

# ภาคผนวก ค-4

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คุณภาพน้ำทิ้ง



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 22154212**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530655-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	22154212-1						
<b>Sampled Date</b>	Jan 16, 2023 3:10 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Color (at Original pH)	ADMI	-	5	21	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	19	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	616	≤1300	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	11	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

Remark :

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

**Technical Management**

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0009**

**Lot ID: 22154212**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530655-2

Page 1 of 1

<b>Sample Number</b>	22154212-1
<b>Sampled Date</b>	Jan 16, 2023 3:10 PM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Jan 17, 2023
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium *	meq/L	0.003	0.005	4.05	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	meq/L	0.003	0.005	1.80	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	1.70	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	meq/L	0.003	0.005	2.92	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite *	mg/L	0.05	0.1	0.22	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :**

Remark :

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

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310331**

Date Received : Feb 17, 2023

Date Reported : Feb 24, 2023

Report Number : 2553616-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2310331-1						
<b>Sampled Date</b>	Feb 17, 2023 1:50 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Color (at Original pH)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	21	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	7.3	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.9	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	596	≤1300	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	11	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :

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

**Technical Management**

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2310331**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553616-2

Page 1 of 1

<b>Sample Number</b>	2310331-1						
<b>Sampled Date</b>	Feb 17, 2023 1:50 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Feb 18, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium	meq/L	0.003	0.005	3.64	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	meq/L	0.003	0.005	1.59	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR		-	-	1.94	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	meq/L	0.003	0.005	3.15	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite	mg/L	0.05	0.1	0.24	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	6.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Paramet Sattayakun , Panupong Manit

Remark :

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Approved by

*Chanatt L.*

Chanattagarn Imchom  
Supervisor



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2329425**

Date Received : Mar 17, 2023

Date Reported : Mar 24, 2023

Report Number : 2595094-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2329425-1
<b>Sampled Date</b>	Mar 17, 2023 2:00 PM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Mar 17, 2023
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Color (at Original pH)	ADMI	-	5	22	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	20	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	7.4	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.6	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	420	≤1300	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	27	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-8592

Remark :

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**Technical Management**

*N. Banongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2329425**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595094-2

Page 1 of 1

<b>Sample Number</b>	2329425-1						
<b>Sampled Date</b>	Mar 17, 2023 2:00 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Mar 18, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium	meq/L	0.003	0.005	2.43	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	meq/L	0.003	0.005	1.11	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR		-	-	1.46	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	meq/L	0.003	0.005	1.94	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite	mg/L	0.05	0.1	0.61	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	6.8	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

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Approved by

*Chanatt L.*

Chanattagarn Imchom

Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2337409**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611994-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2337409-1						
<b>Sampled Date</b>	Apr 20, 2023 10:27 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and five 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	Rayong
Color (at Original pH)	ADMI	-	5	27	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	27	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	7.7	6.5-8.5	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	548	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤35	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Technical Management**

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location :** GNC

**TESTING**

**No.0042**

**Lot ID: 2337409**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611994-2

Page 1 of 2

<b>Sample Number</b>	2337409-1						
<b>Sampled Date</b>	Apr 20, 2023 10:27 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Apr 21, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium *	meq/L	0.003	0.005	3.02	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	meq/L	0.003	0.005	1.35	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Phosphorus	mg/L	0.03	0.05	0.28	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	1.64	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	meq/L	0.003	0.005	2.43	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite *	mg/L	0.05	0.1	0.17	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	7.09	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Nitrite as N *	mg/L	0.0006	0.002	0.031	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO2 (B)	Rayong
Total Nitrogen as N *	mg/L	-	1.0	9.3	No Standard	Calculation	Rayong

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Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2337409**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611994-1

Page 2 of 2

**Sampling By :** Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

**Remark :**

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

**Technical Management**

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2340139**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618831-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2340139-1						
<b>Sampled Date</b>	May 16, 2023 10:55 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Color (at Original pH)	ADMI	-	5	25	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	22	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.3	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	560	≤1300	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	20	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

Remark :

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

**Technical Management**

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2340139**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618831-2

Page 1 of 1

**Sample Number** 2340139-1  
**Sampled Date** May 16, 2023 10:55 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** May 17, 2023  
**Condition of Sample** Contained in one BOD bottle, two glass vials, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium	meq/L	0.003	0.005	3.56	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	meq/L	0.003	0.005	1.70	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR		-	-	1.71	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	meq/L	0.003	0.005	2.78	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite	mg/L	0.05	0.1	0.49	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	7.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

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

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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355733**

Date Received : Jun 16, 2023

Date Reported : Jul 04, 2023

Report Number : 2705742-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2355733-1
<b>Sampled Date</b>	Jun 16, 2023 2:30 PM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Jun 16, 2023
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and five 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	2.7	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	28	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	24	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<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 *		-	-	8.1	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.8	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	792	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.9	≤35	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Note :** This Analysis test report is reissued to supersede report No.2652846-1, Date Reported : Jan 24, 2023 due to revise analytical information.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Panupong Manit ทะเบียนเลขที่ ว-204-จ-8600

**Technical Management**

*N. Banongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

**Approved by**

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2374771**

Date Received : Jun 29, 2023

Date Reported : Jul 04, 2023

Report Number : 2698579-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2374771-1
<b>Sampled Date</b>	Jun 29, 2023 11:35 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Jun 30, 2023
<b>Condition of Sample</b>	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Sampling By :** Pathompong Kornawat ทะเบียนเลขที่ ว-323-จ-9468

Remark :

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

Technical Management

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

TESTING

No.0009

**Lot ID: 2355733**

Date Received : Jun 16, 2023

Date Reported : Jul 04, 2023

Report Number : 2705742-2

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2355733-1						
<b>Sampled Date</b>	Jun 16, 2023 2:30 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Jun 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Calcium *	meq/L	0.003	0.005	4.42	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	meq/L	0.003	0.005	2.28	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	2.46	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	meq/L	0.003	0.005	4.51	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Water Testing</b>							
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.17	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Nitrite as N *	mg/L	0.0006	0.002	0.010	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO2 (B)	Rayong
Total Nitrogen as N *	mg/L	-	1.0	7.1	No Standard	Calculation	Rayong

**Guideline :** Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

**Note :** This Analysis test report is reissued to supersede report No.2652846-2, Date Reported : Jan 24, 2023 due to revise analytical information.

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Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

# ภาคผนวก ค-5

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คุณภาพน้ำผิวดิน



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 22154213**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530656-1

Page 1 of 10

<b>Sample Number</b>	22154213-1						
<b>Sampled Date</b>	Jan 16, 2023 1:30 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	5.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.0	Not Change from natural condition	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	81	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :**

Approved by

*N. Banchoangkit*

Narumon Banchoangkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 22154213**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530656-1

Page 3 of 10

<b>Sample Number</b>	22154213-2						
<b>Sampled Date</b>	Jan 16, 2023 1:40 PM						
<b>Sample Description</b>	Surafce water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.3	Not Change from natural condition	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	70	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :**

Approved by

*N. Banongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 22154213**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530656-1

Page 5 of 10

<b>Sample Number</b>	22154213-3						
<b>Sampled Date</b>	Jan 16, 2023 2:10 PM						
<b>Sample Description</b>	Surafce water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	27.8	Not Change from natural condition	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	42	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :**

Approved by

*N. Banchoangkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 22154213**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530656-1

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<b>Sample Number</b>	22154213-4						
<b>Sampled Date</b>	Jan 16, 2023 2:00 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแนวหนานเหนือจุดบรรจบระหว่างคลองชุมพลกับแนวหนานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	27.8	Not Change from natural condition	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	44	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :**

Approved by

*N. Banchoangkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 22154213**

Date Received : Jan 16, 2023

Date Reported : Jan 24, 2023

Report Number : 2530656-1

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<b>Sample Number</b>	22154213-5						
<b>Sampled Date</b>	Jan 16, 2023 2:20 PM						
<b>Sample Description</b>	Surafce water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jan 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.2	Not Change from natural condition	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	44	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :**

Approved by

*N. Banachongkit*

Narumon Banachongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310333**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553617-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 10

<b>Sample Number</b>	2310333-1						
<b>Sampled Date</b>	Feb 17, 2023 2:15 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทั้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	2.5	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.8	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.2	Not Change from natural condition	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	90	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	27	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Panupong Manit

Approved by

Dej Changchon  
Senior Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310333**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553617-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 3 of 10

<b>Sample Number</b>	2310333-2						
<b>Sampled Date</b>	Feb 17, 2023 2:25 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.8	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.4	Not Change from natural condition	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	424	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	74	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Panupong Manit

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310333**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553617-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 5 of 10

<b>Sample Number</b>	2310333-3						
<b>Sampled Date</b>	Feb 17, 2023 2:45 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.7	Not Change from natural condition	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	49	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Panupong Manit

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310333**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553617-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

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<b>Sample Number</b>	2310333-4						
<b>Sampled Date</b>	Feb 17, 2023 2:35 PM						
<b>Sample Description</b>	Surafce water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.9	Not Change from natural condition	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	49	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	23	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Panupong Manit

Approved by

Dej Changchon  
Senior Manager

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2310333**

Date Received : Feb 17, 2023

Date Reported : Feb 25, 2023

Report Number : 2553617-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

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<b>Sample Number</b>	2310333-5						
<b>Sampled Date</b>	Feb 17, 2023 2:55 PM						
<b>Sample Description</b>	Surafce water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Feb 17, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.6	Not Change from natural condition	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	53	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	23	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Panupong Mani

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2329426**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595096-1

Page 1 of 10

<b>Sample Number</b>	2329426-1						
<b>Sampled Date</b>	Mar 17, 2023 12:00 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Mar 17, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.2	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.7	Not Change from natural condition	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	164	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	30	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

Approved by

*N. Banngkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2329426**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595096-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 3 of 10

<b>Sample Number</b>	2329426-2						
<b>Sampled Date</b>	Mar 17, 2023 11:50 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Mar 17, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	Not Change from natural condition	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	360	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	28	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

Approved by

*N. Banngkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2329426**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595096-1

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<b>Sample Number</b>	2329426-3						
<b>Sampled Date</b>	Mar 17, 2023 12:30 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Mar 17, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.2	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	Not Change from natural condition	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	49	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	24	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

Approved by

*N. Banngkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2329426**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595096-1

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<b>Sample Number</b>	2329426-4						
<b>Sampled Date</b>	Mar 17, 2023 12:15 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Mar 17, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.2	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.2	Not Change from natural condition	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	41	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	24	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

Approved by

*N. Banongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2329426**

Date Received : Mar 17, 2023

Date Reported : Mar 25, 2023

Report Number : 2595096-1

Page 9 of 10

<b>Sample Number</b>	2329426-5						
<b>Sampled Date</b>	Mar 17, 2023 12:40 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Mar 17, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.4	Not Change from natural condition	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	44	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Paramet Sattayakun , Thanasoun Namakunna

Remark :

Approved by

*N. Banngkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2337410**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611996-1

Page 1 of 10

<b>Sample Number</b>	2337410-1						
<b>Sampled Date</b>	Apr 20, 2023 11:10 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	6.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.5	Not Change from natural condition	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	456	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	97	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Surawit Narapong , Samart Khumphlee

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2337410**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611996-1

Page 3 of 10

<b>Sample Number</b>	2337410-2						
<b>Sampled Date</b>	Apr 20, 2023 11:18 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.4	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	532	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	51	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Surawit Narapong , Samart Khumphlee

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0042**

**Lot ID: 2337410**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611996-1

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<b>Sample Number</b>	2337410-3						
<b>Sampled Date</b>	Apr 20, 2023 11:36 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.5	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.5	Not Change from natural condition	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	48	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	23	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Surawit Narapong , Samart Khumphlee

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2337410**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611996-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

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<b>Sample Number</b>	2337410-4						
<b>Sampled Date</b>	Apr 20, 2023 11:30 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.0	Not Change from natural condition	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	53	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	32	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Surawit Narapong , Samart Khumphlee

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2337410**

Date Received : Apr 20, 2023

Date Reported : Apr 28, 2023

Report Number : 2611996-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 9 of 10

<b>Sample Number</b>	2337410-5						
<b>Sampled Date</b>	Apr 20, 2023 11:40 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Apr 20, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.1	Not Change from natural condition	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	47	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	35	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Surawit Narapong , Samart Khumphlee

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0009

**Lot ID: 2340144**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618845-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 10

<b>Sample Number</b>	2340144-1						
<b>Sampled Date</b>	May 16, 2023 12:20 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one plastic bottle, 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 *	mg/L	-	2	2.1	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	9.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	6.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.8	Not Change from natural condition	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	384	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	66	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0009**

**Lot ID: 2340144**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618845-1

Page 3 of 10

<b>Sample Number</b>	2340144-2						
<b>Sampled Date</b>	May 16, 2023 12:05 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one plastic bottle, 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 *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.0	Not Change from natural condition	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	664	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	15	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0009**

**Lot ID: 2340144**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618845-1

Page 5 of 10

<b>Sample Number</b>	2340144-3						
<b>Sampled Date</b>	May 16, 2023 11:30 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one plastic bottle, 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 *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.6	Not Change from natural condition	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	86	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	15	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0009**

**Lot ID: 2340144**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618845-1

Page 7 of 10

<b>Sample Number</b>	2340144-4						
<b>Sampled Date</b>	May 16, 2023 11:20 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one plastic bottle, 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 *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.4	Not Change from natural condition	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	77	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**TESTING**

**No.0009**

**Lot ID: 2340144**

Date Received : May 16, 2023

Date Reported : May 24, 2023

Report Number : 2618845-1

Page 9 of 10

<b>Sample Number</b>	2340144-5						
<b>Sampled Date</b>	May 16, 2023 11:45 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	May 16, 2023						
<b>Condition of Sample</b>	Contained in one BOD bottle, one plastic bottle, 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 *	mg/L	-	2	<2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.8	Not Change from natural condition	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	68	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	17	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

**Sampling By :** Sansoen Khuiyoksui , Panupong Manit

Remark :

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355754**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2652873-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 10

<b>Sample Number</b>	2355754-1						
<b>Sampled Date</b>	Jun 16, 2023 10:58 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	4.9	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.2	Not Change from natural condition	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	176	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	65	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

Approved by

*N. Banchoangkit*

Narumon Banchoangkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355754**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2652873-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 3 of 10

<b>Sample Number</b>	2355754-2						
<b>Sampled Date</b>	Jun 16, 2023 10:24 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.1	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.7	Not Change from natural condition	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	360	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	14	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

Approved by

*N. Banchoangkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355754**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2652873-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 5 of 10

<b>Sample Number</b>	2355754-3						
<b>Sampled Date</b>	Jun 16, 2023 11:49 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	4.7	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.2	Not Change from natural condition	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	116	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	54	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

Approved by

*N. Banchoangkit*

Narumon Banchoangkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355754**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2652873-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 7 of 10

<b>Sample Number</b>	2355754-4						
<b>Sampled Date</b>	Jun 16, 2023 11:19 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	6.5	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.4	Not Change from natural condition	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	114	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	60	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

Approved by

*N. Banchoangkit*

Narumon Banchoangkit  
Supervisor

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## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2355754**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2652873-1

**Client :** Gulf NC Co., Ltd.

418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 9 of 10

<b>Sample Number</b>	2355754-5						
<b>Sampled Date</b>	Jun 16, 2023 11:58 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	6.3	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	4.2	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	In-house method : STM 02-004 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.0	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.0	Not Change from natural condition	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	124	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	58	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

n': Change from Natural condition not more than 3 degree C

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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# ภาคผนวก ค-6

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นิเวศวิทยาในน้ำ



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : Gulf NC Co., Ltd.

Address : 418 Moo 1 Nontree, Kabin Buri, Prachinburi, Thailand, 25110

Project Name : Monitoring EIA

Project Location : GNC

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Division Cyanophyta</b>					
<b>Class Cyanophyceae</b>					
<b>Order Chroococcales</b>					
<b>Family Chroococcaceae</b>					
1. <i>Microcystis aeruginosa</i>	13	-	-	-	-
<b>Order Nostocales</b>					
<b>Family Oscillatoriaceae</b>					
2. <i>Oscillatoria princeps</i>	90	-	-	-	-
3. <i>Oscillatoria</i> sp.	90	83	33	-	15
4. <i>Oscillatoria tenuis</i>	-	119	16	11	15
5. <i>Spirulina platensis</i>	26	-	-	-	15
<b>Family Nostocaceae</b>					
6. <i>Anabaena</i> sp.	13	-	-	-	-
7. <i>Raphidiopsis</i> sp.	13	-	-	-	-

ตาราง ผลการวิเคราะห์แฟลกก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดแฟลกก์ตอนพืช	ปริมาณแฟลกก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Division Chlorophyta</b>					
<b>Class Chlorophyceae</b>					
<b>Order Volvocales</b>					
<b>Family Volvocaceae</b>					
8. <i>Pandorina morum</i>	-	12	33	-	44
<b>Order Tetrasporales</b>					
<b>Family Palmellaceae</b>					
9. <i>Sphaerocystis shroeteri</i>	-	-	16	-	103
<b>Order Chlorococcales</b>					
<b>Family Hydrodictyaceae</b>					
10. <i>Pediastrum duplex</i>	26	-	49	11	-
11. <i>Pediastrum simplex</i>	-	593	-	-	30
<b>Family Coelastraceae</b>					
12. <i>Coelastrum microporum</i>	-	-	-	-	15
<b>Family Oocystaceae</b>					
13. <i>Ankistrodesmus</i> sp.	13	-	-	11	-
14. <i>Dictyosphaerium pulchellum</i>	-	-	49	23	-
15. <i>Tetraedron gracile</i>	-	-	16	23	-
16. <i>Tetraedron trigonum</i>	-	24	-	-	-
<b>Family Scenedesmaceae</b>					
17. <i>Actinastrum hantzschii</i>	-	-	49	-	-
18. <i>Crucigenia apiculata</i>	-	-	-	11	44
19. <i>Scenedesmus armatus</i>	13	-	-	-	-
20. <i>Scenedesmus opoliensis</i>	-	12	16	-	30
21. <i>Scenedesmus</i> sp.	13	-	-	-	-

ตาราง ผลการวิเคราะห์แฟลงก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดแฟลงก์ตอนพืช	ปริมาณแฟลงก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Order Ulotrichales</b>					
<b>Family Ulotrichaceae</b>					
22. <i>Geminella</i> sp.	13	-	-	-	-
<b>Order Zygematales</b>					
<b>Family Desmidiaceae</b>					
23. <i>Closterium gracile</i>	-	-	-	11	15
24. <i>Cosmarium</i> sp.	-	12	-	-	-
25. <i>Staurastrum freemanii</i>	-	-	16	-	-
26. <i>Staurastrum furcigerum</i>	-	-	-	-	15
27. <i>Staurastrum gracile</i>	39	-	49	-	15
28. <i>Staurastrum limnesticum</i>	-	-	-	11	-
29. <i>Staurastrum multicum</i>	-	-	16	-	15
30. <i>Xanthidium antilopaeum</i>	-	-	-	-	15
<b>Class Euglenophyceae</b>					
<b>Order Euglenales</b>					
<b>Family Euglenaceae</b>					
31. <i>Euglena acus</i>	13	119	82	80	15
32. <i>Euglena oxyuris</i>	13	83	49	11	15
33. <i>Euglena</i> sp.	52	12	33	-	-
34. <i>Euglena viridis</i>	65	119	130	80	59
35. <i>Lepocinclis ovum</i>	-	912	114	23	74
36. <i>Phacus angulatus</i>	-	12	33	-	-
37. <i>Phacus hamatus</i>	-	-	49	23	15
38. <i>Phacus longicauda</i>	13	-	33	-	-
39. <i>Phacus platala</i>	13	-	-	-	-
40. <i>Phacus pleuronectes</i>	-	-	-	11	-
41. <i>Phacus ranula</i>	-	36	33	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
42. <i>Phacus</i> sp.	65	119	16	23	30
43. <i>Phacus torta</i>	26	-	82	46	89
44. <i>Strombomonas australica</i>	-	-	16	-	15
45. <i>Strombomonas fluviatilis</i>	-	-	33	69	59
46. <i>Strombomonas gibberosa</i>	26	-	98	11	-
47. <i>Strombomonas girardiana</i>	26	-	49	115	30
48. <i>Strombomonas</i> sp.	26	-	-	-	-
49. <i>Trachelomonas crebea</i>	271	47	293	149	207
50. <i>Trachelomonas daugerdiana</i>	-	-	114	69	15
51. <i>Trachelomonas hispida</i>	194	-	685	687	384
52. <i>Trachelomonas lismorensis</i>	-	-	-	11	-
53. <i>Trachelomonas mirabilis</i>	-	-	-	11	-
54. <i>Trachelomonas rugulosa</i>	-	-	-	-	103
55. <i>Trachelomonas volzii</i>	-	12	65	57	74
<b>Division Chromophyta</b>					
<b>Class Bacillariophyceae</b>					
<b>Order Biddulphiales</b>					
<b>Suborder Coscinodiscineae</b>					
<b>Family Thalassiosiraceae</b>					
56. <i>Cyclotella stelligera</i>	-	12	-	-	-
<b>Family Aulacoseiraceae</b>					
57. <i>Aulacoeira granulata</i>	-	107	65	11	15
<b>Suborder Biddulphiineae</b>					
<b>Family Chaetoceraceae</b>					
58. <i>Bacteriastrum</i> sp.	-	12	-	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Order Bacillariales</b>					
<b>Suborder Fragilariineae</b>					
<b>Family Fragilariaceae</b>					
59. <i>Fragilaria capucina</i>	-	107	-	-	-
60. <i>Synedra acus</i>	-	12	-	23	-
61. <i>Synedra ulna</i>	13	36	-	-	-
<b>Suborder Bacillariineae</b>					
<b>Family Eunotiaceae</b>					
62. <i>Eunotia pectinalis</i>	26	166	-	-	-
<b>Family Cymbellaceae</b>					
63. <i>Gomphonema parvulum</i>	-	24	-	-	-
<b>Family Naviculaceae</b>					
64. <i>Craticula cuspidata</i>	13	-	-	-	-
65. <i>Frustulia vulgaris</i>	-	-	33	-	-
66. <i>Gyrosigma attenuatum</i>	-	12	16	-	-
67. <i>Gyrosigma balticum</i>	-	12	-	-	-
68. <i>Navicula cuspidata</i>	-	24	-	-	-
69. <i>Navicula lanceolata</i>	-	-	-	11	-
70. <i>Pinnularia gibba</i>	-	-	-	-	15
71. <i>Pinnularia</i> sp.	-	-	-	11	-
<b>Family Bacillariaceae</b>					
72. <i>Nitzschia sigmoidea</i>	-	12	-	-	-
<b>Family Surirellaceae</b>					
73. <i>Surirella elegans</i>	-	-	-	-	15

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)  
(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Class Cryophyceae</b>					
<b>Order Ochromonadales</b>					
<b>Family Dinobryaceae</b>					
74. <i>Dictyocha fibula</i>	-	36	-	-	-
<b>Order Synurales</b>					
<b>Family Mallomonadaceae</b>					
75. <i>Mallomonas acaroides</i>	-	-	163	149	-
76. <i>Mallomonas litomesa</i>	26	-	196	103	30
<b>Class Dinophyceae</b>					
<b>Order Dinophysiales</b>					
<b>Family Dinophysiaceae</b>					
77. <i>Phalacroma</i> sp.	-	12	-	-	-
<b>Order Peridinales</b>					
<b>Family Peridiniaceae</b>					
78. <i>Peridinium</i> sp.	26	-	-	-	15
<b>ชนิดแพลงก์ตอนพืช</b>	<b>30</b>	<b>31</b>	<b>36</b>	<b>31</b>	<b>34</b>
<b>ปริมาณแพลงก์ตอนพืช</b>	<b>1,269</b>	<b>2,910</b>	<b>2,838</b>	<b>1,896</b>	<b>1,660</b>
<b>ดัชนีความหลากหลายแพลงก์ตอนพืช</b>	<b>2.8615</b>	<b>2.4626</b>	<b>2.9874</b>	<b>2.5391</b>	<b>2.9353</b>
<b>ดัชนีความสม่ำเสมอแพลงก์ตอนพืช</b>	<b>0.8413</b>	<b>0.7171</b>	<b>0.8336</b>	<b>0.7394</b>	<b>0.8324</b>

**Sample Location :**

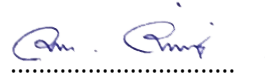
1. สถานี 2355772-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร
2. สถานี 2355772-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทศบาล)
3. สถานี 2355772-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน
4. สถานี 2355772-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานขึ้นไป 500 เมตร
5. สถานี 2355772-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานลงไป 500 เมตร

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



(นางสาวกนกวรรณ ขาวดอน)

ผู้วิเคราะห์



(นายอสงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : Gulf NC Co., Ltd.

Address : 418 Moo 1 Nontree, Kabin Buri, Prachinburi, Thailand, 25110

Project Name : Monitoring EIA

Project Location : GNC

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Phylum Protozoa</b>					
<b>Subphylum Plasmodroma</b>					
<b>Class Sarcodina</b>					
<b>Subclass Rhizopoda</b>					
<b>Order Testacida</b>					
<b>Family Diffugiidae</b>					
1. <i>Diffugia acuminata</i>	-	-	261	206	-
2. <i>Diffugia oblonga</i>	-	-	-	-	15
<b>Family Euglyphidae</b>					
3. <i>Euglypha rotunda</i>	-	12	-	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
<b>Subphylum Ciliophora</b>					
<b>Class Ciliata</b>					
<b>Subclass Spirotricha</b>					
<b>Order Tintinnida</b>					
<b>Family Tintinnididae</b>					
4. <i>Tintinnidium</i> sp.	13	-	-	-	15
<b>Family Codonellidae</b>					
5. <i>Tintinnopsis</i> sp.	103	59	424	240	295
<b>Phylum Rotifera</b>					
<b>Class Monogononta</b>					
<b>Order Ploima</b>					
<b>Family Brachionidae</b>					
6. <i>Anuareopsis fissa</i>	-	-	-	-	15
<b>Family Tricercidae</b>					
7. <i>Trichocerca capucina</i>	-	-	-	-	15
8. <i>Trichocerca pusilla</i>	-	-	98	46	44
<b>Family Synchaetidae</b>					
9. <i>Polyarthra vulgaris</i>	-	24	82	80	59
<b>Order Flosculariacea</b>					
<b>Family Testudinellidae</b>					
10. <i>Filinia terminalis</i>	-	-	16	-	-
<b>Phylum Arthropoda</b>					
<b>Class Crustacea</b>					
<b>Subclass Copepoda</b>					
11. Copepod nauplii	13	83	49	34	15
<b>Order Cyclopoida</b>					
12. Cyclopoid copepod	-	-	-	-	15

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)  
(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลิตร)				
	2355772-1	2355772-2	2355772-3	2355772-4	2355772-5
ชนิดแพลงก์ตอนสัตว์	3	4	6	5	9
ปริมาณแพลงก์ตอนสัตว์	129	178	930	606	488
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	0.6422	1.1737	1.3909	1.3582	1.4189
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	0.5846	0.8466	0.7763	0.8439	0.6458


**Sample Location :**

1. สถานี 2355772-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร
2. สถานี 2355772-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)
3. สถานี 2355772-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน
4. สถานี 2355772-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานขึ้นไป 500 เมตร
5. สถานี 2355772-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานลงไป 500 เมตร

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



(นางสาวกนกวรรณ ขาวค่อน)  
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)  
หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : Gulf NC Co., Ltd.

Address : 418 Moo 1, Nontree, Kabin Buri, Prachinburi, Thailand 25110

Project Name : Monitoring EIA

Project Location : GNC

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	2355767-1	2355767-2	2355767-3	2355767-4	2355767-5
<b>Phylum Annelida</b>					
<b>Class Clitellata</b>					
<b>Order Lumbriculida</b>					
<b>Family Lumbriculidae</b>					
<i>Lumbriculus</i> sp. (ไส้เดือนน้ำ)	-	45	-	-	-
<b>Order Tubificida</b>					
<b>Family Naididae</b>					
<i>Branchiura</i> sp. (ไส้เดือนน้ำ)	-	178	163	-	104
<b>Phylum Arthropoda</b>					
<b>Class Insecta</b>					
<b>Order Diptera</b>					
<b>Family Chironomidae</b>					
<i>Chironomus</i> sp. (หนอนแดง)	45	89	-	30	-

**ตาราง ผลการวิเคราะห์สัตว์หน้าดิน** (เก็บตัวอย่างวันที่ 16 มิถุนายน 2566)

(ต่อ)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	2355767-1	2355767-2	2355767-3	2355767-4	2355767-5
<b>Phylum Mollusca</b>					
<b>Class Gastropoda</b>					
<b>Order Architaenioglossa</b>					
<b>Family Thiariidae</b>					
<i>Melanoides</i> sp. (หอยเจดีย์)	45	75	-	-	-
<b>Class Bivalvia</b>					
<b>Order Unionida</b>					
<b>Family Unionidae</b>					
<i>Ensidens</i> sp. (หอยกาบแหลม)	-	15	-	-	-
<b>ชนิดสัตว์หน้าดิน</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>ปริมาณสัตว์หน้าดิน</b>	<b>90</b>	<b>402</b>	<b>163</b>	<b>30</b>	<b>104</b>
<b>ค่าดัชนีความหลากหลายสัตว์หน้าดิน</b>	<b>0.6931</b>	<b>1.3756</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Sample Location :** 1. สถานี 2355767-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทั้งขึ้นไป 500 เมตร

2. สถานี 2355767-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทั้ง

(บริเวณฝายทอดยาวศร)

3. สถานี 2355767-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน

4. สถานี 2355767-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานขึ้นไป 500 เมตร

5. สถานี 2355767-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานลงไป 500 เมตร

**Condition of Sample :** contained in one plastic zip bag



(นายอรรถวุฒิ กันทะวงศ์)

ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา

# ภาคผนวก ค-7

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คุณภาพน้ำใต้ดิน



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 23, 2023

Report Number : 2695191-1

Page 1 of 1

<b>Sample Number</b>	2355758-1
<b>Sampled Date</b>	Jun 15, 2023 3:26 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Down gradient well no.1
<b>Date Analysis Commenced</b>	Jun 16, 2023
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	7.2	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

(I): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่เป็นบ่อน้ำทิ้งบนที่ศทางารไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

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

Remark :

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

Technical Management

*N. Banchongkit*

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2695191-2

Page 1 of 1

<b>Sample Number</b>	2355758-1						
<b>Sampled Date</b>	Jun 15, 2023 3:26 PM						
<b>Sample Description</b>	Ground water						
<b>Location</b>	Down gradient well no.1						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Chlorite	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	2.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Temperature	Degree C	-	-	32.7	No Standard	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	332	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

**Sampling By :** Paramet Sattayakun

**Remark :**

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Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 23, 2023

Report Number : 2695192-1

Page 1 of 1

<b>Sample Number</b>	2355758-2
<b>Sampled Date</b>	Jun 15, 2023 3:02 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Down gradient well no.2
<b>Date Analysis Commenced</b>	Jun 16, 2023
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	7.3	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

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

Remark :

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

Technical Management

*N. Banchongkit*

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2695192-2

Page 1 of 1

<b>Sample Number</b>	2355758-2					
<b>Sampled Date</b>	Jun 15, 2023 3:02 PM					
<b>Sample Description</b>	Ground water					
<b>Location</b>	Down gradient well no.2					
<b>Date Analysis Commenced</b>	Jun 16, 2023					
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Chlorite	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	3.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Temperature	Degree C	-	-	32.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	324	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

**Sampling By :** Paramet Sattayakun

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Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 23, 2023

Report Number : 2695193-1

Page 1 of 1

<b>Sample Number</b>	2355758-3
<b>Sampled Date</b>	Jun 15, 2023 2:44 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Up gradient well
<b>Date Analysis Commenced</b>	Jun 16, 2023
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	7.1	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

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

Remark :

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

Technical Management

*N. Banchongkit*

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :**

**Project Name :** Monitoring EIA

**Project Location:** GNC

**Lot ID: 2355758**

Date Received : Jun 16, 2023

Date Reported : Jun 24, 2023

Report Number : 2695193-2

Page 1 of 1

<b>Sample Number</b>	2355758-3						
<b>Sampled Date</b>	Jun 15, 2023 2:44 PM						
<b>Sample Description</b>	Ground water						
<b>Location</b>	Up gradient well						
<b>Date Analysis Commenced</b>	Jun 16, 2023						
<b>Condition of Sample</b>	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Chlorite	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	2.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Temperature	Degree C	-	-	30.8	No Standard	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	1930	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

**Guideline :** Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures

**Sampling By :** Paramet Sattayakun

Remark :

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

Approved by

*N. Banchongkit*

Narumon Banchongkit  
Supervisor

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