

## ภาคผนวก ค-3

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ผลการประเมินการระบายก๊าซเรือนกระจก (ก๊าซคาร์บอนไดออกไซด์ (CO<sub>2</sub>))

Glow Phase 5 (1 ปล่อง)

1. Natural gas

ลำดับ	หน่วยผลิต	Unit	มกราคม	กุมภาพันธ์	มีนาคม	เมษายน	พฤษภาคม	มิถุนายน	กรกฎาคม	สิงหาคม	กันยายน	ตุลาคม	พฤศจิกายน	ธันวาคม	รวม	CO2 (tCO2e)
1	CTG 5	MMBtu	1,792,316	1,678,671	1,430,137	1,757,392	1,820,855	1,705,545	1,769,911	1,826,262	1,766,071	1,840,328	1,785,340	1,875,993	21,048,821	1,248,071.72
																1,248,071.72

Emission Factor Reference: IPCC Vol.2 table 2.2, DEDE (updated โดย องค์การบริหารจัดการก๊าซเรือนกระจก (องค์การมหาชน), 1 เมษายน 2565)

1. Natural gas (MJ) = 0.0562 kgCO2e/unit

## ภาคผนวก ค-4

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ใบรายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง (น้ำทะเล)



## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 2467205**  
Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023167-1

Page 1 of 1

<b>Sample Number</b>	2467205-1						
<b>Sampled Date</b>	Jul 03, 2024 11:15 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Jul 03, 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	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	≤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	-	-	36.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33750	39350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 34350 mg/L (Refer to Lot ID 2467966-1)

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476

Remark :

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

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-จ-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 ENERGY PUBLIC COMPANY LIMITED  
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 :** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 2467224**  
Date Received : Jul 10, 2024  
Date Reported : Jul 23, 2024  
Report Number : 3023240-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2467224-1						
<b>Sampled Date</b>	Jul 10, 2024 11:25 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Jul 10, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	48	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	<1	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32250	36350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 31350 mg/L (Refer to Lot ID 2467920-1)

**Sampled By :** Tanasit Wongsachai

Remark :

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Technical Management

**Photchana S.**

Photchana Seeda  
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ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
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:** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 2467224**  
Date Received : Jul 10, 2024  
Date Reported : Jul 23, 2024  
Report Number : 3023240-1 C1

Page 1 of 1

<b>Sample Number</b>	2467224-1					
<b>Sampled Date</b>	Jul 10, 2024 11:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 10, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	34.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32250	36350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 31350 mg/L (Refer to Lot ID 2467920-1)

**Sampled By :** Tanasit Wongsachai

Remark :

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

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:** Glow Phase5

**Lot ID: 2467205**  
Date Received : Jul 03, 2024  
Date Reported : Jul 10, 2024  
Report Number : 3023167-2

Page 1 of 1

<b>Sample Number</b>	2467205-1					
<b>Sampled Date</b>	Jul 03, 2024 11:15 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 03, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	50460	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	29.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	3.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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(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 :

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

Approved by

**Photchana S.**

Photchana Seeda  
Scientist (4)

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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:** Glow Phase5

**Lot ID: 2467224**

Date Received : Jul 10, 2024

Date Reported : Jul 23, 2024

Report Number : 3023240-3 C1

Page 1 of 1

<b>Sample Number</b>	2467224-1					
<b>Sampled Date</b>	Jul 10, 2024 11:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 10, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46700	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	30.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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(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 31350 mg/L (Refer to Lot ID 2467920-1)

**Sampled By :** Tanasit Wongsachai

Remark :

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

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Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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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:** Glow Phase5



TESTING

No.0042

**Lot ID: 2467225**

Date Received : Jul 17, 2024

Date Reported : Jan 07, 2025

Report Number : 3023235-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2467225-1					
<b>Sampled Date</b>	Jul 17, 2024 2:35 PM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 17, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35600	39600(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 34600 mg/L (Refer to Lot ID 2467902-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ ๖-323-๖-0051

Remark :

- LOD : Limit of Detection
- "<" : 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)

ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

D. Chongchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-0001

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
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:** Glow Phase5



**TESTING**  
**No.0042**

**Lot ID: 2467225**  
Date Received : Jul 17, 2024  
Date Reported : Jul 31, 2024  
Report Number : 3023235-1 C1

Page 1 of 1

<b>Sample Number</b>	2467225-1					
<b>Sampled Date</b>	Jul 17, 2024 2:35 PM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 17, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	35.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35600	39600(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 34600 mg/L (Refer to Lot ID 2467902-1)

**Sampled By :** Paramet Sattayakun

Remark :

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

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
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:** Glow Phase5

**Lot ID: 2467225**  
Date Received : Jul 17, 2024  
Date Reported : Jul 31, 2024  
Report Number : 3023235-3 C1

Page 1 of 1

<b>Sample Number</b>	2467225-1					
<b>Sampled Date</b>	Jul 17, 2024 2:35 PM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 17, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49190	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	29.3	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	5.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 34600 mg/L (Refer to Lot ID 2467902-1)

**Sampled By :** Paramet Sattayakun

Remark :

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

Approved by

**Photchana S.**

Photchana Seeda  
Scientist (4)

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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:** Glow Phase5



**TESTING**  
No.0042

**Lot ID: 2467226**

Date Received : Jul 24, 2024

Date Reported : Aug 01, 2024

Report Number : 3023211-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2467226-1					
<b>Sampled Date</b>	Jul 24, 2024 11:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 24, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	57	≤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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	36500	42700(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 37700 mg/L (Refer to Lot ID 2467921-1)

**Sampled By :** Paramet Sattayakun

Remark :

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

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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:** Glow Phase5



**TESTING**  
No.0042

**Lot ID: 2467226**

Date Received : Jul 24, 2024

Date Reported : Aug 01, 2024

Report Number : 3023211-1 C1

Page 1 of 1

<b>Sample Number</b>	2467226-1					
<b>Sampled Date</b>	Jul 24, 2024 11:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 24, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	33.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	36500	42700(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 37700 mg/L (Refer to Lot ID 2467921-1)

**Sampled 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.

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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:** Glow Phase5

**Lot ID: 2467226**

Date Received : Jul 24, 2024

Date Reported : Aug 01, 2024

Report Number : 3023211-3 C1

Page 1 of 1

<b>Sample Number</b>	2467226-1					
<b>Sampled Date</b>	Jul 24, 2024 11:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Jul 24, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48300	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	29.3	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	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 37700 mg/L (Refer to Lot ID 2467921-1)

**Sampled By :** Paramet Sattayakun

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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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 :**

**Project Name :**

**Project Location:** Phase5



TESTING

No.0042

**Lot ID: 2485686**

Date Received : Aug 07, 2024

Date Reported : Jan 07, 2025

Report Number : 3065913-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2485686-1					
<b>Sampled Date</b>	Aug 07, 2024 11:10 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Aug 07, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	-	40	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
pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33650	≤37750(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 32750 mg/L (Refer to Lot ID 2486852-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ ๖-323-๖-0051

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

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

D. Chongchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5



**TESTING**  
**No.0042**  
**Lot ID: 2485686**  
Date Received : Aug 07, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3065913-1 C1

Page 1 of 1

<b>Sample Number</b>	2485686-1						
<b>Sampled Date</b>	Aug 07, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Aug 07, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.1	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33650	≤37750(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 32750 mg/L (Refer to Lot ID 2486852-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-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

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

**D. Chongchon**

Dej Chongchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5

**Lot ID: 2485686**  
Date Received : Aug 07, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3065913-2 C1

Page 1 of 1

<b>Sample Number</b>	2485686-1						
<b>Sampled Date</b>	Aug 07, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Aug 07, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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-O (G)	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)

**Sampled By :** Paramet Sattayakun

Remark :

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
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:** Glow Phase5



**TESTING**  
**No.0042**

**Lot ID: 2485703**  
Date Received : Aug 14, 2024  
Date Reported : Aug 23, 2024  
Report Number : 3065954-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2485703-1					
<b>Sampled Date</b>	Aug 14, 2024 10:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Aug 14, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31950	≤38350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).  
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.  
**Note :** Total Dissolved Solids of receiving water is 33350 mg/L (Refer to Lot ID 2486838-1)

**Sampled By :** Chainusorn Lertnanthakunchai

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

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-ค-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
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:** Glow Phase5



**TESTING**  
**No.0042**

**Lot ID: 2485703**  
Date Received : Aug 14, 2024  
Date Reported : Aug 23, 2024  
Report Number : 3065954-1 C1

Page 1 of 1

<b>Sample Number</b>	2485703-1					
<b>Sampled Date</b>	Aug 14, 2024 10:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Aug 14, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	36.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31950	≤38350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 33350 mg/L (Refer to Lot ID 2486838-1)

**Sampled By :** Chainusorn Lertnanthakunchai

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.

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-ค-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED

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:** Glow Phase5

**Lot ID: 2485703**

Date Received : Aug 14, 2024

Date Reported : Aug 23, 2024

Report Number : 3065954-3 C1

Page 1 of 1

<b>Sample Number</b>	2485703-1					
<b>Sampled Date</b>	Aug 14, 2024 10:25 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Aug 14, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47340	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	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	1.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 33350 mg/L (Refer to Lot ID 2486838-1)

**Sampled By :** Chainusorn Lertnanthakunchai

Remark :

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

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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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 :**

**Project Name :**

**Project Location:** Phase5



TESTING

No.0042

**Lot ID: 2485704**

Date Received : Aug 21, 2024

Date Reported : Jan 07, 2025

Report Number : 3065952-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	2485704-1					
<b>Sampled Date</b>	Aug 21, 2024 11:00 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	Collected discharge point					
<b>Date Analysis Commenced</b>	Aug 21, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	55	≤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
pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	27800	≤32550(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 27550 mg/L (Refer to Lot ID 2486831-1)

**Sampled By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-๓๒๓-๖-๐๐๔๑

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

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ๖-๓๒๓-๖-๐๐๒๘

Approved by

D. Chongchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ๖-๓๒๓-๖-๐๐๐๑

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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 :**  
**Project Name :**  
**Project Location:** Phase5



**TESTING**  
**No.0042**  
**Lot ID: 2485704**  
Date Received : Aug 21, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3065952-1 C1

Page 1 of 1

<b>Sample Number</b>	2485704-1						
<b>Sampled Date</b>	Aug 21, 2024 11:00 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Aug 21, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	36.4	≤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	27800	≤32550(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 27550 mg/L (Refer to Lot ID 2486831-1)

**Sampled By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-0041

Remark :

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- "<" : 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)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

**D. Chongchon**

Dej Chongchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-ค-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5

**Lot ID: 2485704**  
Date Received : Aug 21, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3065952-3 C1

Page 1 of 1

<b>Sample Number</b>	2485704-1						
<b>Sampled Date</b>	Aug 21, 2024 11:00 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Aug 21, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	41540	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	26.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	0.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 27550 mg/L (Refer to Lot ID 2486831-1)

**Sampled By :** Chainusorn Lertnanthakunchai

Remark :

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :**Phase5



**TESTING**  
No.0042  
**Lot ID: 24101036**  
4ate ReDeiced : Sep 03, 2023  
4ate Reported : Sep 12, 2023  
Report nub fer : 30v67N3-1

Page 1 of 1

Sample Number	2J10103N-1						
Sampled Date	Sep 03, 2023 11:20 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
Date Analysis Commenced	Sep 03, 2023						
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>Water Testing</b>							
xO4 H5 days at 20 4egree CB	b g/L	-	2.0	92.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part 5210 x, part J500 - O G	Rayong
pU at 25 degree C		-	-	7.1	5.5-v.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part J500 - U H B	Rayong
Teb perature 8	4egree C	-	-	35.5	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part 2550 x	Rayong
Total 4issolved Solids 4ried at 170 degree C	b g/L	-	5	31100	37300HLB	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part 2510 C	Rayong
Total *jeldahl nitrogen as m	b g/L	-	1.0	91.0	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part J500-morg HCB part nU3 H B	Rayong
Total Suspended Solids 4ried at 103-105 degree C	b g/L	-	5	95	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA ( W ) < 23rd ed., 2016, part 2510 4	Rayong

**Guideline :** Effluent standard for Industries, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for Industries and industrial park set by Notification of The Ministry of Industry dated June 06, x.). 25N0 H2016B  
HLB Total 4issolved Solids when discharged to receiving water having T4S > 3,000 b g/L, T4S in the to-f-e-discharged wastewater can exceed the T4S already found in the receiving water f y not higher than 5,000 b g/L.

**Note :** Total 4issolved Solids o&reDeicing water is 33300 b g/L H&Re to Lot ID 2J102063-1B

**Sampling By :** Parab et Sattayajun ทะเบียนเลขที่ 7-323-3-0051 , Sab art \*hub phlee ทะเบียนเลขที่ 7-203-3-0073

Reb arj :

- LO4 : Lib it o&feteDion
- "9" : Lower than LOQ Hlib it o&QuantitationB/ LOR Hlib it o&ReportingB
- AnalyteHb arjed 8 is/are not inDuded in sDope o&ADedication ISO/I) C 16025.
- The laf oratory has f een aDedted as an aDredited laf oratory Dbplying with the ISO/I) C 16025.

Technical Management

Photchana S.

PhotDana Seeda

SDentist H B

ทะเบียนเลขที่ 7-323-3-0027

Approved by

D. Khunon

4ej ChangDon

Senior Manager

ทะเบียนเลขที่ 7-323-3-0001

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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 :**  
**Project Name :**  
**Project Location :**Phase5



**TESTING**  
No.0009  
**Lot ID: 24101036**  
Date Received : Sep 04, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097863-3 C1

Page 1 of 1

Sample Number	24101036-1						
Sampled Date	Sep 04, 2024 11:20 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
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>Water Testing</b>							
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	48900	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
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 > 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

**Sampled By :** Paramet Sattayakun , Samart Khumphlee

Remark :

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

Approved by

Nant Somb

Nanthawadee Sombon

Specialist 2

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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 :**  
**Project Name :**  
**Project Location:** Phase5

**TESTING**  
No.0042  
**Lot ID: 24101036**  
Date Received : Sep 04, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097863-1 C1

Page 1 of 1

<b>Sample Number</b>	24101036-1						
<b>Sampled Date</b>	Sep 04, 2024 11:20 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 04, 2024						
<b>Condition of Sample</b>	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>Water Testing</b>							
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

**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

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ 7-323-จ-0051 , Samart Khumphlee ทะเบียนเลขที่ 7-204-จ-0084

**Remark :**

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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)

ทะเบียนเลขที่ 7-323-จ-0028

Approved by

**D. Khunson**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ 7-323-ค-0001

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## Analysis / Test Report



**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:** Phase5

**TESTING**  
No.0042  
**Lot ID: 24101047**  
Date Received : Sep 11, 2024  
Date Reported : Sep 18, 2024  
Report Number : 3097876-1

Page 1 of 2

<b>Sample Number</b>	24101047-1						
<b>Sampled Date</b>	Sep 11, 2024 10:43 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 11, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	52	≤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
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	-	-	35.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32950	38450(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 33450 mg/L (Refer to Lot ID 24102092-1)

**Sampling By :** Wanlop Hunchainaow ทะเบียนเลขที่ 7-323-จ-0038

**Remark :**

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ 7-323-จ-0028

Approved by

**D. Khunson**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ 7-323-ค-0001

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

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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 :**  
**Project Name :**  
**Project Location :** Phase5

**Lot ID: 24101047**  
Date Received : Sep 11, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097876-2 C1

Page 1 of 1

<b>Sample Number</b>	24101047-1						
<b>Sampled Date</b>	Sep 11, 2024 10:43 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 11, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48850	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	30.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	1.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 33450 mg/L (Refer to Lot ID 24102092-1)

**Sampled By :** Wanlop Hunchainaow

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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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 :**  
**Project Name :**  
**Project Location :** Phase5

**TESTING**  
No.0042  
**Lot ID: 24101047**  
Date Received : Sep 11, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097876-1 C1

Page 1 of 1

<b>Sample Number</b>	24101047-1						
<b>Sampled Date</b>	Sep 11, 2024 10:43 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 11, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	35.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32950	38450(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 33450 mg/L (Refer to Lot ID 24102092-1)

**Sampled By :** Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-0038

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

Photchana S.

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Chongchon

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-ค-0001

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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 :**  
**Project Name :**  
**Project Location :** Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24101048**  
Date Received : Sep 18, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097878-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	24101048-1						
<b>Sampled Date</b>	Sep 18, 2024 10:35 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 18, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	59	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	38800	40300(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤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 35300 mg/L (Refer to Lot ID 24102082-1)

**Sampled By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-323-๖-0041

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

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ๖-323-๖-0001

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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 :**  
**Project Name :**  
**Project Location :** Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24101048**  
Date Received : Sep 18, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097878-1 C1

Page 1 of 1

<b>Sample Number</b>	24101048-1						
<b>Sampled Date</b>	Sep 18, 2024 10:35 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 18, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	33.5	≤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	38800	40300(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

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

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

**Note :** Total Dissolved Solids of receiving water is 35300 mg/L (Refer to Lot ID 24102082-1)

**Sampled By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-323-๖-0041

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

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ๖-323-๖-0001

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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 :**  
**Project Name :**  
**Project Location :** Phase5

**Lot ID: 24101048**  
Date Received : Sep 18, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097878-2 C1

Page 1 of 1

Sample Number	24101048-1						
Sampled Date	Sep 18, 2024 10:35 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
Date Analysis Commenced	Sep 18, 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
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48970	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	7.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	30.0	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	3.7	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 35300 mg/L (Refer to Lot ID 24102082-1)

**Sampled By :** Chainusorn Lertnanthakunchai

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Phase5



**TESTING**  
No.0042  
**Lot ID: 24101049**  
Date Received : Sep 25, 2024  
Date Reported : Oct 02, 2024  
Report Number : 3089795-1

Page 1 of 1

Sample Number	24101048-1						
Sampled Date	Sep 25, 2024 11:10 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
Date Analysis Commenced	Sep 25, 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
<b>Water Testing</b>							
Conductivity at 25 Degree C	Ng/L	-	2.0	F 2.0	≤20	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 24th ed., 2023, part 5210 ), part 4500 - O G	Rayong
COD <	Ng/L	-	40	51	≤120	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 24th ed., 2023, part 5220 C	Rayong
Oil & Grease <	Ng/L	-	1	F 1	≤5	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 24th ed., 2023, part 5520 )	Rayong
pH at 25 degree C		-	-	7.1	5.5-8.0	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 24th ed., 2023, part 4500 - ( 9 ) E	Rayong
Total Dissolved Solids Dried at 170 degree C	Ng/L	-	5	33850	37900&E	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	Ng/L	-	5	F 5	≤50	Standard Methods for the Examination of Water and Wastewater. AP( A, AWWA f WUx, 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 09, B.E.2560 (2017).

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

**Note :** Total Dissolved Solids of receiving water is 33900 Ng/L (Refer to Lot ID 24102083-1E)

**Sampled By :** Paratet Sattaya\*un ทะเบียนเลขที่ ว-323-จ-0051

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte & EN are not included in scope of Accreditation ISO/IEC 19025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 19025.

Technical Management

Photchana S.

Photchana Seeda  
Scientist &E

ทะเบียนเลขที่ ว-323-จ-0027

Approved by

De Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-จ-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24101049**  
Date Received : Sep 25, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097875-1 C1

Page 1 of 1

<b>Sample Number</b>	24101049-1						
<b>Sampled Date</b>	Sep 25, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 25, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	34.4	≤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	33950	38700(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 33700 mg/L (Refer to Lot ID 24102093-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ ๖-323-๖-0051

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

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ๖-323-๖-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5

**Lot ID: 24101049**  
Date Received : Sep 25, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3097875-2 C1

Page 1 of 1

<b>Sample Number</b>	24101049-1						
<b>Sampled Date</b>	Sep 25, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Sep 25, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49490	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	7.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	31.0	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	3.3	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 33700 mg/L (Refer to Lot ID 24102093-1)

**Sampled By :** Paramet Sattayakun

Remark :

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Phase5



**TESTING**  
No.0042  
**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 310v673-1

Page 1 of 1

<b>Sample Number</b>	24104648-1
<b>Sampled Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	Collected discharge point
<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 (APUA, ES) PAB

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
xOD H5 days at 20 Degree CB	mg/L	-	2.0	92.0	≤20	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 24th ed., 2023, part 5210 x, part 4500 - O G	Rayong
pU at 25 degree C		-	-	7.2	5.5-8.0	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 24th ed., 2023, part 4500 - U H&B	Rayong
Temperature 8	Degree C	-	-	3v.0	≤40	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 24th ed., 2023, part 2550 x	Rayong
Total Dissolved Solids Dried at 170 degree C	mg/L	-	5	32650	≤37v00H&B	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 24th ed., 2023, part 2540 C	Rayong
Total *jeldahl Nitrogen as N	mg/L	-	1.0	91.0	≤100	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 24th ed., 2023, part 4500-Norg H&B part NU3 H&B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	95	≤50	Standard Methods for the Examination of Water and Wastewater. APUA, AWWA ( W ) < 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 06, x.). 25v0 H2016B  
H&B 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 33v00 mg/L Refer to Lot ID 24105243-1B

**Sampling By :** Amonwih Wongsachai ทะเบียนเลขที่ ว-323-จ-0040

Remark :  
- LOD : Limit of Detection  
- "9" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)  
- Analyte H&B marked 8 is/are not included in scope of Accreditation ISO/IEC 16025.  
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 16025.

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist H&B  
ทะเบียนเลขที่ ว-323-จ-0027

Approved by

**D. Johnson**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

Results apply to the sample(s) 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 ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Phase5

**Lot ID: 24104749**  
Date Received : Oct 02, 2024  
Date Reported : Oct 10, 2024  
Report Number : 3106783-3

Page 1 of 1

<b>Sample Number</b>	24104749-1
<b>Sampled Date</b>	Oct 02, 2024 11:15 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	Collected discharge point
<b>Date Analysis Commenced</b>	Oct 03, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
COD	mg/L	-	40	58	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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 :** Amonwih Wongsachai ทะเบียนเลขที่ ว-323-จ-0040

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

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

**D. Johnson**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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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:** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24104772**  
Date Received : Oct 09, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3106824-1 C1

Page 1 of 1

<b>Sample Number</b>	24104772-1						
<b>Sampled Date</b>	Oct 09, 2024 2:38 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Oct 09, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
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	-	-	34.9	≤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	33000	37700(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong

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

**Note :** Total Dissolved Solids of receiving water is 32700 mg/L (Refer to Lot ID 24105159-1)

**Sampled By :** Amonwich Wongsachai ทะเบียนเลขที่ ๖-323-๖-0040

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

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ๖-323-๖-0001

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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:** Glow Phase5

**Lot ID: 24104772**  
Date Received : Oct 09, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3106824-2 C1

Page 1 of 1

<b>Sample Number</b>	24104772-1						
<b>Sampled Date</b>	Oct 09, 2024 2:38 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Oct 09, 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	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47520	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	7.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (G)	Rayong
Salinity	ppt	-	0.1	31.2	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	4.8	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 32700 mg/L (Refer to Lot ID 24105159-1)

**Sampled By :** Amonwich Wongsachai

Remark :

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

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**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:** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24104772**  
Date Received : Oct 09, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3106824-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	24104772-1						
<b>Sampled Date</b>	Oct 09, 2024 2:38 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Oct 09, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	-	40	77	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33000	37700(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤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 32700 mg/L (Refer to Lot ID 24105159-1)

**Sampled By :** Amonwich Wongsachai ทะเบียนเลขที่ ๖-323-๖-0040

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

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-0001

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## Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location:** Glow Phase5



**TESTING**  
**No.0042**  
**Lot ID: 24104773**  
Date Received : Oct 16, 2024  
Date Reported : Oct 30, 2024  
Report Number : 3106821-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	24104773-1						
<b>Sampled Date</b>	Oct 16, 2024 11:35 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Oct 16, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	64	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33600	35800(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤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 30800 mg/L (Refer to Lot ID 24105146-1)

**Sampled By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-323-๖-0041

Remark :

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- 

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-0001

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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 :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24104774**  
Date Received : Oct 24, 2024  
Date Reported : Nov 01, 2024  
Report Number : 3106818-1 C1(1)

Page 1 of 1

Sample Number	24104774-1						
Sampled Date	Oct 24, 2024 11:00 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
Date Analysis Commenced	Oct 24, 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
<b>Water Testing</b>							
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
COD *	mg/L	-	40	45	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31250	37100(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 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 32100 mg/L (Refer to Lot ID 24105160-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ 7-323-จ-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.
- 

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)  
ทะเบียนเลขที่ 7-323-จ-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ 7-323-จ-0001

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24119681**  
Date Received : Oct 04, 2024  
Date Reported : Oct 13, 2024  
Report Number : 31c37D5-1

Page 1 of 1

Sample Number	2c11fD71-1						
Sampled Date	Oct 04, 2024 11:00 AM						
Sample Description	Wastewater						
Location	Collected discharge point						
Date Analysis Commenced	Oct 04, 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
<b>Water Testing</b>							
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		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature	degree C	-	-	30.5	≤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	35700	38750(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 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-J org (C), part J H3 (v)	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 2550 C	Rayong

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 08, B.E.2560 (2018).

(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 2c120737-1)

**Sampled By :** Paramet Sattayakun ทะเบียนเลขที่ 7-323-จ-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 18025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 18025.

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (c)  
ทะเบียนเลขที่ 7-323-จ-0027

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ 7-323-จ-0001

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

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5

**Lot ID: 24119681**  
6ate Re7ei4ed : c o4 0D, 202v  
6ate Reported : c o4 13, 202v  
Report c uN ner : 31v38D5-3

Page 1 ob 1

Sample Number	2v11f D81-1
Sampled Date	c o4 0D, 202v 11:v f AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	c o4 08, 202v
Condition of Sample	Contained in one aN ner glass nottle and three plasti7 nttles, saN ple 7ontainers 7oN ply to pretreatN ent - preser4ation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
CO6	Ng/L	-	v0	v&	≤120	Standard Methods for the ExaN ination obWater and Wastewater. APHA, AWWA 9 WEF, 2vth ed., 2023, part 5220 C	Rayong
Oil 9 Grease	Ng/L	-	1	1	≤5	Standard Methods for the ExaN ination obWater and Wastewater. APHA, AWWA 9 WEF, 2vth ed., 2023, part 5520 B	Rayong

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by the Ministry of Natural Resources and Environment and effluent standard for factories and industrial park set by the Ministry of Industry dated June 08, B.E.2550 (2018).  
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 Ng/L, TDS in the to-be-discharged wastewater 7an ex7eed the TDS already found in the receiving water may not higher than 5,000 Ng/L.

**Note :** Total Dissolved Solids obre7ei4ing water is 32850 Ng/L (Refer to Lot I6 2v120838-1)

**Sampling By :** ParaNet Sattayakun ทะเบียนเลขที่ ว-323-จ-0051

Remark :  
- LO6 : Limit ob6ete7ion  
- "<" : Lower than LOQ (Limit obQuantitation) / LOR (Limit obReporting)

Technical Management

Photchana S.

Photchana Seeda  
Scientist (v)  
ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Johnson

6ej Changthon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24120829**  
vate Re7ei4ed : 4oD 13, 202c  
vate Reported : 4oD 20, 202c  
Report 4u7 6er : 31c3923-1

Page 1 on1

Sample Number	2c120m29-1
Sampled Date	4oD 13, 202c 10:10 AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	4oD 13, 202c
Condition of Sample	Contained in one a7 6er glass bottle and three plasti8 bottles. Sa7 ple 8ontainers 8o7 ply to pretreat7 ent - preserDation standards. fAP&A / ( SHPAU

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
EOv f5 days at 20 vegree CU	7 g/L	-	2.0	x 2.0	≤20	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part 5210 E, part c500 - O G	Rayong
COv F	7 g/L	-	c0	5m	≤120	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part 5220 C	Rayong
Oil b Grease F	7 g/L	-	1	1	≤5	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part 5520 E	Rayong
p& at 25 degree C		-	-	m0	5.5-9.0	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part c500 - & fEU	Rayong
Total v issolDed Solids v ried at 1m0 degree C	7 g/L	-	5	33c50	3<<50f1U	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part 25c0 C	Rayong
Total Suspended Solids v ried at 103-105 degree C	7 g/L	-	5	5	≤50	Standard Methods for the H7a7 ination oNWater and Wastewater. AP&A, AWWA b WHB, 2cth ed., 2023, part 25c0 v	Rayong

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by the Ministry of Natural Resources and Environment and effluent standard for factories and industrial park set by the Ministry of Industry dated June 08, B.E.2550 (2018).  
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 Ng/L, TDS in the to-be-discharged wastewater 8an e)eed the TDS already found in the receiving water may not higher than 5,000 Ng/L.

**Note :** Total Dissolved Solids obre7ei4ing water is 32-50 7 g/L fRe7er to Lot Iv 2c121059-1U

**Sampling By :** Chainusorn Lertnantha\*ทะเบียนเลขที่ ว-323-จ-00c1

Remark :  
- LOv : Limit oNvete8ion  
- "<" : Lower than LOQ fL7 it oNj uantitationU/ LOR fL7 it oNReportingU  
- Analytef5U7 ar\*ed F is/are not included in scope oNAB8reditation ISO/IEC 1-025.  
- The laboratory has been accepted as an accredited laboratory 8o7 plying with the ISO/IEC 1-025.

Technical Management

Photchana S.

Photchana Seeda  
Scientist fcU  
ทะเบียนเลขที่ ว-323-จ-002m

Approved by

D. Johnson

v e\_ Changthon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24120830**  
v ate Re9eiDed : 4oD20, 202c  
v ate Reported : 4oD29, 202c  
Report 4u6 Ner : 31c3713-1

Page 1 om1

Sample Number	2c120b30-1
Sampled Date	4oD20, 202c 10:c0 AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	4oD20, 202c
Condition of Sample	Contained in one a6 Ner glass Nottle and three plasti8 Nottles, sa6 ple 8ontainers 8o6 ply to pretreat6 ent - preserDation standards 8AP( A, HSUPAE

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
) Ov 85 days at 20 vegree CE	6 g/L	-	2.0	F.2.0	≤20	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 5210 ), part c500 - O G	Rayong
COv <	6 g/L	-	c0	F.c0	≤120	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 5220 C	Rayong
Oil f Grease <	6 g/L	-	1	2	≤5	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 5520 )	Rayong
p( at 25 degree C		-	-	b.1	5.5-7.0	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 5520 )	Rayong
Total v issolDed Solids v ried at 1b0 degree C	6 g/L	-	5	31150	3b950&E	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 25c0 C	Rayong
Total Suspended Solids v ried at 103-105 degree C	6 g/L	-	5	*	≤50	Standard Methods ror the UBa6 ination onWater and Wastewater. AP( A, AWWA f WUx, 2cth ed., 2023, part 25c0 v	Rayong

**Guideline :** Urhuent standard ror r8tories, industrial estate and industrial park set Ny 4otir8ation onThe Ministry onNatural Resour8e and UnDron6 ent and erthent standard ror r8tories and industrial park set Ny 4otir8ation onThe Ministry onIndustry dated June 09, ) .U.25\*0 82019E  
&E Total v issolDed Solids when discharged to re8eiDng water haDng TV S > 3,000 6 g/L, Tv S in the to-Ne-discharged wastewater 8an e88eed the TV S already round in the re8eiDng water Ny not higher than 5,000 6 g/L.

**Note :** Total v issolDed Solids onre8eiDng water is 33950 6 g/L &Rer to Lot Iv 2c121052-1E

**Sampling By :** Chainusorn Lertnathakun8hai ทะเชียนเลชที่ ๖-323-๓-00c1

Re6 ark :

- LOv : Li6 it onv ete8tion
- V\ : Lower than LOJ 8Li6 it onj uantitationE/ LOR 8Li6 it onReportingE
- Analyte&E6 arkd < is/are not inluded in s8ope on88reditation ISO/IUC 19025.
- The laNratory has Neen a88epted as an a88redited laNratory 8o6 plying with the ISO/IUC 19025.

Technical Management

**Photchana S.**

Phot8hana Seeda  
S8ientist &E  
ทะเชียนเลชที่ ๖-323-๓-002b

Approved by

**D. Johnson**

ve\_ Chang8hon  
Senior Manager  
ทะเชียนเลชที่ ๖-323-๓-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24120831**  
8ate Re9eiDed : 4oD2c, 202v  
8ate Reported : 8e9 0v, 202v  
Report 4uN ner : 31v3706-1

Page 1 ob1

Sample Number	2v120631-1
Sampled Date	4oD2c, 202v 11:12 AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	4oD2c, 202v
Condition of Sample	Contained in one aN ner glass nottle and three plasti9 nottles, saN ple 9ontainers 9oN ply to pretreatN ent - preserDation standards 8AP( A, HSUPAE

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
) O8 85 days at 20 8egree CE	Ng/L	-	2.0	F.2.0	≤20	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 5210 ), part v500 - O G	Rayong
CO8 <	Ng/L	-	v0	5v	≤120	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 5220 C	Rayong
Oil f Grease <	Ng/L	-	1	1	≤5	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 5520 )	Rayong
p( at 25 degree C		-	-	6.0	5.5-7.0	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 5520 )	Rayong
Total 8 issolDed Solids 8 ried at 160 degree C	Ng/L	-	5	32350	3cv008&E	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 25v0 C	Rayong
Total Suspended Solids 8 ried at 103-105 degree C	Ng/L	-	5	F.5	≤50	Standard Methods for the UBaN ination obWater and Wastewater. AP( A, AWWA f WUx, 2vth ed., 2023, part 25v0 8	Rayong

**Guideline :** Urhuent standard for r8tories, industrial estate and industrial par\* set ny 4otir8ation obThe Ministry ob4atural Resour9e and UnDronNent and erthent standard for r8tories and industrial par\* set ny 4otir8ation obThe Ministry obIndustry dated kune 0c, ) .U.25J0 8201cE  
&E Total 8 issolDed Solids when discharged to re9eiDng water haDng T8 S > 3,000 Ng/L, T8 S in the to-re-discharged wastewater 9an e88eed the T8 S already bound in the re9eiDng water ny not higher than 5,000 Ng/L.

**Note :** Total 8 issolDed Solids obre9eiDng water is 32v00 Ng/L &Rer to Lot 8v 2v1210J0-1E

**Sampling By :** ParaN et Sattaya\*un ทะเชียนเลชที่ ๖-323-๓-๐051

ReN ar\* :

- LO8 : LiN it ob8 ete8tion
- V\ : Lower than LOJ 8LiN it obj uantitationE/ LOR 8LiN it obReportingE
- Analyte&E N ar\*ed < is/are not inluded in s8ope obA99reditation ISO/IUC 1c025.
- The lamratory has neen a99epted as an a99redited lamratory 9oN plying with the ISO/IUC 1c025.

Technical Management

**Photchana S.**

Phot8hana Seeda  
S8ientist &E  
ทะเชียนเลชที่ ๖-323-๓-0026

Approved by

**D. Johnson**

8e\_ Chang8hon  
Senior Manager  
ทะเชียนเลชที่ ๖-323-๓-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24128824**  
J ate Received : J e4 0D, 202c  
J ate Reported : J e4 13, 202c  
Report 6 u7 Ner : 31D2013-1

Page 1 om2

Sample Number	2c12bb2c-1
Sampled Date	J e4 0D, 202c 10:c0 AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	J e4 0D, 202c
Condition of Sample	Contained in one a7 Ner glass Nottle and three plasti4 Nottles, sa7 ple 4ontainers 4o7 ply to pretreat7 ent - preservation standards 8AP( A, HSUPAE

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
)OJ 85 days at 20 J egree CE	7 g/L	-	2.0	F.2.0	≤20	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part 5210 ), part c500 - O G	Rayong
p( at 25 degree C		-	-	b.1	5.5-<0	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part c500 - ( 8 ) E	Rayong
Te7 perature 9	J egree C	-	-	33.3	≤c0	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part 2550 )	Rayong
Total J issolved Solids J ried at 1b0 degree C	7 g/L	-	5	3c350	38050&E	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part 25c0 C	Rayong
Total *jeldahl 6itrogen as 6	7 g/L	-	1.0	F.1.0	≤100	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part c500-6org 8CE, part 6( 3 8 ) E	Rayong
Total Suspended Solids J ried at 103-105 degree C	7 g/L	-	5	F.5	≤50	Standard Methods ror the UBa7 ination onWater and Wastewater. AP( A, AWWA f WUK, 2cth ed., 2023, part 25c0 J	Rayong

**Guideline :** Hrtuent standard ror r4tories, industrial estate and industrial parj set Ny 7otirritation onthe Ministry on6atural Resour4e and Unviro7 ent and emtuent standard ror r4tories and industrial parj set Ny 6otirritation onThe Ministry on7industry dated kune 08, ) U.25D0 82018E  
&ETotal J issolved Solids when dis4arged to re4eiving water having TJ S > 3,000 7 g/L, TJ S in the to-Ne-dis4arged wastewater 4an eB4eed the TJ S already roun in the re4eiving water Ny not higher than 5,000 7 g/L.

**Note :** Total J issolved Solids onre4eiving water is 32050 7 g/L &Rer to Lot Id 2c12<5b8-1E

**Sampling By :** Para7 et Sattayaj un ทะเบียนเลขที่ ว-323-จ-0051

Re7 arj :

- LOJ : L17 it on4 et4tion
- "F" : Lower than LOQ &L17 it onQuantitationE/ LOR &L17 it onReportingE
- Analyte&E7 arj ed 9 is/are not in4luded in s4ope onA44reditation ISO/IUC 18025.

Technical Management

**Photchana S.**

Phot4hana Seeda  
S4ientist &E  
ทะเบียนเลขที่ ว-323-จ-002b

Approved by

**D. Chuan**

J ej Chang4hon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-5 Road, Map Ta Phut, Muang Rayong, Rayong Thailand 21150  
**P/O :** GLOW-OM-22-103  
**Project Name :**  
**Project Location :** Glow Phase5

**Lot ID: 24128824**  
c ate Re4eived : c e4 0D, 202v  
c ate Reported : c e4 13, 202v  
Report 7 u8 Ner : 31D2013-3

Page 1 om1

Sample Number	2v12bb2v-1
Sampled Date	c e4 0D, 202v 10:v0 AM
Sample Description	Wastewater
Location	Collected discharge point
Date Analysis Commenced	c e4 0D, 202v
Condition of Sample	Contained in one a8 Ner glass Nottle and three plasti4 Nottles, sa8 ple 4ontainers 4o8 ply to pretreat8 ent - preservation standards 9AP&A, ( SHPAU

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
COc	8 g/L	-	v0	b3	≤120	Standard Methods ror the HEa8 ination onWater and Wastewater. AP&A, AWWA f WH), 2vth ed., 2023, part 5220 C	Rayong
Oil f Grease	8 g/L	-	1	1	≤5	Standard Methods ror the HEa8 ination onWater and Wastewater. AP&A, AWWA f WH), 2vth ed., 2023, part 5520 x	Rayong

**Guideline :** Hrtuent standard ror r4tories, industrial estate and industrial parF set Ny 7otirritation onthe Ministry on7atural Resour4e and H46iron8 ent and emtuent standard ror r4tories and industrial parF set Ny 7otirritation onThe Ministry on7industry dated Bune 0k, x.H.25D0 8201kU  
9LUTotal c issolved Solids when dis4arged to re4eiving water ha&ing Tc S J 3,000 8 g/L, Tc S in the to-Ne-dis4arged wastewater 4an eB4eed the Tc S already roun in the re4eiving water Ny not higher than 5,000 8 g/L.

**Note :** Total c issolved Solids onre4eiving water is 32050 8 g/L 9Rer to Lot Ic 2v12>5bk-1U

**Sampling By :** Para8 et SattayaFun ทะเบียนเลขที่ ว-323-จ-0051

Re8 arF :

- LOC : L18 it on4 et4tion
- "<" : Lower than LOQ 9L18 it onQuantitationU/ LOR 9L18 it onReportingU

Technical Management

**Photchana S.**

Phot4hana Seeda  
S4ientist 9vU  
ทะเบียนเลขที่ ว-323-จ-002b

Approved by

**D. Chuan**

c ej Chang4hon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-0001

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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:** Glow Phase5



**TESTING**  
No.0042  
**Lot ID: 24128865**  
Date Received : Dec 11, 2024  
Date Reported : Dec 19, 2024  
Report Number : 3162159-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	24128865-1						
<b>Sampled Date</b>	Dec 11, 2024 10:40 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Dec 11, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	48	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33450	38500(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤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 33500 mg/L (Refer to Lot ID 24129550-1)

**Sampled By :** Chainusorn Lertnanthakunchai หมายเลขที่ ๖-323-๖-0041

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.
- 

Technical Management

**Photchana S.**

Photchana Seeda  
Scientist (4)

หมายเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

หมายเลขที่ ๖-323-๖-0001

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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 :**  
**Project Name :**  
**Project Location:** Phase5



**TESTING**  
No.0042  
**Lot ID: 24128866**  
Date Received : Dec 18, 2024  
Date Reported : Jan 07, 2025  
Report Number : 3162150-1 C1(1)

Page 1 of 1

<b>Sample Number</b>	24128866-1						
<b>Sampled Date</b>	Dec 18, 2024 10:37 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	Collected discharge point						
<b>Date Analysis Commenced</b>	Dec 18, 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	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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD *	mg/L	-	40	70	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 C	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
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
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33400	38850(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤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 33850 mg/L (Refer to Lot ID 24129369-1)

**Sampled By :** Chainusorn Lertnanthakunchai หมายเลขที่ ๖-323-๖-0041

Remark :

- LOD : Limit of Detection
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- 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)

หมายเลขที่ ๖-323-๖-0028

Approved by

**D. Chongchon**

Dej Changchon  
Senior Manager

หมายเลขที่ ๖-323-๖-0001

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## Analysis / Test Report

**Client :** GLOW ENERGY PUBLIC COMPANY LIMITED  
11, I-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: 24128867**  
Date Received : 4eD25, 202c  
Date Reported : 8an 03, 2025  
Report Number : 3209795-1

Page 1 of 1

**Sample Number** 2c12ff97-1  
**Sampled Date** 4eD25, 202c 10:55 AM  
**Sample Description** Wastewater  
**Location** Collected discharge point  
**Date Analysis Commenced** 4eD25, 202c  
**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
<b>Water Testing</b>							
BO4 (5 days at 20 degree C)	Ng/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part 5210 B, part c500 - O G	Rayong
CO4 *	Ng/L	-	c0	c2	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part 5220 C	Rayong
Oil & Grease *	Ng/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	f.0	5.5-k.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part c500 - H (B)	Rayong
Total Dissolved Solids dried at 180 degree C	Ng/L	-	5	33250	3k350(1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part 25c0 C	Rayong
Total Suspended Solids dried at 103-105 degree C	Ng/L	-	5	9	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23th ed., 2023, part 25c0 4	Rayong

**Guideline :** Effluent standard for industries, industrial estate and industrial park set by Notification of the Ministry of Natural Resources and Environment and effluent standard for industries and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2590 (2017).  
(1) Total Dissolved Solids when discharged to receiving water having TSS > 3,000 Ng/L, TSS in the to-be-discharged wastewater cannot exceed the TSS already found in the receiving water must not be higher than 5,000 Ng/L.

**Note :** Total Dissolved Solids in receiving water is 3c350 Ng/L (Refer to Lot I4 2c12k551-1)

**Sampling By :** Chainusorn Lertnathajunthai หมายเลขที่ ว-323-จ-00c1

**Remarks :**

- LO4 : 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.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

**Technical Management**

**Photchanas.**

Photchanas Seeda

SDentist (c)

หมายเลขที่ ว-323-จ-002f

**Approved by**

**D. Chansu.**

4e\_ Changdon

Senior Manager

หมายเลขที่ ว-323-จ-0001

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