

ภาคผนวก ค

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ใบรับรองผลการวิเคราะห์

## คุณภาพอากาศในบรรยากาศ

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## Analysis / Test Report



Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-QM-22-103

Project Name :

Project Location : Glow SPP 3

TESTING  
No.0042

Lot ID: 2486258

Date Received : Sep 17, 2024

Date Reported : Oct 01, 2024

Report Number : 3067142-1C3

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	โรงงานอุตสาหกรรม (GPS 47P 0735185, 1405871)						
Date Analysis Commenced	Sep 17, 2024						
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag						
Sample Number	Sampled Date						
2486258-1	Sep 08 - Sep 09, 2024	0.053	0.019	757	28		
2486258-2	Sep 09 - Sep 10, 2024	0.047	0.025	757	28		
2486258-3	Sep 10 - Sep 11, 2024	0.039	0.027	757	29		
2486258-4	Sep 11 - Sep 12, 2024	0.035	0.029	757	28		
2486258-5	Sep 12 - Sep 13, 2024	0.038	0.022	757	27		
2486258-6	Sep 13 - Sep 14, 2024	0.030	0.022	757	28		
2486258-7	Sep 14 - Sep 15, 2024	0.044	0.029	757	27		
Guideline	0.33	0.12	-	-	-	-	-

### Reference Method

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

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

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

Sampled By : Sawai Tonpho

### Remark :

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

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

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Life Sciences

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## Analysis / Test Report



Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-QM-22-103

Project Name :

Project Location : Glow SPP 3

TESTING  
No.0042

Lot ID: 2486258

Date Received : Sep 17, 2024

Date Reported : Oct 01, 2024

Report Number : 3067142-3C3

Page 1 of 1

Sample Description	Air Quality	Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	โรงงานอุตสาหกรรม (GPS 47P 0730822, 1407369)						
Date Analysis Commenced	Sep 17, 2024						
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag						
Sample Number	Sampled Date						
2486258-15	Sep 08 - Sep 09, 2024	0.027	0.016	757	28		
2486258-16	Sep 09 - Sep 10, 2024	0.057	0.025	757	28		
2486258-17	Sep 10 - Sep 11, 2024	0.060	0.027	757	29		
2486258-18	Sep 11 - Sep 12, 2024	0.046	0.025	757	28		
2486258-19	Sep 12 - Sep 13, 2024	0.041	0.021	757	27		
2486258-20	Sep 13 - Sep 14, 2024	0.045	0.023	757	28		
2486258-21	Sep 14 - Sep 15, 2024	0.035	0.020	757	27		
Guideline	0.33	0.12	-	-	-	-	-

### Reference Method

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

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

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

Sampled By : Sawai Tonpho

### Remark :

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow SPP 3

TESTING  
No.0042

Lot ID: 2486258

Date Received : Sep 17, 2024

Date Reported : Oct 01, 2024

Report Number : 3067142-2C3

Page 1 of 1

Sample Description	Air Quality	Sample Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	อุตสาหกรรมหลวง (GPS 47P 0729829, 1403305)	Sep 17, 2024				
Date Analysis Commenced	Sep 17, 2024					
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag					
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)	
2486258-8	Sep 08 - Sep 09, 2024	0.048	0.017	757	28	
2486258-9	Sep 09 - Sep 10, 2024	0.057	0.022	757	28	
2486258-10	Sep 10 - Sep 11, 2024	0.032	0.019	757	29	
2486258-11	Sep 11 - Sep 12, 2024	0.035	0.017	757	28	
2486258-12	Sep 12 - Sep 13, 2024	0.028	0.016	757	27	
2486258-13	Sep 13 - Sep 14, 2024	0.032	0.017	757	28	
2486258-14	Sep 14 - Sep 15, 2024	0.033	0.018	757	27	
Guideline		0.33	0.12	-	-	

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

Sampled By : Sawai Tonpho

Remark :

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

Approved by

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Thanita Kulsurivong  
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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow SPP 3

TESTING  
No.0042

Lot ID: 2483355

Date Received : Sep 17, 2024

Date Reported : Sep 23, 2024

Report Number: 3061644-1

Page 1 of 1

Sample Description		Air Quality			
Location	อุตสาหกรรมหลวง (พ.อ. อุตสาหกรรม) (GPS 47P 0726058, 1402077)				
Date Analysis Commenced	Sep 17, 2024				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2483355-1	Sep 08 - Sep 09, 2024	0.020	0.017	757	28
2483355-2	Sep 09 - Sep 10, 2024	0.028	0.022	757	28
2483355-3	Sep 10 - Sep 11, 2024	0.027	0.021	757	29
2483355-4	Sep 11 - Sep 12, 2024	0.036	0.021	757	28
2483355-5	Sep 12 - Sep 13, 2024	0.024	0.015	757	27
2483355-6	Sep 13 - Sep 14, 2024	0.021	0.014	757	28
2483355-7	Sep 14 - Sep 15, 2024	0.030	0.017	757	27
Guideline		0.33	0.12	-	-

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

Sampled By : Sawai Tonpho

Remark :

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

Approved by

Thanitak.

Thanita Kulsurivong  
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## Analysis / Test Report

**Client:** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**

**Lot ID: 2486124**  
Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3117923-1C3

Page 1 of 1

Sample Description		Air Quality					
Location	Parameter	Latitude (GPS 47P 0730822, 1407369)					
Measurement Date	Measurement by	Nitrogen dioxide (ppm)					
		Sep 08, 2024 - Sep 15, 2024					
		Sawal Tonpho					
Time	2486124-15	2486124-16	2486124-17	2486124-18	2486124-19	2486124-20	2486124-21
11:00 AM - 12:00 PM	0.0053	0.0104	0.0085	0.0066	0.0042	0.0072	0.0094
12:00 PM - 01:00 PM	0.0089	0.0070	0.0049	0.0069	0.0053	0.0054	0.0075
01:00 PM - 02:00 PM	0.0058	0.0150	0.0107	0.0080	0.0039	0.0070	0.0079
02:00 PM - 03:00 PM	0.0003	0.0102	0.0111	0.0060	0.0026	0.0052	0.0061
03:00 PM - 04:00 PM	0.0073	0.0127	0.0091	0.0061	0.0034	0.0093	0.0062
04:00 PM - 05:00 PM	0.0052	0.0131	0.0049	0.0059	0.0033	0.0081	0.0081
05:00 PM - 06:00 PM	0.0050	0.0105	0.0088	0.0087	0.0038	0.0065	0.0088
06:00 PM - 07:00 PM	0.0082	0.0100	0.0042	0.0056	0.0073	0.0073	0.0114
07:00 PM - 08:00 PM	0.0092	0.0112	0.0044	0.0102	0.0124	0.0107	0.0126
08:00 PM - 09:00 PM	0.0073	0.0051	0.0065	0.0073	0.0121	0.0051	0.0073
09:00 PM - 10:00 PM	0.0096	0.0063	0.0122	0.0080	0.0101	0.0029	0.0073
10:00 PM - 11:00 PM	0.0102	0.0074	0.0092	0.0148	0.0115	0.0020	0.0106
11:00 PM - 12:00 AM	0.0045	0.0085	0.0103	0.0106	0.0049	0.0020	0.0088
12:00 AM - 01:00 AM	0.0080	0.0104	0.0066	0.0079	0.0039	0.0019	0.0087
01:00 AM - 02:00 AM	0.0030	0.0092	0.0086	0.0109	0.0022	0.0056	0.0083
02:00 AM - 03:00 AM	0.0027	0.0079	0.0069	0.0060	0.0027	0.0075	0.0075
03:00 AM - 04:00 AM	0.0049	0.0106	0.0063	0.0086	0.0026	0.0040	0.0072
04:00 AM - 05:00 AM	0.0043	0.0079	0.0101	0.0114	0.0045	0.0040	0.0090
05:00 AM - 06:00 AM	0.0045	0.0055	0.0074	0.0114	0.0035	0.0047	0.0081
06:00 AM - 07:00 AM	0.0060	0.0090	0.0092	0.0080	0.0042	0.0059	0.0105
07:00 AM - 08:00 AM	0.0052	0.0075	0.0075	0.0093	0.0041	0.0131	0.0066
08:00 AM - 09:00 AM	0.0077	0.0088	0.0078	0.0102	0.0037	0.0062	0.0048
09:00 AM - 10:00 AM	0.0090	0.0068	0.0111	0.0068	0.0043	0.0038	0.0089
10:00 AM - 11:00 AM	0.0076	0.0080	0.0077	0.0054	0.0066	0.0113	0.0056
Average	0.0062	0.0090	0.0081	0.0084	0.0052	0.0061	0.0084
1hr - Maximum	0.0102	0.0150	0.0122	0.0148	0.0124	0.0131	0.0126
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. 2553). : US EPA Method Part 50 App. F (Chemiluminescence)						

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Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-QM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 2486124**

Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3117922-1C3

Page 1 of 1

Sample Description		Air Quality		2486124-8		2486124-9		2486124-10		2486124-11		2486124-12		2486124-13		2486124-14	
Location	Parameter	Measurement Date	Measurement by	Time	Sep 08, 2024	Sep 09, 2024	Sep 10, 2024	Sep 11, 2024	Sep 12, 2024	Sep 13, 2024	Sep 14, 2024	Sep 15, 2024	Sep 16, 2024	Sep 17, 2024	Sep 18, 2024	Sep 19, 2024	Sep 20, 2024
Nitrogen dioxide (ppm)		Sep 08, 2024 - Sep 15, 2024	Sawal Tonpho	11:00 AM - 12:00 PM	0.0046	0.0061	0.0090	0.0033	0.0032	0.0087	0.0050	0.0015	0.0011	0.0015	0.0011	0.0011	0.0011
				12:00 PM - 01:00 PM	0.0042	0.0044	0.0092	0.0033	0.0022	0.0086	0.0015	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				01:00 PM - 02:00 PM	0.0113	0.0065	0.0063	0.0015	0.0012	0.0089	0.0050	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				02:00 PM - 03:00 PM	0.0102	0.0090	0.0094	0.0036	0.0029	0.0057	0.0056	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				03:00 PM - 04:00 PM	0.0051	0.0090	0.0072	0.0021	0.0018	0.0033	0.0045	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				04:00 PM - 05:00 PM	0.0021	0.0086	0.0059	0.0032	0.0018	0.0034	0.0043	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				05:00 PM - 06:00 PM	0.0057	0.0084	0.0154	0.0037	0.0014	0.0064	0.0055	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				06:00 PM - 07:00 PM	0.0119	0.0113	0.0019	0.0033	0.0034	0.0028	0.0049	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				07:00 PM - 08:00 PM	0.0035	0.0123	0.0111	0.0047	0.0037	0.0025	0.0032	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				08:00 PM - 09:00 PM	0.0043	0.0054	0.0063	0.0058	0.0035	0.0024	0.0054	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				09:00 PM - 10:00 PM	0.0039	0.0051	0.0061	0.0084	0.0037	0.0027	0.0091	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				10:00 PM - 11:00 PM	0.0028	0.0056	0.0061	0.0072	0.0044	0.0025	0.0069	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				11:00 PM - 12:00 AM	0.0064	0.0077	0.0060	0.0024	0.0035	0.0022	0.0125	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				12:00 AM - 01:00 AM	0.0065	0.0101	0.0034	0.0016	0.0038	0.0035	0.0064	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				01:00 AM - 02:00 AM	0.0053	0.0072	0.0038	0.0016	0.0029	0.0026	0.0040	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				02:00 AM - 03:00 AM	0.0066	0.0070	0.0046	0.0013	0.0031	0.0030	0.0057	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				03:00 AM - 04:00 AM	0.0090	0.0085	0.0044	0.0011	0.0029	0.0036	0.0039	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				04:00 AM - 05:00 AM	0.0078	0.0084	0.0071	0.0028	0.0030	0.0030	0.0033	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				05:00 AM - 06:00 AM	0.0089	0.0068	0.0077	0.0062	0.0048	0.0048	0.0072	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				06:00 AM - 07:00 AM	0.0087	0.0051	0.0132	0.0127	0.0049	0.0065	0.0031	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				07:00 AM - 08:00 AM	0.0092	0.0072	0.0082	0.0058	0.0053	0.0049	0.0074	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				08:00 AM - 09:00 AM	0.0097	0.0085	0.0027	0.0040	0.0104	0.0024	0.0080	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				09:00 AM - 10:00 AM	0.0083	0.0092	0.0024	0.0018	0.0096	0.0035	0.0097	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				10:00 AM - 11:00 AM	0.0069	0.0081	0.0021	0.0017	0.0120	0.0029	0.0091	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				Average	0.0068	0.0077	0.0066	0.0039	0.0041	0.0042	0.0065	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				1hr - Maximum	0.0119	0.0123	0.0154	0.0127	0.0120	0.0089	0.0125	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
				Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
				Standard	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
				Reference Method	: US EPA Method Part 50 App. F (Chemiluminescence)												
				Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).												

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Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-QM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 2483352**

Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3061641-1

Page 1 of 1

Sample Description		Air Quality														
Location		วัดสวนหลวง (พ.บ. สวนหลวง) (GPS 47P 0736058, 1402077)														
Parameter		Nitrogen dioxide (ppm)														
Measurement Date		Sep 08, 2024 - Sep 15, 2024														
Measurement by		Sawal Tonpho														
Time		2483352-1		2483352-2		2483352-3		2483352-4		2483352-5		2483352-6		2483352-7		
		Sep 08, 2024	Sep 08, 2024	Sep 09, 2024	Sep 09, 2024	Sep 10, 2024	Sep 10, 2024	Sep 11, 2024	Sep 11, 2024	Sep 12, 2024	Sep 12, 2024	Sep 13, 2024	Sep 13, 2024	Sep 14, 2024	Sep 14, 2024	
10:00 AM - 11:00 AM		0.0027	0.0057	0.0023	0.0016	0.0035	0.0003	0.0029	0.0012	0.0002	0.0002	0.0002	0.0002	0.0002	0.0043	
11:00 AM - 12:00 PM		0.0038	0.0051	0.0015	0.0035	0.0003	0.0003	0.0041	0.0017	0.0002	0.0002	0.0003	0.0001	0.0026	0.0021	
12:00 PM - 01:00 PM		0.0023	0.0044	0.0015	0.0041	0.0003	0.0003	0.0041	0.0003	0.0002	0.0002	0.0003	0.0001	0.0026	0.0021	
01:00 PM - 02:00 PM		0.0008	0.0054	0.0023	0.0023	0.0059	0.0003	0.0030	<0.0001	0.0029	0.0029	0.0007	0.0007	0.0007	0.0007	
02:00 PM - 03:00 PM		0.0017	0.0041	0.0059	0.0021	0.0002	0.0002	0.0021	0.0002	0.0016	0.0016	0.0011	0.0011	0.0011	0.0011	
03:00 PM - 04:00 PM		0.0032	0.0029	0.0058	0.0021	0.0001	0.0001	0.0021	0.0001	0.0013	0.0013	0.0028	0.0028	0.0028	0.0028	
04:00 PM - 05:00 PM		0.0021	0.0028	0.0047	0.0023	0.0003	0.0003	0.0023	0.0003	0.0010	0.0010	0.0039	0.0039	0.0039	0.0039	
05:00 PM - 06:00 PM		0.0026	0.0019	0.0073	0.0024	0.0001	0.0001	0.0024	0.0001	0.0019	0.0019	0.0015	0.0015	0.0015	0.0015	
06:00 PM - 07:00 PM		0.0042	0.0023	0.0068	0.0022	0.0001	0.0001	0.0022	0.0001	0.0002	0.0002	0.0018	0.0018	0.0018	0.0018	
07:00 PM - 08:00 PM		0.0032	0.0012	0.0093	0.0031	0.0001	0.0001	0.0031	0.0001	0.0022	0.0022	0.0018	0.0018	0.0018	0.0018	
08:00 PM - 09:00 PM		0.0040	0.0014	0.0089	0.0020	0.0001	0.0001	0.0020	0.0001	<0.0001	<0.0001	0.0032	0.0032	0.0032	0.0032	
09:00 PM - 10:00 PM		0.0041	0.0027	0.0076	0.0018	0.0002	0.0002	0.0018	0.0002	0.0002	0.0002	0.0028	0.0028	0.0028	0.0028	
10:00 PM - 11:00 PM		0.0075	0.0027	0.0070	0.0011	0.0001	0.0001	0.0011	<0.0001	0.0004	0.0004	0.0024	0.0024	0.0024	0.0024	
11:00 PM - 12:00 AM		0.0094	0.0019	0.0072	0.0007	0.0003	0.0003	0.0007	0.0003	<0.0001	<0.0001	0.0032	0.0032	0.0032	0.0032	
12:00 AM - 01:00 AM		0.0091	0.0007	0.0079	0.0003	0.0003	0.0003	0.0003	0.0004	0.0056	0.0056	0.0054	0.0054	0.0054	0.0054	
01:00 AM - 02:00 AM		0.0088	0.0016	0.0084	0.0003	0.0003	0.0003	0.0003	0.0005	0.0018	0.0018	0.0024	0.0024	0.0024	0.0024	
02:00 AM - 03:00 AM		0.0103	0.0012	0.0079	0.0002	0.0002	0.0002	0.0002	0.0001	0.0016	0.0016	0.0033	0.0033	0.0033	0.0033	
03:00 AM - 04:00 AM		0.0100	0.0016	0.0095	0.0001	0.0001	0.0001	0.0001	0.0001	0.0015	0.0015	0.0008	0.0008	0.0008	0.0008	
04:00 AM - 05:00 AM		0.0099	0.0017	0.0037	0.0001	0.0001	0.0001	0.0001	0.0003	0.0018	0.0018	0.0006	0.0006	0.0006	0.0006	
05:00 AM - 06:00 AM		0.0096	0.0010	0.0049	0.0001	0.0001	0.0001	0.0001	0.0003	0.0019	0.0019	0.0005	0.0005	0.0005	0.0005	
06:00 AM - 07:00 AM		0.0097	0.0008	0.0033	0.0003	0.0003	0.0003	0.0031	0.0003	0.0022	0.0022	0.0014	0.0014	0.0014	0.0014	
07:00 AM - 08:00 AM		0.0082	0.0010	0.0018	0.0018	0.0006	0.0006	0.0006	0.0003	0.0030	0.0030	0.0025	0.0025	0.0025	0.0025	
08:00 AM - 09:00 AM		0.0070	0.0010	0.0017	0.0017	0.0005	0.0005	0.0005	0.0011	0.0019	0.0019	0.0015	0.0015	0.0015	0.0015	
09:00 AM - 10:00 AM		0.0067	0.0020	0.0024	0.0024	0.0005	0.0005	0.0005	0.0004	0.0034	0.0034	0.0025	0.0025	0.0025	0.0025	
Average		0.0059	0.0024	0.0052	0.0018	0.0055	0.0018	0.0055	0.0004	0.0015	0.0015	0.0023	0.0023	0.0023	0.0023	
1hr - Maximum		0.0103	0.0057	0.0093	0.0055	0.0093	0.0055	0.0055	0.0017	0.0056	0.0056	0.0054	0.0054	0.0054	0.0054	
Standard 1hr - Average		0.170	0.170	0.170	0.170	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)														



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location :

Lot ID: 2486130  
Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3066797-1C3

Page 1 of 1

## Analysis / Test Report

Sample Description Location	Air Quality ตรวจคุณภาพอากาศ		Sulfur Dioxide (ppm)	
	Parameter		Measurement Date	
	Measurement by		Sep 08, 2024 - Sep 15, 2024	
	Time		Sawal Tonpho	
09:00 AM - 10:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
10:00 AM - 11:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
11:00 AM - 12:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
12:00 PM - 01:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
01:00 PM - 02:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
02:00 PM - 03:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
03:00 PM - 04:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
04:00 PM - 05:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
05:00 PM - 06:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
06:00 PM - 07:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
07:00 PM - 08:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
08:00 PM - 09:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
09:00 PM - 10:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
10:00 PM - 11:00 PM	2486130-1	2486130-2	2486130-3	2486130-4
11:00 PM - 12:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
12:00 AM - 01:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
01:00 AM - 02:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
02:00 AM - 03:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
03:00 AM - 04:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
04:00 AM - 05:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
05:00 AM - 06:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
06:00 AM - 07:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
07:00 AM - 08:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
08:00 AM - 09:00 AM	2486130-1	2486130-2	2486130-3	2486130-4
Average	0.0026	0.0025	0.0025	0.0025
1hr - Maximum	0.0027	0.0026	0.0026	0.0026
Standard 1hr - Average	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	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			

This above results are valid only for the analyzed/checked 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).  
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Approved by

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Life Sciences

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Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location :

Lot ID: 2486130  
Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3117925-1C3

Page 1 of 1

## Analysis / Test Report

Sample Description Location	Air Quality ตรวจคุณภาพอากาศ		Sulfur Dioxide (ppm)	
	Parameter		Measurement Date	
	Measurement by		Sep 08, 2024 - Sep 15, 2024	
	Time		Sawal Tonpho	
11:00 AM - 12:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
12:00 PM - 01:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
01:00 PM - 02:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
02:00 PM - 03:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
03:00 PM - 04:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
04:00 PM - 05:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
05:00 PM - 06:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
06:00 PM - 07:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
07:00 PM - 08:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
08:00 PM - 09:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
09:00 PM - 10:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
10:00 PM - 11:00 PM	2486130-15	2486130-16	2486130-17	2486130-18
11:00 PM - 12:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
12:00 AM - 01:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
01:00 AM - 02:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
02:00 AM - 03:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
03:00 AM - 04:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
04:00 AM - 05:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
05:00 AM - 06:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
06:00 AM - 07:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
07:00 AM - 08:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
08:00 AM - 09:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
09:00 AM - 10:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
10:00 AM - 11:00 AM	2486130-15	2486130-16	2486130-17	2486130-18
Average	0.0019	0.0019	0.0016	0.0018
1hr - Maximum	0.0021	0.0022	0.0017	0.0021
Standard 1hr - Average	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	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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Anybody who uses this report for the purpose of other than the intended use is at their own risk.

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19517-21/E-MAIL





Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :  
Lot ID: 2486130  
Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3117924-1C3

Page 1 of 1

Sample Description		Air Quality		2486130-8		2486130-9		2486130-10		2486130-11		2486130-12		2486130-13		2486130-14	
Location		ชุมชนอุตสาหกรรม (GPS 47P 0729829, 1403305)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)		Sulfur Dioxide (ppm)	
Measurement Date		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024		Sep 08, 2024 - Sep 15, 2024	
Measurement by		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho		Sawal Tonpho	
Time		Sep 08, 2024		Sep 09, 2024		Sep 10, 2024		Sep 11, 2024		Sep 12, 2024		Sep 13, 2024		Sep 14, 2024		Sep 15, 2024	
11:00 AM - 12:00 PM		0.0020		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0021	
12:00 PM - 01:00 PM		0.0020		0.0021		0.0020		0.0020		0.0020		0.0021		0.0021		0.0023	
01:00 PM - 02:00 PM		0.0021		0.0021		0.0021		0.0020		0.0020		0.0021		0.0021		0.0023	
02:00 PM - 03:00 PM		0.0021		0.0021		0.0021		0.0020		0.0020		0.0021		0.0021		0.0024	
03:00 PM - 04:00 PM		0.0020		0.0021		0.0021		0.0021		0.0021		0.0021		0.0021		0.0024	
04:00 PM - 05:00 PM		0.0020		0.0021		0.0021		0.0021		0.0021		0.0021		0.0022		0.0024	
05:00 PM - 06:00 PM		0.0020		0.0021		0.0021		0.0021		0.0021		0.0021		0.0022		0.0024	
06:00 PM - 07:00 PM		0.0019		0.0021		0.0021		0.0021		0.0021		0.0022		0.0022		0.0024	
07:00 PM - 08:00 PM		0.0019		0.0021		0.0021		0.0021		0.0021		0.0021		0.0021		0.0023	
08:00 PM - 09:00 PM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0023	
09:00 PM - 10:00 PM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0022	
10:00 PM - 11:00 PM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0022	
11:00 PM - 12:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0022	
12:00 AM - 01:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0021		0.0022	
01:00 AM - 02:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0022	
02:00 AM - 03:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0022	
03:00 AM - 04:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0022	
04:00 AM - 05:00 AM		0.0019		0.0019		0.0019		0.0019		0.0020		0.0020		0.0020		0.0022	
05:00 AM - 06:00 AM		0.0019		0.0019		0.0019		0.0019		0.0020		0.0020		0.0020		0.0022	
06:00 AM - 07:00 AM		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0022	
07:00 AM - 08:00 AM		0.0020		0.0019		0.0019		0.0019		0.0020		0.0020		0.0020		0.0022	
08:00 AM - 09:00 AM		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0020		0.0022	
09:00 AM - 10:00 AM		0.0019		0.0019		0.0020		0.0020		0.0020		0.0020		0.0020		0.0021	
10:00 AM - 11:00 AM		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0021		0.0022	
Average		0.0020		0.0020		0.0020		0.0020		0.0020		0.0021		0.0021		0.0023	
1hr - Maximum		0.0021		0.0021		0.0021		0.0021		0.0021		0.0022		0.0024		0.0024	
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		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58		: US EPA Method Part 53 and 58	

The above results are valid only for the analyzed (tested sample(s)) as indicated in the report. No other samples were analyzed. The results are not to be used without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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10617-211 EMAIL



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :  
Lot ID: 2483353  
Date Received : Sep 17, 2024  
Date Reported : Sep 21, 2024  
Report Number: 3061642-1

Page 1 of 1

Sample Description		Air Quality													
Location		โรงงานอุตสาหกรรม (พิกัด: 47P 0736058, 1402077)													
Parameter		Sulfur Dioxide (ppm)													
Measurement Date		Sep 08, 2024 - Sep 15, 2024													
Measurement by		Sawal Tonpho													
Time		2483353-1		2483353-2		2483353-3		2483353-4		2483353-5		2483353-6		2483353-7	
10:00 AM - 11:00 AM		Sep 08, 2024	0.0021	Sep 09, 2024	0.0023	Sep 10, 2024	0.0022	Sep 11, 2024	0.0022	Sep 12, 2024	0.0021	Sep 13, 2024	0.0020	Sep 14, 2024	0.0022
11:00 AM - 12:00 PM		0.0021	0.0021	0.0023	0.0023	0.0023	0.0023	0.0022	0.0022	0.0021	0.0021	0.0022	0.0021	0.0021	0.0021
12:00 PM - 01:00 PM		0.0021	0.0021	0.0023	0.0023	0.0023	0.0022	0.0021	0.0021	0.0022	0.0022	0.0022	0.0022	0.0021	0.0021
01:00 PM - 02:00 PM		0.0022	0.0022	0.0023	0.0023	0.0022	0.0022	0.0021	0.0021	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
02:00 PM - 03:00 PM		0.0021	0.0021	0.0023	0.0023	0.0022	0.0022	0.0021	0.0021	0.0022	0.0023	0.0021	0.0021	0.0022	0.0022
03:00 PM - 04:00 PM		0.0021	0.0021	0.0021	0.0021	0.0022	0.0021	0.0021	0.0021	0.0022	0.0022	0.0022	0.0022	0.0021	0.0022
04:00 PM - 05:00 PM		0.0022	0.0022	0.0022	0.0022	0.0023	0.0022	0.0022	0.0022	0.0022	0.0022	0.0021	0.0021	0.0023	0.0023
05:00 PM - 06:00 PM		0.0021	0.0021	0.0021	0.0021	0.0022	0.0022	0.0021	0.0021	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
06:00 PM - 07:00 PM		0.0020	0.0020	0.0021	0.0021	0.0022	0.0022	0.0020	0.0020	0.0021	0.0021	0.0023	0.0023	0.0021	0.0022
07:00 PM - 08:00 PM		0.0020	0.0020	0.0024	0.0024	0.0022	0.0022	0.0020	0.0020	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
08:00 PM - 09:00 PM		0.0020	0.0020	0.0021	0.0021	0.0020	0.0020	0.0020	0.0020	0.0024	0.0024	0.0021	0.0021	0.0022	0.0022
09:00 PM - 10:00 PM		0.0021	0.0021	0.0020	0.0020	0.0023	0.0023	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0022	0.0022
10:00 PM - 11:00 PM		0.0021	0.0021	0.0021	0.0021	0.0022	0.0022	0.0021	0.0021	0.0021	0.0024	0.0022	0.0022	0.0022	0.0022
11:00 PM - 12:00 AM		0.0019	0.0019	0.0021	0.0021	0.0022	0.0022	0.0021	0.0021	0.0024	0.0024	0.0022	0.0022	0.0022	0.0022
12:00 AM - 01:00 AM		0.0020	0.0020	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0023	0.0023	0.0022	0.0022	0.0022	0.0022
01:00 AM - 02:00 AM		0.0023	0.0023	0.0022	0.0022	0.0020	0.0020	0.0021	0.0021	0.0023	0.0023	0.0021	0.0021	0.0022	0.0022
02:00 AM - 03:00 AM		0.0024	0.0024	0.0023	0.0023	0.0024	0.0024	0.0022	0.0022	0.0023	0.0023	0.0020	0.0020	0.0022	0.0022
03:00 AM - 04:00 AM		0.0023	0.0023	0.0023	0.0023	0.0021	0.0021	0.0021	0.0021	0.0023	0.0023	0.0020	0.0020	0.0022	0.0022
04:00 AM - 05:00 AM		0.0024	0.0024	0.0022	0.0022	0.0021	0.0021	0.0020	0.0020	0.0021	0.0021	0.0020	0.0020	0.0022	0.0022
05:00 AM - 06:00 AM		0.0024	0.0024	0.0023	0.0023	0.0018	0.0018	0.0020	0.0020	0.0021	0.0021	0.0019	0.0019	0.0022	0.0022
06:00 AM - 07:00 AM		0.0024	0.0024	0.0022	0.0022	0.0021	0.0021	0.0020	0.0020	0.0021	0.0021	0.0021	0.0021	0.0022	0.0022
07:00 AM - 08:00 AM		0.0023	0.0023	0.0022	0.0022	0.0022	0.0022	0.0021	0.0021	0.0021	0.0021	0.0022	0.0022	0.0022	0.0022
08:00 AM - 09:00 AM		0.0023	0.0023	0.0023	0.0023	0.0022	0.0022	0.0021	0.0021	0.0020	0.0020	0.0022	0.0022	0.0021	0.0021
09:00 AM - 10:00 AM		0.0023	0.0023	0.0022	0.0022	0.0022	0.0022	0.0021	0.0021	0.0020	0.0020	0.0022	0.0022	0.0021	0.0021
Average		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0021	0.0021	0.0022	0.0022	0.0021	0.0021	0.0022	0.0022
1hr - Maximum		0.0024	0.0024	0.0024	0.0024	0.0023	0.0023	0.0022	0.0022	0.0024	0.0024	0.0022	0.0022	0.0023	0.0023
Standard 1hr - Average		0.3	0.3	0.3	0.3	0.3	0.3	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	0.12	0.12	0.12	0.12	0.12	0.12
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).															



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O :

Project Name :

Project Location : Glow SPP 3

Lot ID: 2486257

Date Received : Sep 17, 2024

Date Reported : Sep 25, 2024

Report Number : 3067136-1 C3

Sample Number : 2486257-1 to 7

Parameter : Wind Speed / Wind Direction

Location : โรงงานผลิตสารเคมีอุตสาหกรรม (GPS 477-0735185, 1405871)

Sampling Date : Sep 08 - Sep 15, 2024

Sampling by : Sawai Tonpho

Time		Sep 08 - Sep 09, 2024		Sep 09 - Sep 10, 2024		Sep 10 - Sep 11, 2024		Sep 11 - Sep 12, 2024		Sep 12 - Sep 13, 2024		Sep 13 - Sep 14, 2024		Sep 14 - Sep 15, 2024								
		WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
09:00 AM - 10:00 AM		0.7	104.0	ESE	2.2	247.0	WSW	1.0	298.0	NNW	1.1	241.0	WSW	0.7	62.0	ENE	0.0	-	-	1.5	0.0	N
10:00 AM - 11:00 AM		0.3	118.0	ESE	0.6	234.0	SW	1.5	196.0	SSW	0.0	-	-	-	0.0	-	-	-	-	0.0	-	-
11:00 AM - 12:00 PM		0.9	73.0	ENE	0.8	271.0	W	3.3	256.0	WSW	1.9	241.0	WSW	0.6	6.0	N	0.0	-	-	0.4	333.0	NNW
12:00 PM - 01:00 PM		0.0	-	-	2.1	195.0	SSW	1.1	195.0	SSW	1.7	263.0	W	0.0	-	-	0.0	-	-	0.0	-	-
01:00 PM - 02:00 PM		0.9	74.0	ENE	1.0	198.0	SSW	2.9	175.0	S	1.3	283.0	NNW	1.2	18.0	NNE	0.3	15.0	NNE	0.0	-	-
02:00 PM - 03:00 PM		0.4	52.0	NE	0.4	166.0	SSE	7.8	228.0	SW	1.7	177.0	S	1.1	156.0	SSE	2.0	297.0	NNW	0.6	104.0	ESE
03:00 PM - 04:00 PM		0.9	86.0	E	4.0	249.0	WSW	0.7	213.0	SSW	1.9	210.0	SSW	1.8	142.0	SE	2.8	198.0	SSW	0.4	81.0	E
04:00 PM - 05:00 PM		0.0	-	-	1.6	213.0	SSW	1.0	169.0	S	2.2	163.0	SSE	6.8	183.0	S	1.9	239.0	WSW	1.7	170.0	S
05:00 PM - 06:00 PM		0.7	140.0	SE	3.1	163.0	SSE	1.2	203.0	SSW	6.5	222.0	SW	1.4	204.0	SSW	2.0	265.0	W	3.6	244.0	WSW
06:00 PM - 07:00 PM		3.1	183.0	S	2.7	243.0	WSW	3.7	180.0	S	2.8	214.0	SW	1.8	71.0	ENE	2.8	228.0	SW	3.2	225.0	SW
07:00 PM - 08:00 PM		0.0	-	-	1.3	168.0	SSE	1.8	249.0	WSW	4.4	178.0	S	0.6	62.0	ENE	1.4	194.0	SSW	1.3	229.0	SW
08:00 PM - 09:00 PM		0.3	156.0	SSE	2.9	207.0	SSW	1.4	229.0	SW	0.5	180.0	S	0.3	61.0	ENE	3.4	314.0	NW	1.2	182.0	S
09:00 PM - 10:00 PM		1.8	191.0	S	5.8	215.0	SW	1.9	188.0	S	1.2	177.0	S	0.2	-	-	1.7	216.0	SW	1.3	184.0	S
10:00 PM - 11:00 PM		0.4	290.0	WSW	4.5	194.0	SSW	2.0	233.0	SW	1.6	195.0	SSW	0.0	-	-	1.5	226.0	SW	2.3	165.0	SSE
11:00 PM - 12:00 AM		0.6	342.0	NNW	0.7	230.0	SW	0.9	172.0	S	0.2	-	-	-	0.0	-	1.8	182.0	S	0.5	299.0	NNW
12:00 AM - 01:00 AM		0.0	-	-	2.0	203.0	SSW	1.2	164.0	SSE	2.3	190.0	S	1.1	166.0	SSE	0.2	-	-	2.4	197.0	SSW
01:00 AM - 02:00 AM		0.0	-	-	0.4	199.0	SSW	3.7	187.0	S	1.0	198.0	SSW	0.5	171.0	S	1.4	214.0	SW	3.7	168.0	SSE
02:00 AM - 03:00 AM		1.5	184.0	S	0.6	210.0	SSW	1.7	154.0	SSE	0.0	-	-	2.6	166.0	SSE	1.1	215.0	SW	2.8	197.0	SSW
03:00 AM - 04:00 AM		1.6	225.0	SW	0.7	238.0	WSW	1.1	285.0	NNW	0.0	-	-	3.1	249.0	WSW	1.4	217.0	SW	1.5	222.0	SW
04:00 AM - 05:00 AM		0.7	255.0	WSW	2.0	289.0	NNW	0.1	-	-	0.0	-	-	1.4	297.0	NNW	1.0	206.0	SSW	1.1	230.0	SW
05:00 AM - 06:00 AM		2.3	278.0	W	1.8	176.0	S	0.0	-	-	0.7	264.0	W	1.0	279.0	W	0.6	212.0	SSW	2.6	345.0	NNW
06:00 AM - 07:00 AM		1.6	222.0	SW	2.2	211.0	SSW	0.3	54.0	NE	0.0	-	-	0.5	338.0	NNW	1.5	251.0	WSW	1.9	345.0	NNW
07:00 AM - 08:00 AM		0.6	130.0	SE	3.3	290.0	NNW	0.4	41.0	NE	0.0	-	-	0.3	66.0	ENE	0.8	227.0	SW	2.4	344.0	NNW
08:00 AM - 09:00 AM		2.1	172.0	S	2.3	180.0	S	0.4	105.0	ESE	0.6	354.0	N	0.1	-	-	1.0	308.0	NW	1.6	330.0	NNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the wind speed and direction. The wind speed and direction are indicated in the report. The wind speed and direction are indicated in the report. The wind speed and direction are indicated in the report.

Approved by

Sareyuth Jitranont  
Assistant General Manager

The above results are valid only for the wind speed and direction. The wind speed and direction are indicated in the report. The wind speed and direction are indicated in the report. The wind speed and direction are indicated in the report.

Approved by

Sareyuth Jitranont  
Assistant General Manager



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O :

Project Name :

Project Location : Glow SPP 3

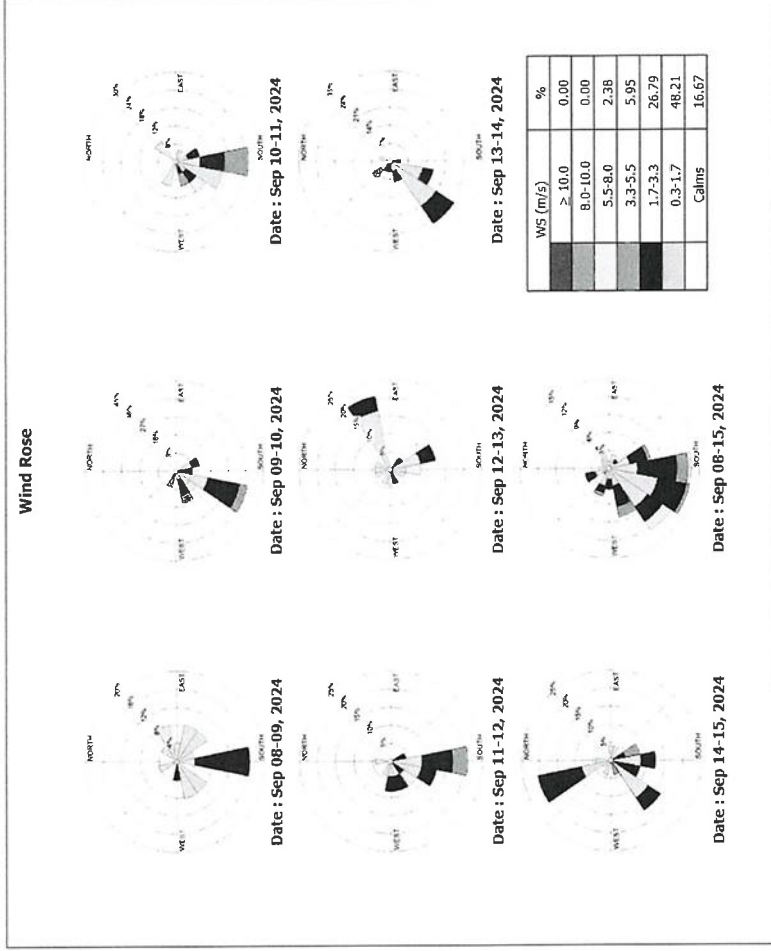
Lot ID: 2486257

Date Received : Sep 17, 2024

Date Reported : Sep 25, 2024

Report Number : 3067136-1 C3

Page 2 of 2







## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O :

Project Name : Glow SPP 3

Project Location : Glow SPP 3

Lot ID: 2486257

Date Received : Sep 17, 2024

Date Reported : Sep 25, 2024

Report Number : 3067136-1 C3

Page 1 of 2

Sample Number 2486257-15 to 21

Parameter Wind Speed / Wind Direction

Location Yarrutai (GPS 47P 0730822, 1407369)

Sampling Date Sep 08 - Sep 15, 2024

Sampling by Sawai Tonpho

Time	Sep 08 - Sep 09, 2024		Sep 09 - Sep 10, 2024		Sep 10 - Sep 11, 2024		Sep 11 - Sep 12, 2024		Sep 12 - Sep 13, 2024		Sep 13 - Sep 14, 2024		Sep 14 - Sep 15, 2024								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
11:00 AM - 12:00 PM	1.5	1.0	N	1.5	178.0	S	0.7	187.0	S	0.7	193.0	SSW	0.8	165.0	SSE	2.4	195.0	SSW	2.8	298.0	WNW
12:00 PM - 01:00 PM	0.7	274.0	W	1.1	181.0	S	0.0	-	-	0.8	135.0	SE	0.8	186.0	S	2.2	221.0	SW	2.2	337.0	NNW
01:00 PM - 02:00 PM	1.0	182.0	S	1.4	253.0	WSW	1.4	163.0	SSE	0.4	247.0	SW	0.4	247.0	WSW	2.8	166.0	SSE	2.1	288.0	NNW
02:00 PM - 03:00 PM	0.4	139.0	SE	0.0	-	0.0	-	0.0	-	0.4	230.0	SW	0.2	-	-	2.8	178.0	S	3.3	306.0	NW
03:00 PM - 04:00 PM	0.8	208.0	SSW	0.8	144.0	SE	1.3	180.0	S	0.7	156.0	SSE	0.6	166.0	SSE	2.9	191.0	S	1.6	303.0	NNW
04:00 PM - 05:00 PM	0.8	232.0	SW	0.0	-	0.4	182.0	S	2.4	189.0	S	0.3	180.0	S	2.4	302.0	WNW	2.3	290.0	NNW	
05:00 PM - 06:00 PM	1.2	202.0	SSW	1.6	194.0	SSW	0.9	193.0	SSW	2.3	203.0	SSW	2.0	142.0	SE	0.3	297.0	WNW	0.5	307.0	NW
06:00 PM - 07:00 PM	0.1	-	-	0.5	220.0	SW	0.2	-	0.6	178.0	S	1.0	179.0	S	2.8	0.0	N	0.3	359.0	N	
07:00 PM - 08:00 PM	0.2	-	-	0.0	-	1.7	92.0	E	0.2	-	0.6	206.0	SSW	2.2	117.0	ESE	0.2	-	-	-	-
08:00 PM - 09:00 PM	0.7	135.0	SE	0.7	231.0	SW	1.1	192.0	SSW	0.1	-	0.4	180.0	S	0.5	144.0	SE	0.1	-	-	-
09:00 PM - 10:00 PM	0.0	-	-	0.8	127.0	SE	0.8	110.0	ESE	0.5	117.0	ESE	0.6	137.0	SE	0.3	131.0	SE	0.4	301.0	NNW
10:00 PM - 11:00 PM	0.2	-	-	0.8	147.0	SSE	1.1	163.0	SSE	0.0	-	0.7	161.0	SSE	1.7	143.0	SE	0.4	116.0	ESE	
11:00 PM - 12:00 AM	0.4	157.0	SSE	0.7	186.0	S	0.6	159.0	SSE	0.8	126.0	SE	1.3	176.0	S	0.9	233.0	SW	0.5	96.0	E
12:00 AM - 01:00 AM	0.9	208.0	SSW	0.7	215.0	SW	1.2	193.0	SSW	1.5	249.0	WSW	1.4	153.0	SSE	1.3	111.0	ESE	0.4	36.0	NE
01:00 AM - 02:00 AM	1.2	359.0	N	1.3	177.0	S	1.3	191.0	S	0.7	184.0	S	1.7	170.0	S	1.3	142.0	SE	1.6	261.0	W
02:00 AM - 03:00 AM	2.5	177.0	S	2.0	113.0	ESE	3.0	125.0	SE	1.8	104.0	ESE	1.8	161.0	SSE	1.5	127.0	SE	2.5	344.0	NNW
03:00 AM - 04:00 AM	2.9	204.0	SSW	3.0	245.0	WSW	3.4	206.0	SSW	1.2	153.0	SSE	0.9	173.0	S	0.2	-	-	1.6	72.0	ENE
04:00 AM - 05:00 AM	2.8	157.0	SSE	0.6	186.0	S	2.2	191.0	S	3.6	124.0	SE	1.3	156.0	SSE	1.4	203.0	SSW	4.0	84.0	E
05:00 AM - 06:00 AM	3.1	179.0	S	3.0	171.0	S	2.1	130.0	SE	2.5	182.0	SE	2.0	75.0	ENE	3.0	336.0	NNW	2.2	300.0	NNW
06:00 AM - 07:00 AM	1.3	141.0	SE	1.7	260.0	W	1.0	239.0	WSW	1.3	111.0	ESE	2.0	183.0	S	1.8	304.0	NW	2.1	309.0	NW
07:00 AM - 08:00 AM	0.7	314.0	NNW	1.9	136.0	SE	1.3	179.0	S	1.2	141.0	SE	1.3	106.0	ESE	4.0	312.0	NW	2.0	310.0	NW
08:00 AM - 09:00 AM	1.3	253.0	WSW	2.9	181.0	S	1.6	177.0	S	2.7	186.0	S	1.5	169.0	S	2.6	311.0	NW	3.4	295.0	NNW
09:00 AM - 10:00 AM	1.6	194.0	SSW	1.7	207.0	SSW	0.6	238.0	WSW	1.9	167.0	SSE	1.9	172.0	S	2.9	292.0	NNW	1.3	297.0	NNW
10:00 AM - 11:00 AM	1.5	295.0	NNW	1.8	204.0	SSW	2.1	186.0	S	1.2	201.0	SSW	2.7	149.0	SSE	2.7	11.0	N	1.5	293.0	NNW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the wind speed and direction (WS and WD) 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) Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

Sarayu Jitranont  
Assistant General Manager

## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O :

Project Name : Glow SPP 3

Project Location : Glow SPP 3

Lot ID: 2486257

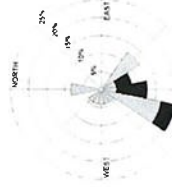
Date Received : Sep 17, 2024

Date Reported : Sep 25, 2024

Report Number : 3067136-1 C3

Page 2 of 2

### Wind Rose



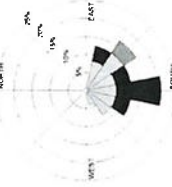
Date : Sep 08-09, 2024



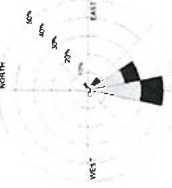
Date : Sep 09-10, 2024



Date : Sep 10-11, 2024



Date : Sep 11-12, 2024



Date : Sep 12-13, 2024



Date : Sep 13-14, 2024

WS (m/s)	%
> 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	3.57
1.7-3.3	30.95
0.3-1.7	55.36
Calm	10.12

The above results are valid only for the wind speed and direction (WS and WD) 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) Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

Sarayu Jitranont  
Assistant General Manager

ADDRESS: 616/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand PHONE: +66 0 3304 8555 FAX: +66 0 3304 8556

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta

**P/O:**

Report Number :3067136-1 C3

**Project Location** : Glow SPP 3

Lot ID: 2486257

Date Received : Sep 17, 2024

Date Reported :Sep 25, 2024

Report Number :3067136-1 C

**Project Location** : Glow SPP 3

Page 2 of 2

## Wind Rose

**2020 11/11**

**Location**  
ชุมชนหนองแฟบ (GPS 47P 0729829, 1403305)

Sampling Date Sep 08 - Sep 15, 2024

Sampling by Sawai Tonpho

Time	Sep 08 - Sep 09, 2024		Sep 09 - Sep 10, 2024		Sep 10 - Sep 11, 2024		Sep 11 - Sep 12, 2024		Sep 12 - Sep 13, 2024		Sep 13 - Sep 14, 2024		Sep 14 - Sep 15, 2024								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
11:00 AM - 12:00 PM	1.0	395.0	SSW	1.3	256.0	WSW	2.3	274.0	W	3.2	255.0	WSW	2.6	290.0	VNW	0.2	-	-	1.1	263.0	VNW
12:00 PM - 01:00 PM	1.2	194.0	SSW	1.6	342.0	NNW	4.5	299.0	VNW	3.7	279.0	W	1.2	299.0	VNW	3.7	268.0	W	0.9	327.0	NNW
01:00 PM - 02:00 PM	1.0	261.0	W	0.9	54.0	NE	2.1	284.0	VNW	2.6	265.0	VNW	1.6	264.0	VNW	2.2	293.0	VNW	2.9	301.0	VNW
02:00 PM - 03:00 PM	0.5	205.0	SSW	2.4	290.0	VNW	0.9	78.0	ENE	0.8	359.0	N	0.8	312.0	NW	1.4	283.0	VNW	2.0	292.0	VNW
03:00 PM - 04:00 PM	1.8	299.0	W	1.8	286.0	VNW	1.8	307.0	NW	0.5	343.0	NNW	1.4	273.0	W	2.9	278.0	W	2.8	285.0	VNW
04:00 PM - 05:00 PM	0.5	311.0	NW	2.3	286.0	VNW	2.6	259.0	W	0.8	345.0	NNW	2.0	263.0	W	1.9	275.0	W	0.7	327.0	NNW
05:00 PM - 06:00 PM	2.0	221.0	SW	1.9	305.0	NW	2.3	267.0	W	0.8	284.0	VNW	1.3	72.0	ENE	1.5	295.0	VNW	0.4	298.0	VNW
06:00 PM - 07:00 PM	2.8	234.0	SW	0.7	318.0	NW	1.7	258.0	WSW	0.7	266.0	W	5.2	239.0	WSW	0.7	256.0	VNW	1.8	278.0	W
07:00 PM - 08:00 PM	1.6	248.0	WSW	0.7	257.0	WSW	0.0	-	-	0.6	265.0	W	4.9	251.0	WSW	0.6	303.0	VNW	0.3	181.0	S
08:00 PM - 09:00 PM	0.6	204.0	SSW	1.1	275.0	W	0.0	-	-	1.0	325.0	NW	3.0	243.0	WSW	0.8	301.0	VNW	1.0	134.0	SE
09:00 PM - 10:00 PM	0.5	213.0	SSW	0.9	242.0	WSW	1.4	274.0	W	0.6	234.0	SW	0.7	280.0	WSW	1.0	325.0	NW	0.0	-	-
10:00 PM - 11:00 PM	0.9	232.0	SW	2.0	259.0	W	0.6	331.0	NNW	0.3	312.0	NW	1.6	287.0	VNW	0.9	352.0	N	1.5	117.0	ESE
11:00 PM - 12:00 AM	1.1	285.0	VNW	3.3	272.0	W	0.8	297.0	VNW	0.4	314.0	NW	2.4	278.0	W	0.9	316.0	NW	1.7	119.0	ESE
12:00 AM - 01:00 AM	0.9	93.0	E	2.4	263.0	W	1.9	301.0	VNW	2.9	273.0	W	1.0	278.0	W	2.8	287.0	VNW	0.7	4.0	N
01:00 AM - 02:00 AM	0.0	-	-	2.4	261.0	W	0.6	322.0	NW	1.8	277.0	W	0.9	45.0	NE	0.9	264.0	W	1.1	290.0	VNW
02:00 AM - 03:00 AM	0.0	-	-	1.2	281.0	W	1.7	278.0	W	2.2	267.0	W	0.9	271.0	W	1.4	266.0	W	0.6	310.0	NW
03:00 AM - 04:00 AM	0.0	-	-	0.4	46.0	NE	0.3	289.0	VNW	2.8	288.0	VNW	0.4	76.0	ENE	0.7	14.0	NNE	0.8	300.0	VNW
04:00 AM - 05:00 AM	0.3	68.0	ENE	0.9	110.0	ESE	1.9	282.0	VNW	0.9	304.0	NW	1.0	84.0	E	0.1	-	-	0.8	329.0	NNW
05:00 AM - 06:00 AM	1.5	216.0	SW	0.5	217.0	SW	1.2	275.0	W	0.6	270.0	W	1.4	234.0	SW	0.3	293.0	VNW	1.4	294.0	VNW
06:00 AM - 07:00 AM	2.0	227.0	SW	0.6	269.0	W	2.2	266.0	W	1.0	255.0	WSW	1.1	328.0	NNW	0.9	332.0	NNW	0.8	307.0	NNW
07:00 AM - 08:00 AM	1.0	243.0	WSW	1.3	267.0	W	1.6	272.0	W	0.8	292.0	VNW	0.3	342.0	VNW	0.7	74.0	ENE	0.9	278.0	W
08:00 AM - 09:00 AM	0.6	240.0	WSW	1.5	259.0	W	0.7	284.0	VNW	1.1	281.0	W	0.6	65.0	ENE	1.7	59.0	ENE	0.8	256.0	WSW
09:00 AM - 10:00 AM	0.0	-	-	1.6	271.0	W	1.3	280.0	W	0.7	272.0	W	0.7	316.0	NW	0.4	172.0	S	1.7	277.0	W
10:00 AM - 11:00 AM	0.0	-	-	1.9	275.0	W	4.0	291.0	VNW	1.2	343.0	NNW	2.5	271.0	W	0.3	177.0	S	0.8	262.0	W

Reference Method : Cup Anemometer &amp; Anodized Aluminium Vane Method

The above results are valid only for the investigated samples and are indicated in this report. In part of the report for confidentiality reasons, the results are not in any form without written consent from the Laboratory. All Laboratory Group (This and)

Approved by

Sarayuth Jittranont

Assistant General Manager

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## Analysis / Test Report

**Client** : Glow SPP 3 Co. Ltd.

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

Lot ID: 248335A

Lot 12: 2405334  
Date Received: Sep 17, 2024

01-1-1999

Date Received : Sep 27, 2024  
Date Reported : Sep 25 2024

P/O : GLOW-OM-22-103

Report Number: 3061643-1

Project Name :

Project Location : Glow SPP 3

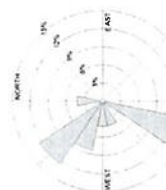
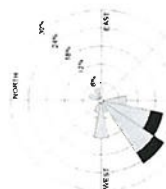
**Sample Number** 2483354-1 to 7

Wind Speed / Wind Direction

**Location**  
วัดตากวนคงคาราม (ทพ. มานตาพด) (GPS 47P 0736058, 1402077)

Sampling Date  
Sep 08 - Sep 15, 2024

### Sampling by Sawai Tonpho



Date : Sep 08-09, 2024

Date : Sep 09-10, 2024

Date : Sep 10-11. 2024

Date : Sep 11-12, 2024

Date : Sep 12-13, 2024

Date : Sep 13-14 2024

Date: Sep 14-15, 2024

Date : Sep 08-15-2024

Sum	OT
-----	----

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	4.76
0.3-1.7	56.55
Calm	38.10

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Approved by

Sarayuth Jitranont  
Assistant General Manager

Sarayuth Jittranont

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## คุณภาพอากาศจากปล่องระบายอากาศ

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## Analysis / Test Report

Client : Glow SPP 2 Co., Ltd.

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

P/O :

Project Name :

Project Location : Glow SPP 2

Lot ID: 2486965

Date Received :Sep 11, 2024

Date Reported :Sep 21, 2024

Report Number :3068379-1

Page 1 of 1

Sample Number 2486965-1

Sample Description Emission from Stationary Source

Location 11km CTG HRSG1

Measurement Date Sep 10, 2024

Stack Description									
Ambient Temperature	33	°C	Diameter	3.06	m	Oxygen	14.43	%	
Ambient Pressure	755	mmHg	Shape	Circle		Carbon dioxide	3.75	%	
Type of Process	Combustion		Stack Temperature	219	°C	Gas Velocity	26.16	m/s	
Type of Fuel	Natural Gas		Moisture	7.20	%	Flow Rate	386253	Nm3/hr	

Run No.	Sampling Time	Oxides of Nitrogen (ppm)			Sulfur Dioxide (ppm)		
		at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>
1	03:20 PM - 03:40 PM	46.93	100.66	0.25	0.25	0.54	0.54
2	03:41 PM - 04:01 PM	46.36	99.57	0.27	0.27	0.59	0.59
3	04:02 PM - 04:22 PM	46.22	99.27	0.28	0.28	0.60	0.60
Average (ppm)		46.50	99.83	0.27	0.27	0.57	0.57
Guideline <sup>1)</sup> (ppm)		-	111	-	-	0.95	0.95
Guideline <sup>2)</sup> (ppm)		-	120	-	-	20	20
Result (mg/Nm <sup>3</sup> )		87.49	187.83	0.70	0.70	1.50	1.50
Emission Rate at Actual O <sub>2</sub> (g/s)		9.3874				0.0752	0.0752
Guideline <sup>3)</sup> (g/s)		10.33				0.12	0.12
Method		US EPA Method 7E			US EPA Method 6C		

Sampled By : Sakit Phaisanphusit

Guideline : <sup>1)</sup>Environmental Impact Assessment Report of Glow SPP 2 Co., Ltd.

<sup>2)</sup>Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

Technical Management

Wichan Choonharat  
Manager  
โทรศัพท์ ๖-204-๙-0006

Approved by

Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ ๖-204-๙-0003

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## Analysis / Test Report

Client : Glow SPP 2 Co., Ltd.

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

P/O :

Project Name :

Project Location : Glow SPP 2

Lot ID: 2486965

Date Received :Sep 11, 2024

Date Reported :Sep 21, 2024

Report Number :3068379-1

Page 1 of 1

Sample Number 2486965-1

Sample Description Emission from Stationary Source

Location 11km CTG HRSG1

Measurement Date Sep 10, 2024

Stack Description									
Ambient Temperature	33	°C	Diameter	3.06	m	Oxygen	14.43	%	
Ambient Pressure	755	mmHg	Shape	Circle		Carbon dioxide	3.75	%	
Type of Process	Combustion		Stack Temperature	219	°C	Gas Velocity	26.16	m/s	
Type of Fuel	Natural Gas		Moisture	7.20	%	Flow Rate	386253	Nm3/hr	

Run No.	Sampling Time	Carbon Dioxide			Carbon Monoxide (ppm)		
		Oxygen (%)	Carbon Dioxide (%)	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>
1	03:20 PM - 03:40 PM	14.42	3.75	6.75	6.75	14.47	14.47
2	03:41 PM - 04:01 PM	14.43	3.75	6.66	6.66	14.29	14.29
3	04:02 PM - 04:22 PM	14.43	3.75	6.70	6.70	14.39	14.39
Average (ppm)		14.43	3.75	6.70	6.70	14.38	14.38
Guideline <sup>1)</sup> (ppm)		-	-	-	-	690	690
Guideline <sup>2)</sup> (ppm)		-	-	-	-	16.47	16.47
Result (mg/Nm <sup>3</sup> )				7.67	7.67	0.8232	0.8232
Emission Rate at Actual O <sub>2</sub> (g/s)							
Method		US EPA Method 10					

Sampled By : Sakit Phaisanphusit

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

Technical Management

Wichan Choonharat  
Manager  
โทรศัพท์ ๖-204-๙-0006

Approved by

Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ ๖-204-๙-0003

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## Analysis / Test Report

**Client** : Glow SPP 2 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** : Glow SPP 2

**Lot ID: 2486966**  
Date Received :Sep 10, 2024  
Date Reported :Sep 21, 2024  
Report Number :3068378-1

Page 1 of 1

<b>Sample Number</b>	2486966-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	11555 CTG HRSG2
<b>Measurement Date</b>	Sep 09, 2024

Stack Description									
Ambient Temperature	35	°C	Diameter	3.06	m	Oxygen	14.31	%	
Ambient Pressure	754.4	mmHg	Shape	Circle		Carbon dioxide	3.76	%	
Type of Process	Combustion		Stack Temperature	205	°C	Gas Velocity	24.84	m/s	
Type of Fuel	Natural Gas		Moisture	9.96	%	Flow Rate	366032	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)			Carbon Dioxide (%)			Oxides of Nitrogen (ppm)			Sulfur Dioxide (ppm)		
		at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>
1	03:40 PM - 04:00 PM	14.28	3.77	42.47	89.20	0.25	0.53						
2	04:01 PM - 04:21 PM	14.33	3.75	36.92	78.08	0.19	0.40						
3	04:22 PM - 04:42 PM	14.32	3.76	36.82	77.74	0.20	0.42						
Average (ppm)		14.31	3.76	38.74	81.67	0.21	0.45						
Guideline <sup>1)</sup> (ppm)		-	-	-	-	-	-						
Guideline <sup>2)</sup> (ppm)		-	-	120	-	-	20						
Result (mg/Nm <sup>3</sup> )		-	-	72.88	153.66	0.56	1.18						
Emission Rate at Actual O <sub>2</sub> (g/s)		-	-	7.4100	-	-	0.0567						
Guideline <sup>3)</sup> (g/s)		-	-	10.31	-	-	0.12						
Method		US EPA Method 7E			US EPA Method 7E			US EPA Method 6C			US EPA Method 6C		

**Sampled By** : Thipong Buadaeng  
**Guideline** : <sup>1)</sup>Environmental Impact Assessment Report of Glow SPP 2 Co., Ltd.  
<sup>2)</sup>Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

**Technical Management**  
Wichan Choonharat  
Manager  
วชิชาน ชูชนะรัตน์ 7-204-0-0006

**Approved by**  
Sarayuht Jitranont  
Assistant General Manager  
สรายุทธ จิตรนนท์ 7-204-0-0003

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



## Analysis / Test Report

**Client** : Glow SPP 2 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** : Glow SPP 2

**Lot ID: 2486966**  
Date Received :Sep 10, 2024  
Date Reported :Sep 21, 2024  
Report Number :3068378-1

Page 1 of 1

<b>Sample Number</b>	2486966-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	11555 CTG HRSG2
<b>Measurement Date</b>	Sep 09, 2024

Stack Description									
Ambient Temperature	35	°C	Diameter	3.06	m	Oxygen	14.31	%	
Ambient Pressure	754.4	mmHg	Shape	Circle		Carbon dioxide	3.76	%	
Type of Process	Combustion		Stack Temperature	205	°C	Gas Velocity	24.84	m/s	
Type of Fuel	Natural Gas		Moisture	9.96	%	Flow Rate	366032	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)			Carbon Dioxide (%)			Carbon Monoxide (ppm)		
		at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>
1	03:40 PM - 04:00 PM	14.28	3.77	42.47	89.20	0.25	0.53	11.28		
2	04:01 PM - 04:21 PM	14.33	3.75	36.92	78.08	0.19	0.40	22.20		
3	04:22 PM - 04:42 PM	14.32	3.76	36.82	77.74	0.20	0.42	20.92		
Average (ppm)		14.31	3.76	38.74	81.67	0.21	0.45	18.13		
Guideline <sup>1)</sup> (ppm)		-	-	-	-	-	-	690		
Guideline <sup>2)</sup> (ppm)		-	-	120	-	-	20	20.77		
Result (mg/Nm <sup>3</sup> )		-	-	72.88	153.66	0.56	1.18	1.0005		
Emission Rate at Actual O <sub>2</sub> (g/s)		-	-	7.4100	-	-	0.0567	US EPA Method 10		
Guideline <sup>3)</sup> (g/s)		-	-	10.31	-	-	0.12			
Method		US EPA Method 7E			US EPA Method 7E			US EPA Method 10		

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

**Technical Management**  
Wichan Choonharat  
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**Approved by**  
Sarayuht Jitranont  
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## Analysis / Test Report

**Client** : GLOW ENERGY PUBLIC 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: 2486992**  
Date Received :Sep 20, 2024  
Date Reported :Oct 01, 2024  
Report Number :3068402-1

Page 1 of 1

<b>Sample Number</b>	2486992-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CTG HRSG3
<b>Measurement Date</b>	Sep 20, 2024

Stack Description									
Ambient Temperature	33	°C	Diameter	3.06	m	Oxygen	14.00	%	
Ambient Pressure	752.9	mmHg	Shape	Circle		Carbon dioxide	3.91	%	
Type of Process	Combustion		Stack Temperature	161	°C	Gas Velocity	21.06	m/s	
Type of Fuel	Natural Gas		Moisture	8.54	%	Flow Rate	346259	Nm <sup>3</sup> /hr	

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)	Sulfur Dioxide (ppm)
			at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>
1	11:10 AM - 11:30 AM	13.87	3.91	35.90	70.96
2	11:31 AM - 11:51 AM	14.01	3.92	35.88	72.37
3	11:52 AM - 12:12 PM	14.14	3.90	36.93	75.90
Average (ppm)		14.00	3.91	36.23	73.07
Guideline <sup>1</sup> (ppm)			-	105	-
Guideline <sup>2</sup> (ppm)			-	120	-
Result (mg/Nm <sup>3</sup> )			68.17	137.48	0.53
Emission Rate at Actual O <sub>2</sub> (g/s)			6.5566		0.0509
Guideline <sup>3</sup> (g/s)			10.02		0.13
Method			US EPA Method 7E		
			US EPA Method 6C		

**Sampled By** : Anuvat Mounpair  
**Guideline** : <sup>1</sup>Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED  
<sup>2</sup>Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

**Technical Management**  
Wichan Choonharat  
Manager  
โทรศัพท์ 7-204-0-0006

**Approved by**  
Sarayuth Jitranont  
Assistant General Manager  
โทรศัพท์ 7-204-0-0003

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## Analysis / Test Report

**Client** : GLOW ENERGY PUBLIC 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: 2486992**  
Date Received :Sep 20, 2024  
Date Reported :Oct 01, 2024  
Report Number :3068402-1

Page 1 of 1

<b>Sample Number</b>	2486992-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CTG HRSG3
<b>Measurement Date</b>	Sep 20, 2024

Stack Description									
Ambient Temperature	33	°C	Diameter	3.06	m	Oxygen	14.00	%	
Ambient Pressure	752.9	mmHg	Shape	Circle		Carbon dioxide	3.91	%	
Type of Process	Combustion		Stack Temperature	161	°C	Gas Velocity	21.06	m/s	
Type of Fuel	Natural Gas		Moisture	8.54	%	Flow Rate	346259	Nm <sup>3</sup> /hr	

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)
			at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	11:10 AM - 11:30 AM	13.87	3.91	7.16
2	11:31 AM - 11:51 AM	14.01	3.92	6.90
3	11:52 AM - 12:12 PM	14.14	3.90	6.00
Average (ppm)		14.00	3.91	6.69
Guideline <sup>1</sup> (ppm)			-	690
Result (mg/Nm <sup>3</sup> )			7.66	15.42
Emission Rate at Actual O <sub>2</sub> (g/s)			0.7366	
Method			US EPA Method 10	

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

**Technical Management**  
Wichan Choonharat  
Manager  
โทรศัพท์ 7-204-0-0006

**Approved by**  
Sarayuth Jitranont  
Assistant General Manager  
โทรศัพท์ 7-204-0-0003

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## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-QM-22-103

Project Name :

Project Location :

TESTING  
No.0009

Lot ID: 2486996

Date Received : Sep 20, 2024

Date Reported : Sep 27, 2024

Report Number: 3068406-1

Page 1 of 2

Sample Number 2486996-1

Sampled Date Sep 20, 2024

Sample Description Emission from Stationary Source

Location Ulaa CTG HRSG3

Date Analysis Commenced Sep 24, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	753	mmHg	Diameter	3.06	m	Oxygen	13.7	%	Testing Location
Ambient Temperature	33.0	°C	Shape	Circle		Carbon Dioxide	3.9	%	
Type of Process	Combustion		Stack Temperature	161	°C	Gas Velocity	21.0	m/s	
Type of Fuel	LPG		Moisture	8.50	%	Flow Rate (Actual O2)	346075	Nm3/hr	

Analyte	Sampled Time	Unit	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
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### Air Testing

Total Suspended Particulate	11:10 AM - 11:52 AM	mg/m3	-	0.5	<0.5	5	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	---	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-QM-22-103

Project Name :

Project Location :

TESTING  
No.0009

Lot ID: 2486996

Date Received : Sep 20, 2024

Date Reported : Sep 27, 2024

Report Number: 3068406-1

Page 2 of 2

Sample Number 2486996-1

Sampled Date Sep 20, 2024

Sample Description Emission from Stationary Source

Location Ulaa CTG HRSG3

Date Analysis Commenced Sep 24, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	753	mmHg	Diameter	3.06	m	Oxygen	13.7	%	Testing Location
Ambient Temperature	33.0	°C	Shape	Circle		Carbon Dioxide	3.9	%	
Type of Process	Combustion		Stack Temperature	161	°C	Gas Velocity	21.0	m/s	
Type of Fuel	LPG		Moisture	8.50	%	Flow Rate (Actual O2)	346075	Nm3/hr	

Analyte	Sampled Time	Unit	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----------	--------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	11:10 AM - 11:52 AM	g/s	-	<0.05	0.25	-	Calculated	Bangkok
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### Guideline :

Guideline (1) Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Sampling By : Anuvat Moungpal วานิชวณิช 7-204-a-0079

Remark :

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

Technical Management

Orawan R.

Orawan Rakhyong  
Scientist (3)  
วณิชวณิช 7-204-a-0027

Approved by

Orawan R.

Kanokorn Anek  
Assistant General Manager  
วณิชวณิช 7-204-a-0004

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Technical Management

Orawan R.

Orawan Rakhyong  
Scientist (3)  
วณิชวณิช 7-204-a-0027

Approved by

Orawan R.

Kanokorn Anek  
Assistant General Manager  
วณิชวณิช 7-204-a-0004

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## Analysis / Test Report

**Client** : GLOW ENERGY PUBLIC COMPANY LIMITED  
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** :  
**Lot ID: 2486993**  
Date Received :Sep 13, 2024  
Date Reported :Sep 25, 2024  
Report Number :3068401-1

Page 1 of 1

<b>Sample Number</b>	2486993-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CTG HRS64
<b>Measurement Date</b>	Sep 13, 2024

Stack Description					
Ambient Temperature	34.7	°C	Diameter	3.06	m
Ambient Pressure	755.3	mmHg	Shape	Circle	
Type of Process	Combustion		Stack Temperature	164	°C
Type of Fuel	Natural Gas		Moisture	16.21	%

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)	Sulfur Dioxide (ppm)
1	11:10 AM - 11:30 AM	14.04	4.01	at Actual O <sub>2</sub> at 7% O <sub>2</sub>	at Actual O <sub>2</sub> at 7% O <sub>2</sub>
2	11:31 AM - 11:51 AM	14.02	4.03	32.36 65.61	0.30 0.60
3	11:52 AM - 12:12 PM	14.13	3.97	31.83 64.29	0.30 0.60
Average (ppm)		14.06	4.00	32.25 66.21	0.28 0.58
Guideline <sup>1/2</sup> (ppm)				32.15 65.37	0.29 0.95
Guideline <sup>2/2</sup> (ppm)				103	-
Result (mg/Nm <sup>3</sup> )				-	120
Emission Rate at Actual O <sub>2</sub> (g/s)				60.48 122.99	0.77 1.56
Guideline <sup>1/2</sup> (g/s)				5.2833 10.25	0.0670 0.13
Method				US EPA Method 7E	US EPA Method 6C

**Sampled By** : Sathaporn Thakraw  
**Guideline** : <sup>1/</sup>Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED  
<sup>2/</sup>Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

**Technical Management** *Wichan Choonharat*  
**Approved by** *Sarayuht Jitranont*  
Wichan Choonharat  
Manager  
Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ 7-204-8-0006

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## Analysis / Test Report

**Client** : GLOW ENERGY PUBLIC COMPANY LIMITED  
11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** :  
**Lot ID: 2486993**  
Date Received :Sep 13, 2024  
Date Reported :Sep 25, 2024  
Report Number :3068401-1

Page 1 of 1

<b>Sample Number</b>	2486993-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CTG HRS64
<b>Measurement Date</b>	Sep 13, 2024

Stack Description					
Ambient Temperature	34.7 °C	Diameter	3.06 m	Oxygen	14.06 %
Ambient Pressure	755.3 mmHg	Shape	Circle	Carbon dioxide	4.00 %
Type of Process	Combustion	Stack Temperature	164 °C	Gas Velocity	20.94 m/s
Type of Fuel	Natural Gas	Moisture	16.21 %	Flow Rate	314485 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)
1	11:10 AM - 11:30 AM	14.04	4.01	at Actual O <sub>2</sub> at 7% O <sub>2</sub>
2	11:31 AM - 11:51 AM	14.02	4.03	7.23 14.66
3	11:52 AM - 12:12 PM	14.13	3.97	7.43 15.01
Average (ppm)		14.06	4.00	8.34 17.13
Guideline (ppm)				7.67 15.60
Result (mg/Nm <sup>3</sup> )				- 690
Emission Rate at Actual O <sub>2</sub> (g/s)				8.78 17.86
Method				US EPA Method 10

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

**Technical Management** *Wichan Choonharat*  
**Approved by** *Sarayuht Jitranont*  
Wichan Choonharat  
Manager  
Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ 7-204-8-0006

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## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Lot ID: 2486997

Date Received : Sep 13, 2024

Date Reported : Sep 20, 2024

Report Number: 3068405-1

Page 1 of 2

Sample Number 2486997-1

Sampled Date Sep 13, 2024

Sample Description

Emission from Stationary Source

Location

11km CTG HRSG4

Date Analysis Commenced Sep 14, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Stack Description		Guideline (1)	Guideline (2)	Method	Testing Location
						Ambient Pressure	Ambient Temperature	Oxygen	Carbon Dioxide		
	755	mmHg			3.06			m			
	34.7	°C			Circle						
	Combustion				164						
	Natural Gas				16.12						
					%						
					Flow Rate (Actual O2)						
					316032						
					Nm3/hr						

### Air Testing

Total Suspended Particulate	11:10 AM - 11:52 AM	mg/m3	-	0.5	<0.5	5	60	United States Environmental Protection Agency, EPA Method 5			Bangkok
-----------------------------	---------------------	-------	---	-----	------	---	----	---	--	--	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

Orawan R.

Orawan Rakyoung

Scientist (3)

วราวัน รักษ์ยิ่งยง 3-204-3-0027

Approved by

Orawan R.

Kanokkorn Anek

Assistant General Manager

วราวัน อเนก 3-204-3-0004

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S Reports\_Air\_Stack\_O2\_ZGL\_pr (4.24PW)



## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Lot ID: 2486997

Date Received : Sep 13, 2024

Date Reported : Sep 20, 2024

Report Number: 3068405-1

Page 2 of 2

Sample Number 2486997-1

Sampled Date Sep 13, 2024

Sample Description

Emission from Stationary Source

Location

11km CTG HRSG4

Date Analysis Commenced Sep 14, 2024

Condition of Sample Extracted into one filter paper placed in plastic petri dish

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Stack Description		Guideline (1)	Guideline (2)	Method	Testing Location
						Ambient Pressure	Ambient Temperature	Oxygen	Carbon Dioxide		
	755	mmHg			3.06			m			
	34.7	°C			Circle						
	Combustion				164						
	Natural Gas				16.12						
					%						
					Flow Rate (Actual O2)						
					316032						
					Nm3/hr						

### Air Testing

Total Suspended Particulate	11:10 AM - 11:52 AM	g/s	-	-	<0.044	0.26	-	Calculated			Bangkok
-----------------------------	---------------------	-----	---	---	--------	------	---	------------	--	--	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED.

Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Sampling By : Naratip Thuakachalkam วราวัน 3-204-3-0003

Remark :

- LOD : Limit of Detection

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

Technical Management

Orawan R.

Orawan Rakyoung

Scientist (3)

วราวัน รักษ์ยิ่งยง 3-204-3-0027

Approved by

Orawan R.

Kanokkorn Anek

Assistant General Manager

วราวัน อเนก 3-204-3-0004

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S Reports\_Air\_Stack\_O2\_ZGL\_pr (4.24PW)



## Analysis / Test Report

**Client** : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** : Glow SPP 3

**Lot ID: 2483358**  
Date Received : Sep 10, 2024  
Date Reported : Sep 21, 2024  
Report Number : 3061646-1

Page 1 of 1

<b>Sample Number</b>	2483358-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CFB & STG 2
<b>Measurement Date</b>	Sep 09, 2024

Stack Description									
Ambient Temperature	31.9	°C	Diameter	2.82	m	Oxygen	3.51	%	
Ambient Pressure	754.7	mmHg	Shape	Circle		Carbon dioxide	15.53	%	
Type of Process	Combustion		Stack Temperature	154	°C	Gas Velocity	31.19	m/s	
Type of Fuel	Coal		Moisture	17.11	%	Flow Rate	401361	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)			Carbon Dioxide (%)			Oxides of Nitrogen (ppm)			Sulfur Dioxide (ppm)		
		at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>
1	12:30 PM - 12:50 PM	3.42	89.14	70.87	15.61	15.61	15.61	184.50	184.50	146.68	184.50	184.50	146.68
2	12:51 PM - 01:11 PM	3.56	89.42	71.69	15.47	15.47	15.47	162.40	162.40	130.20	162.40	162.40	130.20
3	01:12 PM - 01:32 PM	3.54	87.41	69.99	15.51	15.51	15.51	153.14	153.14	122.62	153.14	153.14	122.62
Average (ppm)		3.51	88.66	70.85	15.53	15.53	15.53	166.68	166.68	133.17	166.68	166.68	133.17
Guideline <sup>1/</sup> (ppm)				100						180			
Guideline <sup>2/</sup> (ppm)				350						320			
Result (mg/Nm <sup>3</sup> )													
Emission Rate at Actual O <sub>2</sub> (g/s)				166.80			133.30			348.58			48.6427
Guideline <sup>3/</sup> (g/s)				18.5964			28.77			72.06			
Method				US EPA Method 7E			US EPA Method 6C						

**Sampled By** : Usaree Namburee

**Guideline** : <sup>1/</sup> Environmental Impact Assessment Report of Glow SPP 3 Co., Ltd.

<sup>2/</sup> Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

**Technical Management**

**Wichan Choonharat**  
Manager  
โทรศัพท์ 7-204-0-0006

**Approved by**

**Sarayuht Jitrantorn**  
Assistant General Manager  
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## Analysis / Test Report

**Client** : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** : Glow SPP 3

**Lot ID: 2483358**  
Date Received : Sep 10, 2024  
Date Reported : Sep 21, 2024  
Report Number : 3061646-1

Page 1 of 1

<b>Sample Number</b>	2483358-1
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ใกล้ CFB & STG 2
<b>Measurement Date</b>	Sep 09, 2024

Stack Description									
Ambient Temperature	31.9	°C	Diameter	2.82	m	Oxygen	3.51	%	
Ambient Pressure	754.7	mmHg	Shape	Circle		Carbon dioxide	15.53	%	
Type of Process	Combustion		Stack Temperature	154	°C	Gas Velocity	31.19	m/s	
Type of Fuel	Coal		Moisture	17.11	%	Flow Rate	401361	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)			Carbon Dioxide (%)			Carbon Monoxide (ppm)		
		at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at 7% O <sub>2</sub>
1	12:30 PM - 12:50 PM	3.42	15.61	15.61	15.61	15.61	15.61	9.98	9.98	7.94
2	12:51 PM - 01:11 PM	3.56	15.47	15.47	15.47	15.47	15.47	10.08	10.08	8.08
3	01:12 PM - 01:32 PM	3.54	15.51	15.51	15.51	15.51	15.51	10.01	10.01	8.02
Average (ppm)		3.51	15.53	15.53	15.53	15.53	15.53	10.02	10.02	8.01
Guideline <sup>1/</sup> (ppm)										690
Guideline <sup>2/</sup> (ppm)										11.48
Result (mg/Nm <sup>3</sup> )										9.17
Emission Rate at Actual O <sub>2</sub> (g/s)										1.2799
Method										

**Sampled By** : Usaree Namburee

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

**Technical Management**

**Wichan Choonharat**  
Manager  
โทรศัพท์ 7-204-0-0006

**Approved by**

**Sarayuht Jitrantorn**  
Assistant General Manager  
โทรศัพท์ 7-204-0-0003

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 2483360**  
Date Received : Sep 10, 2024  
Date Reported : Oct 03, 2024  
Report Number: 3061648-2

Page 1 of 1

**Sample Number** 2483360-1  
**Sampled Date** Sep 09, 2024  
**Sample Description** Emission from Stationary Source  
**Location** 11km CFB & STG 2  
**Date Analysis Commenced** Sep 17, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Ambient Pressure	755	mmHg	Diameter	2.82	m	Oxygen	3.5	%	
Ambient Temperature	31.9	°C	Shape	Circle		Carbon Dioxide	15.5	%	
Type of Process	Combustion		Stack Temperature	154	°C	Gas Velocity	31.2	m/s	
Type of Fuel	Coal		Moisture	17.15	%	Flow Rate (Actual O2)	401714	Nm3/hr	
Analyte			Unit	LOQ (LOR)		Result at 7 %O <sub>2</sub>	Method	Testing Location	
<b>Metals Testing</b>									
Mercury	12:30 PM - 01:18 PM	mg/m3		0.0002	<0.0002		United States Environmental Protection Agency, EPA Method 29	Bangkok	

**Sampling By :** Warawut Pubpa รหัสพนักงาน 7-323-a-0033 , Naratip Thueakhaikam รหัสพนักงาน 7-204-a-0003

**Remark :**  
\* LOD : Limit of Detection  
\* %O<sub>2</sub> : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

**Technical Management**  
*Savitree N.*  
Savitree Naisianglam  
Manager  
รหัสพนักงาน 7-204-a-0007

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager  
รหัสพนักงาน 7-323-a-0001

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S (Reports)\_Air Stack\_O2\_NeGL pr ( 2 27AM)



## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 2483360**  
Date Received : Sep 10, 2024  
Date Reported : Oct 03, 2024  
Report Number: 3061648-3

Page 1 of 3

**Sample Number** 2483360-1  
**Sampled Date** Sep 09, 2024  
**Sample Description** Emission from Stationary Source  
**Location** 11km CFB & STG 2  
**Date Analysis Commenced** Sep 11, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Ambient Pressure	755	mmHg	Diameter	2.82	m	Oxygen	3.5	%	
Ambient Temperature	31.9	°C	Shape	Circle		Carbon Dioxide	15.5	%	
Type of Process	Combustion		Stack Temperature	154	°C	Gas Velocity	31.2	m/s	
Type of Fuel	Coal		Moisture	17.15	%	Flow Rate (Actual O2)	401714	Nm3/hr	
Analyte			Unit	LOQ (LOR)		Result at 7 %O <sub>2</sub>	Method	Testing Location	
<b>Air Testing</b>									
1,4-Dioxane	12:45 PM - 01:00 PM	mg/m3	-	2.0	<2.0		Based on NIOSH, 1602	Bangkok	
Acetaldehyde	12:30 PM - 12:45 PM	mg/m3	-	1.00	<1.00		United States Environmental Protection Agency, EPA Method 18	Bangkok	
Acrolein	12:30 PM - 12:45 PM	mg/m3	-	0.8	<0.8		United States Environmental Protection Agency, EPA Method 18	Bangkok	
Acrylonitrile	12:30 PM - 12:45 PM	mg/m3	-	1.0	<1.0		United States Environmental Protection Agency, EPA Method 18	Bangkok	
1,1,2,2-Tetrachloroethane	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0		United States Environmental Protection Agency, EPA Method 18	Bangkok	
1,2-Dichloroethane	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0		United States Environmental Protection Agency, EPA Method 18	Bangkok	
1,2-Dichloropropane	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0		United States Environmental Protection Agency, EPA Method 18	Bangkok	
1,3-Butadiene	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0		United States Environmental Protection Agency, EPA Method 18	Bangkok	

Approved by

*Chontichok*  
Chonticha Subongloch  
Scientist (3)

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S (Reports)\_Air Stack\_O2\_NeGL pr ( 9 40AM)





Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, J-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2483360  
Date Received : Sep 10, 2024  
Date Reported : Oct 03, 2024  
Report Number: 3061648-3

Page 2 of 3

Sample Number 2483360-1  
Sample Date Sep 09, 2024  
Sample Description Emission from Stationary Source  
Location Ulaa3 CFB & STG 2  
Date Analysis Commenced Sep 11, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Analyte	Sampled Time	Unit	LOD (LOR)	Result at 7 %O <sub>2</sub> , at 3.5 % O <sub>2</sub>	Method	Testing Location			
1,4-Dichlorobenzene	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Benzene	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Carbon tetrachloride	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Chloroform	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Dichloromethane	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Tetrachloroethylene	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Trichloroethylene	12:45 PM - 01:00 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Benzyl Chloride	01:00 PM - 01:10 PM	mg/m3	-	0.05	<0.05	In-house method based on United States Environmental Protection Agency, Compendium Method	Rayong		

Approved by

Chonticha Subongkoch  
Scientist (3)

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S:\Reports\_Air Stack\_O2\_No6L.rpt (9.40AM)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, J-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2483360  
Date Received : Sep 10, 2024  
Date Reported : Oct 03, 2024  
Report Number: 3061648-3

Page 3 of 3

Sample Number 2483360-1  
Sample Date Sep 09, 2024  
Sample Description Emission from Stationary Source  
Location Ulaa3 CFB & STG 2  
Date Analysis Commenced Sep 11, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Analyte	Sampled Time	Unit	LOD (LOR)	Result at 7 %O <sub>2</sub> , at 3.5 % O <sub>2</sub>	Method	Testing Location			
Ambient Pressure	755	mmHg		2.82	m	Oxygen	3.5		
Ambient Temperature	31.9	°C		Circle		Carbon Dioxide	15.5		
Type of Process	Combustion			Stack Temperature	154	°C	Gas Velocity	31.2	m/s
Type of Fuel	Coal			Moisture	17.15	%	Flow Rate (Actual O2)	401714	Nm3/hr

Sampling By : Warawut Puppa , Naratip Thuasakchalam

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

Approved by

Chonticha Subongkoch  
Scientist (3)

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S:\Reports\_Air Stack\_O2\_No6L.rpt (9.40AM)



## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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

**P/O :** GLOW-OM-22-103

**Project Name :**

**Project Location :**

**Lot ID:** 2486963

Date Received :Sep 12, 2024

Date Reported :Sep 24, 2024

Report Number :3068372-1

Page 1 of 1

**Sample Number** 2486963-1  
**Sample Description** Emission from Stationary Source  
**Location** Ulala CFB & STG 3  
**Measurement Date** Sep 11, 2024

Stack Description									
Ambient Temperature	35	°C	Diameter	2.82	m	Oxygen	3.89	%	
Ambient Pressure	755.8	mmHg	Shape	Circle		Carbon dioxide	15.16	%	
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.44	m/s	
Type of Fuel	Coal		Moisture	11.82	%	Flow Rate	424340	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O <sub>2</sub>	Sulfur Dioxide (ppm) at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	12:20 PM - 12:40 PM	3.89	15.15	77.78	140.49	114.81
2	12:41 PM - 01:01 PM	3.88	15.15	77.99	142.05	116.04
3	01:02 PM - 01:22 PM	3.89	15.17	78.79	146.47	119.71
Average (ppm)		3.89	15.16	78.19	143.00	116.86
Guideline <sup>1/</sup> (ppm)				100	-	170
Guideline <sup>2/</sup> (ppm)				350	-	320
Result (mg/Nm <sup>3</sup> )				147.10	374.32	305.88
Emission Rate at Actual O <sub>2</sub> (g/s)				17.3991	44.1220	
Guideline <sup>3/</sup> (g/s)				28.77	68.06	
Method				US EPA Method 7E	US EPA Method 6C	

**Sampled By :** Sakskit Phaisanphisit

**Guideline :** <sup>1/</sup> Environmental Impact Assessment Report of GLOW ENERGY PUBLIC COMPANY LIMITED

<sup>2/</sup> Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).

**Technical Management**

Wichan Choonharat  
Manager  
โทรศัพท์ ๖-204-๙-0006

**Approved by**

Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ ๖-204-๙-0003



## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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

**P/O :** GLOW-OM-22-103

**Project Name :**

**Project Location :**

**Lot ID:** 2486963

Date Received :Sep 12, 2024

Date Reported :Sep 24, 2024

Report Number :3068372-1

Page 1 of 1

**Sample Number** 2486963-1  
**Sample Description** Emission from Stationary Source  
**Location** Ulala CFB & STG 3  
**Measurement Date** Sep 11, 2024

Stack Description									
Ambient Temperature	35	°C	Diameter	2.82	m	Oxygen	3.89	%	
Ambient Pressure	755.8	mmHg	Shape	Circle		Carbon dioxide	15.16	%	
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.44	m/s	
Type of Fuel	Coal		Moisture	11.82	%	Flow Rate	424340	Nm3/hr	

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm) at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	12:20 PM - 12:40 PM	3.89	15.15	27.09	22.14
2	12:41 PM - 01:01 PM	3.88	15.15	27.01	22.06
3	01:02 PM - 01:22 PM	3.89	15.17	27.05	22.11
Average (ppm)		3.89	15.16	27.05	22.11
Guideline <sup>1/</sup> (ppm)				-	690
Result (mg/Nm <sup>3</sup> )				30.98	25.32
Emission Rate at Actual O <sub>2</sub> (g/s)				3.6516	
Method				US EPA Method 10	

**Sampled By :** Sakskit Phaisanphisit

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

**Technical Management**

Wichan Choonharat  
Manager  
โทรศัพท์ ๖-204-๙-0006

**Approved by**

Sarayuht Jitranont  
Assistant General Manager  
โทรศัพท์ ๖-204-๙-0003

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Analysis / Test Report

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

Lot ID: 2486962  
Date Received : Sep 12, 2024  
Date Reported : Oct 08, 2024  
Report Number: 3068371-2

Page 1 of 3

Sample Number 2486962-1  
Sampled Date Sep 11, 2024  
Sample Description Emission from Stationary Source  
Location Ukas CFB & STG 3  
Date Analysis Commenced Sep 13, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Ambient Pressure	756	mmHg	Diameter	2.82	m	Oxygen	3.9	%	
Ambient Temperature	35.0	°C	Shape	Circle		Carbon Dioxide	15.2	%	
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.5	m/s	
Type of Fuel	Coal		Moisture	11.67	%	Flow Rate (Actual O2)	425430	Nm3/hr	
Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O <sub>2</sub>	Method	Testing Location		
Air Testing									
1,4-Dioxane	12:55 PM - 01:10 PM	mg/m3	-	2.0	<2.0	Based on NIOSH, 1602	Bangkok		
Acetaldehyde	12:40 PM - 12:55 PM	mg/m3	-	1.00	<1.00	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Acrolein	12:40 PM - 12:55 PM	mg/m3	-	0.8	<0.8	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Acrylonitrile	12:40 PM - 12:55 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
1,1,2,2-Tetrachloroethane	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
1,2-Dichloroethane	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
1,2-Dichloropropane	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
1,3-Butadiene	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS and the laboratory has been notified in writing that the sample was not for ALS analysis. ALS Laboratory Group (Thailand) strongly recommends that this report be not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakying  
Scientist (3)

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Analysis / Test Report

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

Lot ID: 2486962  
Date Received : Sep 12, 2024  
Date Reported : Oct 08, 2024  
Report Number: 3068371-2

Page 2 of 3

Sample Number 2486962-1  
Sampled Date Sep 11, 2024  
Sample Description Emission from Stationary Source  
Location Ukas CFB & STG 3  
Date Analysis Commenced Sep 13, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

Stack Description									
Ambient Pressure	756	mmHg	Diameter	2.82	m	Oxygen	3.9	%	
Ambient Temperature	35.0	°C	Shape	Circle		Carbon Dioxide	15.2	%	
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.5	m/s	
Type of Fuel	Coal		Moisture	11.67	%	Flow Rate (Actual O2)	425430	Nm3/hr	
Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O <sub>2</sub>	Method	Testing Location		
1,4-Dichlorobenzene	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Benzene	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Carbon tetrachloride	01:20 PM - 01:35 PM	ppm	-	0.2	<0.2	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Chloroform	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Dichloromethane	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Tetrachloroethylene	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Trichloroethylene	01:20 PM - 01:35 PM	mg/m3	-	1.0	<1.0	United States Environmental Protection Agency, EPA Method 18	Bangkok		
Benzyl Chloride	01:10 PM - 01:20 PM	mg/m3	-	0.05	<0.05	In-house method based on United States Environmental Protection Agency, Compendium Method	Rayong		

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS and the laboratory has been notified in writing that the sample was not for ALS analysis. ALS Laboratory Group (Thailand) strongly recommends that this report be not reproduced except in full.

Approved by

*Orawan R.*

Orawan Rakying  
Scientist (3)

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## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-QM-22-103

Project Name :

Project Location :

Lot ID: 2486962

Date Received : Sep 12, 2024

Date Reported : Oct 08, 2024

Report Number: 3068371-2

Page 3 of 3

Sample Number 2486962-1

Sampled Date Sep 11, 2024

Sample Description Emission from Stationary Source

Location 11km CFB & STG 3

Date Analysis Commenced Sep 13, 2024

Condition of Sample

Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

### Stack Description

Ambient Pressure	756	mmHg	Diameter	2.82	m	Oxygen	3.9	%
Ambient Temperature	35.0	°C	Shape	Circle		Carbon Dioxide	15.2	%
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.5	m/s
Type of Fuel	Coal		Moisture	11.67	%	Flow Rate (Actual O2)	425430	Nm3/hr
Analyte	Sampled Time	Unit	LOD (LOR)	Result	Method	Testing Location		

Sampling By : Warawut Pubpa , Saksit Phaisanphisut

Remark :

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

Approved by *Orawan R.*

Approved by

Orawan Rakyoung  
Scientist (3)

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S:\Reports\_Air Stack\_O2\_NoGL.rpt (9.45AM)



## Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O : GLOW-QM-22-103

Project Name :

Project Location :

Lot ID: 2486962

Date Received : Sep 12, 2024

Date Reported : Oct 04, 2024

Report Number: 3068371-3

Page 1 of 1

Sample Number 2486962-1

Sampled Date Sep 11, 2024

Sample Description Emission from Stationary Source

Location 11km CFB & STG 3

Date Analysis Commenced Sep 17, 2024

Condition of Sample

Extracted into one filter paper placed in plastic petri dish, one 10-L air sampling bag and four sorbent tubes, refrigerated

### Stack Description

Ambient Pressure	756	mmHg	Diameter	2.82	m	Oxygen	3.9	%
Ambient Temperature	35.0	°C	Shape	Circle		Carbon Dioxide	15.2	%
Type of Process	Combustion		Stack Temperature	147	°C	Gas Velocity	30.5	m/s
Type of Fuel	Coal		Moisture	11.67	%	Flow Rate (Actual O2)	425430	Nm3/hr
Analyte	Sampled Time	Unit	LOD (LOR)	Result	Method	Testing Location		

Metals Testing

Mercury 12:20 PM - 01:14 PM mg/m3

0.0002 <0.0002 <0.0002  
United States Environmental Protection Agency, EPA Method 29

Sampling By : Warawut Pubpa วรวัฏ ภูบปา , Saksit Phaisanphisut ศักสิต พิษานพิสุต 2486962-3

Remark :

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

Approved by *Savitree N.*

Approved by

Savitree Naisianglam  
Manager

Approved by *Vanak Anuk*

Vanak Anuk  
Assistant General Manager

2486962-1 2486962-1

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S:\Reports\_Air Stack\_O2\_NoGL.rpt ( 8:09PM)

ผลการตรวจวัดระดับเสียงทั่วไป (Leq 24 hrs)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116616-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-1
Parameter	Noise (Leq 24 hrs.)
Location	บ้านจัดสรรใหม่ไร่ใหญ่ (GPS 47P 0731.882, 1402465)
Measurement Date	Sep 06 - Sep 07, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.7	83.5	55.1
10:00 AM - 11:00 AM	56.6	78.0	55.3
11:00 AM - 12:00 PM	56.8	70.3	55.5
12:00 PM - 01:00 PM	58.1	76.3	55.7
01:00 PM - 02:00 PM	56.9	74.7	55.3
02:00 PM - 03:00 PM	56.1	72.6	54.9
03:00 PM - 04:00 PM	56.7	79.2	54.7
04:00 PM - 05:00 PM	64.6	69.5	60.2
05:00 PM - 06:00 PM	58.6	68.4	55.5
06:00 PM - 07:00 PM	54.4	66.8	53.5
07:00 PM - 08:00 PM	55.4	68.4	53.9
08:00 PM - 09:00 PM	56.9	67.6	55.4
09:00 PM - 10:00 PM	57.3	65.4	55.8
10:00 PM - 11:00 PM	62.8	75.5	57.8
11:00 PM - 12:00 AM	64.6	69.5	60.2
12:00 AM - 01:00 AM	59.6	67.7	57.0
01:00 AM - 02:00 AM	58.5	64.1	57.0
02:00 AM - 03:00 AM	57.4	61.4	56.4
03:00 AM - 04:00 AM	56.8	65.4	55.9
04:00 AM - 05:00 AM	56.8	64.7	55.8
05:00 AM - 06:00 AM	57.8	72.7	56.5
06:00 AM - 07:00 AM	57.2	75.6	56.2
07:00 AM - 08:00 AM	62.3	82.9	56.3
08:00 AM - 09:00 AM	60.6	92.8	54.9
Leq Average 24 hrs. (dB(A))	59.3	92.8	55.7
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))			
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Chonticha

Chonticha Subongkroch  
Scientist (3)

Approved by

Supt S.

Supot Salamteah  
Section Head

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S: Reports\_Air Noise m ( 2 26AM)



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-2
Parameter	Noise (Leq 24 hrs.)
Location	บ้านจัดสรรใหม่ไร่ใหญ่ (GPS 47P 0731.882, 1402465)
Measurement Date	Sep 07 - Sep 08, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.2	76.0	54.5
10:00 AM - 11:00 AM	55.8	67.5	54.6
11:00 AM - 12:00 PM	56.3	70.5	55.0
12:00 PM - 01:00 PM	56.6	71.0	54.8
01:00 PM - 02:00 PM	57.6	80.7	55.5
02:00 PM - 03:00 PM	56.9	78.9	55.4
03:00 PM - 04:00 PM	56.8	72.2	55.2
04:00 PM - 05:00 PM	56.6	74.9	55.1
05:00 PM - 06:00 PM	57.3	79.9	55.4
06:00 PM - 07:00 PM	57.7	70.0	56.4
07:00 PM - 08:00 PM	57.3	64.6	56.1
08:00 PM - 09:00 PM	57.2	63.9	56.2
09:00 PM - 10:00 PM	59.3	67.1	56.0
10:00 PM - 11:00 PM	63.5	69.7	57.3
11:00 PM - 12:00 AM	63.2	69.6	59.1
12:00 AM - 01:00 AM	60.5	66.8	57.1
01:00 AM - 02:00 AM	57.3	65.9	55.7
02:00 AM - 03:00 AM	56.4	61.7	55.3
03:00 AM - 04:00 AM	56.7	61.8	55.6
04:00 AM - 05:00 AM	57.3	66.1	56.3
05:00 AM - 06:00 AM	57.7	75.1	56.2
06:00 AM - 07:00 AM	57.1	74.3	55.9
07:00 AM - 08:00 AM	57.0	66.2	56.0
08:00 AM - 09:00 AM	56.8	80.9	55.6
Leq Average 24 hrs. (dB(A))	58.3	80.9	55.6
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))			
Standard (dB(A))	70	115	
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Chonticha

Chonticha Subongkroch  
Scientist (3)

Approved by

Supt S.

Supot Salamteah  
Section Head

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S: Reports\_Air Noise m ( 9 27AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116618-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number : 2483356-3  
Parameter : Noise (Leq 24 hrs.)  
Location : บ้านนาโพธิ์ไร่โพธิ์ (GPS 47P 0731882, 1402465)  
Measurement Date : Sep 08 - Sep 09, 2024  
Measurement by : Sawai Tonpho  
Sound Level meter : Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.9	69.8	55.5
10:00 AM - 11:00 AM	56.1	64.8	55.1
11:00 AM - 12:00 PM	56.2	65.6	55.1
12:00 PM - 01:00 PM	56.1	67.1	55.0
01:00 PM - 02:00 PM	56.1	68.1	55.0
02:00 PM - 03:00 PM	56.0	64.0	55.1
03:00 PM - 04:00 PM	60.8	76.1	55.3
04:00 PM - 05:00 PM	63.4	82.6	56.3
05:00 PM - 06:00 PM	57.8	80.0	55.5
06:00 PM - 07:00 PM	57.3	78.0	56.4
07:00 PM - 08:00 PM	57.8	65.1	56.6
08:00 PM - 09:00 PM	59.6	66.5	57.6
09:00 PM - 10:00 PM	64.4	69.4	59.9
10:00 PM - 11:00 PM	64.8	70.6	60.4
11:00 PM - 12:00 AM	61.4	68.8	58.5
12:00 AM - 01:00 AM	58.5	67.1	56.5
01:00 AM - 02:00 AM	57.0	65.0	55.9
02:00 AM - 03:00 AM	56.7	61.5	55.7
03:00 AM - 04:00 AM	56.9	61.3	56.0
04:00 AM - 05:00 AM	57.2	68.9	56.2
05:00 AM - 06:00 AM	58.1	79.7	56.3
06:00 AM - 07:00 AM	57.3	76.2	56.1
07:00 AM - 08:00 AM	57.3	71.9	55.7
08:00 AM - 09:00 AM	56.8	74.3	55.6
Leq Average 24 hrs. (dB(A))	59.3		
Lmax (dB(A))	82.6		55.9
L90 (dB(A))			
Ldn (dB(A))	66.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงในโรงงานอุตสาหกรรม และระดับเสียงที่เกิดจากกิจกรรมต่างๆ  
ทั้งนี้ พ.ศ. 2548

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

Chontichak

Technical Management

Chonticha Subongkloch  
Scientist (3)

Approved by

Supt S.

Supot Salamteh  
Section Head

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S (Reports)\_Air Noise pr ( 9 28AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116619-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number : 2483356-4  
Parameter : Noise (Leq 24 hrs.)  
Location : บ้านนาโพธิ์ไร่โพธิ์ (GPS 47P 0731882, 1402465)  
Measurement Date : Sep 09 - Sep 10, 2024  
Measurement by : Sawai Tonpho  
Sound Level meter : Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.6	73.9	55.4
10:00 AM - 11:00 AM	56.5	81.2	55.2
11:00 AM - 12:00 PM	57.3	65.5	55.4
12:00 PM - 01:00 PM	57.4	70.1	55.8
01:00 PM - 02:00 PM	56.3	76.7	55.3
02:00 PM - 03:00 PM	57.2	75.8	55.3
03:00 PM - 04:00 PM	57.1	79.6	55.6
04:00 PM - 05:00 PM	56.5	71.9	55.7
05:00 PM - 06:00 PM	56.4	66.4	55.6
06:00 PM - 07:00 PM	56.3	62.7	55.6
07:00 PM - 08:00 PM	57.2	67.0	56.0
08:00 PM - 09:00 PM	60.0	70.0	56.6
09:00 PM - 10:00 PM	62.1	68.4	58.1
10:00 PM - 11:00 PM	61.7	67.9	56.5
11:00 PM - 12:00 AM	57.6	66.9	55.6
12:00 AM - 01:00 AM	56.1	63.6	55.3
01:00 AM - 02:00 AM	56.1	65.5	55.3
02:00 AM - 03:00 AM	56.7	65.2	55.8
03:00 AM - 04:00 AM	57.2	70.9	56.1
04:00 AM - 05:00 AM	57.9	78.1	56.0
05:00 AM - 06:00 AM	57.7	77.7	56.0
06:00 AM - 07:00 AM	57.5	74.9	56.1
07:00 AM - 08:00 AM	56.6	72.1	55.5
08:00 AM - 09:00 AM	56.9	71.3	55.3
Leq Average 24 hrs. (dB(A))	57.8		
Lmax (dB(A))	81.2		55.6
L90 (dB(A))			
Ldn (dB(A))	64.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่ามาตรฐานระดับเสียงในโรงงานอุตสาหกรรม และระดับเสียงที่เกิดจากกิจกรรมต่างๆ  
ทั้งนี้ พ.ศ. 2548

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

Chontichak

Technical Management

Chonticha Subongkloch  
Scientist (3)

Approved by

Supt S.

Supot Salamteh  
Section Head

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S (Reports)\_Air Noise pr ( 9 28AM)





TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116620-1

Page 1 of 1



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-5
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหลังใหม่รังสิต (GPS 47P 0731882, 1402465)
Measurement Date	Sep 10 - Sep 11, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.9	72.6	54.9
10:00 AM - 11:00 AM	56.6	77.6	54.9
11:00 AM - 12:00 PM	55.8	67.5	54.8
12:00 PM - 01:00 PM	55.9	75.7	54.9
01:00 PM - 02:00 PM	56.3	77.8	55.3
02:00 PM - 03:00 PM	57.7	77.6	55.8
03:00 PM - 04:00 PM	57.5	77.4	56.1
04:00 PM - 05:00 PM	56.5	65.3	55.7
05:00 PM - 06:00 PM	56.4	67.5	55.6
06:00 PM - 07:00 PM	56.3	62.1	55.5
07:00 PM - 08:00 PM	57.2	63.0	55.9
08:00 PM - 09:00 PM	57.2	63.7	55.7
09:00 PM - 10:00 PM	56.8	70.8	55.5
10:00 PM - 11:00 PM	56.3	64.0	55.3
11:00 PM - 12:00 AM	55.5	65.3	54.8
12:00 AM - 01:00 AM	55.5	66.5	54.8
01:00 AM - 02:00 AM	55.4	64.4	54.7
02:00 AM - 03:00 AM	56.3	65.9	55.3
03:00 AM - 04:00 AM	57.0	69.2	55.9
04:00 AM - 05:00 AM	57.4	82.5	55.6
05:00 AM - 06:00 AM	57.3	79.7	55.8
06:00 AM - 07:00 AM	59.3	86.6	55.4
07:00 AM - 08:00 AM	56.3	71.5	54.8
08:00 AM - 09:00 AM	56.5	72.3	54.8

Leq Average 24 hrs. (dB(A)) 56.7  
Lmax (dB(A)) 86.6  
L90 (dB(A)) 55.3  
Ldn (dB(A)) 63.2  
Standard (dB(A)) 70  
Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่ควรจำกัดการรบกวน  
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ควรจำกัดการรบกวน  
พ.ร.บ. 2548  
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management  
Chonticha Subongkotch  
Scientist (3)

Approved by

Supot Salamteh  
Section Head

Supt S

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S:\Reports\_Air Noise pr (9 28AM)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-6
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหลังใหม่รังสิต (GPS 47P 0731882, 1402465)
Measurement Date	Sep 11 - Sep 12, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	56.9	75.9	55.5
10:00 AM - 11:00 AM	56.5	67.4	55.4
11:00 AM - 12:00 PM	56.0	74.5	54.8
12:00 PM - 01:00 PM	56.1	72.5	55.2
01:00 PM - 02:00 PM	56.3	74.1	55.4
02:00 PM - 03:00 PM	56.8	81.9	55.5
03:00 PM - 04:00 PM	56.5	70.5	55.5
04:00 PM - 05:00 PM	56.7	72.5	55.7
05:00 PM - 06:00 PM	56.1	66.2	55.3
06:00 PM - 07:00 PM	55.8	66.7	55.2
07:00 PM - 08:00 PM	55.7	59.1	55.2
08:00 PM - 09:00 PM	56.2	63.3	55.1
09:00 PM - 10:00 PM	57.2	63.4	55.6
10:00 PM - 11:00 PM	56.2	62.8	55.2
11:00 PM - 12:00 AM	55.5	59.6	54.9
12:00 AM - 01:00 AM	55.0	60.2	54.4
01:00 AM - 02:00 AM	55.2	59.3	54.5
02:00 AM - 03:00 AM	56.6	63.3	55.7
03:00 AM - 04:00 AM	57.0	70.0	56.1
04:00 AM - 05:00 AM	59.1	84.7	56.2
05:00 AM - 06:00 AM	57.0	73.7	55.9
06:00 AM - 07:00 AM	57.6	78.3	55.7
07:00 AM - 08:00 AM	56.6	74.0	55.6
08:00 AM - 09:00 AM	64.9	77.7	55.4

Leq Average 24 hrs. (dB(A)) 57.6  
Lmax (dB(A)) 84.7  
L90 (dB(A)) 55.4  
Ldn (dB(A)) 63.4  
Standard (dB(A)) 70  
Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่ควรจำกัดการรบกวน  
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ควรจำกัดการรบกวน  
พ.ร.บ. 2548  
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management  
Chonticha Subongkotch  
Scientist (3)

Approved by

Supot Salamteh  
Section Head

Supt S

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S:\Reports\_Air Noise pr (9 28AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116622-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number : 2483356-7  
Parameter : Noise (Leq 24 hrs.)  
Location : บริเวณพื้นที่วัดน้ำ (พ.ล. อนุสาวรีย์) (GPS 47P 0731882, 1402465)  
Measurement Date : Sep 12 - Sep 13, 2024  
Measurement by : Sawat Tonpho  
Sound Level meter : Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	59.9	73.3	56.2
10:00 AM - 11:00 AM	57.4	71.4	56.0
11:00 AM - 12:00 PM	56.5	68.1	55.2
12:00 PM - 01:00 PM	56.3	68.1	55.4
01:00 PM - 02:00 PM	56.1	70.8	55.2
02:00 PM - 03:00 PM	58.5	81.6	56.2
03:00 PM - 04:00 PM	57.3	76.8	56.5
04:00 PM - 05:00 PM	56.8	68.8	56.3
05:00 PM - 06:00 PM	56.9	65.4	56.3
06:00 PM - 07:00 PM	56.7	62.2	56.2
07:00 PM - 08:00 PM	57.1	64.2	56.3
08:00 PM - 09:00 PM	60.1	65.3	57.2
09:00 PM - 10:00 PM	62.9	69.4	61.2
10:00 PM - 11:00 PM	60.2	66.9	56.8
11:00 PM - 12:00 AM	56.8	62.2	55.9
12:00 AM - 01:00 AM	57.3	61.5	56.4
01:00 AM - 02:00 AM	56.8	61.0	56.1
02:00 AM - 03:00 AM	57.0	66.9	56.2
03:00 AM - 04:00 AM	57.5	70.3	56.5
04:00 AM - 05:00 AM	58.5	82.1	56.3
05:00 AM - 06:00 AM	57.4	75.3	56.1
06:00 AM - 07:00 AM	59.0	87.7	55.9
07:00 AM - 08:00 AM	57.3	86.0	56.1
08:00 AM - 09:00 AM	57.4	77.1	55.9
Leq Average 24 hrs. (dB(A))	58.2		
Lmax (dB(A))	87.7		56.2
L90 (dB(A))			
Ldn (dB(A))	64.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ใช้มาตรฐานการวัดระดับความดังของเสียง (พ.ล. 2540) ใช้กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ใช้มาตรฐานการวัดระดับความดังของเสียง (พ.ล. 2548) ใช้กำหนดระดับเสียงการรบกวน และระดับเสียงที่คาดการณ์การรบกวน  
จาก พ.ล. 2548

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

Chonticha

Technical Management

Chonticha Subongkotch  
Scientist (3)

Approved by

Supot Salamteh  
Section Head

Supt S.

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S:\Reports\_Air Noise pr (9.30AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116623-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number : 2483356-8  
Parameter : Noise (Leq 24 hrs.)  
Location : บริเวณพื้นที่วัดน้ำ (พ.ล. อนุสาวรีย์) (GPS 47P 0730685, 1403045)  
Measurement Date : Sep 06 - Sep 07, 2024  
Measurement by : Sawat Tonpho  
Sound Level meter : Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.2	84.0	49.2
10:00 AM - 11:00 AM	58.3	88.2	50.0
11:00 AM - 12:00 PM	62.2	95.0	51.1
12:00 PM - 01:00 PM	59.4	83.7	50.8
01:00 PM - 02:00 PM	63.1	82.8	52.3
02:00 PM - 03:00 PM	58.5	79.7	51.4
03:00 PM - 04:00 PM	57.8	80.7	50.4
04:00 PM - 05:00 PM	56.9	75.7	49.6
05:00 PM - 06:00 PM	55.4	81.6	48.6
06:00 PM - 07:00 PM	53.1	73.4	47.8
07:00 PM - 08:00 PM	51.0	71.0	46.3
08:00 PM - 09:00 PM	51.8	72.7	47.2
09:00 PM - 10:00 PM	52.8	80.3	46.9
10:00 PM - 11:00 PM	52.7	78.5	46.4
11:00 PM - 12:00 AM	49.3	69.7	45.8
12:00 AM - 01:00 AM	50.9	75.6	45.3
01:00 AM - 02:00 AM	49.7	69.3	45.0
02:00 AM - 03:00 AM	52.7	76.6	45.0
03:00 AM - 04:00 AM	50.0	72.0	44.3
04:00 AM - 05:00 AM	56.0	74.3	48.2
05:00 AM - 06:00 AM	57.5	79.8	51.1
06:00 AM - 07:00 AM	61.0	80.5	50.2
07:00 AM - 08:00 AM	58.7	77.6	50.4
08:00 AM - 09:00 AM	57.9	84.0	49.6
Leq Average 24 hrs. (dB(A))	57.3		
Lmax (dB(A))	93.0		48.6
L90 (dB(A))			
Ldn (dB(A))	62.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ใช้มาตรฐานการวัดระดับความดังของเสียง (พ.ล. 2540) ใช้กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ใช้มาตรฐานการวัดระดับความดังของเสียง (พ.ล. 2548) ใช้กำหนดระดับเสียงการรบกวน และระดับเสียงที่คาดการณ์การรบกวน  
จาก พ.ล. 2548

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

Chonticha

Technical Management

Chonticha Subongkotch  
Scientist (3)

Approved by

Supot Salamteh  
Section Head

Supt S.

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S:\Reports\_Air Noise pr (9.30AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116624-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Sample Number	2483356-9
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนแยก (พ.ท. หนองหญ้า) (GPS 47P 0730695, 1403045)
Measurement Date	Sep 07 - Sep 08, 2024
Measurement by	Sawai Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.1	81.5	49.8
10:00 AM - 11:00 AM	59.1	88.3	48.6
11:00 AM - 12:00 PM	57.3	81.5	50.0
12:00 PM - 01:00 PM	57.5	86.4	48.6
01:00 PM - 02:00 PM	58.4	85.9	49.9
02:00 PM - 03:00 PM	57.0	78.8	51.6
03:00 PM - 04:00 PM	58.8	85.4	50.1
04:00 PM - 05:00 PM	57.2	84.1	49.6
05:00 PM - 06:00 PM	60.4	87.2	48.8
06:00 PM - 07:00 PM	61.4	91.9	48.5
07:00 PM - 08:00 PM	57.1	82.0	48.1
08:00 PM - 09:00 PM	54.9	84.2	45.6
09:00 PM - 10:00 PM	51.8	79.3	45.4
10:00 PM - 11:00 PM	53.0	78.6	43.3
11:00 PM - 12:00 AM	52.1	73.7	42.8
12:00 AM - 01:00 AM	52.2	76.1	42.8
01:00 AM - 02:00 AM	53.4	78.2	44.3
02:00 AM - 03:00 AM	51.6	73.6	45.3
03:00 AM - 04:00 AM	54.1	79.0	45.0
04:00 AM - 05:00 AM	55.5	79.4	47.9
05:00 AM - 06:00 AM	57.9	90.2	49.5
06:00 AM - 07:00 AM	56.8	80.7	47.5
07:00 AM - 08:00 AM	57.7	82.2	48.2
08:00 AM - 09:00 AM	58.1	88.1	48.7
Leq Average 24 hrs. (dB(A))	57.1		
Lmax (dB(A))	91.9		
L90 (dB(A))			48.2
Ldn (dB(A))	61.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องการวัดระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) เรื่องกำหนดวิธีการวัดระดับเสียงรบกวน  
2. ประกาศกระทรวงมหาดไทย เรื่องการวัดระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) เรื่องกำหนดวิธีการวัดระดับเสียงรบกวน

รายงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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S: Reports\_Air Noise.pdf (9.30AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116625-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Sample Number	2483356-10
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนแยก (พ.ท. หนองหญ้า) (GPS 47P 0730695, 1403045)
Measurement Date	Sep 08 - Sep 09, 2024
Measurement by	Sawai Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	57.0	83.6	48.3
10:00 AM - 11:00 AM	58.4	87.1	48.4
11:00 AM - 12:00 PM	57.2	92.3	49.7
12:00 PM - 01:00 PM	55.9	79.9	48.5
01:00 PM - 02:00 PM	54.5	74.2	48.9
02:00 PM - 03:00 PM	56.2	82.7	50.7
03:00 PM - 04:00 PM	65.3	105.8	50.6
04:00 PM - 05:00 PM	52.8	80.0	45.9
05:00 PM - 06:00 PM	50.9	74.1	43.9
06:00 PM - 07:00 PM	49.0	73.3	43.6
07:00 PM - 08:00 PM	48.6	74.9	43.1
08:00 PM - 09:00 PM	48.8	69.9	43.6
09:00 PM - 10:00 PM	48.2	70.9	44.6
10:00 PM - 11:00 PM	48.9	75.1	43.2
11:00 PM - 12:00 AM	46.7	74.9	41.6
12:00 AM - 01:00 AM	47.1	70.9	43.7
01:00 AM - 02:00 AM	50.0	77.0	44.5
02:00 AM - 03:00 AM	52.7	73.2	44.9
03:00 AM - 04:00 AM	50.5	74.1	43.9
04:00 AM - 05:00 AM	68.3	112.0	47.7
05:00 AM - 06:00 AM	57.7	81.0	52.1
06:00 AM - 07:00 AM	57.0	79.0	50.6
07:00 AM - 08:00 AM	54.7	77.7	47.8
08:00 AM - 09:00 AM	56.3	80.5	48.8
Leq Average 24 hrs. (dB(A))	58.2		
Lmax (dB(A))		112.0	
L90 (dB(A))			45.9
Ldn (dB(A))	65.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องการวัดระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) เรื่องกำหนดวิธีการวัดระดับเสียงรบกวน  
2. ประกาศกระทรวงมหาดไทย เรื่องการวัดระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) เรื่องกำหนดวิธีการวัดระดับเสียงรบกวน

รายงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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S: Reports\_Air Noise.pdf (9.30AM)



## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116626-1

Page 1 of 1



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-11
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนเทศบาล (พ.ท. รามคำแหง) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 09 - Sep 10, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	58.7	90.7	48.3
10:00 AM - 11:00 AM	56.0	79.5	49.9
11:00 AM - 12:00 PM	53.2	70.7	48.1
12:00 PM - 01:00 PM	53.0	69.7	47.3
01:00 PM - 02:00 PM	53.8	71.6	47.7
02:00 PM - 03:00 PM	55.3	76.2	48.0
03:00 PM - 04:00 PM	64.9	86.1	52.9
04:00 PM - 05:00 PM	58.4	87.1	48.4
05:00 PM - 06:00 PM	58.5	82.1	47.4
06:00 PM - 07:00 PM	56.6	83.5	49.1
07:00 PM - 08:00 PM	52.6	77.2	46.0
08:00 PM - 09:00 PM	49.1	73.2	45.6
09:00 PM - 10:00 PM	49.3	75.1	45.0
10:00 PM - 11:00 PM	46.1	63.7	42.6
11:00 PM - 12:00 AM	45.5	63.3	43.1
12:00 AM - 01:00 AM	45.3	58.1	43.0
01:00 AM - 02:00 AM	47.5	64.2	41.9
02:00 AM - 03:00 AM	53.7	80.7	42.9
03:00 AM - 04:00 AM	48.1	72.0	42.6
04:00 AM - 05:00 AM	67.6	82.2	44.6
05:00 AM - 06:00 AM	63.1	82.8	52.3
06:00 AM - 07:00 AM	65.6	85.4	52.2
07:00 AM - 08:00 AM	57.3	78.2	49.3
08:00 AM - 09:00 AM	54.5	70.7	48.3
Leq Average 24 hrs. (dB(A))	59.2		
Lmax (dB(A))	90.7		
L90 (dB(A))			47.4
Ldn (dB(A))	67.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ใช้มาตรฐานการประเมินค่าเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ท. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ใช้มาตรฐานการประเมินค่าเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ท. 2548) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
โดยงาน พ.ท. 2548

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

Chonticha

Technical Management

Chonticha Subongkroh  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116627-1

Page 1 of 1



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location :

Sample Number	2483356-12
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนเทศบาล (พ.ท. รามคำแหง) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 10 - Sep 11, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.1	74.8	48.7
10:00 AM - 11:00 AM	58.7	80.3	50.8
11:00 AM - 12:00 PM	55.7	76.9	49.3
12:00 PM - 01:00 PM	53.8	71.8	47.4
01:00 PM - 02:00 PM	56.0	77.6	48.8
02:00 PM - 03:00 PM	55.8	75.4	48.7
03:00 PM - 04:00 PM	58.6	78.2	51.0
04:00 PM - 05:00 PM	55.3	74.5	49.6
05:00 PM - 06:00 PM	55.3	80.4	48.1
06:00 PM - 07:00 PM	53.0	74.1	46.5
07:00 PM - 08:00 PM	52.3	74.3	46.5
08:00 PM - 09:00 PM	51.3	77.0	46.9
09:00 PM - 10:00 PM	51.0	71.2	46.0
10:00 PM - 11:00 PM	49.5	70.8	45.2
11:00 PM - 12:00 AM	47.0	68.6	44.6
12:00 AM - 01:00 AM	46.2	63.7	44.5
01:00 AM - 02:00 AM	47.8	75.6	44.3
02:00 AM - 03:00 AM	52.7	79.7	44.0
03:00 AM - 04:00 AM	48.0	66.6	43.5
04:00 AM - 05:00 AM	53.2	73.9	44.7
05:00 AM - 06:00 AM	57.6	74.6	51.3
06:00 AM - 07:00 AM	57.6	78.5	51.8
07:00 AM - 08:00 AM	55.5	77.7	48.5
08:00 AM - 09:00 AM	56.0	79.7	49.1
Leq Average 24 hrs. (dB(A))	54.7		
Lmax (dB(A))	80.4		
L90 (dB(A))			47.4
Ldn (dB(A))	60.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ใช้มาตรฐานการประเมินค่าเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ท. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ใช้มาตรฐานการประเมินค่าเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ท. 2548) ซึ่งกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
โดยงาน พ.ท. 2548

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

Chonticha

Technical Management

Chonticha Subongkroh  
Scientist (3)

Approved by

Supt S.

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Section Head

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TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116628-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Sample Number	2483356-13
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนสุขุมวิท (พ.ร.บ. ถนน) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 11 - Sep 12, 2024
Measurement by	Sawai Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	55.3	74.6	49.4
10:00 AM - 11:00 AM	57.1	78.2	50.9
11:00 AM - 12:00 PM	54.6	69.5	49.6
12:00 PM - 01:00 PM	55.8	79.9	49.2
01:00 PM - 02:00 PM	56.3	76.5	49.8
02:00 PM - 03:00 PM	56.0	76.8	48.5
03:00 PM - 04:00 PM	60.0	86.6	51.2
04:00 PM - 05:00 PM	55.4	77.1	48.4
05:00 PM - 06:00 PM	55.5	83.9	47.2
06:00 PM - 07:00 PM	55.5	79.8	46.6
07:00 PM - 08:00 PM	50.9	71.5	45.7
08:00 PM - 09:00 PM	49.8	74.7	45.3
09:00 PM - 10:00 PM	48.2	67.1	45.3
10:00 PM - 11:00 PM	49.8	74.4	45.2
11:00 PM - 12:00 AM	48.0	71.3	44.9
12:00 AM - 01:00 AM	48.0	72.7	45.2
01:00 AM - 02:00 AM	48.6	65.7	45.6
02:00 AM - 03:00 AM	53.0	79.3	46.3
03:00 AM - 04:00 AM	49.8	67.4	47.5
04:00 AM - 05:00 AM	53.9	73.8	48.0
05:00 AM - 06:00 AM	57.1	73.0	51.0
06:00 AM - 07:00 AM	57.7	77.4	52.0
07:00 AM - 08:00 AM	54.5	72.7	47.8
08:00 AM - 09:00 AM	54.1	76.8	47.5

Leq Average 24 hrs. (dB(A))	54.7
Lmax (dB(A))	86.6
L90 (dB(A))	47.5
Ldn (dB(A))	60.1
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน พ.ศ. 2540 (พ.ร.บ. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงรบกวน  
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดระดับเสียงรบกวน และระดับเสียงรบกวนจากกิจกรรมการจราจร พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkotch  
Scientist (3)

Approved by

Supt S.

Supot Salameh  
Section Head

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5281-111/EMAIL

S:Reports\_Air Noise rpt ( 9 31AM)



## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116629-1

Page 1 of 1



Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location :

Sample Number	2483356-14
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนสุขุมวิท (พ.ร.บ. ถนน) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 12 - Sep 13, 2024
Measurement by	Sawai Tonpho
Sound Level meter	Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	54.1	75.8	47.9
10:00 AM - 11:00 AM	55.8	77.3	50.1
11:00 AM - 12:00 PM	54.6	70.9	48.3
12:00 PM - 01:00 PM	54.6	82.4	47.7
01:00 PM - 02:00 PM	56.3	84.0	49.0
02:00 PM - 03:00 PM	55.9	73.2	49.9
03:00 PM - 04:00 PM	58.5	82.9	50.8
04:00 PM - 05:00 PM	55.9	78.9	48.3
05:00 PM - 06:00 PM	54.8	79.2	46.7
06:00 PM - 07:00 PM	52.8	74.5	44.6
07:00 PM - 08:00 PM	49.6	72.6	43.3
08:00 PM - 09:00 PM	50.7	78.7	43.7
09:00 PM - 10:00 PM	50.0	78.1	43.4
10:00 PM - 11:00 PM	46.7	69.8	43.1
11:00 PM - 12:00 AM	44.7	62.8	42.4
12:00 AM - 01:00 AM	44.5	67.4	41.8
01:00 AM - 02:00 AM	44.3	62.2	41.8
02:00 AM - 03:00 AM	51.8	78.3	41.7
03:00 AM - 04:00 AM	48.1	73.3	41.9
04:00 AM - 05:00 PM	53.3	73.7	44.1
05:00 AM - 06:00 AM	57.2	79.0	50.5
06:00 AM - 07:00 AM	59.3	85.2	52.1
07:00 AM - 08:00 AM	54.4	73.5	49.3
08:00 AM - 09:00 AM	50.7	78.7	43.7

Leq Average 24 hrs. (dB(A))	54.2
Lmax (dB(A))	84.0
L90 (dB(A))	59.9
Ldn (dB(A))	70
Standard (dB(A))	115

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน พ.ศ. 2540 (พ.ร.บ. 2540) ซึ่งกำหนดมาตรฐานระดับเสียงรบกวน  
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดระดับเสียงรบกวน และระดับเสียงรบกวนจากกิจกรรมการจราจร พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkotch  
Scientist (3)

Approved by

Supt S.

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5281-111/EMAIL

S:Reports\_Air Noise rpt ( 9 32AM)



Analysis / Test Report

TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116630-1

Page 1 of 1



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location :

Sample Number 2483356-15  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณเขตอุตสาหกรรม-บ้านไร่สูง (ทอ. ราษฎร์เทพ) (GPS 47P 0730685, 1403045)  
Measurement Date Sep 06 - Sep 07, 2024  
Measurement by Sawai Tonpho  
Sound Level meter Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	51.3	77.0	46.9
10:00 AM - 11:00 AM	50.5	74.5	43.4
11:00 AM - 12:00 PM	50.6	70.9	46.5
12:00 PM - 01:00 PM	50.4	65.8	45.1
01:00 PM - 02:00 PM	51.8	70.1	46.4
02:00 PM - 03:00 PM	53.3	73.4	45.2
03:00 PM - 04:00 PM	52.0	70.2	43.5
04:00 PM - 05:00 PM	52.1	73.8	41.5
05:00 PM - 06:00 PM	46.2	70.2	38.6
06:00 PM - 07:00 PM	44.3	69.6	39.2
07:00 PM - 08:00 PM	46.3	61.0	44.7
08:00 PM - 09:00 PM	48.4	53.4	47.0
09:00 PM - 10:00 PM	47.6	53.6	46.4
10:00 PM - 11:00 PM	48.5	56.9	46.7
11:00 PM - 12:00 AM	49.9	60.8	46.0
12:00 AM - 01:00 AM	48.6	61.9	47.4
01:00 AM - 02:00 AM	48.6	55.1	47.2
02:00 AM - 03:00 AM	48.6	53.6	46.0
03:00 AM - 04:00 AM	48.2	70.6	45.4
04:00 AM - 05:00 AM	47.0	70.5	44.1
05:00 PM - 06:00 AM	46.2	66.7	41.2
06:00 AM - 07:00 AM	45.1	65.3	40.9
07:00 AM - 08:00 AM	47.7	72.0	42.0
08:00 AM - 09:00 AM	50.8	70.0	43.7
Leq Average 24 hrs. (dB(A))	49.5		
Lmax (dB(A))	77.0		
L90 (dB(A))			45.1
Ldn (dB(A))	54.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการวัดระดับเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดการวัดระดับเสียงโดยทั่วไป  
2. ปริมาณการวัดระดับเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดการวัดระดับเสียงโดยทั่วไป  
โดย พ.ศ. 2548

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

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S.

Supot Salameh  
Section Head

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Life Sciences

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S:Reports\_Air Noise rpt ( 9 32AM)



Analysis / Test Report

TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116631-1

Page 1 of 1



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location :

Sample Number 2483356-16  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณเขตอุตสาหกรรม-บ้านไร่สูง (ทอ. ราษฎร์เทพ) (GPS 47P 0730685, 1403045)  
Measurement Date Sep 07 - Sep 08, 2024  
Measurement by Sawai Tonpho  
Sound Level meter Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	48.7	71.7	43.3
10:00 AM - 11:00 AM	48.2	72.4	43.2
11:00 AM - 12:00 PM	48.3	69.2	43.5
12:00 PM - 01:00 PM	47.2	70.0	41.9
01:00 PM - 02:00 PM	49.4	71.9	42.4
02:00 PM - 03:00 PM	50.9	67.2	44.6
03:00 PM - 04:00 PM	45.7	67.5	40.9
04:00 PM - 05:00 PM	46.4	70.3	41.8
05:00 PM - 06:00 PM	48.2	69.6	41.3
06:00 PM - 07:00 PM	46.5	68.8	42.8
07:00 PM - 08:00 PM	50.5	59.7	48.4
08:00 PM - 09:00 PM	49.8	68.6	47.8
09:00 PM - 10:00 PM	49.2	60.6	47.1
10:00 PM - 11:00 PM	47.9	57.7	46.9
11:00 PM - 12:00 AM	47.5	54.3	46.8
12:00 AM - 01:00 AM	47.5	52.8	46.2
01:00 AM - 02:00 AM	47.1	52.7	45.9
02:00 AM - 03:00 AM	47.7	54.0	45.9
03:00 AM - 04:00 AM	47.5	70.1	44.8
04:00 AM - 05:00 AM	46.8	70.2	43.1
05:00 AM - 06:00 AM	46.6	64.2	42.2
06:00 AM - 07:00 AM	46.1	67.4	42.5
07:00 AM - 08:00 AM	47.8	65.6	43.1
08:00 AM - 09:00 AM	48.8	67.3	43.4
Leq Average 24 hrs. (dB(A))	48.1		
Lmax (dB(A))		72.4	
L90 (dB(A))			43.3
Ldn (dB(A))	53.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ปริมาณการวัดระดับเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดการวัดระดับเสียงโดยทั่วไป  
2. ปริมาณการวัดระดับเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) ซึ่งกำหนดการวัดระดับเสียงโดยทั่วไป  
โดย พ.ศ. 2548

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

Chontichak

Chonticha Subongkoch  
Scientist (3)

Technical Management

Approved by

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Supot Salameh  
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528-111/EMAIL

S:Reports\_Air Noise rpt ( 9 32AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116632-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OW-22-103

Project Name :

Project Location :

Sample Number	2483356-17
Parameter	Noise (Leq 24 hrs.)
Location	ฝั่งถนนสายถนน-บ้านไร่ใหญ่ (หมู่. 11บ้านไร่ใหญ่) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 08 - Sep 09, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	50.0	71.7	44.1
10:00 AM - 11:00 AM	47.9	70.6	44.1
11:00 AM - 12:00 PM	48.6	61.8	44.0
12:00 PM - 01:00 PM	46.5	60.2	42.8
01:00 PM - 02:00 PM	74.4	74.4	42.2
02:00 PM - 03:00 PM	64.8	64.8	42.1
03:00 PM - 04:00 PM	45.1	64.5	42.2
04:00 PM - 05:00 PM	63.3	74.8	43.3
05:00 PM - 06:00 PM	68.2	68.2	47.8
06:00 PM - 07:00 PM	51.3	77.2	46.2
07:00 PM - 08:00 PM	52.5	60.6	50.0
08:00 PM - 09:00 PM	50.6	62.6	49.0
09:00 PM - 10:00 PM	50.9	61.8	49.4
10:00 PM - 11:00 PM	50.3	57.7	49.0
11:00 PM - 12:00 AM	49.5	59.5	48.5
12:00 AM - 01:00 AM	49.8	56.2	48.6
01:00 AM - 02:00 AM	49.8	55.2	48.3
02:00 AM - 03:00 AM	49.4	59.5	48.6
03:00 AM - 04:00 AM	49.1	55.1	46.2
04:00 AM - 05:00 AM	48.8	68.6	45.0
05:00 AM - 06:00 AM	48.5	67.1	43.9
06:00 AM - 07:00 AM	59.3	94.6	44.1
07:00 AM - 08:00 AM	59.2	86.7	43.9
08:00 AM - 09:00 AM	50.1	74.4	44.5

Leq Average 24 hrs. (dB(A))	53.8
Lmax (dB(A))	94.6
L90 (dB(A))	44.5
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป	
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Chontichak

Chonticha Subongkoch  
Scientist (3)

Technical Management

Approved by

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S (Reports)\_Air Noise pr (9.33AM)



TESTING  
No.0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116633-1

Page 1 of 1



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OW-22-103

Project Name :

Project Location :

Sample Number	2483356-18
Parameter	Noise (Leq 24 hrs.)
Location	ฝั่งถนนสายถนน-บ้านไร่ใหญ่ (หมู่. 11บ้านไร่ใหญ่) (GPS 47P 0730685, 1403045)
Measurement Date	Sep 09 - Sep 10, 2024
Measurement by	Sawal Tonpho
Sound Level meter	Serial No. 873109

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	47.4	60.6	44.0
10:00 AM - 11:00 AM	48.6	67.5	44.5
11:00 AM - 12:00 PM	48.3	69.6	44.2
12:00 PM - 01:00 PM	49.1	63.6	45.2
01:00 PM - 02:00 PM	48.3	66.8	44.3
02:00 PM - 03:00 PM	46.2	62.3	43.3
03:00 PM - 04:00 PM	50.7	73.8	43.9
04:00 PM - 05:00 PM	47.0	74.0	42.7
05:00 PM - 06:00 PM	55.9	83.4	42.0
06:00 PM - 07:00 PM	44.1	66.1	41.5
07:00 PM - 08:00 PM	45.1	61.9	43.0
08:00 PM - 09:00 PM	48.8	61.8	46.4
09:00 PM - 10:00 PM	48.5	54.8	47.4
10:00 PM - 11:00 PM	47.8	63.3	46.9
11:00 PM - 12:00 AM	49.3	55.3	48.4
12:00 AM - 01:00 AM	49.0	53.2	47.7
01:00 AM - 02:00 AM	49.4	54.2	47.3
02:00 AM - 03:00 AM	47.4	57.7	46.5
03:00 AM - 04:00 AM	48.5	57.2	47.3
04:00 AM - 05:00 AM	48.3	69.6	44.8
05:00 AM - 06:00 AM	45.4	70.1	42.7
06:00 AM - 07:00 AM	46.2	65.7	42.8
07:00 AM - 08:00 AM	57.2	90.0	44.7
08:00 AM - 09:00 AM	49.5	68.5	44.4

Leq Average 24 hrs. (dB(A))	49.9
Lmax (dB(A))	90.0
L90 (dB(A))	44.4
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป	
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Chontichak

Chonticha Subongkoch  
Scientist (3)

Technical Management

Approved by

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S (Reports)\_Air Noise pr (9.33AM)



## Analysis / Test Report

TESTING  
No. 0042

Lot ID: 2483356

Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116635-1

Page 1 of 1

Sample Number	Z483356-20				
Parameter	Noise (Leq 24 hrs.)				
Location	მუნიციპალიტეტის ცენტრში (თბილისი, 1403045)				
Measurement Date	Sep 11 - Sep 12, 2024				
Measurement by	Sawal Tonpho				
Sound Level meter	Serial No. 873109				
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
	09:00 AM - 10:00 AM	46.7	66.3	42.3	
	10:00 AM - 11:00 AM	44.8	69.1	41.3	
	11:00 AM - 12:00 PM	46.1	65.2	42.4	
	12:00 PM - 01:00 PM	49.6	64.8	44.5	
	01:00 PM - 02:00 PM	46.4	65.9	42.7	
	02:00 PM - 03:00 PM	45.9	69.4	42.2	
	03:00 PM - 04:00 PM	49.9	74.5	42.5	
	04:00 PM - 05:00 PM	45.8	62.7	40.6	
	05:00 PM - 06:00 PM	45.7	74.1	40.9	
	06:00 PM - 07:00 PM	46.9	71.2	40.7	
	07:00 PM - 08:00 PM	44.3	58.1	42.2	
	08:00 PM - 09:00 PM	45.0	63.8	44.1	
	09:00 PM - 10:00 PM	45.7	66.8	44.6	
	10:00 PM - 11:00 PM	47.1	53.9	45.8	
	11:00 PM - 12:00 AM	48.0	54.2	48.0	
	12:00 AM - 01:00 AM	48.8	56.1	46.7	
	01:00 AM - 02:00 AM	47.3	51.7	46.5	
	02:00 AM - 03:00 AM	47.1	59.4	46.0	
	03:00 AM - 04:00 AM	44.6	68.4	43.6	
	04:00 AM - 05:00 AM	46.2	64.4	43.2	
	05:00 AM - 06:00 AM	45.3	64.5	42.5	
	06:00 AM - 07:00 AM	47.0	60.5	44.1	
	07:00 AM - 08:00 AM	56.3	77.2	45.2	
	08:00 AM - 09:00 AM	48.5	67.6	40.8	

1 eq Average 24 hrs. (dB(A))

((A)BP) 067

Ldn (dB(A))

Standard (dB)

Reference Method : ISO1006-1 and 1006-2

Reference Interval : 150-1950-I and 1950-2  
Standard : 1. ระยะสุดท้ายของการตั้งครรภ์และคลอด (15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานการดูแลสุขภาพสตรีและทารกในครรภ์)

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ

โรงงาน พ.ศ. 2548

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

11

**Medical Management**  
**Approved by**

Chonticha Subongkach

Scientist (3) Sect

ADDRESSES 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand TEL: 091-110101 FAX: +66 0 3304 8555

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Analysis / Test Report



Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 2483356  
TESTING No.0042  
Date Received : Sep 17, 2024  
Date Reported : Sep 20, 2024  
Report Number: 3116636-1

Page 1 of 1

Sample Number	2483356-21
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณถนนพหลโยธิน-วงแหวน (ข.ม. หนองพอก) (GPS 47° 07'30.685, 14°03'04.5)
Measurement Date	Sep 12 - Sep 13, 2024
Measurement by	Sawai Tompho
Sound Level meter	Serial No. 873109
Time	Leq (dB(A)) Lmax (dB(A)) L90 (dB(A))
09:00 AM - 10:00 AM	45.9 65.3 41.3
10:00 AM - 11:00 AM	45.3 61.2 41.6
11:00 AM - 12:00 PM	46.3 64.8 43.3
12:00 PM - 01:00 PM	52.2 65.9 47.4
01:00 PM - 02:00 PM	51.6 76.6 46.6
02:00 PM - 03:00 PM	48.1 65.1 45.3
03:00 PM - 04:00 PM	52.0 73.9 45.8
04:00 PM - 05:00 PM	46.6 60.1 43.0
05:00 PM - 06:00 PM	49.1 77.7 43.5
06:00 PM - 07:00 PM	47.2 68.3 42.6
07:00 PM - 08:00 PM	44.2 62.8 42.6
08:00 PM - 09:00 PM	45.6 55.0 44.1
09:00 PM - 10:00 PM	45.6 54.3 44.7
10:00 PM - 11:00 PM	46.3 59.8 45.1
11:00 PM - 12:00 AM	46.2 57.8 45.0
12:00 AM - 01:00 AM	46.4 55.8 45.4
01:00 AM - 02:00 AM	48.5 53.5 47.2
02:00 AM - 03:00 AM	45.9 53.7 44.6
03:00 AM - 04:00 AM	45.7 51.0 44.7
04:00 AM - 05:00 AM	47.2 69.0 44.2
05:00 AM - 06:00 AM	43.6 70.0 41.6
06:00 AM - 07:00 AM	44.9 70.3 41.7
07:00 AM - 08:00 AM	58.8 79.3 45.1
08:00 AM - 09:00 AM	48.7 76.7 42.1
Leq Average 24 hrs. (dB(A))	49.5
Lmax (dB(A))	79.3
L90 (dB(A))	44.2
Ldn (dB(A))	
Standard (dB(A))	70 115

Reference Method : ISO1996-1 and 1996-2  
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง การวัดระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ได้จากการรบกวนการจราจร  
ที่รายงาน พ.ศ. 2548

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

Technical Management Chontichak Chonticha Subongkach Scientist (3)

Approved by Supt S. Supot Salameh Section Head

## ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้ง

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-S Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING

Lot ID: 2467199  
Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023156-1

Page 1 of 1

Sample Number	2467199-1
Sample Date	Jul 03, 2024 10:25 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากกระบวนการผลิตด้านสีของโรงงานน้ำพอง พื้นที่ภาคเหนือของโครงการ (North Canal)
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
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	-	-	37.4	≤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	1330	39350(1)	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	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part 103 (D)	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.2550 (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 34350 mg/L (Refer to Lot ID 2467966-1)  
Sampling By : Paramet Sattayakun

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

Technical Management

Photochanna S.

Photochanna Seeda

Scientist (4)

หน้างานเลขที่ 3-323-9-9446

Approved by

D. Chanchon

Dej Chanchon

Senior Manager

หน้างานเลขที่ 3-323-9-9442

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

Client : Glow SPP 3 Co., Ltd.  
11, 1-S Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2467199  
Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023156-2

Page 1 of 1

Sample Number	2467199-1
Sample Date	Jul 03, 2024 10:25 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากกระบวนการผลิตด้านสีของโรงงานน้ำพอง พื้นที่ภาคเหนือของโครงการ (North Canal)
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	2473	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	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Nitrate as N	mg/L	0.015	0.05	1.48	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	1.2	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	6.7	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.2550 (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 34350 mg/L (Refer to Lot ID 2467966-1)  
Sampling By : Paramet Sattayakun

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

Approved by

Photochanna S.

Photochanna Seeda

Scientist (4)

หน้างานเลขที่ 3-323-9-9446

Approved by

D. Chanchon

Dej Chanchon

Senior Manager

หน้างานเลขที่ 3-323-9-9442

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

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location: Glow SPP 3

Lot ID: 2467201

Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023163-2

Page 1 of 1

Sample Number	2467201-1							
Sampled Date	Jul 03, 2024 10:35 AM							
Sample Description	Wastewater							
Location	น้ำทิ้งจากโรงงานน้ำตาลที่ตำบลวังขนายอำเภอท่าช้างการผลิตน้ำตาลทราย (South Canal)							
Date Analysis Commenced	Jul 03, 2024							
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
Conductivity at 25 Degree C	micromhos/cm	-	0.5	994	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 (G)	Rayong
Nitrate as N	mg/L	0.015	0.05	3.74	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	0.5	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	3.9	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 34350 mg/L (Refer to Lot ID 2467966-1)  
Sampling By : Paramet Sattayakun

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

Technical Management  
Photchanas S.  
Photichana Seeda  
Scientist (4)

Approved by

Photchanas S.  
Photichana Seeda  
Scientist (4)

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S. Japornit, M. Ch. Ph. (12/10PH)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location: Glow SPP 3

Lot ID: 2467201

Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023163-3

Page 1 of 1

Sample Number	2467201-1							
Sampled Date	Jul 03, 2024 10:35 AM							
Sample Description	Wastewater							
Location	บริษัทจะนาภัณฑ์สินค้าโภคภัณฑ์เพื่อสิ่งแวดล้อม(หนองโรง) (South Canal)							
Date Analysis Commenced	Jul 03, 2024							
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
COD	mg/L	1.5	25	34	≤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	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 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 34350 mg/L (Refer to Lot ID 2467966-1)  
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.

Technical Management  
Photchanas S.  
Photichana Seeda  
Scientist (4)

Approved by

Dej Changchon  
Senior Manager

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S. Japornit, M. Ch. Ph. (12/10PH)





## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OH-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 2467205**

Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023167-3

Page 1 of 1

Sample Number	2467205-1
Sampled Date	Jul 03, 2024 11:15 AM
Sample Description	Wastewater
Location	บริเวณตามน้ำจาก South Canal North Canal สถานีเพื่อทำการปล่อยน้ำลงโครงการ
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
COD	mg/L	-	40	56	≤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

**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 34350 mg/L (Refer to Lot ID 2467966-1)

**Sampling By :** Paramet Saitayakun รหัสประจำตัว 7-323-9-9476

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

**Technical Management** **Photchanas.** **Approved by** **D. J. J.**  
Photchanas Seeda  
Scientist (4)  
รหัสประจำตัว 7-323-9-9446  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 7-323-9-9442

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OH-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 2483373**

Date Received : Aug 07, 2024  
Date Reported : Aug 15, 2024  
Report Number : 3061663-1

Page 1 of 1

Sample Number	2483373-1
Sampled Date	Aug 07, 2024 10:31 AM
Sample Description	Wastewater
Location	บริเวณตามน้ำจาก South Canal North Canal สถานีเพื่อทำการปล่อยน้ำลงโครงการ (North Canal)
Date Analysis Commenced	Aug 07, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
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
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	532	≤37750(1)	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	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	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 2500 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 32750 mg/L (Refer to Lot ID 2486852-1)

**Sampling By :** Paramet Saitayakun รหัสประจำตัว 7-323-9-9476

**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** **Photchanas.** **Approved by** **D. J. J.**  
Photchanas Seeda  
Scientist (4)  
รหัสประจำตัว 7-323-9-9446  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 7-323-9-9442

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No. 0042  
Lot ID: 2485683  
Date Received : Aug 07, 2024  
Date Reported : Aug 15, 2024  
Report Number : 3065911-1

Page 1 of 1

Sample Number 2485683-1  
Sampled Date Aug 07, 2024 10:40 AM  
Sample Description Wastewater  
Location บึงหลวงโรงงานไฟฟ้าถ่านหินดิบของโรงงานน้ำตาล ชลประทานชลประทานคลองโคกกรวด (South Canal)  
Date Analysis Commenced Aug 07, 2024  
Condition of Sample Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	<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		-	8.0	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	-	37.2	≤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	-	860	≤37750(1)	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	-	2.2	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	13	≤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 32750 mg/L (Refer to Lot ID 2486852-1)

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

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

Technical Management

Photochanna S.

Photochanna Seeda  
Scientist (4)

รหัสประจำตัว 7-323-9-9446

Approved by

D. J. J.

Dej Changchon  
Senior Manager

รหัสประจำตัว 7-323-9-9442

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5281-111

S:Report, All Gl.m (4:50PM)



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2485683  
Date Received : Aug 07, 2024  
Date Reported : Aug 15, 2024  
Report Number : 3065911-2

Page 1 of 1

Sample Number 2485683-1  
Sampled Date Aug 07, 2024 10:40 AM  
Sample Description Wastewater  
Location บึงหลวงโรงงานไฟฟ้าถ่านหินดิบของโรงงานน้ำตาล ชลประทานชลประทานคลองโคกกรวด (South Canal)  
Date Analysis Commenced Aug 07, 2024  
Condition of Sample Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing						
Conductivity at 25 Degree C	micromhos/cm	-	0.5	1420	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	7.7	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Nitrate as N	mg/L	0.015	0.05	4.95	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Salinity	ppt	-	0.1	0.7	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	12.0	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 32750 mg/L (Refer to Lot ID 2486852-1)

Sampling By : Paramet Sattayakun

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

Technical Management

Photochanna S.

Photochanna Seeda  
Scientist (4)

รหัสประจำตัว 7-323-9-9446

Approved by

D. J. J.

Dej Changchon  
Senior Manager

รหัสประจำตัว 7-323-9-9442

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Life Sciences

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S:Report, All Gl.m (4:50PM)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

**Lot ID: 2485686**  
Date Received : Aug 07, 2024  
Date Reported : Aug 15, 2024  
Report Number : 3065913-2

Page 1 of 1

Sample Number	2485686-1
Sampled Date	Aug 07, 2024 11:10 AM
Sample Description	Wastewater
Location	บริเวณจุดรับน้ำจาก South Canal & North Canal คูน้ำที่หน้าท่าการชลประทานคลองทราย
Date Analysis Commenced	Aug 07, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	45780	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-C (G)	Rayong
Nitrate as N	mg/L	0.015	0.05	<0.05	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	28.6	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	1.5	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 32750 mg/L (Refer to Lot ID 2486852-1)

**Sampling By :** Paramet Sattayakun

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

Approved by

Photchanas S.  
Photchanas Seeda  
Scientist (4)

Technical Management

Approved by

Photchanas S.  
Photchanas Seeda  
Scientist (4)

Senior Manager

Dej Changchon

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

**Lot ID: 2485686**  
Date Received : Aug 07, 2024  
Date Reported : Aug 15, 2024  
Report Number : 3065913-3

Page 1 of 1

Sample Number	2485686-1
Sampled Date	Aug 07, 2024 11:10 AM
Sample Description	Wastewater
Location	บริเวณจุดรับน้ำจาก South Canal & North Canal คูน้ำที่หน้าท่าการชลประทานคลองทราย
Date Analysis Commenced	Aug 08, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
COD	mg/L	-	40	44	≤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

**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 32750 mg/L (Refer to Lot ID 2486852-1)

**Sampling By :** Paramet Sattayakun

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

Approved by

Photchanas S.  
Photchanas Seeda  
Scientist (4)

Senior Manager

Dej Changchon

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No. 0009  
Lot ID: 24101007  
Date Received : Sep 04, 2024  
Date Reported : Sep 13, 2024  
Report Number : 3097804-3

Page 1 of 2

Sample Number	24101007-1				
Sample Date	Sep 04, 2024	10:28 AM			
Sample Description	Wastewater				
Location	บริเวณทางระบายน้ำที่ด้านทิศเหนือของโรงงานน้ำตาล ที่ทำการชลประทานโครงการ (North Canal)				
Date Analysis Commenced	Sep 04, 2024				
Condition of Sample	Contained in four glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>						
Iron	mg/L	0.003	0.005	0.44	No Standard	Bangkok
<b>Petroleum Hydrocarbons</b>						
TPH C10-C14 *	ug/L	-	10	<10	No Standard	Bangkok
TPH C15-C28 *	ug/L	-	50	<50	No Standard	Bangkok
TPH C29-C36 *	ug/L	-	50	<50	No Standard	Bangkok
TPH C5-C9 *	ug/L	-	20	<20	No Standard	Bangkok

<b>Water Testing</b>						
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1457	No Standard	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.0	No Standard	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.42	No Standard	Rayong

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

Approved by  
Nanthawadee Somboon  
Specialist 2

Nant Somb

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S30-1117 (FNA)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No. 0009  
Lot ID: 24101007  
Date Received : Sep 04, 2024  
Date Reported : Sep 13, 2024  
Report Number : 3097804-3

Page 2 of 2

Sample Number	24101007-1		
Sample Date	Sep 04, 2024	10:28 AM	
Sample Description	Wastewater		
Location	บริเวณทางระบายน้ำที่ด้านทิศเหนือของโรงงานน้ำตาล ที่ทำการชลประทานโครงการ (North Canal)		
Date Analysis Commenced	Sep 04, 2024		
Condition of Sample	Contained in four glass vials, three amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>						
Salinity *	ppt	-	0.1	0.7	No Standard	Rayong
Turbidity *	NTU	-	0.1	16.0	No Standard	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** : TPH C6-C9, TPH C10-C14, TPH C15-C28 and TPH C29-C36 : Integration mode Baseline to Baseline

**Sampling By** : Paramet Sattayakun , Smart Khumplinee

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

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

Approved by  
Nanthawadee Somboon  
Specialist 2

Nant Somb

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S30-1117 (FNA)

S30-1117 (FNA)





## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0009  
Lot ID: 24101034  
Date Received : Sep 04, 2024  
Date Reported : Sep 12, 2024  
Report Number : 3097859-2

Page 1 of 1

Sample Number 24101034-1  
Sampled Date Sep 04, 2024 10:35 AM  
Sample Description Wastewater  
Location บริเวณโรงงานน้ำดื่มตามพื้นที่คลองบางขนานน้ำพอง ผ่านการปล่อยน้ำทิ้งโครงการ (South Canal)  
Date Analysis Commenced Sep 05, 2024  
Condition of Sample Contained in 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
<b>Metals Testing</b>							
Arsenic	mg/L	0.0003	0.0005	0.008	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.004	≤2.0	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

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 33300 mg/L (Refer to Lot ID 24102073-1)  
Sampling By : Paramet Sakayakun ทรัพย์สินสงฆ์ 3-223-0-0051, Samart Khumplee ทรัพย์สินสงฆ์ 3-204-0-0084  
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 Sawitree N. Saviwree Noiengiam Manager ทรัพย์สินสงฆ์ 3-204-0-0007  
Approved by Kanokkorn Anek Assistant General Manager ทรัพย์สินสงฆ์ 3-204-0-0004

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0009  
Lot ID: 24101034  
Date Received : Sep 04, 2024  
Date Reported : Sep 13, 2024  
Report Number : 3097859-3

Page 1 of 2

Sample Number 24101034-1  
Sampled Date Sep 04, 2024 10:35 AM  
Sample Description Wastewater  
Location บริเวณโรงงานน้ำดื่มตามพื้นที่คลองบางขนานน้ำพอง ผ่านการปล่อยน้ำทิ้งโครงการ (South Canal)  
Date Analysis Commenced Sep 04, 2024  
Condition of Sample Contained in 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
<b>Metals Testing</b>							
Iron	mg/L	0.003	0.005	1.40	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Petroleum Hydrocarbons</b>							
TPH C10-C14 *	ug/L	-	10	<10	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 C	Bangkok
TPH C15-C28 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 C	Bangkok
TPH C29-C36 *	ug/L	-	50	<50	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 C and 8015 C	Bangkok
TPH C5-C9 *	ug/L	-	20	46.6	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 3510 B and 8260D	Bangkok

Water Testing  
Conductivity at 25 Degree C \* 0.5 1111  
Dissolved Oxygen \* mg/L - 0.1 8.0  
Nitrate as N \* mg/L 0.015 0.05 4.77

Approved by Nant Somb Nanthawadee Sombon Specialist 2

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
TESTING  
No.0042  
Lot ID: 24107137  
Date Received : Sep 18, 2024  
Date Reported : Sep 23, 2024  
Report Number : 3113155-1

Page 1 of 1

Sample Number	2410137-1
Sampled Date	Sep 18, 2024 9:35 AM
Sample Description	Wastewater
Location	บริเวณทางระบายน้ำด้านใต้ของโรงงานน้ำพวด ฝั่งทางท่าเรือคลองโคกกรวย (South Canal)
Date Analysis Commenced	Sep 19, 2024
Condition of Sample	Contained in 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							
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, 24th ed., 2023, 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.  
Sampling By : Chainusorn Letnanhakhunchai รหัสประจำตัว 7-323-0-0041

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  
Photchana S.  
Photchana Seeda  
Scientist (4)  
รหัสประจำตัว 7-323-0-0028

Approved by  
D. J. J. J.  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 7-323-0-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
TESTING  
No.0042  
Lot ID: 24101036  
Date Received : Sep 04, 2024  
Date Reported : Sep 12, 2024  
Report Number : 3097863-1

Page 1 of 1

Sample Number	24101036-1
Sampled Date	Sep 04, 2024 11:20 AM
Sample Description	Wastewater
Location	บริเวณถนนท่าเรือ South Canal& North Canal ฝั่งทางท่าเรือคลองโคกกรวย
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in 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, part 4500 - O G	Rayong
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	34100	38300(1)	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	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part 1H3 (D)	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 33300 mg/L (Refer to Lot ID 24102073-1)  
Sampling By : Paramet Sattayakun รหัสประจำตัว 7-323-0-0051, Samart Khumplee รหัสประจำตัว 7-204-0-0084

Remark :  
- LOD : Limit of Detection  
- "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  
Photchana S.  
Photchana Seeda  
Scientist (4)  
รหัสประจำตัว 7-323-0-0028

Approved by  
D. J. J. J.  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 7-323-0-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location: Glow SPP 3

TESTING  
No.0009

Lot ID: 24101036

Date Received : Sep 04, 2024  
Date Reported : Sep 13, 2024  
Report Number : 3097863-3

Page 2 of 2

Sample Number	24101036-1
Sample Date	Sep 04, 2024 11:20 AM
Sample Description	Wastewater
Location	บ่อกักเก็บน้ำฝนจาก South Canal & North Canal คู่มือการเก็บน้ำฝนของโรงงาน
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in 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							
Salinity *	ppt	-	0.1	30.3	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	2.9	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 > 5,000 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 : TPH C6-C9,TPH C10-C14,TPH C15-C28 and TPH C29-C36 : Integration mode Baseline to Baseline

Sampling By : Paramet Sattayakun , Samart Khumplee

Remark :  
- LOD : Limit of Detection  
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)  
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This report is not representative except in full.

Approved by

Nant Somb-  
Nanthawadee Somboon  
Specialist 2

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S28-1117 EPAL

S. Reperth, AL. G. pt ( 6 Sep 24)



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location: Glow SPP 3

TESTING  
No.0042

Lot ID: 24101036

Date Received : Sep 04, 2024  
Date Reported : Sep 12, 2024  
Report Number : 3097863-4

Page 1 of 1

Sample Number	24101036-1
Sample Date	Sep 04, 2024 11:20 AM
Sample Description	Wastewater
Location	บ่อกักเก็บน้ำฝนจาก South Canal & North Canal คู่มือการเก็บน้ำฝนของโรงงาน
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in 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							
COD *	mg/L	-	40	53	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2220 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 2520 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 > 5,000 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 33300 mg/L (Refer to Lot ID 24102073-1)

Sampling By : Paramet Sattayakun นพดลนาถ 7-323-0051 , Samart Khumplee นพดลนาถ 7-204-0084

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

Photchanas.  
Photchanas Seeda  
Scientist (4)

Approved by

Dej Changchon  
Senior Manager

นพดลนาถ 7-323-0028

นพดลนาถ 7-323-0001

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S28-1117 EPAL

S. Reperth, AL. G. pt ( 3 Sep 24)





## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24104745  
Date Received : Oct 02, 2024  
Date Reported : Oct 09, 2024  
Report Number : 310672-3

Page 1 of 1

Sample Number	24104745-1
Sample Date	Oct 02, 2024 10:20 AM
Sample Description	Wastewater
Location	บริเวณโรงงานบำบัดน้ำผิวดินเขตโรงงานน้ำตาล ที่ทำการชลประทานของโครงการ (North Canal)
Date Analysis Commenced	Oct 03, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 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 33600 mg/L (Refer to Lot ID 24105243-1)  
**Sampling By :** Aronwich Wongsachai รหัสประจำตัว 3-323-3-0040

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**  
Chontichak  
Chonicha Subongkech  
Scientist (3)  
รหัสประจำตัว 3-323-3-0031

**Approved by**  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 3-323-3-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24104747  
Date Received : Oct 02, 2024  
Date Reported : Oct 09, 2024  
Report Number : 3106779-1

Page 1 of 1

Sample Number	24104747-1
Sample Date	Oct 02, 2024 10:34 AM
Sample Description	Wastewater
Location	บริเวณโรงงานบำบัดน้ำผิวดินเขตโรงงานน้ำตาล ที่ทำการชลประทานของโครงการ (South Canal)
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	608	<38600(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	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, 24th ed., 2023, 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 33600 mg/L (Refer to Lot ID 24105243-1)  
**Sampling By :** Aronwich Wongsachai รหัสประจำตัว 3-323-3-0040

Remark :  
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**Technical Management**  
Chontichak  
Chonicha Subongkech  
Scientist (3)  
รหัสประจำตัว 3-323-3-0031

**Approved by**  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 3-323-3-0001

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

## TESTING

**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 3106783-1

Page 1 of 1

<b>Sample Number</b>	24104749-1
<b>Sample Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บริเวณจุดรับน้ำจาก South Canal & North Canal ส่วนที่พบฟักน้ำตาลใกล้บ่อของโครงการ
<b>Date Analysis Commenced</b>	Oct 02, 2024
<b>Condition of Sample</b>	Contained in 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
<b>Water Testing</b>						
BOD (5 days at 20 Degree C)	mg/L	-	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (6)	Rayong
Temperature *	Degree C	-	36.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	32750	≤38600(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 33600 mg/L (Refer to Lot ID 24105243-1)

**Sampling By :** Anonwich Wongsachai รหัสพนักงาน 3-323-3-0040

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

**Photchanas.**  
Photchanas Seeda  
Scientist (4)

รหัสพนักงาน 3-323-3-0028

### Approved by

**D. Chongchon**  
Dej Chongchon  
Senior Manager

รหัสพนักงาน 3-323-3-0001



## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 3106783-2

Page 1 of 1

<b>Sample Number</b>	24104749-1
<b>Sample Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บริเวณจุดรับน้ำจาก South Canal & North Canal ส่วนที่พบฟักน้ำตาลใกล้บ่อของโครงการ
<b>Date Analysis Commenced</b>	Oct 02, 2024
<b>Condition of Sample</b>	Contained in 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
<b>Water Testing</b>						
Conductivity at 25 Degree C	micromhos/cm	-	48900	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	6.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Nitrate as N	mg/L	0.015	<0.05	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Salinity	ppt	-	33.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Turbidity	NTU	-	2.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 33600 mg/L (Refer to Lot ID 24105243-1)

**Sampling By :** Anonwich Wongsachai

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

### Approved by

**Photchanas.**  
Photchanas Seeda  
Scientist (4)

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

## TESTING

**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 3106783-1

Page 1 of 1

<b>Sample Number</b>	24104749-1
<b>Sample Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บริเวณจุดรับน้ำจาก South Canal & North Canal ส่วนที่พบฟักน้ำตาลใกล้บ่อของโครงการ
<b>Date Analysis Commenced</b>	Oct 02, 2024
<b>Condition of Sample</b>	Contained in 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
<b>Water Testing</b>						
BOD (5 days at 20 Degree C)	mg/L	-	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (6)	Rayong
Temperature *	Degree C	-	36.0	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	32750	≤38600(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	<5	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 33600 mg/L (Refer to Lot ID 24105243-1)

**Sampling By :** Anonwich Wongsachai รหัสพนักงาน 3-323-3-0040

**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

**Photchanas.**  
Photchanas Seeda  
Scientist (4)

รหัสพนักงาน 3-323-3-0028

### Approved by

**D. Chongchon**  
Dej Chongchon  
Senior Manager

รหัสพนักงาน 3-323-3-0001



## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 3106783-2

Page 1 of 1

<b>Sample Number</b>	24104749-1
<b>Sample Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บริเวณจุดรับน้ำจาก South Canal & North Canal ส่วนที่พบฟักน้ำตาลใกล้บ่อของโครงการ
<b>Date Analysis Commenced</b>	Oct 02, 2024
<b>Condition of Sample</b>	Contained in 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
<b>Water Testing</b>						
Conductivity at 25 Degree C	micromhos/cm	-	48900	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	6.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Nitrate as N	mg/L	0.015	<0.05	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Salinity	ppt	-	33.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Turbidity	NTU	-	2.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 33600 mg/L (Refer to Lot ID 24105243-1)

**Sampling By :** Anonwich Wongsachai

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

### Approved by

**Photchanas.**  
Photchanas Seeda  
Scientist (4)

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5283-1131 BNAH



## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 24120792**

Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number : 3143735-2

Page 1 of 1

**Sample Number** 24120792-1  
**Sampled Date** Nov 06, 2024 11:00 AM  
**Sample Description** Wastewater  
**Location** บริเวณทางระบายน้ำที่ด้านทิศใต้ของโรงงานน้ำตาลฯ ผ่านทางท่อปล่อยของโครงการ (North Canal)  
**Date Analysis Commenced** Nov 06, 2024  
**Condition of Sample** Contained in one amber glass bottle and three plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	652	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.9	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Nitrate as N	mg/L	0.015	0.05	2.38	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (F)	Rayong
Salinity	ppt	-	0.1	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Turbidity	NTU	-	0.1	5.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 32850 mg/L (Refer to Lot ID 24120838-1)

**Sampling By :** Paramet Sattayakun

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

**Technical Management** **Photchanas.**

Photchana Seeda  
Scientist (4)

**Approved by**

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5293-1117 EN04L

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

**Lot ID: 24120792**

Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number : 3143735-3

Page 1 of 1

**Sample Number** 24120792-1  
**Sampled Date** Nov 06, 2024 11:00 AM  
**Sample Description** Wastewater  
**Location** บริเวณทางระบายน้ำที่ด้านทิศใต้ของโรงงานน้ำตาลฯ ผ่านทางท่อปล่อยของโครงการ (North Canal)  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Contained in one amber glass bottle and three plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 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 32850 mg/L (Refer to Lot ID 24120838-1)

**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** **Photchanas.**

Photchana Seeda  
Scientist (4)

**Approved by**

Dej Changchon  
Senior Manager

โทรศัพท์ 3-323-8-0001

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

Page 1 of 1

Sample Number	24120799-1		
Sample Date	Nov 06, 2024	11:07 AM	
Sample Description	Wastewater		
Location	บริเวณงานระบายน้ำด้านทิศใต้ของงานระบบบำบัดน้ำทะเล ด้านการปล่อยน้ำของโครงการ (South Canal)		
Date Analysis Commenced	Nov 07, 2024		
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 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 32850 mg/L (Refer to Lot ID 24120838-1)

**Sampling By :** Paramet Sattayakun วันที่เก็บตัวอย่าง 7-323-0-0051

**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

Photochanas.S.

Photochana Seeda

Scientist (4)

วันที่อนุมัติ 7-323-0-0028

Approved by

Dej Changchon

Senior Manager

วันที่อนุมัติ 7-323-0-0001

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5281-1117 Email

S.Bojwala, Al. G. pr (S.Bojwala)



## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow SPP 3

Page 1 of 1

Sample Number	24119681-1		
Sample Date	Nov 06, 2024	11:49 AM	
Sample Description	Wastewater		
Location	บริเวณจุดระบายน้ำจาก South Canal & North Canal คูน้ำที่ระบายน้ำจากแหล่งน้ำของโครงการ		
Date Analysis Commenced	Nov 06, 2024		
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35800	37850(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	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, 24th ed., 2023, 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 32850 mg/L (Refer to Lot ID 24120838-1)

**Sampling By :** Paramet Sattayakun วันที่เก็บตัวอย่าง 7-323-0-0051

**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

Photochanas.S.

Photochana Seeda

Scientist (4)

วันที่อนุมัติ 7-323-0-0028

Approved by

Dej Changchon

Senior Manager

วันที่อนุมัติ 7-323-0-0001

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S.Bojwala, Al. G. pr (S.Bojwala)



## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

Sample Number 24128820-1  
Sample Date Dec 06, 2024 10:10 AM  
Sample Description Wastewater  
Location บริเวณทางระบายน้ำใต้ถนนพิเศษของโรงงานน้ำพริกและ ฟาร์มกบหลังหนองโสมกร (North Canal)  
Date Analysis Commenced Dec 06, 2024  
Condition of Sample Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C		-	-	8.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	304	37050(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	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, 24th ed., 2023, 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 32050 mg/L (Refer to Lot ID 24129587-1)  
Sampling By : Paramet Sattayakun รหัสผู้ดูแลฯ 7-323-0-0051  
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.

Technical Management Photchanas. S. Photchana Seeda  
Dej Changchon Senior Manager  
รหัสผู้ดูแลฯ 7-323-0-0028

Approved by D. J. J. J.  
Dej Changchon Senior Manager  
รหัสผู้ดูแลฯ 7-323-0-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

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

TESTING  
No.0042  
Lot ID: 24128820  
Date Received : Dec 06, 2024  
Date Reported : Dec 13, 2024  
Report Number : 3162009-1

Technical Management Photchanas. S. Photchana Seeda  
Dej Changchon Senior Manager  
รหัสผู้ดูแลฯ 7-323-0-0028

Approved by D. J. J. J.  
Dej Changchon Senior Manager  
รหัสผู้ดูแลฯ 7-323-0-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24128823  
Date Received : Dec 06, 2024  
Date Reported : Dec 13, 2024  
Report Number : 3162011-1

Page 1 of 2

Sample Number	24128823-1
Sample Date	Dec 06, 2024 10:20 AM
Sample Description	Wastewater
Location	บริเวณโรงงานน้ำดื่มตามพื้นที่ของโรงงานน้ำดื่ม (South Canal)
Date Analysis Commenced	Dec 06, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C				8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.3	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	496	37050(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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 32050 mg/L (Refer to Lot ID 24129587-1)  
Sampling By : Paramet Sattayakun รหัสประจำตัว 3-323-a-0051

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

Technical Management :  
Phatchana Seeda  
Scientist (4)  
รหัสประจำตัว 3-323-a-0028

Approved by :  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 3-323-a-0001

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24128823  
Date Received : Dec 06, 2024  
Date Reported : Dec 13, 2024  
Report Number : 3162011-1

Page 2 of 2

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

Technical Management :  
Phatchana Seeda  
Scientist (4)  
รหัสประจำตัว 3-323-a-0028

Approved by :  
Dej Changchon  
Senior Manager  
รหัสประจำตัว 3-323-a-0001

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24128824  
Date Received : Dec 06, 2024  
Date Reported : Dec 13, 2024  
Report Number : 3162013-1

Page 1 of 2

Sample Number	24128824-1
Sampled Date	Dec 06, 2024 10:40 AM
Sample Description	Wastewater
Location	บริเวณจุดระบายน้ำจาก South Canal North Canal ส่วนน้ำทิ้งเสียที่งานท่ากลั่นแอมโมเนียโรงกลั่น
Date Analysis Commenced	Dec 06, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
pH at 25 degree C		-	-	8.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34350	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	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, 24th ed., 2023, 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 32050 mg/L (Refer to Lot ID 24129587-1)  
Sampling By : Paramet Sattayakun วันที่ตรวจ 7-323-a-0051

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

Technical Management : Photchanan S.  
Photchanan Seeda  
Scientist (4)  
วันที่ตรวจ 7-323-a-0028

Approved by : D. J. J. J.  
Dej Changchon  
Senior Manager  
วันที่ตรวจ 7-323-a-0001

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

TESTING  
No.0042  
Lot ID: 24128824  
Date Received : Dec 06, 2024  
Date Reported : Dec 13, 2024  
Report Number : 3162013-1

Page 2 of 2

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

Technical Management : Photchanan S.  
Photchanan Seeda  
Scientist (4)  
วันที่ตรวจ 7-323-a-0028

Approved by : D. J. J. J.  
Dej Changchon  
Senior Manager  
วันที่ตรวจ 7-323-a-0001

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## ผลการตรวจวิเคราะห์คุณภาพน้ำทะเล

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:  
**Lot ID: 2467966**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025124-1 C3

Page 1 of 2

Sample Number	2467966-1
Sample Date	Jul 03, 2024 11:20 AM
Sample Description	Seawater
Location	บริเวณจุดเก็บน้ำทะเลของโครงการ
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	49930	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 (G)	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	30.4	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	-	-	33.3	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	34350	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	n/a	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Chontichak

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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:  
**Lot ID: 2467966**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025124-1 C3

Page 2 of 2

Sample Number	2467966-1
Sample Date	Jul 03, 2024 11:20 AM
Sample Description	Seawater
Location	บริเวณจุดเก็บน้ำทะเลของโครงการ
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.9	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.5	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 : Narunat thannasaro

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

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Chontichak

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Analysis / Test Report

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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:  
**Lot ID: 2467970**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025188-1 C3

Page 1 of 2

**Sample Number** 2467970-1  
**Sample Date** Jul 03, 2024 12:05 PM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากท่าเรือบริเวณท่าอากาศยานนานาชาติสุวรรณภูมิ 500 เมตร จุดที่ 1  
**Date Analysis Commenced** Jul 03, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	microhmhos/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	7.3	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	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 1500 - H (9)	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	-	-	31.5	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	34900	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	n/a	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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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:  
**Lot ID: 2467970**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025188-1 C3

Page 2 of 2

**Sample Number** 2467970-1  
**Sample Date** Jul 03, 2024 12:05 PM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากท่าเรือบริเวณท่าอากาศยานนานาชาติสุวรรณภูมิ 500 เมตร จุดที่ 1  
**Date Analysis Commenced** Jul 03, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.2	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 :** Narurat thannamasaro

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

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## Analysis / Test Report

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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2467977**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025201-1 C3

Page 1 of 2

<b>Sample Number</b>	2467977-1
<b>Sample Date</b>	Jul 03, 2024 11:45 AM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณแหล่งน้ำทะเลจากท่าเรือขนาดใหญ่ของโครงการปิโตรเคมีระยอง 500 เมตร
<b>Date Analysis Commenced</b>	Jul 03, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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 6	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49820	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 (G)	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	30.6	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	-	-	33.1	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	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	5	n/a	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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**Chonticha Subongkoch**  
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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2467977**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025201-1 C3

Page 2 of 2

<b>Sample Number</b>	2467977-1
<b>Sample Date</b>	Jul 03, 2024 11:45 AM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณแหล่งน้ำทะเลจากท่าเรือขนาดใหญ่ของโครงการปิโตรเคมีระยอง 500 เมตร
<b>Date Analysis Commenced</b>	Jul 03, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.3	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	5.5	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 :** Narunat thiammasaro

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

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2467987**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025210-1 C3

Page 1 of 2

<b>Sample Number</b>	2467987-1
<b>Sample Date</b>	Jul 03, 2024 11:10 AM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณแหล่งน้ำทะเลห่างจากชายฝั่งประมาณห้ากิโลเมตรทางทิศตะวันตกเฉียงใต้ 1,000 เมตร จุดที่ 2
<b>Date Analysis Commenced</b>	Jul 03, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	49890	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 (G)	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	29.6	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	-	-	32.1	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	35900	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	n/a	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Results apply to the samples as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2467987**  
Date Received : Jul 03, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3025210-1 C3

Page 2 of 2

<b>Sample Number</b>	2467987-1
<b>Sample Date</b>	Jul 03, 2024 11:10 AM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณแหล่งน้ำทะเลห่างจากชายฝั่งประมาณห้ากิโลเมตรทางทิศตะวันตกเฉียงใต้ 1,000 เมตร จุดที่ 2
<b>Date Analysis Commenced</b>	Jul 03, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	6.7	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 :** Narinrat thammassaro

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

**Approved by**

*Chontichak*

Chonticha Subongkloch  
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## Analysis / Test Report

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555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2486853**  
Date Received : Aug 07, 2024  
Date Reported : Sep 03, 2024  
Report Number : 3068263-1 C3

Page 1 of 2

<b>Sample Number</b>	2486853-1
<b>Sample Date</b>	Aug 07, 2024 12:10 PM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณจุดรวมน้ำคลองชลประทาน
<b>Date Analysis Commenced</b>	Aug 07, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	44560	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 (G)	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-CI (F)	Rayong
Salinity	ppt	-	0.1	28.0	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 2530 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32700	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	n/a	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. ALS is not responsible for the accuracy of the results if the sample was not properly preserved or if the sample was not properly labeled. This report is not reproduced except in full.

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Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 2486853**  
Date Received : Aug 07, 2024  
Date Reported : Sep 03, 2024  
Report Number : 3068263-1 C3

Page 2 of 2

<b>Sample Number</b>	2486853-1
<b>Sample Date</b>	Aug 07, 2024 12:10 PM
<b>Sample Description</b>	Seawater
<b>Location</b>	บริเวณจุดรวมน้ำคลองชลประทาน
<b>Date Analysis Commenced</b>	Aug 07, 2024
<b>Condition of Sample</b>	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.0	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 :** Chainusorn Lertmanthakunchai

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

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Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 2486855  
Date Received : Aug 07, 2024  
Date Reported : Sep 03, 2024  
Report Number : 306265-1 C3

Page 1 of 2

Sample Number 2486855-1  
Sample Date Aug 07, 2024 12:20 PM  
Sample Description Seawater  
Location บริเวณแหล่งน้ำทะเลสาบจากทะเลสาบหน้าห้องของโครงการในทางทิศตะวันตกฝั่งใต้ 500 เมตร จุดที่ 2  
Date Analysis Commenced Aug 07, 2024  
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	43550	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 (G)	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	27.5	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	-	-	31.5	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	32250	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) Public Co., Ltd. and the report is not reproduced except in full.

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
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Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 2486855  
Date Received : Aug 07, 2024  
Date Reported : Sep 03, 2024  
Report Number : 306265-1 C3

Page 2 of 2

Sample Number 2486855-1  
Sample Date Aug 07, 2024 12:20 PM  
Sample Description Seawater  
Location บริเวณแหล่งน้ำทะเลสาบจากทะเลสาบหน้าห้องของโครงการในทางทิศตะวันตกฝั่งใต้ 500 เมตร จุดที่ 2  
Date Analysis Commenced Aug 07, 2024  
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	6.7	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 : Chainusorn Lertranthakunchai

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

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## Analysis / Test Report

**Lot ID: 2486857**  
 Date Received : Aug 07, 2024  
 Date Reported : Sep 03, 2024  
 Report Number : 3068267-1 C3

**Client :** Glow SPP 3 Co., Ltd.  
 555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
 Chatuchak, Khet Chatuchak, Bangkok Thailand 10900

**P/O :** GLOW-QW-22-103

**Project Name :**  
**Project Location :**

Page 1 of 2

Sample Number	2406057-1
Sampled Date	Aug 07, 2024 12:30 PM
Sample Description	Seawater
Location	บริเวณหน้าเขื่อนฝายลพบุรีชลประทาน ตำบลบ้านใหม่ อำเภอเมือง จังหวัดลพบุรี 1,000 เมตร จุดที่ 1
Date Analysis Commenced	Aug 07, 2024
Condition of Sample	Contained in two plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LoQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	43200	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 (G)	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	27.3	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	-	-	31.2	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	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	3	n/a	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Chatuchak, Khui Chatuchak, Bangkok Thailand 10900  
P/O : GLOW-OM-22-103

Page 2 of 2

Sample Number	2486056-1
Sampled Date	Aug 07, 2024 11:50 AM
Sample Description	Seawater
Location	บริเวณผืนน้ำทะเลห่างจากชายฝั่งเมืองสงขลาทางทิศตะวันตก 500 เมตร
Date Analysis Commenced	Aug 07, 2024
Condition of Sample	Contained in 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 Transparency	m	-	-	2.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.4	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:** Chainusom Lertmanthakunchai

**Remark**  $\square$

• LOD : Limit of Detection

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

Approved by

Chonticha Subongkoch  
Scientist (3)

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## Analysis / Test Report

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P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 2486858  
Date Received : Aug 07, 2024  
Date Reported : Sep 03, 2024  
Report Number : 3068269-1 C3

Page 2 of 2

Sample Number 2486858-1  
Sample Date Aug 07, 2024 11:20 AM  
Sample Description Seawater  
Location บริเวณแหล่งท่องเที่ยวทางทะเลบริเวณท่าเรือท่าเรือ 1,000 เมตร จุดที่ 2  
Date Analysis Commented Aug 07, 2024  
Condition of Sample Contained in 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							
Transparency	m	-	-	2.5	Change from Natural condition not more than 10% of the lowest	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.4	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 : Chainusom Lerbanthakunchai

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

Approved by  
Chonticha Subongkloch  
Chonticha Subongkloch  
Scientist (3)

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## Analysis / Test Report

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11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24102073  
Date Received : Sep 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3100028-1 C3

Page 1 of 3

Sample Number 24102073-1  
Sample Date Sep 04, 2024 9:25 AM  
Sample Description Seawater  
Location บริเวณจุดประมงทะเลสาบสงขลา  
Date Analysis Commented Sep 04, 2024  
Condition of Sample Contained in one amber glass bottle, two glass vials 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	ug/L	2.00	5.00	Not Detected	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	3.00	<3.00	≤8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	ug/L	1.00	3.00	56.3	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	0.05	Not Detected	≤0.1	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	ug/L	3.00	10.0	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	<2.0	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	48690	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Approved by  
Siriluk P.  
Siriluk Bunnak  
Section Head

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) Public Co., Ltd. and the analysis was performed in the Laboratory, ALS Laboratory Group (Thailand) Public Co., Ltd. This report is not reproduced except in full.

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:

Lot ID: 24102074  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 310029-1 C3

Page 1 of 3

Sample Number	24102074-1
Sample Date	Sep 04, 2024 10:15 AM
Sample Description	Seawater
Location	บริเวณท่าเรือหน้าท่าเรือของโครงการ
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOE)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Arsenic	ug/L	2.00	5.00	<5.00	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	3.00	Not Detected	≤8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	0.05	<0.05	≤0.1	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	ug/L	3.00	10.0	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
<b>Water Testing</b>							
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	48400	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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Siriluk P.  
Siriluk Bunrak  
Section Head

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:

Lot ID: 24102074  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 310029-1 C3

Page 2 of 3

Sample Number	24102074-1
Sample Date	Sep 04, 2024 10:15 AM
Sample Description	Seawater
Location	บริเวณท่าเรือหน้าท่าเรือของโครงการ
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOE)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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 (G)	Rayong
Petroleum Hydrocarbon	ug/L	0.02	0.05	0.58	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	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	≤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	30.2	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	-	-	32.2	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	33900	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. ALS is not responsible for the accuracy of the results if the sample was not collected from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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Siriluk Bunrak  
Section Head

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-QM-22-103

Project Name :

Project Location : Glow SPP 3

Lot ID: 24101539

Date Received : Sep 11, 2024

Date Reported : Sep 16, 2024

Report Number : 3098910-1

Page 2 of 7

Sample Number	24101539-2
Sampled Date	Sep 11, 2024 12:10 PM
Sample Description	Sea Water
Location	บริเวณจุดรับน้ำท่ามาบตาพุด
Date Analysis Commenced	Sep 12, 2024
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Sayan Yalbamning

Remark :

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

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Photchanas S.

Phokchana Seeda

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng

Chaluchak, Khet Chaluchak, Bangkok Thailand 10900

P/O : GLOW-QM-22-103

Project Name :

Project Location :

Lot ID: 24102076

Date Received : Sep 04, 2024

Date Reported : Dec 18, 2024

Report Number : 3100031-1 C3

Page 1 of 3

Sample Number	24102076-1
Sampled Date	Sep 04, 2024 10:00 AM
Sample Description	Seawater
Location	บริเวณแหล่งน้ำท่าทางหลวงหมายเลข 5 ในพื้นที่ตำบลชะอำ อำเภอชะอำ จังหวัดเพชรบุรี
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials 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	ug/L	2.00	5.00	Not Detected	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	3.00	Not Detected	≤8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	ug/L	1.00	3.00	146	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	0.05	Not Detected	≤0.1	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	ug/L	3.00	10.0	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	<2.0	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	46500	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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

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Siriluk P.

Siriluk Turnak

Section Head

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## Analysis / Test Report

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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24102077**  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3100032-1 C3

Page 1 of 3

<b>Sample Number</b>	24102077-1				
<b>Sample Date</b>	Sep 04, 2024	10:10 AM			
<b>Sample Description</b>	Seawater				
<b>Location</b>	บริเวณแหล่งน้ำทะเลห่างจากท่าเรือท่าใหม่ทางทิศตะวันตกเฉียงใต้ 500 เมตร จุดที่ 2				
<b>Date Analysis Commenced</b>	Sep 04, 2024				
<b>Condition of Sample</b>	Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Arsenic	ug/L	2.00	5.00	<5.00	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	3.00	Not Detected	≤8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	0.05	<0.05	≤0.1	In-house Method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	ug/L	3.00	10.0	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
<b>Water Testing</b>							
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	47320	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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Siriluk P.

Siriluk Bunrak  
Section Head

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24102077**  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3100032-1 C3

Page 2 of 3

<b>Sample Number</b>	24102077-1				
<b>Sample Date</b>	Sep 04, 2024	10:10 AM			
<b>Sample Description</b>	Seawater				
<b>Location</b>	บริเวณแหล่งน้ำทะเลห่างจากท่าเรือท่าใหม่ทางทิศตะวันตกเฉียงใต้ 500 เมตร จุดที่ 2				
<b>Date Analysis Commenced</b>	Sep 04, 2024				
<b>Condition of Sample</b>	Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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 (G)	Rayong
Petroleum Hydrocarbon	ug/L	0.02	0.05	0.60	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (100/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 - 11 (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	-	-	31.2	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	33450	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Transparency	m	-	-	2.2	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong

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Siriluk P.

Siriluk Bunrak  
Section Head

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location : Glow SPP 3

**Lot ID: 24101539**  
Date Received : Sep 11, 2024  
Date Reported : Sep 16, 2024  
Report Number : 3098910-1

Page 4 of 7

**Sample Number** 24101539-4  
**Sampled Date** Sep 11, 2024 11:50 AM  
**Sample Description** Sea Water  
**Location** บริเวณแหล่งน้ำทะเลห่างจากตอมรน้ำทิ้งของโรงงานในทางทิศตะวันออก 500 เมตร จุดที่ 2  
**Date Analysis Commenced** Sep 12, 2024  
**Condition of Sample** Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Method	Testing Location
<b>Water Testing</b>					
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Sampling By :** Sayan Yatbannung

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

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

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OH-22-103  
Project Name :  
Project Location :

**Lot ID: 24102078**  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3100034-1 C3

Page 1 of 3

**Sample Number** 24102078-1  
**Sampled Date** Sep 04, 2024 10:30 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากตอมรน้ำทิ้งของโรงงานในทางทิศตะวันออก 500 เมตร  
**Date Analysis Commenced** Sep 04, 2024  
**Condition of Sample** Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>						
Arsenic	ug/L	2.00	<5.00	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	Not Detected	≤8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	ug/L	1.00	222	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	<0.05	≤0.1	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Selenium	ug/L	3.00	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

<b>Water Testing</b>						
BOD (5 days at 20 Degree C)	mg/L	-	<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	-	45440	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

Approved by

**Siriluk P.**  
Siriluk Bunrak  
Section Head

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

**Lot ID: 24101539**  
Date Received : Sep 11, 2024  
Date Reported : Sep 16, 2024  
Report Number : 3098910-1

Page 5 of 7

Sample Number	24101539-5				
Sampled Date	Sep 11, 2024 12:20 PM				
Sample Description	Sea Water				
Location	บริเวณแหล่งประมงทางตอนบนน้ำคลองโครงการในทางทิศเหนือ 500 เมตร				
Date Analysis Commenced	Sep 12, 2024				
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Method
Water Testing					
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D
Sampling By : Sayan Yaitbannung					
Remark : - LOD : Limit of Detection - %C : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)					
Testing Location	Rayong				

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

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

**Lot ID: 24102079**  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3100037-1 C3

Page 1 of 3

Sample Number	24102079-1				
Sampled Date	Sep 04, 2024 9:50 AM				
Sample Description	Seawater				
Location	บริเวณแหล่งประมงทางตอนบนน้ำคลองโครงการในทางทิศเหนือ 1,000 เมตร จุดที่ 1				
Date Analysis Commenced	Sep 04, 2024				
Condition of Sample	Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)				
Analyte	Unit	LOD	LOQ (LOR)	Result	Method
Metals Testing					
Arsenic	ug/L	2.00	5.00	<5.00	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Copper	ug/L	1.00	3.00	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Iron	ug/L	1.00	3.00	112	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Mercury	ug/L	0.003	0.05	Not Detected	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E
Selenium	ug/L	3.00	10.0	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
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, part 4500 - O G
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46930	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

**Lot ID: 24101539**  
Date Received : Sep 11, 2024  
Date Reported : Sep 16, 2024  
Report Number : 3098910-1

Page 6 of 7

**Sample Number** 24101539-6  
**Sampled Date** Sep 11, 2024 11:20 AM  
**Sample Description** Sea Water  
**Location** บริเวณแหล่งน้ำทะเลห่างจากท่าเรือประมาณ 1 กิโลเมตร โดยทำการเก็บตัวอย่างน้ำทะเลบริเวณนี้ 1,000 เมตร จุดที่ 1  
**Date Analysis Commenced** Sep 12, 2024  
**Condition of Sample** Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Water Testing</b>						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Sampling By :** Sayan Yatbamrung

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

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :

**Lot ID: 24102081**  
Date Received : Sep 04, 2024  
Date Reported : Dec 18, 2024  
Report Number : 3100040-1 C3

Page 1 of 3

**Sample Number** 24102081-1  
**Sampled Date** Sep 04, 2024 11:00 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากท่าเรือประมาณ 1 กิโลเมตร โดยทำการเก็บตัวอย่างน้ำทะเลบริเวณนี้ 1,000 เมตร จุดที่ 2  
**Date Analysis Commenced** Sep 04, 2024  
**Condition of Sample** Contained in one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Arsenic	ug/L	2.00	5.00	<5.00	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	ug/L	1.00	3.00	Not Detected	≤8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	ug/L	1.00	3.00	105	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	ug/L	0.003	0.05	<0.05	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	ug/L	3.00	10.0	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	<2.0	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	47190	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	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong

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## Analysis / Test Report

**Client :** Glow SP3 Co., Ltd.  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 24105243**

Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108085-1 C3

Page 1 of 2

<b>Sample Number</b>	24105243-1			
<b>Sample Date</b>	Oct 02, 2024 11:08 AM			
<b>Sample Description</b>	Seawater			
<b>Location</b>	บริเวณจุดรับประมงสดโครงการ			
<b>Date Analysis Commenced</b>	Oct 02, 2024			
<b>Condition of Sample</b>	Contained in two plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48530	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.4	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500 - O (G)	Rayong
pH at 25 degree C	-	-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-C (F)	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, 24th ed., 2023, 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, 24th ed., 2023, 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, 24th ed., 2023, part 2540 D	Rayong

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## Analysis / Test Report

**Client :** Glow SP3 Co., Ltd.  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 24105243**

Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108085-1 C3

Page 2 of 2

<b>Sample Number</b>	24105243-1			
<b>Sample Date</b>	Oct 02, 2024 11:08 AM			
<b>Sample Description</b>	Seawater			
<b>Location</b>	บริเวณจุดรับประมงสดโครงการ			
<b>Date Analysis Commenced</b>	Oct 02, 2024			
<b>Condition of Sample</b>	Contained in two plastic bottles; sample containers comply to pretreatment - preservation standards (APHA, USEPA)			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.9	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	0.8	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Phongthep Sitthithoh

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

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## Analysis / Test Report

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**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 24105250**  
Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108087-1 C3

Page 2 of 2

**Sample Number** 24105250-1  
**Sampled Date** Oct 02, 2024 11:29 AM  
**Sample Description** Seawater  
**Location** บริเวณจุดระบายน้ำจากทางรถไฟทาง  
**Date Analysis Commenced** Oct 02, 2024  
**Condition of Sample** Contained in 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							
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of 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, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Phongthep Sitthiloh

**Remark :**  
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Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OW-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 24105165**  
Date Received : Oct 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3108003-1 C3

Page 1 of 1

**Sample Number** 24105165-1  
**Sampled Date** Oct 09, 2024 2:00 PM  
**Sample Description** Seawater  
**Location** บริเวณจุดระบายน้ำจากทางรถไฟทาง  
**Date Analysis Commenced** Oct 09, 2024  
**Condition of Sample** Contained in 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	31.1	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Suphanat Sakulk

**Remark :**  
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- "LQ" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
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Thailand 21150  
**P/O :** GLOW-OM-22-103

**Lot ID: 24105254**  
Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108089-1 C3

Page 1 of 2

Sample Number	24105254-1
Sample Date	Oct 02, 2024 11:27 AM
Sample Description	Seawater
Location	บริเวณแหล่งท่องเที่ยว/จากจุดชุมชนใกล้เคียงโครงการทางทิศตะวันออกฝั่ง 500 เมตร จุด 2
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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,	Rayong

	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87													

Conductivity at 25 degree C	micromhos/cm	NO standard	Examination of Water and standard methods for the	NO/019
48750	0.3			

Parameter	Unit	Value	Standard	Method
Dissolved Oxygen	mg/L	0.1	7.2	Standard Methods for the
Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B			≥4	Rayong

Parameter	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)
pH at 25 degree C	-	7.7	7.0-8.5	Rayong
Residual Free Chlorine	mg/L	<0.01	<0.01	Rayong

Temperature	Degree C	33.6	Change from natural condition not more than 2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 1995	Rayong
	*	*			

Test	Frequency	Method	Acceptance Criteria	Pass/Fail
Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	2	mg/L	100-105 degree C	Pass
Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	4	mg/L	100-105 degree C	Pass

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## Analysis / Test Report

**Client:** : Glow SP3 Co., Ltd.  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103

**Lot ID: 24105255**  
Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108090-1 C3

Page 2 of 2

Sample Number	24105255-1
Sample Date	Oct 02, 2024 11:33 AM
Sample Description	Seawater
Location	หน้าท่าเรือประมงท่าเรือชุมชนบ้านท่าเรือในอ่าวเกาะวิเศษ 500 เมตร
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in 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 Transparency	m	-	-	2.3	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, 24th ed., 2023, part 2130 B	Rayong

**Guideline:** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By : Phonathep Sithiloh**

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

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24105257**  
Date Received : Oct 02, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3108094-1 C3

Page 2 of 2

**Sample Number** 24105257-1  
**Sample Date** Oct 02, 2024 11:21 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากถนนท่าช้างของโครงการไปทางทิศตะวันตกเฉียงใต้ 1,000 เมตร จุดที่ 1  
**Date Analysis Commenced** Oct 02, 2024  
**Condition of Sample** Contained in 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							
Transparency	m	-	-	2.3	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, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Phongthep Sithiloh

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

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## Analysis / Test Report

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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24105229**  
Date Received : Oct 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3108072-1 C3

Page 1 of 1

**Sample Number** 24105229-1  
**Sample Date** Oct 09, 2024 1:40 PM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากถนนท่าช้างของโครงการไปทางทิศตะวันตกเฉียงใต้ 1,000 เมตร จุดที่ 1  
**Date Analysis Commenced** Oct 09, 2024  
**Condition of Sample** Contained in 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	30.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Suphanat Sakul

**Remark :**  
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555/2 Energy Complex Building B, 5th Floor, Vibhavadi - Rangsit Road, Kwaeng  
Chatuchak, Khet Chatuchak, Bangkok Thailand 10900  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24105236  
Date Received : Oct 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3108083-1 C3

Page 1 of 1

Sample Number	24105236-1
Sample Date	Oct 09, 2024 2:04 PM
Sample Description	Seawater
Location	บริเวณแหล่งน้ำทะเลสาบจากถนนท่าเรือคลองโคกขามโพธิ์ทะเลสาบฝั่งใต้ 1,000 เมตร จุดที่ 2
Date Analysis Commenced	Oct 09, 2024
Condition of Sample	Contained in 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, 24th ed., 2023, part 2510 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled BY : Suphanat Sakul

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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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24120838  
Date Received : Nov 06, 2024  
Date Reported : Nov 18, 2024  
Report Number : 314937-1 C3

Page 1 of 2

Sample Number	24120838-1
Sample Date	Nov 06, 2024 2:15 PM
Sample Description	Seawater
Location	บริเวณจุดอนุรักษ์ทะเลสาบโคกขาม
Date Analysis Commenced	Nov 06, 2024
Condition of Sample	Contained in 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							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48690	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.6	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C		-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-CI (F)	Rayong
Salinity	ppt	-	0.1	30.2	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32850	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:

Lot ID: 24120839

Date Received : Nov 06, 2024  
Date Reported : Nov 18, 2024  
Report Number : 3143947-1 C3

Page 2 of 2

Sample Number	24120839-1
Sampled Date	Nov 06, 2024 3:00 PM
Sample Description	Seawater
Location	บริเวณจุดระแนงน้ำเกลือของโรงงาน
Date Analysis Commenced	Nov 06, 2024
Condition of Sample	Contained in 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							
Transparency	m	-	-	2.0	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, 24th ed., 2023, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Narurat thammassaro

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

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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location:

Lot ID: 24120841

Date Received : Nov 06, 2024  
Date Reported : Nov 18, 2024  
Report Number : 3144001-1 C3

Page 1 of 2

Sample Number	24120841-1
Sampled Date	Nov 06, 2024 2:50 PM
Sample Description	Seawater
Location	บริเวณแหล่งน้ำเกลือจากกระบวนการบำบัดของโรงงานไฟฟ้าขยะเทศบาลเมืองใต้ 500 เมตร จุดที่ 1
Date Analysis Commenced	Nov 06, 2024
Condition of Sample	Contained in 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							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48790	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.8	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 1500-O (G)	Rayong
pH at 25 degree C		-	-	7.9	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 1500 - 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, 24th ed., 2023, part 4500-C (F)	Rayong
Salinity	ppt	-	0.1	30.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Temperature	Degree C	-	-	31.0	Change from the natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33500	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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P/O : GLOW-QM-22-103  
Project Name :  
Project Location : Glow SPP 3

Page 4 of 7

Sample Number	24121042-4
Sample Date	Nov 20, 2024 11:19 AM
Sample Description	Sea Water
Location	บริเวณแหล่งน้ำทะเลสาบจตุรพักตรพิมานจังหวัดร้อยเอ็ด 500 เมตร ลอย 2
Date Analysis Commenced	Nov 21, 2024
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOE)	Result	Method	Testing Location
<b>Water Testing</b>						
Total Suspended Solids Dried at 105-105 degree C	mg/L	-	2	4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Raying

**Sampling By :** Sayan Yatbamrung

Approved by \_\_\_\_\_  
Dej Changchon  
Senior Manager

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Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:**

**Lot ID: 24121014**  
Date Received : Nov 06, 2024  
Date Reported : Nov 18, 2024  
Report Number : 3144481-1 C

Page 1 of 2

**Sample Number** 24121014-1  
**Sample Date** Nov 06, 2024 2:45 PM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากชุมชนบ้านห้วยของโครงการโรงงานผลิตแอมโมเนียได้ 1,000 เมตร จุดที่ 1  
**Date Analysis Commenced** Nov 06, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48430	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.7	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C		-	-	7.8	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, 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, 24th ed., 2023, part 2510 B	Rayong
Temperature	Degree C	-	-	31.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33050	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

**Lot ID: 24121014**  
Date Received : Nov 06, 2024  
Date Reported : Nov 18, 2024  
Report Number : 3144481-1 C

Page 2 of 2

**Sample Number** 24121014-1  
**Sample Date** Nov 06, 2024 2:45 PM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งน้ำทะเลห่างจากชุมชนบ้านห้วยของโครงการโรงงานผลิตแอมโมเนียได้ 1,000 เมตร จุดที่ 1  
**Date Analysis Commenced** Nov 06, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Narurat thannasaro

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

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

**Lot ID: 24129587**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164603-1 C3

Page 1 of 2

Sample Number	24129587-1
Sample Date	Dec 04, 2024 10:45 AM
Sample Description	Seawater
Location	บริเวณจุดรับทะเลสาบโครงการ
Date Analysis Commenced	Dec 04, 2024
Condition of Sample	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, AMWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48910	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AMWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.5	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AMWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C		-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AMWA & WEF, 24th ed., 2023, 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, AMWA & WEF, 24th ed., 2023, 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, AMWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Temperature	Degree C	-	-	31.9	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AMWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32050	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AMWA & WEF, 24th ed., 2023, 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, AMWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

**Lot ID: 24129587**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164603-1 C3

Page 2 of 2

Sample Number	24129587-1
Sample Date	Dec 04, 2024 10:45 AM
Sample Description	Seawater
Location	บริเวณจุดรับทะเลสาบโครงการ
Date Analysis Commenced	Dec 04, 2024
Condition of Sample	Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	3.8	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, AMWA & WEF, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Suphanat Sakulkitmasak

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

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24129589**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164605-1 C3

Page 1 of 2

**Sample Number** 24129589-1  
**Sample Date** Dec 04, 2024 10:40 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งท่องเที่ยวจากทะเลบริเวณท่าเทียบเรือกรมการปกครองจังหวัดระยองฝั่งใต้ 500 เมตร จุดที่ 1  
**Date Analysis Commenced** Dec 04, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48860	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.6	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C		-	-	7.7	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, 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, 24th ed., 2023, part 2510 B	Rayong
Temperature	Degree C	-	-	31.8	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32100	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 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, 24th ed., 2023, part 2540 D	Rayong

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## Analysis / Test Report

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11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24129589**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164605-1 C3

Page 2 of 2

**Sample Number** 24129589-1  
**Sample Date** Dec 04, 2024 10:40 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งท่องเที่ยวจากทะเลบริเวณท่าเทียบเรือกรมการปกครองจังหวัดระยองฝั่งใต้ 500 เมตร จุดที่ 1  
**Date Analysis Commenced** Dec 04, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.4	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, 24th ed., 2023, part 2130 B	Rayong

**Guideline :** Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By :** Suphanat Sakulkitmasak

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

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Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24129594  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164611-1 C3

Page 1 of 2

Sample Number 24129594-1  
Sample Date Dec 04, 2024 11:48 AM  
Sample Description Seawater  
Location บริเวณแหล่งท่องเที่ยวทางทะเลท่าเทียบเรือโครงการในทางทิศรวม 500 เมตร  
Date Analysis Commenced Dec 04, 2024  
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48710	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	9.0	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-CI (F)	Rayong
Salinity	ppt	-	0.1	30.3	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31650	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2510 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, 24th ed., 2023, part 2540 D	Rayong

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11, Map Ta Phut Industrial Estate, I-5 Road, Map Ta Phut, Muang Rayong, Rayong  
Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24129594  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164611-1 C3

Page 2 of 2

Sample Number 24129594-1  
Sample Date Dec 04, 2024 11:48 AM  
Sample Description Seawater  
Location บริเวณแหล่งท่องเที่ยวทางทะเลท่าเทียบเรือโครงการในทางทิศรวม 500 เมตร  
Date Analysis Commenced Dec 04, 2024  
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Suphanat Sakulkitmasak

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

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Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** :  
**Lot ID: 24129599**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164626-1 C3

Page 1 of 2

**Sample Number** 24129599-1  
**Sample Date** Dec 04, 2024 11:30 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งท่องเที่ยวทางทะเลท่าเรือท่าใหม่ของโครงการในทางทิศตะวันตกฝั่งใต้ 1,000 เมตร จุดที่ 2  
**Date Analysis Commenced** Dec 04, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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, 24th ed., 2023, part 2510 B, part 4500 - O G	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47530	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	8.9	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
pH at 25 degree C	-	-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-C (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, 24th ed., 2023, 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, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32450	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2510 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, 24th ed., 2023, part 2540 D	Rayong

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Thailand 21150  
**P/O** : GLOW-OM-22-103  
**Project Name** :  
**Project Location** :  
**Lot ID: 24129599**  
Date Received : Dec 04, 2024  
Date Reported : Dec 16, 2024  
Report Number : 3164626-1 C3

Page 2 of 2

**Sample Number** 24129599-1  
**Sample Date** Dec 04, 2024 11:30 AM  
**Sample Description** Seawater  
**Location** บริเวณแหล่งท่องเที่ยวทางทะเลท่าเรือท่าใหม่ของโครงการในทางทิศตะวันตกฝั่งใต้ 1,000 เมตร จุดที่ 2  
**Date Analysis Commenced** Dec 04, 2024  
**Condition of Sample** Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Transparency	m	-	-	2.8	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.1	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2130 B	Rayong

**Guideline** : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

**Sampled By** : Suphanat Sakulkitmasak

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

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ผลการตรวจวิเคราะห์ทรัพยากรชีวภาพ  
ของแหล่งน้ำทะเล

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

Client : Glow SPP 3 Co., Ltd.  
Address : 11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand, 21150  
Project Location : Glow SPP 3

รายงานผลการวิเคราะห์แหล่งกักต่อน้ำพืช  
ตาราง ผลการวิเคราะห์แหล่งกักต่อน้ำพืช (เก็บตัวอย่างวันที่ 4 กันยายน 2567)

สกุลแหล่งกักต่อน้ำพืช	ปริมาณแหล่งกักต่อน้ำพืช (หน่วยต่อลูกบาศก์เมตร)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102065-1
Division Cyanophyta					
Class Cyanophyceae					
Order Chroococcales					
Family Chroococcaceae					
1. <i>Merismopedia</i> sp.	-	-	-	-	38,000
Order Nostocales					
Family Oscillatoriaceae					
2. <i>Oscillatoria</i> sp.	-	48,000	31,000	7,000	30,000
Family Nostocaceae					
3. <i>Pseudanabaena</i> sp.	212,000	184,000	8,000	28,000	23,000
4. <i>Richelia</i> sp.	-	-	-	-	137,000
Family Scytonemataceae					
5. <i>Scytonema</i> sp.	-	8,000	-	-	-

ตาราง ผลการวิเคราะห์แหล่งกักต่อน้ำพืช (เก็บตัวอย่างวันที่ 4 กันยายน 2567)  
(ต่อ)

สกุลแหล่งกักต่อน้ำพืช	ปริมาณแหล่งกักต่อน้ำพืช (หน่วยต่อลูกบาศก์เมตร)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102065-1
Division Chlorophyta					
Class Chlorophyceae					
Order Chlorococcales					
Family Scenedesmeceae					
6. <i>Scenedesmus</i> sp.	-	-	-	14,000	-
Order Ulotrichales					
Family Ulotrichaceae					
7. <i>Geminella</i> sp.	-	-	8,000	-	-
Division Chromophyta					
Class Bacillariophyceae					
Order Biddulphiales					
Suborder Coscinodiscineae					
Family Thalassiosiraceae					
8. <i>Cyclotella</i> sp.	670,000	256,000	179,000	114,000	137,000
9. <i>Lauderia</i> sp.	14,000	624,000	70,000	185,000	1,140,000
10. <i>Skeletonema</i> sp.	113,000	24,000	3,276,000	263,000	15,000
11. <i>Thalassiosira</i> sp.	3,102,000	1,000,000	328,000	781,000	1,368,000
Family Melosiraceae					
12. <i>Melosira</i> sp.	7,000	-	-	-	-
13. <i>Paralia</i> sp.	35,000	16,000	140,000	21,000	175,000
Family Leptocylindraceae					
14. <i>Corethron</i> sp.	35,000	328,000	47,000	92,000	707,000
Family Coscinodiscaceae					
15. <i>Coscinodiscus</i> sp.	197,000	192,000	491,000	1,704,000	570,000
16. <i>Palmeria</i> sp.	-	80,000	226,000	7,000	167,000
Family Hemidiscaceae					
17. <i>Actinocyclus</i> sp.	-	16,000	23,000	-	-



ตาราง ผลการวิเคราะห์แหล่งกำเนิดพืช (เก็บตัวอย่างวันที่ 4 กันยายน 2567)  
(ต่อ)

สกุลแหล่งกำเนิดพืช	ปริมาณแหล่งกำเนิดพืช (หน่วยต่อลูกบาศก์เมตร)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102065-1
51. <i>Pimularia</i> sp.	-	-	23,000	-	7,000
52. <i>Plagiotropis</i> sp.	14,000	-	-	-	-
53. <i>Pleurostigma</i> sp.	63,000	64,000	172,000	28,000	403,000
54. <i>Sauroneis</i> sp.	-	-	-	-	15,000
55. <i>Trachyneis</i> sp.	21,000	8,000	-	-	-
<b>Family Bacillariaceae</b>					
56. <i>Bacillaria</i> sp.	-	-	16,000	-	213,000
57. <i>Nitzschia</i> sp.	7,000	8,000	304,000	22,000	114,000
58. <i>Pseudo-nitzschia</i> sp.	127,000	120,000	-	-	-
59. <i>Tryblionella</i> sp.	-	-	-	-	8,000
<b>Family Surirellaceae</b>					
60. <i>Entomoneis</i> sp.	14,000	-	8,000	-	7,000
61. <i>Surirella</i> sp.	14,000	-	-	-	-
<b>Class Dictyochophyceae</b>					
<b>Order Dictyochales</b>					
<b>Family Dictyochophyceae</b>					
62. <i>Dictyocha</i> sp.	14,000	40,000	-	21,000	15,000
<b>Class Dinophyceae</b>					
<b>Order Prorocentrales</b>					
<b>Family Prorocentraceae</b>					
63. <i>Prorocentrum</i> sp.	14,000	16,000	8,000	-	15,000
<b>Order Dinophysiales</b>					
<b>Family Dinophysaceae</b>					
64. <i>Dinophysis</i> sp.	-	8,000	-	-	15,000
65. <i>Phlaccroma</i> sp.	-	16,000	-	-	-

ตาราง ผลการวิเคราะห์แหล่งกำเนิดพืช (เก็บตัวอย่างวันที่ 4 กันยายน 2567)  
(ต่อ)

สกุลแหล่งกำเนิดพืช	ปริมาณแหล่งกำเนิดพืช (หน่วยต่อลูกบาศก์เมตร)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102065-1
<b>Order Gymnodiniales</b>					
<b>Family Gymnodiniaceae</b>					
66. <i>Gymnodinium</i> sp.	-	-	-	14,000	-
67. <i>Gyrodinium</i> sp.	7,000	-	23,000	-	-
<b>Order Noctilucales</b>					
<b>Family Noctiluaceae</b>					
68. <i>Noctiluca</i> sp.	7,000	-	23,000	99,000	22,000
<b>Order Gonyaulacales</b>					
<b>Family Ceratiaceae</b>					
69. <i>Ceratium</i> sp.	-	88,000	125,000	36,000	15,000
<b>Family Gonyaulacaceae</b>					
70. <i>Gonyaulax</i> sp.	-	40,000	-	7,000	-
<b>Family Pyrophacaceae</b>					
71. <i>Pyrophacus</i> sp.	-	-	-	-	7,000
<b>Order Peridinales</b>					
<b>Family Peridiniaceae</b>					
72. <i>Peridinium</i> sp.	7,000	-	-	-	-
<b>Family Protoperidiniaceae</b>					
73. <i>Protoperidinium</i> sp.	56,000	744,000	55,000	92,000	148,000
<b>สกุลแหล่งกำเนิดพืช</b>	<b>46</b>	<b>44</b>	<b>43</b>	<b>38</b>	<b>45</b>
<b>ปริมาณแหล่งกำเนิดพืช</b>	<b>144,353,000</b>	<b>126,032,000</b>	<b>29,516,000</b>	<b>14,163,000</b>	<b>118,825,000</b>
<b>ดัชนีความหลากหลายแหล่งกำเนิดพืช</b>	<b>0.4859</b>	<b>1.4754</b>	<b>1.8147</b>	<b>1.7999</b>	<b>2.0189</b>
<b>ดัชนีความสม่ำเสมอแหล่งกำเนิดพืช</b>	<b>0.1269</b>	<b>0.3899</b>	<b>0.4825</b>	<b>0.4948</b>	<b>0.5304</b>

ตาราง ผลการวิเคราะห์เพลงก้นตอมสัตว์ (เก็บตัวอย่างวันที่ 4 กันยายน 2567)  
(ต่อ)

สกุล/กลุ่มเพลงก้นตอมสัตว์	ปริมาณเพลงก้นตอมสัตว์ (หน่วยต่อลูกบาทก้นตอม)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102066-1
Family Codonellidae					
4. <i>Tintinnopsis</i> sp.	78,000	32,000	39,000	7,000	-
Family Codonellopsidae					
5. <i>Cadomellopsis</i> sp.	7,000	24,000	8,000	-	-
6. <i>Stenosmella</i> sp.	14,000	-	-	7,000	-
Family Cyttarocylidae					
7. <i>Favella</i> sp.	-	-	-	-	-
Family Petalotrichidae					
8. <i>Metacylis</i> sp.	7,000	-	-	-	-
Family Tintinnidae					
9. <i>Amphorella</i> sp.	7,000	40,000	31,000	14,000	37,000
10. <i>Eutintinnus</i> sp.	-	8,000	-	-	-
Subclass Peritricha					
Order Peritrichida					
11. <i>Vorticella</i> sp.	-	56,000	-	-	37,000
Phylum Rotifera					
Class Monogononta					
Order Ploima					
Family Lecanidae					
12. <i>Lecane</i> sp.	-	-	-	-	7,000
Family Tricerceridae					
13. <i>Trichocerca</i> sp.	-	8,000	-	-	7,000
Phylum Chaetognatha					
Class Sagittoidea					
Family Sagittidae					
14. <i>Sagitta</i> sp.	-	-	-	7,000	-

ตาราง ผลการวิเคราะห์เพลงก้นตอมสัตว์ (เก็บตัวอย่างวันที่ 4 กันยายน 2567)  
(ต่อ)

สกุล/กลุ่มเพลงก้นตอมสัตว์	ปริมาณเพลงก้นตอมสัตว์ (หน่วยต่อลูกบาทก้นตอม)				
	24102070-1	24102069-1	24102068-1	24102067-1	24102066-1
Phylum Annelida					
Class Polychaeta					
15. Polychaete larvae	-	16,000	-	64,000	37,000
Phylum Arthropoda					
Class Crustacea					
Subclass Copepoda					
16. Copepod nauplius	374,000	376,000	218,000	518,000	274,000
Order Calanoida					
17. Calanoid copepod	28,000	8,000	31,000	85,000	37,000
Order Cyclopoida					
18. Cyclopoid copepod	49,000	8,000	47,000	28,000	30,000
Order Harpacticoida					
19. Harpacticoid copepod	-	40,000	8,000	21,000	22,000
Subclass Cirripedia					
20. Cirripede nauplius	-	-	16,000	-	-
Phylum Mollusca					
Class Gastropoda					
21. Gastropod larvae	-	8,000	-	-	-
Class Bivalvia					
22. Pelecypod larvae	-	136,000	94,000	-	22,000
Phylum Echinodermata					
Class Holothuroidea					
23. Auricularia larvae	-	-	-	-	-
Class Echinoidea					
24. Echinopluteus larvae	-	-	-	-	-
Class Ophiuroidea					
25. Ophiopluteus larvae	-	-	-	-	-

ตาราง ผลการวิเคราะห์สัตว์น้ำวัยอ่อน (เก็บตัวอย่างวันที่ 4 กันยายน 2567) (ต่อ)

กลุ่มของสัตว์น้ำวัยอ่อน		ปริมาณสัตว์น้ำวัยอ่อน (หน่วยต่ออุณหภูมิต่อเมตร)	
		24102062-1	24102063-1
Phylum Echinodermata			
Class Holothuroidea			
Auricularia larvae (ตัวอ่อนปลิงทะเล)		15,000	-
Class Echinoidea			
Echinopluteus larvae (ตัวอ่อนแมงทะเล)		7,000	-
Class Ophiuroidea			
Ophiopluteus larvae (ตัวอ่อนดาวปลา)		15,000	-
จำนวนกลุ่มของสัตว์น้ำวัยอ่อนทั้งหมด		6	4
ปริมาณของสัตว์น้ำวัยอ่อนทั้งหมด		1,062,000	536,000

Sample Location : 1. สถานี 24102062-1 : บริเวณจุดสูบน้ำทะเลของโครงการ

2. สถานี 24102063-1 : บริเวณแหล่งน้ำทะเลห่างจากจุดระบายน้ำทิ้งของโครงการไปทางทิศตะวันตกเฉียงใต้ 1,000 เมตร  
จุดที่ 1

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

  
(นางสาวกมลวรรณ ขาวค้อน)  
ผู้วิเคราะห์

  
(นายอลงกต อินทรชาติ)  
หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : Glow SPP 3 Co., Ltd.  
Address : 11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand, 21150  
Project Location : Glow SPP 3

รายงานผลการวิเคราะห์สัตว์น้ำดิน

ตาราง ผลการวิเคราะห์สัตว์น้ำดิน (เก็บตัวอย่างวันที่ 4 กันยายน 2567)

สกุลสัตว์น้ำดิน	ปริมาณสัตว์น้ำดิน (ตัวต่อตารางเมตร)				
	24102059-1	24102058-1	24102057-1	24102056-1	24102054-1
Phylum Annelida					
Class Polychaeta					
Order Capitellida					
Family Capitellidae					
<i>Heteromastus</i> sp. (ไส้เดือนทะเล)	15	30	15	15	30
Family Maldanidae					
<i>Euchemene</i> sp. (ไส้เดือนทะเล)	-	-	-	-	15
Order Phyllodocta					
Family Nephtyidae					
<i>Nephtys</i> sp. (ไส้เดือนทะเล)	15	-	-	-	-
Order Terebellida					
Family Cirratulidae					
<i>Timarete</i> sp. (ไส้เดือนทะเล)	-	-	15	-	-

ผลการตรวจวัดระดับความร้อน  
บริเวณพื้นที่โครงการ

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Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2483363  
Date Received : Sep 19, 2024  
Date Reported : Sep 25, 2024  
Report Number: 3061652-1

Page 1 of 3

Sample Number	2483363-1				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Chanon Booncheun				
Location	เบ่งบัวบาน 1 พื้นที่ (ผา-บานกลาง) สูงเบ่งบัวบาน : - เมตร : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เบ่งบัวบาน 1 พื้นที่ (ผา-บานกลาง) สูงเบ่งบัวบาน	120	29.0	27.5	32.6	32.5
		พัดลมพัด 3000 (Glow3)			
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat  
Assistant Manager

Life Sciences

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S Report\_Air-Heat ref (10/22/60)



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location : Glow SPP 3

Lot ID: 2483363  
Date Received : Sep 19, 2024  
Date Reported : Sep 25, 2024  
Report Number: 3061652-1

Page 2 of 3

Sample Number	2483363-2				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Sep 16, 2024				
Measurement by	Chanon Booncheun				
Location	เบ่งบัวบาน 1 พื้นที่ (ผา-บานกลาง) สูงเบ่งบัวบาน : - เมตร : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เบ่งบัวบาน 1 พื้นที่ (ผา-บานกลาง) สูงเบ่งบัวบาน พัดลมพัด 3000 (Glow3)	120	33.6	31.7	38.0	37.9
Average (WBGT)		33.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

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S Report\_Air-Heat ref (10/22/60)

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บริเวณพื้นที่โครงการ

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Analysis / Test Report

Client : Glow SPP 2 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
P/O : 3100011692  
Project Name :  
Project Location :  
Lot ID: 2486986  
Date Received : Sep 20, 2024  
Date Reported : Sep 24, 2024  
Report Number: 3120358-1

Page 1 of 1

Sample Number	2486986-1
Parameter	Noise (Leq 8 hrs.)
Location	พื้นที่วัดไฟฟ้าบนถนนหน้าวัดท่า 1 (CTG HRSG 1)
Measurement Date	Sep 19, 2024
Measurement by	Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:07 AM - 10:07 AM	86.3	88.5	85.6
10:07 AM - 11:07 AM	86.0	87.8	85.3
11:07 AM - 12:07 PM	86.0	87.7	85.4
12:07 PM - 01:07 PM	85.9	87.6	85.2
01:07 PM - 02:07 PM	85.5	87.4	84.9
02:07 PM - 03:07 PM	85.2	87.3	84.8
03:07 PM - 04:07 PM	85.4	87.8	84.9
04:07 PM - 05:07 PM	85.5	87.3	85.0
Leq Average 8 hrs. (dB(A))	85.7		
Lmax (dB(A))	88.5		
Standard (dB(A))	90		
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ปกติมาตรฐานการวัดเสียงตามระบบเสียงมาตรฐานของกรมการสาธารณสุข		
	ในการประเมินค่าการวัดเสียงตามพื้นที่การวัดเสียงตามมาตรฐานการวัดเสียง พ.ศ.๒๕๕๖		

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by  
Supot Salameh  
Section Head

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S (Reports, Air Noise rpt (3 SPM))



Analysis / Test Report

Client : Glow SPP 2 Co., Ltd.  
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
P/O : 3100011692  
Project Name :  
Project Location :  
Lot ID: 2486986  
Date Received : Sep 20, 2024  
Date Reported : Sep 24, 2024  
Report Number: 3120359-1

Page 1 of 1

Sample Number	2486986-2
Parameter	Noise (Leq 8 hrs.)
Location	พื้นที่วัดไฟฟ้าบนถนนหน้าวัดท่า 2 (CTG HRSG 2)
Measurement Date	Sep 19, 2024
Measurement by	Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	70.0	78.9	69.6
10:00 AM - 11:00 AM	70.1	71.3	69.8
11:00 AM - 12:00 PM	70.4	72.3	69.8
12:00 PM - 01:00 PM	70.5	73.1	69.9
01:00 PM - 02:00 PM	70.9	75.9	69.4
02:00 PM - 03:00 PM	70.1	71.3	69.7
03:00 PM - 04:00 PM	70.7	72.1	69.9
04:00 PM - 05:00 PM	68.7	71.9	67.3
Leq Average 8 hrs. (dB(A))	70.2		
Lmax (dB(A))	78.9		
Standard (dB(A))	90		
Reference Method	: ISO1996-1 and 1996-2		
Standard	: ปกติมาตรฐานการวัดเสียงตามระบบเสียงมาตรฐานของกรมการสาธารณสุข		
	ในการประเมินค่าการวัดเสียงตามพื้นที่การวัดเสียงตามมาตรฐานการวัดเสียง พ.ศ.๒๕๕๖		

Technical Management  
Chonticha Subongkoch  
Scientist (3)

Approved by  
Supot Salameh  
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S (Reports, Air Noise rpt (3 SPM))



Analysis / Test Report

Client : GLOW ENERGY PUBLIC COMPANY LIMITED

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

P/O :

Project Name :

Project Location :

Lot ID: 2487000

Date Received : Sep 21, 2024

Date Reported : Sep 24, 2024

Report Number: 3120368-1

Page 1 of 1

Sample Number	2487000-2
Parameter	Noise (Leq 8 hrs.)
Location	พิกัดไฟฟ้าบนพื้นที่ 5 (CTG HRSG 4)
Measurement Date	Sep 20, 2024
Measurement by	Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	80.5	81.9	80.1
10:05 AM - 11:05 AM	80.2	81.9	79.9
11:05 AM - 12:05 PM	80.1	81.4	79.8
12:05 PM - 01:05 PM	79.8	81.1	79.4
01:05 PM - 02:05 PM	80.2	81.6	79.9
02:05 PM - 03:05 PM	80.2	81.5	79.9
03:05 PM - 04:05 PM	80.3	81.5	80.0
04:05 PM - 05:05 PM	80.6	81.8	80.3

Leq Average 8 hrs. (dB(A)) 80.2

Lmax (dB(A))

81.9

140

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ปกติค่าการวัดเสียงตามมาตรฐาน ISO1996-1 และ ISO1996-2

ในการวัดค่าการวัดเสียงตามมาตรฐาน ISO1996-1 และ ISO1996-2



Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

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

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow SPP 3

Lot ID: 2483366

Date Received : Sep 19, 2024

Date Reported : Sep 24, 2024

Report Number: 3117295-1

Page 1 of 1

Sample Number	2483366-1
Parameter	Noise (Leq 8 hrs.)
Location	พิกัดไฟฟ้าบนพื้นที่ 1 (CFB & STG 1)
Measurement Date	Sep 16, 2024
Measurement by	Charon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:59 AM - 10:59 AM	77.5	94.8	76.5
10:59 AM - 11:59 AM	77.6	94.9	76.6
11:59 AM - 12:59 PM	77.7	94.7	76.7
12:59 PM - 01:59 PM	77.7	94.9	76.6
01:59 PM - 02:59 PM	77.9	94.7	76.9
02:59 PM - 03:59 PM	77.8	95.0	76.7
03:59 PM - 04:59 PM	77.7	94.9	76.7
04:59 PM - 05:59 PM	78.0	94.9	77.0

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

95.0

140

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ปกติค่าการวัดเสียงตามมาตรฐาน ISO1996-1 และ ISO1996-2

ในการวัดค่าการวัดเสียงตามมาตรฐาน ISO1996-1 และ ISO1996-2

Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

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S Reports\_Air Noise pr ( 9 39AM)



ผลการตรวจวัดระดับเสียงเฉลี่ยตลอด  
ระยะเวลาการทำงานในแต่ละวัน (TWA)

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

11, 1-3 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name : Glow SPP 3

Project Location : Glow SPP 3

Page 1 of 4

Lot ID: 2483367

Date Received : Sep 18, 2024

Date Reported : Sep 24, 2024

Report Number : 3061657-1

Sample Number	2483367-1
Sample Date	Sep 06, 2024
Sample Description	Noise Dose
Location	Operation / Hybrid CFB 1
Personal Sampling	การตรวจวัดมลพิษทางอากาศ
Date Analysis Commenced	Sep 20, 2024

Analyte	Sampled Date/time	Unit	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>								
Noise Dose (12 hrs.) (Calculated from Lavg)	07:20 AM - 07:20 PM	%	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
Noise Dose (8 hrs.)	07:20 AM - 07:20 PM	%	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (12 hrs.) (Calculated from Lavg)	07:20 AM - 07:20 PM	dB(A)	-	60.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (8 hrs.)	07:20 AM - 07:20 PM	dB(A)	-	62.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong

### Guideline :

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

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

Supt S.

Approved by

Supot Salameeh  
Section Head

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.

11, 1-3 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150

P/O : GLOW-OH-22-103

Project Name : Glow SPP 3

Project Location : Glow SPP 3

Page 3 of 4

Lot ID: 2483367

Date Received : Sep 18, 2024

Date Reported : Sep 24, 2024

Report Number : 3061657-1

Sample Number	2483367-3
Sample Date	Sep 06, 2024
Sample Description	Noise Dose
Location	Operation / Hybrid CFB 3
Personal Sampling	การตรวจวัดมลพิษทางอากาศ
Date Analysis Commenced	Sep 20, 2024

Analyte	Sampled Date/time	Unit	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>								
Noise Dose (12 hrs.) (Calculated from Lavg)	07:20 AM - 07:20 PM	%	1	12.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
Noise Dose (8 hrs.)	07:20 AM - 07:20 PM	%	1	11.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (12 hrs.) (Calculated from Lavg)	07:20 AM - 07:20 PM	dB(A)	-	73.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong
TWA (8 hrs.)	07:20 AM - 07:20 PM	dB(A)	-	75.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Rayong

### Guideline :

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

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

Supt S.

Approved by

Supot Salameeh  
Section Head

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บริเวณพื้นที่โครงการ

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## Analysis / Test Report

Client : Glow Spp 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24101512  
Date Received : Sep 18, 2024  
Date Reported : Sep 24, 2024  
Report Number : 3098855-1

Page 1 of 6

Sample Number	24101512-1								
Sampled Date	Sep 17, 2024								
Sample Description	Air Quality								
Location	พื้นที่ตลาดเกษตร/พื้นที่ด้านใน								
Date Analysis Commenced	Sep 19, 2024								
Condition of Sample	Drawn into two filter papers placed in plastic cassette								
Barometric Pressure	755 mmHg								
Atmospheric Temperature	30.2 °C								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	10:00 AM - 06:00 PM	mg/m <sup>3</sup>	-	0.15	<0.15	5	Based on NIOSH (1998), OSHA 0600	OSHA	Rayong
Total Dust	10:00 AM - 06:00 PM	mg/m <sup>3</sup>	-	0.15	<0.15	15	Based on NIOSH (1994), OSHA 0500	OSHA	Rayong

### Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Norranon Tathongkham

### Remark :

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

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Thanitak.

Approved by

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report

Client : Glow Spp 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O : GLOW-OM-22-103  
Project Name :  
Project Location :  
Lot ID: 24101512  
Date Received : Sep 18, 2024  
Date Reported : Sep 24, 2024  
Report Number : 3098855-1

Page 2 of 6

Sample Number	24101512-2								
Sampled Date	Sep 17, 2024								
Sample Description	Air Quality								
Location	จังหวัดฉะเชิงเทรา, กรุงเทพมหานคร								
Date Analysis Commenced	Sep 19, 2024								
Condition of Sample	Drawn into two filter papers placed in plastic cassette								
Barometric Pressure	755 mmHg								
Atmospheric Temperature	30.2 °C								
Analyte	Sampled Date/Time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Respirable Dust	06:00 PM - 02:00 AM	mg/m <sup>3</sup>	-	0.15	<0.15	5		Based on NIOSH (1998), OSHA 0600	Rayong
Total Dust	06:00 PM - 02:00 AM	mg/m <sup>3</sup>	-	0.15	<0.15	15		Based on NIOSH (1994), OSHA 0500	Rayong

### Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Norranon Tathongkham

### Remark :

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

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Thanitak.

Approved by

Thanita Kulsuriwong  
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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
**11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150**  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24101512**  
**Date Received :** Sep 18, 2024  
**Date Reported :** Sep 24, 2024  
**Report Number :** 3098865-1

Page 5 of 6

<b>Sample Number</b>	24101512-5
<b>Sampled Date</b>	Sep 17, 2024
<b>Sample Description</b>	Air Quality
<b>Location</b>	พื้นที่โรงงานฟาร์มไก่เนื้อ
<b>Date Analysis Commenced</b>	Sep 19, 2024
<b>Condition of Sample</b>	Drawn into two filter papers placed in plastic cassette
<b>Barometric Pressure</b>	755 mmHg
<b>Atmospheric Temperature</b>	30.2 °C
<b>Analyte</b>	
<b>Air Testing</b>	
Respirable Dust	06:00 PM - 02:00 AM mg/m3 - 0.15 <0.15 5 Based on NIOSH (1998), OSHA 0600
Total Dust	06:00 PM - 02:00 AM mg/m3 - 0.15 <0.15 15 Based on NIOSH (1994), OSHA 0500
<b>Guideline :</b>	
<b>OSHA :</b>	Occupational Safety and Health Administration
<b>Sampled By :</b>	Norranon Tathongkham
<b>Remark :</b>	
- LOD :	Limit of Detection
- "<" :	Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Thanitak.

Approved by

Thanita Kulsiurwong  
Scientist (4)

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## Analysis / Test Report

**Client :** Glow SPP 3 Co., Ltd.  
**11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150**  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**

**Lot ID: 24101512**  
**Date Received :** Sep 18, 2024  
**Date Reported :** Sep 24, 2024  
**Report Number :** 3098865-1

Page 6 of 6

<b>Sample Number</b>	24101512-6
<b>Sampled Date</b>	Sep 18, 2024
<b>Sample Description</b>	Air Quality
<b>Location</b>	พื้นที่โรงงานฟาร์มไก่เนื้อ
<b>Date Analysis Commenced</b>	Sep 19, 2024
<b>Condition of Sample</b>	Drawn into two filter papers placed in plastic cassette
<b>Barometric Pressure</b>	755 mmHg
<b>Atmospheric Temperature</b>	30.2 °C
<b>Analyte</b>	
<b>Air Testing</b>	
Respirable Dust	02:00 AM - 10:00 AM mg/m3 - 0.15 <0.15 5 Based on NIOSH (1998), OSHA 0600
Total Dust	02:00 AM - 10:00 AM mg/m3 - 0.15 <0.15 15 Based on NIOSH (1994), OSHA 0500
<b>Guideline :</b>	
<b>OSHA :</b>	Occupational Safety and Health Administration
<b>Sampled By :</b>	Norranon Tathongkham
<b>Remark :</b>	
- LOD :	Limit of Detection
- "<" :	Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Thanitak.

Approved by

Thanita Kulsiurwong  
Scientist (4)

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O :  
Project Name :  
Project Location :  
Lot ID: 2483365 (1)  
Date Received : Sep 17, 2024  
Date Reported : Sep 18, 2024  
Report Number: 2483365 (1)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Glow SPP 3		No.	Illuminance (Lux)	Guideline Limit		Comment
			Date	Time		Spot	Average	Spot/Min	
1	Spot : MCR 1 via Laboratory : 1st Floor : พื้นที่ปฏิบัติงาน	2483365 (1)-1	16-Sep-24	Day time	1	759	-	400-500	Pass
		2483365 (1)-2	16-Sep-24	Night time	1	752	-	400-500	Pass
2	Area : Maintenance and Warehouse : 1st Floor : พื้นที่ปฏิบัติงาน (Tool Room)	2483365 (1)-3	16-Sep-24	Day time	1	723	581	100	Pass
		2483365 (1)-4	16-Sep-24	Day time	2	632			
		2483365 (1)-5	16-Sep-24	Day time	3	643			
		2483365 (1)-6	16-Sep-24	Day time	4	404			
		2483365 (1)-7	16-Sep-24	Day time	5	781			
		2483365 (1)-8	16-Sep-24	Day time	6	717			
		2483365 (1)-9	16-Sep-24	Day time	7	716			
		2483365 (1)-10	16-Sep-24	Day time	8	411			
		2483365 (1)-11	16-Sep-24	Day time	9	497			
		2483365 (1)-12	16-Sep-24	Day time	10	645			
		2483365 (1)-13	16-Sep-24	Day time	11	511			
		2483365 (1)-14	16-Sep-24	Day time	12	526			
		2483365 (1)-15	16-Sep-24	Day time	13	633			
		2483365 (1)-16	16-Sep-24	Day time	14	522			
		2483365 (1)-17	16-Sep-24	Day time	15	517			
		2483365 (1)-18	16-Sep-24	Day time	16	411			
		2483365 (1)-19	16-Sep-24	Night time	1	674	506	100	Pass
		2483365 (1)-20	16-Sep-24	Night time	2	581			
		2483365 (1)-21	16-Sep-24	Night time	3	381			
3	Spot : Maintenance and Warehouse : 1st Floor : พื้นที่ปฏิบัติงาน	2483365 (1)-22	16-Sep-24	Night time	4	322			
		2483365 (1)-23	16-Sep-24	Night time	5	495			
		2483365 (1)-24	16-Sep-24	Night time	6	600			
		2483365 (1)-25	16-Sep-24	Night time	7	571			
		2483365 (1)-26	16-Sep-24	Night time	8	456			
		2483365 (1)-27	16-Sep-24	Night time	9	518			
		2483365 (1)-28	16-Sep-24	Night time	10	679			
		2483365 (1)-29	16-Sep-24	Night time	11	482			
		2483365 (1)-30	16-Sep-24	Night time	12	552			
		2483365 (1)-31	16-Sep-24	Night time	13	510			
		2483365 (1)-32	16-Sep-24	Night time	14	412			
		2483365 (1)-33	16-Sep-24	Night time	15	405			
		2483365 (1)-34	16-Sep-24	Night time	16	457			
		2483365 (1)-35	16-Sep-24	Day time	1	356	-	200-300	Pass
		2483365 (1)-36	16-Sep-24	Night time	1	341	-	200-300	Pass

Technical Management  
Supot Salamteh  
Section Head

Approved by  
Nichan Chonharat  
Assistant Manager

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## Analysis / Test Report

Client : Glow SPP 3 Co., Ltd.  
11, 1-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
P/O :  
Project Name :  
Project Location :  
Lot ID: 2483365 (1)  
Date Received : Sep 17, 2024  
Date Reported : Sep 18, 2024  
Report Number: 2483365 (1)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Glow SPP 3		No.	Illuminance (Lux)	Guideline Limit		Comment
			Date	Time		Spot	Average	Spot/Min	
4	Spot : Mark V compartment : 1st Floor : via Mark V (CTG-1A)	2483365 (1)-37	16-Sep-24	Day time	1	558	-	200-300	Pass
		2483365 (1)-38	16-Sep-24	Night time	1	446	-	200-300	Pass

Measurement by : Chanon Booncheun

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

Technical Management  
Supot Salamteh  
Section Head

Approved by  
Nichan Chonharat  
Assistant Manager

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