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662461-1

Page 1 of 1

Sample Number	2342013-10
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer E-F
Measurement Date	May 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.7	80.6	65.8
10:00 AM - 11:00 AM	66.4	69.7	65.7
11:00 AM - 12:00 PM	66.3	68.5	65.7
12:00 PM - 01:00 PM	66.5	69.4	65.7
01:00 PM - 02:00 PM	66.6	70.6	65.9
02:00 PM - 03:00 PM	66.3	72.2	65.6
03:00 PM - 04:00 PM	66.2	72.3	65.5
04:00 PM - 05:00 PM	66.5	69.6	65.9
Leq Average 8 hrs. (dB(A))	66.4		
Lmax (dB(A))		80.6	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการหาค่าเสียงรบกวนเฉลี่ย ในการประกอบกิจการโรงงานเกี่ยวกับการควบคุมในการทำงาน พ.ศ.๒๕๖๓		

Technical Management

Thanitak.
Thanita Kulsuriwong
Scientist (4)

Approved by

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662462-1

Page 1 of 1

Sample Number	2342013-11		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer E-F		
Measurement Date	May 17, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.6	71.4	65.9
10:00 AM - 11:00 AM	66.5	68.9	65.9
11:00 AM - 12:00 PM	66.6	69.5	66.0
12:00 PM - 01:00 PM	66.2	68.6	65.6
01:00 PM - 02:00 PM	66.1	70.4	65.4
02:00 PM - 03:00 PM	65.7	67.9	65.2
03:00 PM - 04:00 PM	65.9	68.7	65.3
04:00 PM - 05:00 PM	65.8	71.7	65.0
Leq Average 8 hrs. (dB(A))	66.2		
Lmax (dB(A))		71.7	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม ซึ่งกำหนดค่ามาตรฐานโดย กรมโรงงานอุตสาหกรรม/กรมควบคุมมลพิษในทางราชการ พ.ศ.๒๕๖๓			

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Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
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Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662464-1

Page 1 of 1

Sample Number	2342013-13		
Parameter	Noise (Leq 8 hrs.)		
Location	PA Fan A		
Measurement Date	May 16, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.6	78.9	58.6
10:00 AM - 11:00 AM	59.6	71.6	58.4
11:00 AM - 12:00 PM	58.8	75.1	57.8
12:00 PM - 01:00 PM	59.5	82.2	57.7
01:00 PM - 02:00 PM	60.4	83.1	57.7
02:00 PM - 03:00 PM	58.5	72.8	57.6
03:00 PM - 04:00 PM	59.9	81.4	57.8
04:00 PM - 05:00 PM	59.1	70.4	58.3
Leq Average 8 hrs. (dB(A))	59.6		
Lmax (dB(A))		83.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม ซึ่งกำหนดค่ามาตรฐานโดย กรมโรงงานอุตสาหกรรม/กรมควบคุมมลพิษในทางราชการ พ.ศ.๒๕๖๓			

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Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662463-1

Page 1 of 1

Sample Number	2342013-12		
Parameter	Noise (Leq 8 hrs.)		
Location	Pulverizer E-F		
Measurement Date	May 18, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.7	70.5	66.0
10:00 AM - 11:00 AM	66.4	71.8	65.7
11:00 AM - 12:00 PM	66.5	68.7	65.8
12:00 PM - 01:00 PM	66.1	68.5	65.5
01:00 PM - 02:00 PM	65.9	69.2	65.1
02:00 PM - 03:00 PM	66.3	81.1	65.1
03:00 PM - 04:00 PM	67.0	74.4	65.8
04:00 PM - 05:00 PM	66.3	70.9	65.4
Leq Average 8 hrs. (dB(A))	66.4		
Lmax (dB(A))		81.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม ซึ่งกำหนดค่ามาตรฐานโดย กรมโรงงานอุตสาหกรรม/กรมควบคุมมลพิษในทางราชการ พ.ศ.๒๕๖๓			

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P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662465-1

Page 1 of 1

Sample Number	2342013-14		
Parameter	Noise (Leq 8 hrs.)		
Location	PA Fan A		
Measurement Date	May 17, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.4	80.1	58.7
10:00 AM - 11:00 AM	60.4	78.5	58.1
11:00 AM - 12:00 PM	59.0	73.6	57.8
12:00 PM - 01:00 PM	58.5	72.3	57.7
01:00 PM - 02:00 PM	58.9	75.7	57.4
02:00 PM - 03:00 PM	58.6	72.8	57.3
03:00 PM - 04:00 PM	58.3	74.7	57.2
04:00 PM - 05:00 PM	58.6	72.4	57.3
Leq Average 8 hrs. (dB(A))	59.2		
Lmax (dB(A))		80.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประเทศไทยมาตรฐานอุตสาหกรรม ซึ่งกำหนดค่ามาตรฐานโดย กรมโรงงานอุตสาหกรรม/กรมควบคุมมลพิษในทางราชการ พ.ศ.๒๕๖๓			

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Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662466-1

Page 1 of 1

Sample Number	2342013-15
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	May 18, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	60.1	74.6	58.6
10:00 AM - 11:00 AM	59.3	70.4	58.5
11:00 AM - 12:00 PM	59.3	69.5	58.4
12:00 PM - 01:00 PM	59.3	74.9	57.9
01:00 PM - 02:00 PM	58.9	76.0	57.2
02:00 PM - 03:00 PM	58.7	77.0	57.3
03:00 PM - 04:00 PM	59.0	71.7	57.5
04:00 PM - 05:00 PM	59.0	74.6	57.4
Leq Average 8 hrs. (dB(A))	59.2		
Lmax (dB(A))		77.0	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับมาตรการลดผลกระทบทาง พ.ร.บ.๒๕๖๓		



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662467-1

Page 1 of 1

Sample Number	2342013-16
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	May 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.6	75.5	64.9
10:00 AM - 11:00 AM	65.2	67.8	64.7
11:00 AM - 12:00 PM	65.1	71.2	64.5
12:00 PM - 01:00 PM	65.4	80.3	64.5
01:00 PM - 02:00 PM	65.8	84.4	64.4
02:00 PM - 03:00 PM	65.4	89.1	64.7
03:00 PM - 04:00 PM	66.2	87.5	64.7
04:00 PM - 05:00 PM	66.0	67.8	65.4
Leq Average 8 hrs. (dB(A))	65.6		
Lmax (dB(A))		87.5	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับมาตรการลดผลกระทบทาง พ.ร.บ.๒๕๖๓		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S

Supot Salamteah
Section Head

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662468-1

Page 1 of 1

Sample Number	2342013-17
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	May 17, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.6	76.1	64.7
10:00 AM - 11:00 AM	66.0	86.4	64.7
11:00 AM - 12:00 PM	65.0	70.3	64.4
12:00 PM - 01:00 PM	65.0	67.6	64.5
01:00 PM - 02:00 PM	65.0	85.0	64.1
02:00 PM - 03:00 PM	64.7	74.9	64.0
03:00 PM - 04:00 PM	64.9	77.8	64.1
04:00 PM - 05:00 PM	64.6	75.0	63.9
Leq Average 8 hrs. (dB(A))	65.1		
Lmax (dB(A))		86.4	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับมาตรการลดผลกระทบทาง พ.ร.บ.๒๕๖๓		

Technical Management

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Scientist (4)

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662469-1

Page 1 of 1

Sample Number	2342013-18
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	May 18, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.8	75.7	64.8
10:00 AM - 11:00 AM	65.6	68.1	64.8
11:00 AM - 12:00 PM	65.6	67.7	64.9
12:00 PM - 01:00 PM	65.4	72.8	64.7
01:00 PM - 02:00 PM	65.5	76.8	64.5
02:00 PM - 03:00 PM	66.0	78.1	64.6
03:00 PM - 04:00 PM	66.1	76.4	64.5
04:00 PM - 05:00 PM	66.0	73.2	64.5
Leq Average 8 hrs. (dB(A))	65.8		
Lmax (dB(A))		78.1	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง นวัตกรรมคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับมาตรการลดผลกระทบทาง พ.ร.บ.๒๕๖๓		

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662470-1

Page 1 of 1

Sample Number	2342013-19		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan A		
Measurement Date	May 16, 2023		
Measurement by	Nornanon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.7	63.6	61.2
10:00 AM - 11:00 AM	61.9	63.7	61.2
11:00 AM - 12:00 PM	62.5	64.4	61.6
12:00 PM - 01:00 PM	62.1	63.9	61.2
01:00 PM - 02:00 PM	61.8	63.6	61.2
02:00 PM - 03:00 PM	61.8	63.6	61.2
03:00 PM - 04:00 PM	61.9	64.3	61.3
04:00 PM - 05:00 PM	61.8	63.6	61.2
Leq Average 8 hrs. (dB(A))	61.9		
Lmax (dB(A))		64.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมการขนส่งทางบก พ.ร.บ.จราจรทางบก. พ.ศ. 2522			



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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662471-1

Page 1 of 1

Sample Number	2342013-20		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan A		
Measurement Date	May 17, 2023		
Measurement by	Nornanon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.3	63.3	60.5
10:00 AM - 11:00 AM	61.4	63.0	60.6
11:00 AM - 12:00 PM	61.1	62.6	60.4
12:00 PM - 01:00 PM	61.4	69.1	60.6
01:00 PM - 02:00 PM	61.4	63.3	60.6
02:00 PM - 03:00 PM	61.9	63.6	61.0
03:00 PM - 04:00 PM	61.7	63.6	60.7
04:00 PM - 05:00 PM	61.3	68.2	60.4
Leq Average 8 hrs. (dB(A))	61.4		
Lmax (dB(A))		69.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมการขนส่งทางบก พ.ร.บ.จราจรทางบก. พ.ศ. 2522			

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Technical Management

Thanita Kulsurivong
Scientist (4)

Approved by

Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662472-1

Page 1 of 1

Sample Number	2342013-21		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan A		
Measurement Date	May 18, 2023		
Measurement by	Nornanon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.2	62.6	60.5
10:00 AM - 11:00 AM	61.1	62.7	60.4
11:00 AM - 12:00 PM	61.6	63.5	60.9
12:00 PM - 01:00 PM	62.4	64.5	61.5
01:00 PM - 02:00 PM	61.7	69.0	61.1
02:00 PM - 03:00 PM	61.3	67.7	60.6
03:00 PM - 04:00 PM	61.4	63.5	60.7
04:00 PM - 05:00 PM	62.1	63.9	61.2
Leq Average 8 hrs. (dB(A))	61.6		
Lmax (dB(A))		69.0	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมการขนส่งทางบก พ.ร.บ.จราจรทางบก. พ.ศ. 2522			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662473-1

Page 1 of 1

Sample Number	2342013-22		
Parameter	Noise (Leq 8 hrs.)		
Location	ID Fan B		
Measurement Date	May 16, 2023		
Measurement by	Nornanon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	67.1	77.9	66.5
10:00 AM - 11:00 AM	66.9	76.4	66.2
11:00 AM - 12:00 PM	66.5	71.7	65.9
12:00 PM - 01:00 PM	66.5	80.9	65.9
01:00 PM - 02:00 PM	66.5	71.5	66.0
02:00 PM - 03:00 PM	67.1	76.4	66.2
03:00 PM - 04:00 PM	66.7	76.0	66.2
04:00 PM - 05:00 PM	66.6	68.0	66.2
Leq Average 8 hrs. (dB(A))	66.7		
Lmax (dB(A))		80.9	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : กรมการขนส่งทางบก พ.ร.บ.จราจรทางบก. พ.ศ. 2522			

Technical Management

Thanita Kulsurivong
Scientist (4)

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Project Name :

Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662474-1

Page 1 of 1

Sample Number	2342013-23
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	May 17, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.9	69.5	66.2
10:00 AM - 11:00 AM	66.6	71.1	66.1
11:00 AM - 12:00 PM	67.0	69.6	66.3
12:00 PM - 01:00 PM	67.4	70.7	66.6
01:00 PM - 02:00 PM	66.8	68.6	66.1
02:00 PM - 03:00 PM	66.5	68.0	66.1
03:00 PM - 04:00 PM	66.5	68.1	66.0
04:00 PM - 05:00 PM	66.7	67.7	66.3
Leq Average 8 hrs. (dB(A))	66.8		
Lmax (dB(A))		71.1	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในแหล่งทำงาน/การรายงานค่าเสียงในแหล่งทำงานฉบับที่ ๒๕๔๖		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662475-1

Page 1 of 1

Sample Number	2342013-24
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	May 18, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.1	67.9	65.4
10:00 AM - 11:00 AM	66.1	76.1	65.4
11:00 AM - 12:00 PM	66.1	78.5	65.3
12:00 PM - 01:00 PM	66.1	69.3	65.4
01:00 PM - 02:00 PM	66.3	75.6	65.8
02:00 PM - 03:00 PM	66.4	70.7	65.8
03:00 PM - 04:00 PM	66.4	75.6	65.9
04:00 PM - 05:00 PM	66.4	76.3	66.0
Leq Average 8 hrs. (dB(A))	66.2		
Lmax (dB(A))		78.5	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในแหล่งทำงาน/การรายงานค่าเสียงในแหล่งทำงานฉบับที่ ๒๕๔๖		

Technical Management

Thanitak.

Thanita Kulsuriwong
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Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662476-1

Page 1 of 1

Sample Number	2342013-25
Parameter	Noise (Leq 8 hrs.)
Location	FGD Air Blower
Measurement Date	May 16, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	63.3	75.9	62.2
10:00 AM - 11:00 AM	62.6	73.9	61.9
11:00 AM - 12:00 PM	62.2	74.8	61.8
12:00 PM - 01:00 PM	62.2	69.1	61.7
01:00 PM - 02:00 PM	62.1	64.6	61.7
02:00 PM - 03:00 PM	62.1	65.1	61.6
03:00 PM - 04:00 PM	62.4	66.9	61.9
04:00 PM - 05:00 PM	62.2	65.7	61.7
Leq Average 8 hrs. (dB(A))	62.4		
Lmax (dB(A))		75.9	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในแหล่งทำงาน/การรายงานค่าเสียงในแหล่งทำงานฉบับที่ ๒๕๔๖		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342013

Date Received : May 20, 2023

Date Reported : May 25, 2023

Report Number: 2662477-1

Page 1 of 1

Sample Number	2342013-26
Parameter	Noise (Leq 8 hrs.)
Location	FGD Air Blower
Measurement Date	May 17, 2023
Measurement by	Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	61.9	72.8	61.3
10:00 AM - 11:00 AM	61.8	67.2	61.4
11:00 AM - 12:00 PM	61.6	65.0	61.1
12:00 PM - 01:00 PM	61.6	63.5	61.2
01:00 PM - 02:00 PM	61.5	64.3	61.1
02:00 PM - 03:00 PM	61.7	68.1	61.3
03:00 PM - 04:00 PM	61.9	64.9	61.5
04:00 PM - 05:00 PM	61.9	68.9	61.5
Leq Average 8 hrs. (dB(A))	61.7		
Lmax (dB(A))		72.8	
Standard (dB(A))	90	140	
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดและรายงานค่าเสียง ในแหล่งทำงาน/การรายงานค่าเสียงในแหล่งทำงานฉบับที่ ๒๕๔๖		

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662478-1

Page 1 of 1

Sample Number	2342013-27		
Parameter	Noise (Leq 8 hrs.)		
Location	FGD Air Blower		
Measurement Date	May 18, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	62.8	71.4	61.5
10:00 AM - 11:00 AM	61.9	66.2	61.3
11:00 AM - 12:00 PM	61.9	66.4	61.1
12:00 PM - 01:00 PM	61.6	66.0	61.0
01:00 PM - 02:00 PM	62.0	76.2	61.0
02:00 PM - 03:00 PM	61.5	67.5	61.0
03:00 PM - 04:00 PM	61.6	64.7	61.1
04:00 PM - 05:00 PM	61.8	65.0	61.4
Leq Average 8 hrs. (dB(A))	61.9		
Lmax (dB(A))		76.2	
Standard (dB(A))	90	140	
Reference Method :	ISO1996-1 and 1996-2		
Standard :	ประเทศไทยมาตรฐานอุตสาหกรรม (ซึ่ง มาตรฐานอุตสาหกรรมฉบับนี้ ใช้สำหรับวัดค่าการสั่นสะเทือนและการวัดค่าการสั่นสะเทือน)		
	ใช้สำหรับประกอบกิจการโรงงานเกี่ยวกับกิจการทางเคมีในภาคทางาน พ.ศ.๒๕๖๓		



Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662479-1

Page 1 of 1

Sample Number	2342013-28			
Parameter	Noise (Leq 8 hrs.)			
Location	Condenser			
Measurement Date	May 16, 2023			
Measurement by	Norranon Tathongkham			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM	74.0	88.4	71.3	
10:00 AM - 11:00 AM	72.8	85.6	71.2	
11:00 AM - 12:00 PM	72.0	78.9	70.9	
12:00 PM - 01:00 PM	72.0	78.2	70.9	
01:00 PM - 02:00 PM	72.0	84.9	70.9	
02:00 PM - 03:00 PM	72.0	78.4	70.9	
03:00 PM - 04:00 PM	71.9	78.4	70.8	
04:00 PM - 05:00 PM	71.9	78.2	70.9	
Leq Average 8 hrs. (dB(A))	72.4			
Lmax (dB(A))		88.4		
Standard (dB(A))	90	140		
Reference Method :	ISO1996-1 and 1996-2			
Standard :	ประเทศไทยมาตรฐานอุตสาหกรรม ซึ่ง มาตรฐานอุตสาหกรรมฉบับนี้ ใช้สำหรับวัดค่าการสั่นสะเทือนและการวัดค่าการสั่นสะเทือน			

Technical Management

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot Salamteh

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Scientist (4)

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662480-1

Page 1 of 1

Sample Number	2342013-29		
Parameter	Noise (Leq 8 hrs.)		
Location	Condenser		
Measurement Date	May 17, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	71.9	78.5	70.9
10:00 AM - 11:00 AM	72.0	78.2	71.0
11:00 AM - 12:00 PM	71.9	77.2	71.0
12:00 PM - 01:00 PM	71.8	77.8	70.8
01:00 PM - 02:00 PM	71.9	77.2	70.9
02:00 PM - 03:00 PM	72.0	77.2	71.0
03:00 PM - 04:00 PM	71.9	78.2	70.9
04:00 PM - 05:00 PM	71.9	78.1	70.9
Leq Average 8 hrs. (dB(A))	71.9		
Lmax (dB(A))		78.5	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard :	ใช้มาตรฐานของอุตสาหกรรม ซึ่ง มาตรฐานของอุตสาหกรรมฉบับนี้ใช้สำหรับวัดค่าการสั่นสะเทือนและการวัดค่าการสั่นสะเทือน		
	ใช้สำหรับวัดค่าการสั่นสะเทือนและการวัดค่าการสั่นสะเทือน		



Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342013
Date Received : May 20, 2023
Date Reported : May 25, 2023
Report Number: 2662481-1

Page 1 of 1

Sample Number	2342013-30		
Parameter	Noise (Leq 8 hrs.)		
Location	Condenser		
Measurement Date	May 18, 2023		
Measurement by	Norranon Tathongkham		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	74.2	88.0	71.0
10:00 AM - 11:00 AM	73.2	89.1	71.0
11:00 AM - 12:00 PM	73.1	84.8	70.9
12:00 PM - 01:00 PM	71.5	78.1	70.5
01:00 PM - 02:00 PM	73.0	86.0	70.7
02:00 PM - 03:00 PM	72.6	83.7	70.9
03:00 PM - 04:00 PM	72.2	84.4	70.8
04:00 PM - 05:00 PM	72.9	84.8	71.0
Leq Average 8 hrs. (dB(A))	72.9		
Lmax (dB(A))		89.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการตรวจวัดค่ามลพิษ ในการประกอบกิจการโรงงานเกี่ยวกับผลกระทบด้านเสียงในภาคทางบก พ.ศ.๒๕๖๓			

Technical Management

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot Salamteh

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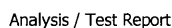
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Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

Page 1 of 22

Sample Number	2342016-1								
Sampled Date	May 17, 2023								
Sample Description	Noise Dose								
Location	Sudu W. (Engineer)								
Personal Sampling	Sudu W. (Engineer)								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOB)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	4.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	71.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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

Approved by Wichan Choonharat
Wichan Choonharat
Assistant Manager

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19517-21/EMATU



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-3									
Sampled Date	May 17, 2023									
Sample Description	Noise Dose									
Location	nearby a, (Engineer)									
Personal Sampling	engineer show									
Date Analysis Commenced	May 23, 2023									
Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	5.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	72.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

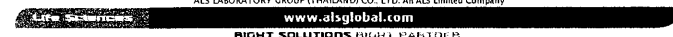
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour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

Remark :

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

Approved by Wichan Choonharat
Wichan Choonharat
Assistant Manager

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19517-21/EMA2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Page 2 of 22

Sample Number	2342016-2								
Sampled Date	May 17, 2023								
Sample Description	Noise Dose								
Location	สุขุม ส. (Engineer)								
Personal Sampling	อุปกรณ์ส่วนบุคคล								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOD)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	3.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	70.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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

Approved by Wichan Choonharat
Wichan Choonharat
Assistant Manager

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19517-2L/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

Page 4 of 2

Sample Number	2342016-4								
Sampled Date	May 17, 2023								
Sample Description	Noise Dose								
Location	วัดสุเมธฯ (Engineer)								
Personal Sampling	อุปกรณ์ส่วนบุคคล								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	64.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

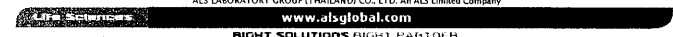
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour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

Remark :

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

Approved by Wichan Choonharat
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19517-21/ EMA2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number : 2342016-5
Sampled Date : May 17, 2023
Sample Description : Noise Dose
Location : วิศวกร น. (Engineer)
Personal Sampling : วิศวกร น. (Engineer)
Date Analysis Commenced : May 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	61.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number : 2342016-6
Sampled Date : May 17, 2023
Sample Description : Noise Dose
Location : วิศวกร น. (Engineer)
Personal Sampling : วิศวกร น. (Engineer)
Date Analysis Commenced : May 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	2.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	69.0	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number : 2342016-7
Sampled Date : May 17, 2023
Sample Description : Noise Dose
Location : วิศวกร น. (Engineer)
Personal Sampling : วิศวกร น. (Engineer)
Date Analysis Commenced : May 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	3.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	70.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number : 2342016-8
Sampled Date : May 17, 2023
Sample Description : Noise Dose
Location : วิศวกร น. (Electrical Section Manager)
Personal Sampling : วิศวกร น. (Engineer)
Date Analysis Commenced : May 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	60.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-13								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๖. (Engineer)								
Personal Sampling	สุรพันธ์ หนองบัว								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	62.2	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Remark :

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Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

Page 14 of 22

Sample Number	2342016-14								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๖. (Engineer)								
Personal Sampling	สุรพันธ์ หนองบัว								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	2.7	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	69.3	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Remark :

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

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Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

Page 15 of 22

Sample Number	2342016-15								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๖. (Engineer)								
Personal Sampling	สุรพันธ์ หนองบัว								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	55.2	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Remark :

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

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

Page 16 of 22

Sample Number	2342016-16								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๖. (Engineer)								
Personal Sampling	สุรพันธ์ หนองบัว								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	47.7	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Remark :

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

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Wichan Choonharat
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-17								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	ส่วน ก. (Engineer)								
Personal Sampling	นายสุวิทย์ นิลสุข								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	62.7	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Nonnon Tathongkham

Remark :

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

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-19								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	ส่วน ก. (Engineer)								
Personal Sampling	นายสุวิทย์ นิลสุข								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	61.7	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Nonnon Tathongkham

Remark :

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P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-18								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	ส่วน ก. (Engineer)								
Personal Sampling	นายสุวิทย์ นิลสุข								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	59.9	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Nonnon Tathongkham

Remark :

- LOD : Limit of Detection
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P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342016
Date Received : May 19, 2023
Date Reported : May 23, 2023
Report Number : 2623784-1

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Sample Number	2342016-20								
Sampled Date	May 18, 2023								
Sample Description	Noise Dose								
Location	ส่วน ก. (Engineer)								
Personal Sampling	นายสุวิทย์ นิลสุข								
Date Analysis Commenced	May 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	2.0	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	68.1	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Nonnon Tathongkham

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342016

Date Received : May 19, 2023

Date Reported : May 23, 2023

Report Number : 2623784-1

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Sample Number	2342016-21									
Sampled Date	May 18, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๖ (Engineer)									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	May 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	63.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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

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Wichan Choonharat
Assistant Manager

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342016

Date Received : May 19, 2023

Date Reported : May 23, 2023

Report Number : 2623784-1

Page 22 of 22

Sample Number	2342016-22									
Sampled Date	May 18, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๖ (QSHF)									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	May 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	60.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

- LOD : Limit of Detection
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Wichan Choonharat
Assistant Manager

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2358086

Date Received : May 26, 2023

Date Reported : May 30, 2023

Report Number : 2656938-1

Page 1 of 2

Sample Number	2358086-1									
Sampled Date	May 26, 2023									
Sample Description	Noise Dose									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	May 29, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	2.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	69.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

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

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Supot Salameeth
Section Head

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2358086

Date Received : May 26, 2023

Date Reported : May 30, 2023

Report Number : 2656938-1

Page 2 of 2

Sample Number	2358086-2									
Sampled Date	May 26, 2023									
Sample Description	Noise Dose									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	May 29, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	8.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	74.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

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

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Supot Salameeth
Section Head

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

Page 1 of 22

Sample Number	2342018-1								
Sampled Date	Jun 07, 2023								
Sample Description	Noise Dose								
Personal Sampling	ผู้ช่วยฯ (Assistant Shift Manager)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	1.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	63.4	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	64.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jengwarewong

Remark :

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

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

Page 3 of 22

Sample Number	2342018-3								
Sampled Date	Jun 07, 2023								
Sample Description	Noise Dose								
Personal Sampling	ผู้ช่วยฯ (Field Operator)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	3.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	2.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	68.0	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	69.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jengwarewong

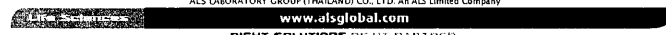
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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number	2342018-2								
Sampled Date	Jun 07, 2023								
Sample Description	Noise Dose								
Personal Sampling	ผู้ช่วยฯ (Operator)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	20.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	17.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	76.0	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	77.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jengwarewong

Remark :

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

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

Page 4 of 22

Sample Number	2342018-4								
Sampled Date	Jun 07, 2023								
Sample Description	Noise Dose								
Personal Sampling	ผู้ช่วยฯ (Field Operator)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	12.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	11.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	74.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	75.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jengwarewong

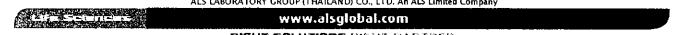
Remark :

- LOD : Limit of Detection
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Approved by 
Wichan Choonharat
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19517-21/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	24.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	20.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	76.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	78.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwarewong

Remark :

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



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

Page 6 of 22

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	12.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	11.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	74.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	75.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwarewong

Remark :

- LOD : Limit of Detection
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	2.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	2.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	67.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	68.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwarewong

Remark :

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



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	15.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	13.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	74.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	76.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwarewong

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number	2342018-9	Sampled Date	Jun 07, 2023	Sample Description	Noise Dose รณรณ ร. (Assistant Shift Manager)	Personal Sampling	รณรณ ร. รณรณ ร.	Date Analysis Commenced	Jun 12, 2023
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	49.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	50.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jitngwareewong

Remark :

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

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number	2342018-11	Sampled Date	Jun 08, 2023	Sample Description	Noise Dose รณรณ ร. (Assistant Shift Manager)	Personal Sampling	รณรณ ร. รณรณ ร.	Date Analysis Commenced	Jun 12, 2023
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	10.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	9.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	73.0	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	74.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jitngwareewong

Remark :

- LOD : Limit of Detection
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Approved by

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Wichan Choonharat
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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-QM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number	2342018-10	Sampled Date	Jun 07, 2023	Sample Description	Noise Dose รณรณ ร. (Shift Operator Manager)	Personal Sampling	รณรณ ร. รณรณ ร.	Date Analysis Commenced	Jun 12, 2023
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	08:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	08:00 AM - 07:00 PM	dB(A)	-	-	56.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 07:00 PM	dB(A)	-	-	58.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Natthapon Jitngwareewong

Remark :

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Assistant Manager

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

Page 13 of 22

Sample Number 2342018-13

Sampled Date Jun 08, 2023

Sample Description Noise Dose

Personal Sampling ณพื้นที่ (Field Operator)

Date Analysis Commenced Jun 12, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	35.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	33.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	78.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	80.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
- * MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

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

Approved by

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Assistant Manager

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

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Sample Number 2342018-15

Sampled Date Jun 08, 2023

Sample Description Noise Dose

Personal Sampling ณพื้นที่ (Field Operator)

Date Analysis Commenced Jun 12, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	27.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	26.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	77.4	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	79.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
- * MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

- LOD : Limit of Detection
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Approved by

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

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Sample Number 2342018-14

Sampled Date Jun 08, 2023

Sample Description Noise Dose

Personal Sampling ณพื้นที่ (Field Operator)

Date Analysis Commenced Jun 12, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	28.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	26.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	77.6	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	79.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
- * MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

Page 16 of 22

Sample Number 2342018-16

Sampled Date Jun 08, 2023

Sample Description Noise Dose

Personal Sampling ณพื้นที่ (Field Operator)

Date Analysis Commenced Jun 12, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	10.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	10.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	73.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	75.0	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
- * MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

Page 17 of 22

Sample Number	2342018-17								
Sampled Date	Jun 08, 2023								
Sample Description	Noise Dose นายสมชาย ส. (Field Operator)								
Personal Sampling	นายสมชาย ส. (Field Operator)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	1.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	64.7	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	66.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

Page 19 of 22

Page 19 of 2									
Sample Number	2342018-19								
Sampled Date	Jun 08, 2023								
Sample Description	Noise Dose นายสมชาย ส. (Assistant Shift Manager)								
Personal Sampling	นายสมชาย ส. (Assistant Shift Manager)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	8.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	7.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	72.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	73.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number	2342018-18								
Sampled Date	Jun 08, 2023								
Sample Description	Noise Dose นายสมชาย ส. (Field Operator)								
Personal Sampling	นายสมชาย ส. (Field Operator)								
Date Analysis Commenced	Jun 12, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	10.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	10.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	73.3	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	75.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342018
Date Received : Jun 09, 2023
Date Reported : Jun 13, 2023
Report Number : 2623786-1

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Sample Number

2342018-20

Sampled Date

Jun 08, 2023

Sample Description

Noise Dose
นายสมชาย ส. (Field Operator)

Personal Sampling

นายสมชาย ส. (Field Operator)

Date Analysis Commenced

Jun 12, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	32.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	30.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	78.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	79.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jitwareewong

Remark :

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

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

Page 21 of 22

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	79.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	75.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	82.0	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	83.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

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

Approved by 
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2342018

Date Received : Jun 09, 2023

Date Reported : Jun 13, 2023

Report Number : 2623786-1

Page 22 of 22

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	2.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	66.0	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	67.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Natthapon Jengwareewong

Remark :

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

Approved by 
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

Page 1 of 21

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	1.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	64.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	65.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by 
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

Page 2 of 21

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	2.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	2.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	66.4	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	68.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by 
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-3								
Sampled Date	Jun 19, 2023								
Sample Description	Noise Dose								
Location	อาคารที่ ๓, FO								
Personal Sampling	การสุ่มตัวอย่างบุคคล								
Date Analysis Commenced	Jun 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	1.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	64.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	65.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakam Vonginyoo

Remark :

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

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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19517-21/ENML



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-5									
Sampled Date	Jun 19, 2023									
Sample Description	Noise Dose									
Location	อาคารที่ ๓, FO									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	8.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	8.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	72.4	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	74.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakam Vonginyoo

Remark :

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

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

Page 4 of 21

Sample Number	2370140-4								
Sampled Date	Jun 19, 2023								
Sample Description	Noise Dose								
Location	อาคารที่ ๓, FO								
Personal Sampling	การสุ่มตัวอย่าง								
Date Analysis Commenced	Jun 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	4.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	4.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	69.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	71.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakam Vonginyoo

Remark :

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

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Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-6									
Sampled Date	Jun 19, 2023									
Sample Description	Noise Dose									
Location	อาคารที่ ๓, FO									
Personal Sampling	การสุ่มตัวอย่าง									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	66.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	47.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	81.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	81.8	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakam Vonginyoo

Remark :

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

Approved by

Wichan Choonharat

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	60.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	56.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	80.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	82.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	7.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	6.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	71.6	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	73.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	60.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	61.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	1.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.4	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	64.6	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	66.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-11								
Sampled Date	Jun 19, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๓. ASM								
Personal Sampling	นายวิชาญ วัฒนชัย								
Date Analysis Commenced	Jun 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	25.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	24.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	77.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	78.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-13									
Sampled Date	Jun 20, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๓. ASM									
Personal Sampling	นายวิชาญ วัฒนชัย									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	1.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	1.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	65.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	66.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-12									
Sampled Date	Jun 20, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๓. ASM									
Personal Sampling	นายวิชาญ วัฒนชัย									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	61.3	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	63.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-14								
Sampled Date	Jun 20, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๓. FO								
Personal Sampling	นายวิชาญ วัฒนชัย								
Date Analysis Commenced	Jun 23, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	7.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	7.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	71.8	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	73.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Sample Number 2370140-15

Sampled Date Jun 20, 2023

Sample Description Noise Dose

Location กรุงเทพมหานคร อ. SOM

Personal Sampling กรุงเทพมหานคร อ. SOM

Date Analysis Commenced Jun 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	3.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	2.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	67.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	69.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Sample Number 2370140-16

Sampled Date Jun 20, 2023

Sample Description Noise Dose

Location กรุงเทพมหานคร อ. FO

Personal Sampling กรุงเทพมหานคร อ. SOM

Date Analysis Commenced Jun 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	35.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	33.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	78.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	80.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Sample Number 2370140-17

Sampled Date Jun 20, 2023

Sample Description Noise Dose

Location กรุงเทพมหานคร อ. FO

Personal Sampling กรุงเทพมหานคร อ. SOM

Date Analysis Commenced Jun 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	4.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	4.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	69.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	71.7	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2370140

Date Received : Jun 21, 2023

Date Reported : Jun 23, 2023

Report Number : 2687503-1

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Sample Number 2370140-18

Sampled Date Jun 20, 2023

Sample Description Noise Dose

Location กรุงเทพมหานคร อ. FO

Personal Sampling กรุงเทพมหานคร อ. SOM

Date Analysis Commenced Jun 23, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	2.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	2.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	67.4	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	69.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vonginyoo

Remark :

- LOD : Limit of Detection

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

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

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Sample Number	2370140-19									
Sampled Date	Jun 20, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๑. ASM									
Personal Sampling	สุพจน์ แซ่แต้									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	58.3	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	60.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

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Wichan Choonharat

Wichan Choonharat
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

Page 21 of 21

Page 21 of 2

Sample Number	2370140-21									
Sampled Date	Jun 20, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๑. FO									
Personal Sampling	สุพจน์ แซ่แต้									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	8.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	24.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	72.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	78.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370140
Date Received : Jun 21, 2023
Date Reported : Jun 23, 2023
Report Number : 2687503-1

Page 20 of 21

Sample Number	2370140-20									
Sampled Date	Jun 20, 2023									
Sample Description	Noise Dose									
Location	อาคาร ๑. FO									
Personal Sampling	สุพจน์ แซ่แต้									
Date Analysis Commenced	Jun 23, 2023									
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location	
Air Testing										
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	12.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	11.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	73.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	75.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok	

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Nattakarn Vongyinyoo

Remark :

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

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Wichan Choonharat
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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370141
Date Received : Jun 23, 2023
Date Reported : Jun 27, 2023
Report Number : 2687560-1

Page 1 of 4

Page 1 of 4									
Sample Number	2370141-1								
Sampled Date	Jun 22, 2023								
Sample Description	Noise Dose								
Location	อาคาร ๑. (Engineer)								
Personal Sampling	สุพจน์ แซ่แต้								
Date Analysis Commenced	Jun 27, 2023								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	2.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	68.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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

Remark :

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Approved by

Supt Salameh

Supt Salameh
Section Head

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Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370141
Date Received : Jun 23, 2023
Date Reported : Jun 27, 2023
Report Number : 2687560-1

Page 2 of 4

Sample Number	2370141-2
Sampled Date	Jun 22, 2023
Sample Description	Noise Dose
Location	โรงงาน อ. (Engineer)
Personal Sampling	บุคลากร วิศวกร
Date Analysis Commenced	Jun 27, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	2.8	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	69.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

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

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

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Approved by

Supt Salameh
Section Head

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370141
Date Received : Jun 23, 2023
Date Reported : Jun 27, 2023
Report Number : 2687560-1

Page 3 of 4

Sample Number	2370141-3
Sampled Date	Jun 22, 2023
Sample Description	Noise Dose
Location	โรงงาน อ. (Engineer)
Personal Sampling	บุคลากร วิศวกร
Date Analysis Commenced	Jun 27, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	45.1	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

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

Remark :
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2370141
Date Received : Jun 23, 2023
Date Reported : Jun 27, 2023
Report Number : 2687560-1

Page 4 of 4

Sample Number	2370141-4
Sampled Date	Jun 22, 2023
Sample Description	Noise Dose
Location	โรงงาน อ. (Operation)
Personal Sampling	บุคลากร วิศวกร
Date Analysis Commenced	Jun 27, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:00 AM - 04:00 PM	%	-	1	1.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:00 AM - 04:00 PM	dB(A)	-	-	65.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

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

Remark :
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11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2372581
Date Received : Jun 23, 2023
Date Reported : Jun 27, 2023
Report Number : 2693693-1

Page 1 of 1

Sample Number	2372581-1
Sampled Date	Jun 22, 2023
Sample Description	Noise Dose
Location	โรงงาน อ. (Field Operation)
Personal Sampling	บุคลากร วิศวกร
Date Analysis Commenced	Jun 27, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	-	4.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	3.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	69.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	70.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :
MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)
Sampled By : Chanon Booncheun

Remark :
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2375730

Date Received : Jun 30, 2023

Date Reported : Jul 04, 2023

Report Number : 2699878-1

Page 1 of 3

Sample Number	2375730-1
Sampled Date	Jun 29, 2023
Sample Description	Noise Dose
Location	อาคารสำนักงาน
Personal Sampling	อาคารสำนักงาน
Date Analysis Commenced	Jul 04, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:50 AM - 04:50 PM	%	-	1	1.0	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:50 AM - 04:50 PM	dB(A)	-	-	65.1	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2375730

Date Received : Jun 30, 2023

Date Reported : Jul 04, 2023

Report Number : 2699878-1

Page 2 of 3

Sample Number	2375730-3
Sampled Date	Jun 29, 2023
Sample Description	Noise Dose
Location	อาคารสำนักงาน
Personal Sampling	อาคารสำนักงาน
Date Analysis Commenced	Jul 04, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:10 AM - 04:10 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:10 AM - 04:10 PM	dB(A)	-	-	60.8	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 2375730

Date Received : Jun 30, 2023

Date Reported : Jul 04, 2023

Report Number : 2699878-1

Page 2 of 3

Sample Number	2375730-2
Sampled Date	Jun 29, 2023
Sample Description	Noise Dose
Location	อาคารสำนักงาน
Personal Sampling	อาคารสำนักงาน
Date Analysis Commenced	Jul 04, 2023

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	52.1	85	MOL, Department Labour Protection and Welfare (B.E. 2561)	MOL	Bangkok

Guideline :

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

Sampled By : Norranon Tathongkham

Remark :

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ผู้ลงชื่อ



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location :

Lot ID: 2328407
Date Received : Mar 31, 2023
Date Reported : Apr 05, 2023
Report Number : 2592658-1

Page 1 of 2

Sample Number	2328407-1							
Sampled Date	Mar 30, 2023							
Sample Description	Air Quality							
Location	ห้องโดยสารรถตู้							
Date Analysis Commenced	Apr 03, 2023							
Condition of Sample	Drawn into one filter paper placed in plastic cassette							
Barometric Pressure	758 mmHg							
Atmospheric Temperature	33.0 °C							
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline Testing Location
Air Testing								
Total Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), OSHA 0500	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Tairin Octjinda

Remark :

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

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Thanitak.

Approved by

Thanita Kulsurwong
Scientist (4)

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location :

Lot ID: 2328407
Date Received : Mar 31, 2023
Date Reported : Apr 05, 2023
Report Number : 2592658-1

Page 2 of 2

Sample Number	2328407-2							
Sampled Date	Mar 30, 2023							
Sample Description	Air Quality							
Location	พื้นที่ภายในอาคาร							
Date Analysis Commenced	Apr 03, 2023							
Condition of Sample	Drawn into one filter paper placed in plastic cassette							
Barometric Pressure	758 mmHg							
Atmospheric Temperature	33.0 °C							
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline Testing Location
Air Testing								
Total Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), OSHA 0500	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Tairin Octjinda

Remark :

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

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Thanitak.

Approved by

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11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2342014
Date Received : May 17, 2023
Date Reported : May 23, 2023
Report Number : 2623781-1

Page 1 of 2

Sample Number 2342014-1
Sampled Date May 17, 2023
Sample Description Air Quality
Location พื้นที่โรงงานด้านหน้า
Date Analysis Commenced May 18, 2023
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 759 mmHg
Atmospheric Temperature 33.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	<0.15	-15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration
Sampled By : Tarin Octjinda

Remark :

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

Thanitak.

Approved by

Thanita Kulsuriwong
Scientist (4)

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Project Name :
Project Location : GHECO-ONE

Lot ID: 2342014
Date Received : May 17, 2023
Date Reported : May 23, 2023
Report Number : 2623781-1

Page 2 of 2

Sample Number 2342014-2
Sampled Date May 17, 2023
Sample Description Air Quality
Location พื้นที่โรงงานด้านหน้า
Date Analysis Commenced May 18, 2023
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 759 mmHg
Atmospheric Temperature 33.0 °C

Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration
Sampled By : Tarin Octjinda

Remark :

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

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